The London School of Economics and Political Science

Ecological Modernisation Theory and Bangladesh: Lessons from the Environmental Compliance Upgrading Experiences of Bangladeshi Garments Firms

Volume I: Chapters One to Nine

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Declaration

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

I warrant that this authorisation does not, to the best of my belief, infringe the rights of any third party.

Abstract

In this era of international supply chains where Least Developed Countries (LDCs) are exporting to Developed Countries (DCs), concerns about economic growth that is environmentally benign has meant that LDC factories are taking environmental upgrading measures to meet standards set by DC customers. This thesis looks at the applicability of ecological modernisation theory (EMT) to this situation by examining the Bangladeshi readymade garments (RMG) sector that is part of the global apparel value chain.

EMT suggests that economic growth can continue while providing environmental protection in the long run due to proactive environmental actions by the market actors, civil society and the nation state. This thesis tests the tenets of EMT by looking at the apparel value chain in three parts (management networks within firms, economic networks of the supply chain, and policy networks) and then as a whole (EM network). Evidence from Bangladeshi garment factories (corporate culture, organisational change and environmental learning) suggests significant problems: factories are compliant with buyer codes only on paper and not in reality. Firms have a mixture of proactive and reactive greening measures and enjoy only an indirect competitive advantage from greening. The absence of "win win" gains can be pinned to buyer behaviour along the chains, coupled with their reluctance for closer collaboration and weak green customer pressures for clothing sourced in Bangladesh. Policymaking by the state has also been problematic: issue cognition and conflict, closed hierarchical networks, mistrust, political bargaining and prioritising national economic interests hampered the EM vision of the modern nation state. Overall, this thesis questions the adequacy of EMT for investing international supply chains. EMT needs to reconceptualise itself with hierarchical relationship realities, LDC

cultural contexts, LDC growth trajectories, actor heterogeneity, "no win" situations, and the suitability of EM tools.

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For Ammu, who will perhaps think it unnecessary.

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List of Abbreviations

BGMEA	Bangladesh Garments Manufacturers and Exporters Association
BKMEA	Bangladesh Knitwear Manufacturers and Exporters Association
CAD	Computer Aided Design
CAM	Computer Aided Machine
CAP	Corrective Action Plan
CM	Cost-of-Making
CMC	Compliance Monitoring Cell
DC	Developed Country
DoE	Department of Environment
DoL	Department of Labour
EC	Environmental Clearance
ECA	Environmental Conservation Act (ECA 1995)
ECC	Environmental Clearance Certificate
ECR	Environmental Conservation Rules (ECR 1997)
EM	Ecological Modernisation
EMT	Ecological Modernisation Theory
EPB	Export Promotion Bureau
ETI	Ethical Trading Initiative
ETP	Effluent Treatment Plant
FA	Factories Act (1965)
FFF I	Forum for the Future I
FFF II	Forum for the Future II
FR	Factories Rules (1979)
GOB	Government of Bangladesh
GVC	Global Value Chain
IEE	Initial Environmental Evaluation
ISO	International Standards Organisation
L/C	Letter of Credit
LDC	Least Developed Country
MFA	Multi Fibre Arrangement
MFB	Multistakeholder Forum Bangladesh
MoC	Ministry of Commerce
MoEF	Ministry of Environment and Forests
RAJUK	Rajdhani Unnayan Kortipokhkho
RBV	Resource Based View
RMG	Ready Made Garments
SC	Steering Committee
SCF	Social Compliance Forum
TPC	Third Party Certification
WRAP	Worldwide Responsible Apparel Production

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Chapter One: Ecological Modernisation Theory and Bangladesh

1.1 Introduction:

Economic development that is environmentally and socially beneficial is at the forefront of contemporary development debates all over the world. This is especially relevant in international trade where goods manufactured in least developed countries (LDCs) are being exported to developed countries (DCs) via international supply chains. The LDC exporters, workers and governments are participating in this trade regime to earn foreign exchange and fight their way out of endemic poverty. The DC importers and governments are encouraging these global supply chains to stimulate their own economies with goods that are high quality, but produced at much cheaper rates than in their own home countries. At the same time, consumers, governments and civil society in LDCs and DCs are concerned about the environmental and social impacts of these supply chains in sites of production and consumption. This concern is visible in commodity chains for apparel (the garments industry), paper (the pulp and paper industry), coffee, bananas, chocolate (the food industry), etc. where product labelling is gaining prominence, starting from "fair trade" stickers on coffee packets to "sweatshop free" and "organic cotton" labels on clothing sold in DC shops.

Accompanying this concern for environmental and social quality is the lively ethical trade debate, where well organised non governmental organisations (NGOs) in DCs and LDCs are getting organised and bringing to light issues of labour rights, working conditions and environmental resource degradation in LDCs as a result of globalised supply chains. The NGO debates are matched by a marked rise in the use of company codes of conduct (CoCs) by the product importers (DC retailers and buyers), which set conditions and standards that have to be met by the suppliers before goods can be shipped.

The policymakers in both geographical ends are also active in finding ways to adjust to these new non-price trade conditions.

In our contemporary lives, the question of ethical trade touches us all, whether we are shopping for cotton t-shirts in the West or walking to work in a Vietnamese factory that produces hundreds of these t-shirts in a day. What does ethical trade mean? What *should* it mean? What is our responsibility as the consumer? What is our responsibility as the factory manager? What are our expectations as workers and factory neighbours? Who has the right to decide these things? What are the different truths of ethical trade and whose voices carry the truths?

These questions remind me of the ancient Jain-Buddhist fable of the wise king who asked six blind courtiers to describe an elephant by touching it, the end result being much squabbling and determined insistence by the blind men that they each exclusively own the truth. The wise king then said,

> O how they cling and wrangle, some who claim
> For preacher and monk the honoured name!
> For, quarrelling, each to his view they cling.
> Such folk see only one side of a thing.[1]

The reality of ethical trade debaters may be like that of the blind men – scattered all over the globe, we are only seeing partial views of the whole truth due to our geographical, cultural, economic and political perspectives, and our whole view of ethical trade is made up of these partial truths. None of us are necessarily right until we consider our perceptions in the light of open and inclusive discourse. This thesis, in its small way, is an attempt to open half an eye to gauge the reality of ethical trade in supply chains.

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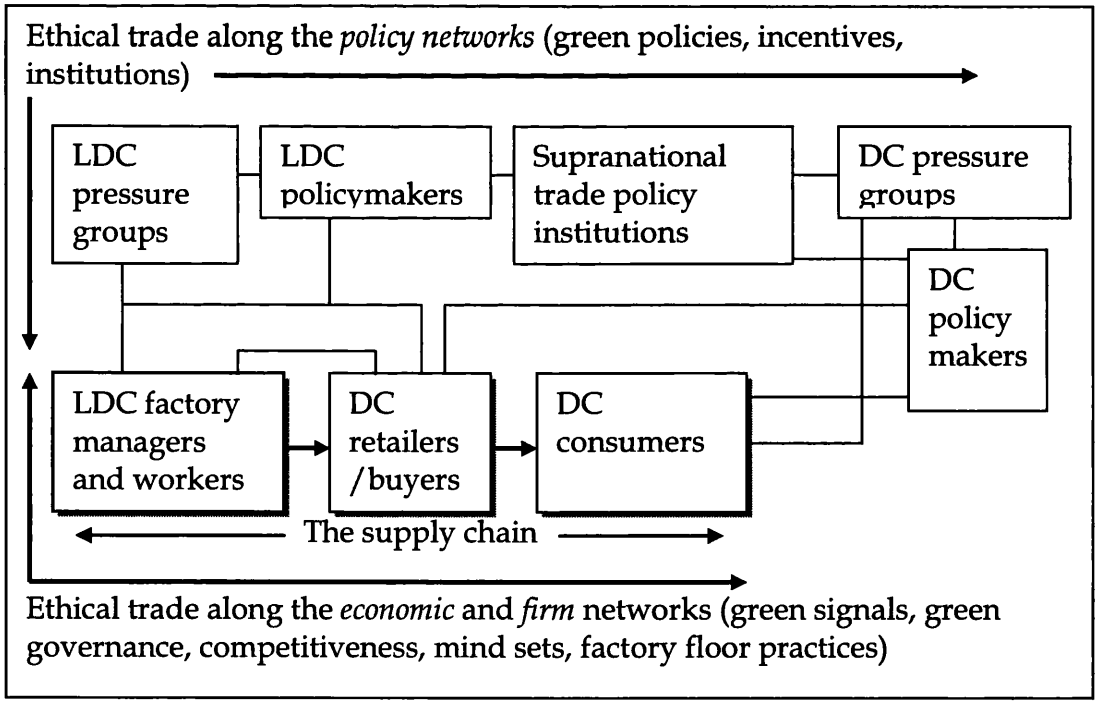
[1] For details of the fable, please see http://www.cs.princeton.edu/~rywang/berkeley/258/parable.html, accessed February 14, 2008.

The apparel supply chain is particularly vibrant with ethical trade debates, and my thesis looks at the Bangladeshi ready-made garments (RMG) industry as a case study. Bangladesh is the seventh largest apparel exporter in the world (MFB 2007). The factories in Dhaka and Chittagong are facing demands for environmental and social management according to standards set by apparel buyers and consumers in environmentally progressive societies that may not find cultural or institutional resonance in Bangladesh (Huq 2002, Khatun 2003, Khondker et al 2005). The firms are finding themselves in a situation of "institutional ambiguity" (Hajer 2004), where there is little experience or precedent of green production in a reactive, technocentric, ineffective and change resistant institutional set up among both, firms and regulators.

Figure 1.1: Ethical trade in supply chains and the main influences



The problem is very complex (figure 1.1) - it touches upon themes such as changing mindsets and practices at the level of the factory floor (firm networks); reliance on green supply chain signals (economic networks); policymaking and implementation arrangements (policy networks). We also

cannot ignore the basic principles behind the structure of the supply chain – constant pressures for cost reduction, on time delivery and cheap labour in a highly competitive international market. It is interesting then, to question how ethical trade pushes these factories into greening to maintain market share in such a complex scenario. The main research question of this thesis is posed as follows:

Why are export based ready made garments (RMG) suppliers in Bangladesh failing to undertake environmental management?

One way of looking at this problem is through the lens of **ecological modernisation** (EM) theory. The remainder of the chapter discusses the main tenets of EM theory and based on that discussion I explain the main variables that were chosen to study environmental compliance, regulation and policy making in the technocratic change resistant system prevalent in Bangladesh. The following discussion informs the thesis objectives, key hypothesis, research design, conceptual frameworks and the chapter sequences – which are all explained towards the latter part in detail.

1.2 Ecological Modernisation Theory (EMT) and its Critics:

Ecological modernisation refers to a group of theories based on the idea that economic growth can continue whilst ensuring environmental protection via long term changes in the structures of production and consumption that emphasises proactive environmental management by society, market actors and the state. EMT arose in the 1980's as a reaction to the steady state and zero-growth ideologies of the 1970's, and in opposition to the Club of Rome's "limits to growth" argument. EMT architects (such as Huber, Jänicke, Spaargaren, Mol, Hajer, Weale and Simmonis) postulated that economic and environmental goals need not be in conflict with each other, and environmentally proactive economic growth can only help towards

sustainable development. Needless to say, EMT is immensely influential in present day discourses of development. For example, the UN WCED (1987), and various EU environmental action programmes, with their environmentally sustainable development rhetoric, designed to reorient fiscal and economic instruments towards technologies for resource efficiency, the internalisation of costs, waste minimisation strategies, longer product life cycles etc. are resonant of EM principles (Berger at al 2001, Mol 1995 1996 1999, Rydin 1999, Hajer 1996, Toke 2001, Pepper 1999, Reitan 1998, Young 2000, Mol and Sonnenfeld 2000, Barry and Paterson 2004, Cater and Lowe 2000).

EMT was initially studied and empirically tested in industrialised countries in the mid 1990's. Since then it has broadened not only theoretically but also geographically to include less developed transitional countries (central and eastern Europe) and in non OECD countries (Canada and USA). The first stage heavily emphasised science and technological innovation in environmental modernisation. The second phase (from the late 1980's to mid 1990's) had less emphasis on technological innovations and took a more balanced perspective of the comparative roles of the centralised state vis-à-vis market dynamics. Since the mid 1990's the third phase saw broader horizons in terms of geography (most significantly in Asia) and theoretical scope (including studies about ecologising consumption behaviour and global processes involving export based firms) (Mol and Sonnenfeld 2000).

EMT espouses renewed engagements with structural change and consequently, with modernity. EMT recognises the structural nature of modern ecological problems; the relationship between the environment and the structures of modernity need to become more benign via institutional change. Consequently, Spaargaren (1997:3) describes EM as "a general theory of environment induced social change", highlighting a view of multi-stakeholder involvement for creating capacity and incentives, that will lead to

a network of institutions changing over time, including such geographically dispersed structures as global supply chains (Young 2000). EMT does not oppose modernity. Instead it suggests that by rethinking the environmental crises, we might find the impetus for social institutions to change from a reactive technocentric paradigm to a more proactive prevention-based paradigm, which will be the basis of a new engagement with modernity (Mol 1996). Theorists suggest, "solutions to the problems caused by modernisation, industrialisation, and science can only be solved through more modernisation, industrialisation and science" (Buttel 2000a: 62). As Mol (1996) states, contemporary economic practices are deeply rooted in modernity and it makes no sense to imagine ecological production and consumption divorced from state institutions and modern science and technology. He suggests that economic processes be re-embedded with their ecological impacts within the existing institutions of modernity. Therefore the two main assumptions of EMT are – first, in the words of Hajer (1996: 251) that, "the dominant institutions indeed can learn and that their learning can produce meaningful change", and second, that the "win-win" goals can be attained through instruments of modernity.

Role of the nation-state - EMT suggests a style of environmental policymaking where the regulators move away from traditional command and control based standard setting policy style, towards a more consensual policy negotiation based decentralised policy style, using market mechanisms to change private sector behaviour. Berger (1999) calls this partial self-regulation with legal boundaries. This may be explained by Jänicke's earlier work on state failure (1997), where he argued that given the different social spheres of development (the development of specialised knowledge and expertise, fast changing societies, post-modern institutions, the globalisation of markets) and the limitations of a state's capacity to solve societal problems, the state should change to more participative and inclusive forms of governance. Pepper (1999:6) refers to this as changing from a "curative and

dirigiste" style towards regulation that is akin to contextual steering. EMT's normative side assumes a certain level of political modernisation (Jänicke and Weidner 1995, Berger et al 2001, Sonnenfeld and Mol 2002) where citizens can express a preference for environmental quality and non-state actors (NGOs, research organisations, trade unions etc.) are given the opportunity to contribute towards solving environmental problems, and assume traditional administrative, regulatory managerial and mediating functions. EM imperatives on policymakers do not end at changing policy styles: they have to design and facilitate the use of economic instruments (such as taxes, fines, subsidies and tradable permits) to monetise environmental protection by economic actors, and encourage proactive/preventative strategies by the private sector. Policymakers also have to realise the economic importance of strengthening green consumerism. Of course, behind these imperatives is the notion that multi-level stakeholders are genuinely convinced of greening and the distributive benefits of policy mechanisms is fair (Fisher and Freudenberg 2001). Analytically, pro-EM political modernisation can be seen in Europe with the trend of NGOs influencing environmental policymaking (e.g. Toke and Strachan 2006); increased civil society memberships in NGOs (Young 2000); and increased use of voluntary self regulation mechanisms and eco-taxes for the private sector (Young 2000, Welford 2003), which means that the state is an important EM enabler (Berger et al 2001). The nation-state is no longer the only level of analysis either; supra-level regional/international policymaking have become important aspects in addressing how environmental impacts of a region or country inform environmental policymaking in international supply chains and globalisation; and EM studies in the age of globalisation cannot help but ask how much impact local environmental conditions have in that context of market economy environmentalism (Berger et al 2001, Gibbs 1998, 2003).

Role of market actors – Economic actors are very much part of EM's vision of modern institutions, not only because they hold together the modern

phenomenon of globalised supply chains, but also because they are responsible for environmental degradation and remediation. Consequently, market actors (retailers, suppliers and consumers) "appear as actors for environmental reform, using mainly economic arguments and mechanisms to articulate environmental goals" (Berger et al 2001: 59). The normative vision of EM suggests that the economic actors will develop market advantage through the integration of anticipatory/preventative mechanisms into their production process. They have to recognise and internalise actual and anticipated costs of environmental externalities (perhaps reinforced via EM driven economic instruments to be designed by the state actors) in company strategy making, which requires motivation, management skills and resources. Such motivation and incentive is meant to come from the market, legislation, and civil society preferences for a cleaner environment. Analytically, EM theorists link the reducing industrial pollution levels in DCs to the gradually increasing greening behaviour among Western companies and consumers as arguments for successful EM uptake among economic actors (Jänicke and Weidner 1995, Mol and Spaargaren 2002). The success indicators include numerous CSR initiatives, retailer CoCs for environmental management, environmental quality assurance certification schemes and the green technology options that can "leapfrog" to LDC economic actors. Collaboration between private sector actors and civil society, NGOs, etc. is another aspect of successful EM. Most of these actions are not borne of private sector altruism but are driven by legislation, civil society protests and eco-awareness (Williams 2001). Motivating market actors remains a key challenge in operationalising the normative aspects of EMT.

Role of science and technology - Science and technology are highly valued in EM because of their role the refinement of production (e.g. use of green technology to achieve highest possible environmental standards, use of anticipatory mechanisms, resource use minimisation, etc.) and consumption (e.g. life-cycle analysis, recycling and reuse). According to Weale (1992:76),

> "Since environmental amenity is a superior good, the demand for pollution control is likely to increase and there is therefore a considerable advantage to an economy to have the technical and production capacity to produce low polluting goods or pollution control technology."

Instead of being judged for their role in creating the environmental crises, science and technology are highly valued in EMT for creating the basis of proactiveness (Blowers 1997). The normative EMT suggestions depend on the availability and ability of technology to deliver a win-win ecology-economy synergy by providing resource efficient methods of producing goods, while keeping costs down and profit levels up. This is especially pertinent in pollution intensive sectors such as paper, pulp, palm oil, etc. Another key challenge of EM remains the availability of expert knowledge, ease of learning and actual adoption of green-technology/practices at the level of non-expert practitioners (Sarkis 1999), especially in LDCs. Therefore, along the supply chain, questions arise regarding the necessary conditions behind the availability, quick transfer and acceptance of green technology and green management mechanisms.

Repeatedly we have seen that EMT is both a normative theory (that prescribes desirable solutions for structural change) and an analytical-descriptive theory (that identifies how modern societies construct the environment, and analyses the nature of social and policy dynamics) (Gouldson and Murphy 1997, Blowers 1997, Christoff 1996, Mol and Sonnenfeld 2000). On a practical level, these aspects often merge, and proponents have used EMT for both purposes - as an analytical framework for understanding social change of modern structures, institutions and practices as well as for comparing the changes to the normative scenario (Mol 1997, Toke and Strachan 2006), which is also the approach taken by this thesis. This approach is useful in delineating the

contradictions between the normative and the analytical dimensions – it helps illustrate why and how a given EM situation may be only partially ecological.

Some Criticisms of EMT:

EM has elicited much criticism from various corners, foremost among them the Neo Marxists, radical environmentalists and post-modernists (Buttel 2000b, Toke and Strachan 2006). Broadly, they disagree with EM's theoretical assumptions by saying that its technocratic solutions, economistic arguments, and reliance on Western dominated market systems justifies the Western style status quo by hindering more radical approaches to sustainable development (Pepper 1993, Yearley 1994, Christoff 1996 1997, Dobson 1990, Seippel 2000).

An important criticism comes from Christoff (1996:486) who suggests that in its most common forms, EM is reductive, technocratic and corporatist:

> "Given this dominant emphasis on increasing the environmental efficiency of industrial development and resource exploitation, such EM remains only superficially or weakly ecological. Consideration of the integrity of ecosystems, and the cumulative impacts of industrialisation upon these, is limited and peripheral."

Christoff, along with Berger et al (2001) and Harvey (1996), criticise EM for giving insufficient emphasis on ecological protection. They suggest that such economistic discourse dresses environmentalism into the language of business, and gives licence for "greenwash" and "politicians' puff" (Williams 2001:112). EM's assumptions that existing structures and relationships between the state and the private sector can meaningfully internalise ecological considerations, are seen by Neo Marxists as celebrating contemporary capitalism with a green paint job, a criticism that is also raised by different shades of the green radicals (Blowers 1997 and Hannigan 1994).

The corporatism aspect of EM is symptomatic of a "belief system" which seeks to govern by injecting business-friendly environmentalism into the political rationalities of the state (Christoff 1996). According to Hajer (1996:262), the nation state has great freedom when regulating economic actors:

> "They can either make a few aesthetic alterations but basically continue with business as usual, or they can use sustainable development as a crowbar to break with previous commitments."

However, critics do not have faith in modern corporatist alliances and say that EM offers no real solutions to the "self-interest of corporate power and sclerotic government" (Williams 2001:113). Christoff (1996) further criticises the state-industry nexus by saying that while the state, may support the market by removing barriers to trade and competition, there comes a point when state intervention may be in conflict with market forces.

The Neo Marxists criticise EM for favouring mainstream Western development discourses; when sustainability requires a more radical reinterpretation of development needs (going beyond well-being measurements of economic wealth and consumption levels) (Dobson 1990) and addressing inequality (Buttel 2000c). EM is based entirely on the Western industrial experience (Blowers 1997) and propagates Western scientific hegemony (Christoff 1996), a criticism that is shared by the radical greens and post modernists like Sachs (1993) who argue that the "green globalism" message is merely an effort by Western environmental establishment to evade the consequences of its own profligacy by imposing its agenda on the LDCs, while ignoring the sub national level (although international and sub-regional level environmental policymaking is gaining more ground recently, for example within EU Environmental Action Programmes (Young 2000)). These critics would like to see a more radical alternative reflecting regional/local

perspectives reflecting broader cultural needs and non-anthropocentric values suitable for LDCs (Dobson 1990, Yearley 1994, Williams 2001).

The limited applicability of EM in LDCs is taken forwards by Christoff (1996: 488) who says that EM "presents a unilinear path to ecological modernity", where EM is the next evolutionary stage in industrial transformation that has to happen in LDCs (Blowers 1997 calls this superindustrialisation), which ignores the fact that LDC cultures may require more indigenous (and perhaps more radical) solutions over resource intensive agricultural and industrial production in those countries.

EM is also criticised for its political project by Berger et al (2001): its technocratic neo-corporatist style favours the voices of the powerful (mainly politicians and industry representatives) and uses tools (such as voluntary agreements) that leave out large parts of the affected. EM is criticised as being a mere rhetorical device seeking to co-opt radical ecological dissent and legitimise existing power structures that deliver solutions acceptable to the economically empowered, when much of this wealth (and DC eco-gains which EM proponents highlight) has come at the cost of exporting environmental degradation to LDCs (Christoff 1996, Sachs 1993).

According to Pepper (1998), the EM project ignores consumer behaviour: EM policy discourse is inherently contradictory because it does not call to diminish total resource consumption along the supply chain (in fact, EM calls for more growth), which is one the main Marxist criticisms of EU's Environmental Action Programme and the Single Market policies.

Post modernists criticise EM for ignoring social justice, given the context of power-relations and the consequent ethical issues in favour of putting faith in new institutions (Hajer 1996). The power resource balances in LDC societies might pose unique challenges to mainstream ideas of EM, since economic

development is often more powerfully prioritised over the green agenda (Huq 2002) which somewhat clouds up the distributive implications of EM.

So what should be the alternative to EM theory and discourse? Is there a narrow reading compared to a broader interpretation? Christoff (1996) distinguishes between weak and strong EM to illustrate the difference between what currently practiced *weak EM* is (encapsulating the criticisms mentioned above) and what *strong EM* could be (table 1.1). Hajer (1996) explains the strong EM as rising from the risks created by weak EM - a new reflexive EM, where people grow disenchanted with exiting projects of modern institutions (the practices of over production and over-consumption), and move to re-embed their relationships with the local ecology, privileging local cultures and true economic democracy.

Table 1.1: Christoff's strong and weak EM

Weak EM	Strong EM
Economistic rationalities privileged	Ecological rationalities privileged
Technological solutions to environmental problems (narrow changes)	Broad changes to institutional and economic structure of society incorporating ecological concerns
Instrumental focus	Communicative focus
Technocratic/corporatist styles of policy making limited to economic and political elites	Open, democratic decision making with participation beyond state-business networks
Concerned with a national focus privileging Western countries who use EM to further their economic advantage	Concerned with broader development and environmental challenges; cross boundary focus.
Imposes a single, closed-ended, hegemonic framework on political and economic policy.	Takes a diverse, open-ended approach with no single view, acknowledging multiple EM possibilities for policy.

Based on: Berger et al (2001:62) and Christoff (1996)

Under strong EM, economic and political development proceeds based on ecologically self aware discourse, with adequate public scrutiny and democratic control (Williams 2001). Although Christoff's classification

(above) shows two versions of EM, it must be mentioned that he believes that there is no single correct view of what EM should mean, and that policy discourse must be open to multiple possibilities to which EM will provide orientation; a perspective that greatly influenced my reading of EM.

At this point it is necessary to clarify my view of EM. EM is undoubtedly an important and useful theoretical framework for analysing greening related change (especially strategies involving significant change). However the tension between the normative and analytical strands of EM is problematic. Given that normative EM calls for wide ranging and sustained change for win-win gains in change resistant political-economies, it would be a naïve and reductive reading of EM to suggest that EM is only about ecology-economy gains. Therefore I suggest EM as a broad social and political theory of change: EM prescribes modern nation-states changing their environmental preferences and values as a starting point; therefore the underlying issues of power hierarchies, power dependencies, influences and motivations driving the economy and society at large, form the backbone of that change, and is part of a reflexive and broad EMT. Also, EM can be seen as a theory of social learning, given that the uptake of voluntary eco-management schemes, self monitoring, best-practice industry standards, etc. is built upon the idea that environmental information will be sufficiently understood and learnt at various levels of society.

The radical, Neo Marxist and post modern critique has considerable purchase when set against the techno-corporatist EM model. In this sense the growth logic of capitalism needs to be challenged, if only to produce a reflexive response of a society-wide drive to seek new technical opportunities (Toke 2002). I would however, like to distance myself slightly from these critics, and perhaps rather optimistically start from envisioning EM as a dynamic process of socio-political change that *can* permeate through international networks towards *strong* integration of EM principles in the longer term.

While the radicals' arguments about rejecting capitalism and consumerism are valuable in themselves, it is also possible to argue that it understates some of the economic realities of underlying economic processes in the world economy, for example, in global supply chains where LDCs are determined to maintain their participation because the LDC workers want to end poverty. Also, neo-Marxist criticisms are extremely valuable in analysing the power politics in modern structures that are as complex and geographically dispersed as supply chains and have informed my analysis, but I would like to view capitalism and supply chains as more heterogeneous and complex entities and view ethical trade as positive influence. In the next section, I turn to EM and ethical trade in LDC supply chains.

1.3 EM and Ethical Trade in International Supply Chains:

China's emerging economy is a remarkable success story of continued high growth based on strong industrial manufacturing and exports. However, looking at press photographs of smog filled Chinese industrial cities like Chongqing, Beijing, Shanghai, and Shenyang (where, according World Bank (2000), 10,000 people die prematurely per year from exposure to particulates in the air), it is reasonable to wonder: has EM nothing to give to developing countries with poor environmental capacity and a hunger for growth?

EM responses in DC countries' involvement in supply chains has not been without problems or controversy, but the DC private sector overall has been investing in greening.[2] Outside of DCs, Bangladesh, India, Pakistan, Sri Lanka, Thailand, Mexico, Indonesia and the Philippines have also made pollution control investments into resource intensive dirty sectors such as fertiliser, paper, pulp, palm oil, etc. despite being resource poor and lacking a serious commitment to cleaning up pollution (Huq and Wheeler 1992,

[2] See Annex 1.1 for a discussion on DC responses to EM in supply chains.

UNIDO 2002, 2003a, 2003b and 2004, Arora and Puranik 2004, Lopez et al 2004). Being part of global supply chains has helped in some cases (although neo Marxists would disagree) in adopting greener technology through green leapfrogging (Wheeler, Huq and Martin 1993, Neumayer and Perkins 2004, Perkins and Neumayer 2005). Pro-EM policy interventions have been crucial for green leapfrogging success; however, diffusion rates have varied considerably, and resource depletion and pollution load rises are still a reality. Total pollution in LDCs could still rise if industrial output grows faster than pollution intensity declines. Also, the transition to cleaner production will be harder when growth relies on exports from polluting sectors such as food, pulp and paper, chemicals and textiles (Hettige, Mani, and Wheeler 1998). In this situation, research on ethical trade in supply chains becomes even more important because of potential buyer demands that can enable what Christoff (1996) envisioned as strong EM.

Ethical trade and DC motivations - Ethical trade, using retailer standards for worker welfare, social protection and environmental diligence by suppliers, has been of interest to academics, NGOs, consumer groups and the media for some time. To some, it is dressed up greenwash (Christian Aid 2005), but to some it symbolises a way forward with corporate citizenship, a way to redeem supply chains that can be exploitative of its workers and the ecosystem (Hughes 2005, Green et al 1998, 1996, Bowen et al 1999, Dahlsrud 2008, Holt 2004). It is important to view modern capitalist institutions like global supply chains critically, and recognise different approaches to social accountability in supply chains, perhaps akin to what Hughes (2006) calls soft capitalism. Recently there has been a rise of alternative trading spaces (involving fair trade produce, farmers markets, etc. with strong goals of social justice and sustainable rural livelihoods) as forms of resistance to mainstream trade dominated by the financial markets and MNCs, but the mainstream economy is simultaneously showing signs of adopting measures for ethically

responsible trade in supply chains.[3] Why supply chains go green is an interesting question to ask, not only because it reveals what the most important and effective pressures are, but also because it helps us understand why certain responses and tools (proactive or reactive) are employed by buyers (Preuss 2005, Sharfman et al 2007). It is possible to argue that ethical trade motivations and tools have to do with the refabricated regions of regulations: buyer led governance of the supply chains has happened in the contested space of capitalism, globalisation, international politics, multi-scale institutions, and the critical search for alternatives (by academic critics, NGOs, activists, labour unionists etc.). The pressures and tools are also similarly influenced by that refabricated space, where actors are in conflict and in alliance; the conflicts and the alliances determine what pressures are made upon the retailers and the tools that retailers employ in conjunction with critical feedback.

The profile of ethical trading rose in the 1990s through critical attention from the media and organisational campaigning by civil society in DCs, who brought to public attention the sourcing policies of supermarkets, food and clothing retailers. Academics criticised the West for a consumer culture that kept these LDC workers below-poverty, working in chains dictated by the Western development model, under pressure of hegemonistic Western buyers, and being forced to meet standards that are borne of Western science: interestingly, variations of these criticisms were made by EMT critics, noted earlier. The popular media exposed how familiar brand names such as Nike and Gap were propagating "sweatshops" in their overseas factories (Hughes 2000, Hartwick 1998, Cook 1994, 1995, Klein 2000, Jenkins et al 2002) and as recently as June 2008, BBC's Panorama news programme exposed labour and wage violations by Primark's contractors in India (BBC 2008). NGOs such as

[3] Ethical trade is seen by practitioners as quite distinct from fair trade, but their interface can be blurry. Ethical trade includes labour rights for LDC supply chain workers, and recently this has included environmental responsibility as well, while fair trade has more distributive justice and development oriented goals while being still part of the profit-making commodity chains (Blowfield 1999).

Oxfam and Christian Aid have since targeted UK supermarket chains' own-brand clothing imports, while Labour Behind the Label is active in monitoring UK clothing retailers. Hughes et al (2007) illustrates the cases of UK's Ethical Trade Initiative (ETI) where NGO networks and media campaigns led the way; and the US's Fair Labour Association (FLA) and Workers Rights Consortium (WRC) where consumer pressure from university clothing customers and the media were instrumental in creating networks of coalitions involving actors from LDCs (trade unions, NGOs, workers, factory owners) and DCs (government agencies, NGOs, consumer groups, media), pressuring apparel retailers to change (Oakes 2005).

These pressures have increased reputational risk to big brand retailers, who have become locked into sourcing from LDCs (Gereffi 1994, Klein 2000, Jenkins 2002, Bansal and Roth 2000, Nadvi 2008). Conventional financial logic dictates that risk and return go hand in hand, and along supply chains this meant that buyers wanted to continue operating in supply chains but with a focus on risk management (Hebb and Wojick 2005). Reputational capital was judged as being important in the long term success of retailers, and they could not afford to have it eroded by the operation of their supply chain firms (who might be operating in full compliance with their national laws) whose operations were inconsistent with the values and expectations of end consumers (Angel and Rock 2005). Due to this gap (or variation) in environmental/social standards along the supply chain, retailers became interested in seeking harmonisation of environmental standards through codes of conduct for suppliers. Murphy (2002) explains this in terms of "asset specificity": assets have high domestic specificity when their value can be realised in the domestic country only; therefore, when retailers have high multinational asset specificity, they respond to inter-country regulatory standards and capacity variations by enforcing codes on their suppliers, aimed at reducing transactions costs.

Investors and shareholders in publicly traded companies (that tend to be the brand name retailers, like Gap, Nike, Tesco, etc.) were also increasingly demanding environmental ratings and disclosure of company operations (Hebb and Wojick 2005, Godfrey and Langfield-Smith 2004). Government pressure was another important driver, according to Berger et al (2001), while the least important driver was environmental or social awareness. The financial benefits of adopting a multi stakeholder CSR approach were the main reason for some (Fraser and Fraser 2007). Stakeholder and shareholder pressure, social contracts and social values led to CSR proactivity, and their findings broadly support the fact that reactive CSR was linked to pressure only from regulators and media. Runhaar (2006), Darnall (2008), Bayliss et al (1998a, 1998b) and Holt (2004), among others, have found that typically larger, more visible companies (especially those that have some experience with EMSs, and are in higher risk industrial sectors) tend to be more proactive, although researchers note that generalisations are difficult to make.

Governance of ethical trade in chains - Extensive research on the global governance of supply chains shows the rise of private actors (publicly traded MNCs and NGOs), as well as regional and international actors (both public and private) and the decline of national level public actors (Messner 2004, Nadvi and Waltring 2004, Hughes 2005, Zadek 2004, Nadvi 2008); although that is not to say that national legislation and regulatory pressures have insignificant impact on how CSR standards are implemented in factories (Egels Zanden 2007). Retailers (and or buyers) govern the supply chains (structure, product design, marketing, profit distribution, etc.) and also the way ethical trade (standard setting, codes of conduct, monitoring and audits, etc.) is implemented (Nadvi 2008). Buyers in tightly controlled supply chains demonstrate oligoposonistic buyer power (Hughes 2006a), in terms of dictating pricing, delivery lead times, and strict product quality (Dolan and Humphrey 2004, Gereffi et al 2005). Doel (1996) and Hughes (2000) suggest that such power-relations not only created worsening working conditions and

environmental degradation in the first place, but that the voluntiristic aspect of ethical trade regulation is structured by the same supply chain power-relations that favours the buyers. Jeppesen and Hansen (2004) and Hughes (2005) have identified different kinds of governance structures for ethical trade, ranging from arms-length (shallow collaboration) to a more developmental approach (deeper communication and collaboration) in terms of how factory audits are conducted, how in depth the issues are investigated during factory visits, how personalised the approach is and the opportunities for designing bottom-up approaches to ethical trade implementation. Sometimes retailers do not collaborate beyond the first tier of suppliers: Holt (2004) mentions cases of retailers forming closer collaboration mainly with first tier suppliers, and only in few instances was green purchasing seen to have trickled down to second tier suppliers.

Although ethical trade operates on what Amin (2004:226) calls "microworlds of regulation", the hierarchy of relationships remain problematical between market forces, nation-states and citizens, even as they form multi-stakeholder alliances, exemplifying the complex nature of the ethical trade agenda. At the macro level, we can identify multi stakeholder initiatives (UK ETI, the Jo-In Code, the Dutch Fair Wear Foundation, US FLA and WRC, etc.); industry specific labelling initiatives (e.g. Kenya Flower Council, EU eco-labels for apparels (Muller 2002, EC 2007, EC 2002, EC 2003b)); and individual firm based minimum standards for suppliers (CoCs from Gap, Nike etc.). Such programmes may be linked with international initiatives such as the UN Global Compact and the Global Reporting Initiative, lending them greater legitimacy and transparency (Haddock-Fraser and Fraser 2007). Christopherson and Lille (2005) suggest that this private system of buyer codes is "non regulation" by voluntary regulation; and often gains its legitimacy from the DC laws and framework agreements, (e.g. the wage rate clause in the Jo-In code (Hughes et al 2007)) and is thus indirectly sponsored by DC governments. This code regime is political in its emphasis on

"enlightened self restraint" (Chistopherson and Lille 2005: 1924) over legal regulation and creates an "ambiguously defined regulatory hierarchy" (ibid), which is specific to each sectoral supply chain. The system of codes is also important for instrumental reasons: Hebb and Wojick (2005) point out that in the absence of uniform global governance of a sector, retailer codes continue to be important, although their voluntary implementation and disclosure levels remain debated.

LDC firms and CSR performance -Adhering to ethical standards set by DC retailers is an important way of LDC suppliers gaining competitive advantage and becoming better bargainers (Khan 2002, Abbot et al 1999). CSR type practices have been common in South Asia and Latin America, even though the term CSR has not been explicitly applied to them, and research shows that it is more structural than incidental (Muller and Kolk 2008; Kumar, Balsari and Murphy 2006; Achda 2006).

In India, corporate philanthropy has a rich and varied tradition: business houses such as the Indian owned Tata, Godrej, Mahindra, Bajaj, Reliance, Bharat Heavy Electricals Ltd., Maruti Udyog, Southern Petrochemicals, and the Birla Group have been contributing to society over decades, while becoming major powerhouses in the national and international business arena. Some of these Indian powerhouse businesses act as suppliers in international markets, meeting international standards in quality (Saha 2006). Some of them (who are as large as US and EU based MNCs operating in India) have been long practicing what is now recognised as a multi-stakeholder model of CSR - looking out for customers, employees, communities, etc. as well as company profits. That stakeholders hold these companies in high esteem (in fact, Tata reinvests 65% of its annual turnover into its philanthropic trusts, which is unique (Viswanath and Dadrwala 2004)) is not surprising, especially given that most Indians have no regular access to basic amenities like state sponsored education, healthcare etc. Also

unsurprising is that Indian consumers value CSR by these large companies - a 2006 poll on corporate responsibility undertaken by TERI-Europe in four urban areas of India reveals that there is an increasing awareness of corporate responsibility and that a home grown agenda is evolving. 58% of consumers value a company's brand quality and reputation, while 32% said they considered environmental, labour and social issues. IT, telecom, pharmaceuticals and financial sector were most highly valued, while alcohol and tobacco were seen as least socially responsible (Saha 2006, Viswanath and Dardrawala 2004, Arora and Pramanik 2004, Kumar, Balsari and Murphy 2006). The political and economic context behind the rise of Indian CSR practices in recent times has also benefited from what Perkins (2007) refers to as "cross national convergence processes", which means that increased international exposure at the policymaking and political level, meaningful engagement and interdependence, along with increased economic exposure to DC actors, innovations and pressures. Therefore, broader policy networks facilitating an LDC's representation and engagement in the spaces of international policy and politics of CSR are conceptually important while understanding LDC corporate philanthropy.

CSR among LDC SMEs that are part of the international supply chains has to be understood in its own context that is separate from the renowned powerhouses, especially the interrelationships between capital, labour and technology at the SME level (Dasgupta 2000). Research in Latin American SMEs that are part of a cross sectoral sample and Indian SMEs that supply to Dutch companies have shown distinct sectoral differences, however, as far as generalisations can be made, CSR among LDC SMEs is very different from that practiced in LDC larger companies. Indian SMEs were found to have a short term profit maximisation perspective, and tend to discount longer term ecological returns (Sandesara 1991).

Studies show that many of these LDC SMEs are family owned and have very different stakeholders, thus SME activities and strategy making is more influenced by social contacts, knowledge, literacy levels, ability to manage change, low market awareness, values, character, attitudes and education level of the owner and has a large impact on SME CSR involvement (Dasgupta 1997, Sthuraman 1992, Muller 2006, Luken and Stares 2005, Dasgupta, Hettige and Wheeler 2000). Research in Nairobi and Calcutta show that frequently the entrepreneur of a family based SME lacks the skills for successful management, since training is uncommon (Patel 1987, Dasgupta 1997, Frijns et al 1997). They also tend to be product orientated, and lack personnel specialised in promoting CSR (Dasgupta 2000). Interestingly, DC SMEs also face similar challenges.

Among the Indian firms, it was found that SMEs were normally struggling to survive under highly competitive supply chain pressures, and as a result, national legislation and buyer codes were more of a burden than to larger suppliers the implications were that SME managers were more anxious, but like their larger company colleagues, firms in LDCs must see definite increase in competitiveness to make them act (Halila 2007). However, for SMEs it was less a matter of education (or CSR learning) than an issue of basic awareness and changing CSR perceptions (Kumar, Balsari and Murphy 2006, UNIDO 2003). The Latin American studies showed that a large number of SMEs were mostly concerned with local markets, and the SMEs that did supply international markets were functionally similar to the other SMEs and in comparison to DC SMEs, were much less developed - lower productivity, low capital intensity, families in the work force, low levels of investments in innovation, lack of access to finance etc. - which influenced to the extent they adopted CSR affiliated activities (Chapple and Moon 2005, Muller and Kolk 2008, Vives 2006). In common with their DC colleagues, LDC suppliers are also driven by legislation and NGO pressure in their own countries: we have seen much evidence of LDC suppliers working with civil society, government

and donor organisations in dealing innovatively with production related environmental impacts. LDC suppliers also participate in ethical trade due to concerns for their own health and safety, which improve with CSR practices (Saha 2006).

What is common in these research findings, is the theme that the main motivations for DC retailers and LDC suppliers is monetary (market share/ per capita incomes/ company profit levels) and regulatory, which neatly fit with the EMT rationale of greening motivations. There may be many examples of LDC CSR success stories which would reinforce optimism for EM in supply chains (even though Christoff (2006) might still consider it weakly ecological), however, there are many problems with ethical trade in the whole of the supply chain. In the next section, I highlight the problems most relevant to this thesis.

1.4 The Tools and Problems of Ethical Trade:

Literature on supply chain greening and CSR is extensive and covers a wide range of issues (Dahlsrud 2008), however, existing literature (descriptive or normative) defines CSR and greening in different ways, hinting at much operational uncertainty about what greening means to stakeholders and how they act on it (Welford and Frost 2006). The over abundance of definitions and highlighted dimensions can cause confusion (Dahlsrud 2008, Sarkis 1995, Sarkis 1999, Frier 2003) and even generate a lively debate about whose version is more ethical - the corporations' or the citizens' (Rossi 2000). However, there are common themes within the literature; according to Dahlsrud (2008), the most common aspects emphasised are: the environment, contributions to a better society, preserving business profitability, stakeholder interaction, and going beyond legal obligations due to ethical considerations. Taken together, we get a feel for what supply chain greening is about. I agree with Sarkis (1999) and Shrivastava (1995) that definitions have to take a holistic

perspective; the supply side and the demand side (Welford et al 1997). There is a trend among researchers recently to move away from looking at CSR narrowly as something DC firms have to do, in favour of looking at the greening of the product chains, not only because of the new global trends, but also because they want to bring emphasis on renegotiating the power and resource balances along the way to form more collaborative and "personalised" approaches to management (Vermeulen and Ras 2006, Hughes et al 2007).

In theory, comprehensive supply chain green management should begin with the chain leaders analysing the entire life cycle of the product, identifying the major environmental impacts, deciding on objectives (such as reducing raw materials and energy inputs, recycling and reuse of materials, etc.) based on criteria set either by themselves, or by existing industry wide standards by government agencies (e.g. EU's EcoLabel), deciding on which parts of the supply chain activity needs to be changed to meet which objectives (vendor selection, the production process, in-bound and out-bound logistics plus continual improvements), how these changes are to be implemented, look at the economics behind the reduction goals and implementation strategies vis-à-vis the company's overall goals, and develop systems of monitoring and control, sometimes involving third party auditors to gain legitimacy and environmental disclosure to stakeholders to gain transparency (Sarkis 1999, Angel 1996, Green et al 1996, 1998, Seuring 2004, Canning and Hanmer-Lloyd 2001, Mont and Bleischwitz 2007, Nash and Stoughton 1994). However, this is merely a simplified version of comprehensive models suggested by academic researchers; a CSR manager, taking the first steps from inaction to reactive pollution prevention strategies to proactive strategies, will have to start with the already known bottlenecks in chain greening, bank on cooperation with close inter-firm linkages and then design a strategy that works for her firm. Of course, who decides on which perspective to take (and implications on tools used and methodologies of auditing) is a contentious issue in managing

supply chain options, a point made by Vermeuen and Ras (2006) who point to the power hierarchies and agenda bargaining between the "inside chain actors" (economic actors) and "outside chain actors"(NGOs, government agencies). The former group tend to depend on conservative measurable solutions, while the latter group have more freedom in identifying options.

Contrasting the comprehensive supply chain CSR models with the vibrant empirical research being done on many aspects of operational CSR (Nawrocka 2007, Font 2006, Seuring and Muller 2007, Preuss 2005, Andrews et al 2001), and despite case studies of triumphant innovation and creativity at work (Rondinelli 1998, Wycherley 1999), certain problematic challenges still exist. The main problems can be summarised as below:

Motivation - DC retail company top management and LDC factory managers need to be motivated to participate in something that is not part of traditional business practices (Jacques 2006). Full participation requires eco-proactive corporate cultures so that at every step they value the environmental consequences of their actions as they make decisions about human resources and budgeting to enable greening. In the previous section it was noted how the actors each perceive their motivations and benefits of participating in CSR. It is, no doubt, a difficult quality to have running through the chain, at all times. Critics have variously questioned the motivations by pointing out the gaps between declared intentions and actual performance (e.g. the Clean Up Fashion 2007 review of the top UK clothing retailers' enduring sweatshops, CCC 1998, CCC 2005, Fleishman-Hillard 2005, MSN 2005, Oxfam 2004a and 2004b, Sweatshopwatch 1999, Wick 2005). However, this is not specific only to DC retailer management. CSR studies of LDC and DC firms have shown that the least cited driving force towards environmental supply chain management is personal interest in environmental protection or social responsibility of as part of core business operations (Tilley 1999, Berger et al 2001, Hahn and Scheermesser 2006, Welford 2007, Ketola 2006, Fernandez et

al 2006, Font et al 2008). Hughes (2005) presented a case of UK food and clothing retailers, where a variation of commitment to ethical trade was shown as dependent on corporate culture, staff motivations, company financial health and corporate structure. Christopherson and Lille's (2005) study comparing WalMart and Ikea also showed how firm motivations were determined by cultural differences (among other factors).

Operational conflict and complexity - One reason cited for the"start stop" style piecemeal CSR initiatives that do not go beyond one or two linkages in the supply chain (Holt 2004) is the sheer leviathan task of managing the cross-boundary changes and negotiating conflicting interests within the same organisation. Sometimes these conflicts are due to regional and global cultural differences (Thompson 2005, Vives 2006, von Moltke 1998). Researchers have reiterated that implementation of greening and integration of greening principles at each production stage will require time (e.g. to find or design eco-friendly substitutes), economies of scale to materialise (e.g. enough green production to make it profitable), and managerial complexity resolution (e.g. new sector partnerships and roles being demanded, administrative and operational conflict and debate resolution) (Wells and Orsato 2003, Min and Galle 1997, Hughes 2006, Penman 1994, Sarkis 1999). These complexities are probably true tests of actor motivations and beliefs (UNIDO 2003), and are one aspect of the process that EMT altogether too briefly touches upon when it mentions changing institutions of modernity.

Knowledge and expertise - Supply chain greening management and EM depend greatly upon science and technology, as we have seen earlier in the chapter. However, judging by contemporary CSR literature, there is a problem with not only learning scientific information (e.g. understanding the true environmental costs of "just in time delivery" options under TEQM practices, given that frequent transport runs add up fuel costs and emissions, Grankvist and Biel 2007) but also the supply of scientific solutions (e.g.

finding a low-emissions alternative that is not too expensive). Then there is the problem of employees who are not aware of ethical trade impacts of their company's actions overseas. Hughes (2006) talks about new ethical consultancies that operate with DC retailer managers, and provide learning spaces where they motivate, inform and empower managers about ethical issues of global trade. This is a reflection that learning about ethical trade needs to happen at every managerial level if the message is going to pass on in a robust manner down the chain. This is of course also very important at the level of LDC factory managers and workers; Rothenberg (1999) has illustrated a case where low worker participation in greening was due to inadequate technical expertise. Another aspect of this is related directly to EMT - the availability of expert advice. As Sarkis (1999) and Preuss (2005) suggest, some of the advisory papers used by NGOs and government agencies may not be available or understandable to practitioners, especially in SMEs.

Costs of being green - The costs of greening have been highly contested by EM critics and by CSR practitioners themselves. Firstly, there is the monetary investment into environmental upgrading. Correctly estimating the costs is a problem highlighted by several researchers, who typically mention the burdensome and complicated cost calculation process and realistic cost estimation problems (Green et al 1998, Burrit 2004, Roberts 2002a). Secondly, the demonstrable financial benefits of greening, which are sometimes unclear for DC firms adapting EMSs and for LDC firms adjusting to CSR, fall far short of the EMT suggestions of a "win-win" outcome (KPMG 2005, UNIDO 2003, Welford and Frost 2006, Welford 2007, Frost and Ho 2006, Drake et al 2004). Findings across LDCs and DCs suggest that businesses will only act towards environmental supply chain management when it is in their interest to do so, influenced by short or long-term profits, increased efficiency, risk management or competitive advantage: this calls into question whether greening behaviour along the supply chain can be sustained over the long

term if they are not persuaded that environmental and social ethical considerations will gain in importance in the future(Perez-Sanchez et al 2003, Hahn and Scheermesser 2006, UNIDO 2003a, UNIDO 2003b). Evidence of CSR managers complaining that they have resource shortages that make them choose between eco-management options, only to favour the most cost effective (Revell 2003, 2005 and 2007, Tilley 1999, Bayliss 1998, Pedersen and Andersen 2006, Werndle, Brown and Packer 2006, Reed 2003, Halkos and Evangelinous 2002, Preuss 2005, Darnall et al 2008, Piotrowski and Kratz 1999, Roberts 2002b), suggests that the mutually beneficial relationship between economic and ecological issues falls short when related to practical experiences. As most of these studies show, environmental supply chain management has succeeded when it made business sense, meaning that potential savings or profit opportunities are obviously a driving force.

Power and governance relationship strengths - Since supply chains are predicated on the notion of allocative efficiency (Khan 2002, Durieu 2003) and are buyer driven in structure, we cannot think about supply chain greening without highlighting the problems created by the inherent capitalistic power politics that are the bases of these relationships (Pedersen and Andersen 2006). While the existing power relationships *are* pushing greening in some cases, these relationships are also hindering the process, especially since retailers' commitment/motivations are sometimes not sustained and not backed up by higher prices on offer to suppliers. If supply chain greening demands continue on the back of embedded commitment to global cost effective sourcing, then cost-cutting on the LDC factory floor will continue and greening will falter (e.g. the Wal-Mart case in Christopherson and Lille 2005), especially given that the suppliers are operating in national contexts where there are no equivalent greening obligations. Greening also needs strong long term inter-firm relationships to make it financially feasible for LDC factories and DC buyers to invest time and money into greening changes (UNIDO 2003, Arora and Puranik 2004, CREM 2003). Long term relationships

also demonstrate inter-chain trust and reduce uncertainty pressures, and are positively correlated to cooperation over environmental upgrading (Sharfman et al 2007). However, if the supply chain has many suppliers for each buyer (as it does in the case of the apparel chain), then buyer relationships with the bottom rung SME suppliers are not close enough for inter-network collaboration and assistance (Holt 2004). Supply chain governance is also not cut out for easy advancement of EM beyond the "quick easy steps" - research by Ho and Welford (2006) and Beske et al (2006) reveals the inability of many companies to see further than one (or at most two) levels down their supply chain even in sectors where the bottom of the supply chain involves resource intensive production in developing countries. These phases of production often remain untouched by the CSR initiatives of those who govern the supply chain. According to the authors (2006:170), "In particular, if CSR is driven by brand vulnerability, then it is the elimination of textile sweatshops that matter more than getting children out of cotton fields, for example. CSR managers admit that they find it difficult to do much more than deal with the first tier of suppliers. They recognise there may be problems further down the supply chain but do not have the resources to do very much in this respect." Furthermore, studies show that there are several problems within the relationships within LDC factories themselves - there is insufficient cooperation when it comes to environmental management across different departments within the firms, and even less between different departments and their counterparts in other firms. The former would be necessary in achieving a more responsive approach to ecological modernisation through green management. The latter does not happen because of the highly competitive structure of the supply chain which means that suppliers do not share their experiences, and as a result, firms find is hard to create a "learning zone" among peers (Welford 2007).

Anonymous markets - Vermeulen and Ras (2006) make an interesting point by taking forward Welford's (2003) idea of a weightless economy where

increasingly retailers are finding overseas suppliers, thereby externalising environmental management responsibility of these chains; resulting in a break down in green purchasing monitoring where it is hard to determine both the green-footprint of wholesale product purchase mixes (e.g. blended cotton yarn or fabrics) and the identity of the original producers (Green et al 1996 and 2003).

Green market signals - EMT is based on the idea that consumers in capitalist democracies are expressing their desire for a cleaner environment by voting with their shopping bags and are generating a green-economy. The critical media exposures of retailers in the West, the rise in NGO memberships/subscribers (Rihoux 2000, Kronsell 2000, Rawcliffe 2000), the media visibility of sustainable development conferences and events etc. all provide evidence of the rise in post materialist values in human society that makes people take a holistic approach to nature and human beings. But has a change in material values translated to a change in buying patterns? Kessler et al (2003) and McWilliams and Siegel (2000) point out that despite a growth in green-purchasing in North America and Europe, most green-markets are niches. As various authors point out, greening of supply chains is only worth it when those products can compete in the marketplace (Min and Galle 1997).

Political and policy signals - DC government policies (e.g. eco-labeling, policies promoting pollution-prevention and other EMT related discourse (EC 2003a and 2003b)) have been supportive of green supply chain efforts; however, policies in DC waste management and recycling policies often prove to be bottlenecks (Young 2000, Kronsell 2000) and critics have pointed out that while the DC states have created new institutional arrangements for supply chain environmental upgrading, these new liaisons are strictly by-invitation only (Rawcliffe 2000, Toke and Strachan 2006). At the LDC level, the lack of government action on environmental management of industrial effluents is nothing new (e.g. in the case of green leapfrogging of green

technologies imported by LDCs being hampered by weak regulatory support in resource intensive sectors such as steel making, paper and pulp (Wheeler et al 1993).

Codes and auditing tools - CSR managers in Asia often complain about something that represents the most important EM tool for the supply chains - the CoCs. Managers have a number of different codes which they have to adhere depending on the number of different customers they have (Fischer et al 2005, Welford and Frost 2006, Hughes 2006, Fischer 2005, Nadvi 2008. Klooster 2006, Stringer 2006, Hebb and Wójcik 2005). Many codes have contradictory elements, particularly in the footwear and apparel chains. The auditing requirement is also problematic - there is much debate surrounding auditing integrity and the extent to which suppliers are able to cheat, and how seriously buyers take non-compliance in audit reports while renegotiating future production contracts (Clean Up Fashion 2007, Hebb and Wójcik 2005, Matouq 2000).

1.5 Thesis Objectives and Structure:

EMT suggests that modern industrial democratic societies can continue to grow economically in an environmentally sustainable way if their nation-state and economic actors change their policymaking styles and greening behaviour to take advantage of scientific evidence and green technological opportunities. This in itself is a simplistic summary of EMT, and given the above discussion and criticism of EMT, I have argued for a broader understanding where EM goes beyond simple "win win" arguments. I view the economy-ecology relationship as something that can indeed be a positive sum game, but in a more reflexive way to include elements of social and political change, and social environmental learning so that EM's assumptions and predictions can be tested in change-resistant structures.

Consequently, I am interested in using EM as an analytical framework for ethical trade in Bangladeshi RMG supply chains to see whether greening efforts are in line with EM, and if not, why. I will be using analytical variables generated from EM literature that examine the economic (costs of greening, green consumer signals), instrumental (tools of EM), communicative (environmental information, learning, cognitive complexity, and consequent organisational change for greening) and social political aspects (corporate cultures, hierarchies of power, resource dependencies, governance modes, collaborations, participation vs. exclusion, etc.). The objectives of this thesis and its possible contributions to academic understanding of EM in LDCs are discussed below in detail.

Why EM? At a casual glance Bangladesh does not conform to EM's assumptions of a modern industrial society where a preference for environmental quality is expressed. Bangladesh is a politically unstable LDC with a largely agricultural economic base, a population crisis and serious problems with economic infrastructure and environmental degradation that is only worsening its battle with poverty. One might argue that perhaps other theories (Global Value Chain, or industrial ecology) may have been more appropriate. I chose to study EM because of its strong theoretical emphasis on the driving forces behind greening and the ground situation in Bangladesh. Industrial regulation here has traditionally been heavily focused on technological solutions (often end-of-pipe) that are driven by government laws and resisted by the private sector. EMT provides an analytical edge in this case that is invaluable because of its emphasis on the role of technology, the government and the private sector in greening production.

The objective of my thesis is to ask whether EM's predictions (economic growth that is environmentally beneficial) will hold true here. In that sense, if the predictions do not hold true in the Bangladeshi case, does it prove EMT as being right? If that is indeed the case, then EMT will be proven correct, although we will have gotten a better understanding of the value of EM

outside of the Western industrial societies it was conceived in, where its starting assumptions do hold true. There is plenty of EM research showing that EM succeeds in non Western countries, and if the Bangladeshi case is not one of them, then it is worth understanding why not – is it because of shortcomings at the national level, or because of the supply chain structure, or because of a practice of weak EM, or a mixture of all?

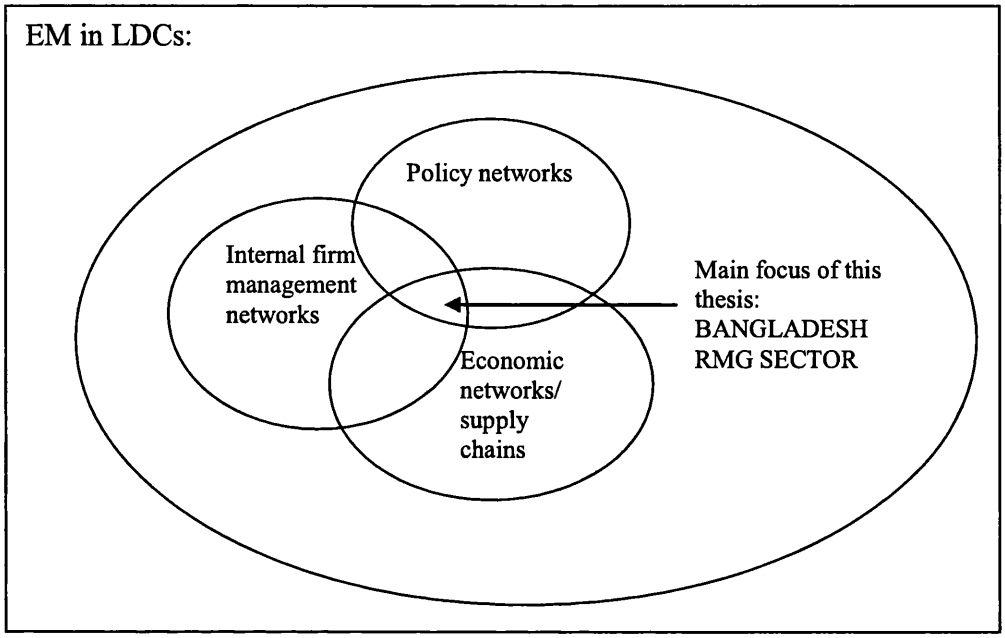
Based on the LDC SME CSR literature reviewed here, one can make some a-priori assumptions of what CSR and EM would be like for Bangladeshi RMG (they too are mostly SMEs). At the theoretical level, I expect that the Bangladeshi nation-state is unable to move away from traditional command-and-control styles of policymaking that does not privilege peripheral voices. One might be more optimistic about the role of the market actors though, since Bangladeshi RMG companies supply to some of the most recognisable high quality brands and are responsive to technical and process standard demands. This might mean that buyers and suppliers are working in collaboration to implement the codes, and that environmental learning is happening in the supply chain. Given price competition pressures, it would be reasonable to assume that profits would be a higher priority than finding creative ways of greening; in which case one should not expect much difference from Christoff's weak EM (1996). At the functional level, it would be reasonable to expect Bangladeshi RMG companies having similar trouble to the LDC SMEs studied by earlier researchers – such as low environmental awareness, poor knowledge, low willingness to green, correctly positioning CSR in the company, organising stakeholder engagement, having cost calculation problems, having trouble overcoming the age of the company/venue, juggling retailer expectations with local practices and cultural norms, accountability, communication, policy development, implementation, monitoring mechanisms, etc. We can also expect the larger RMG firms to differ from the SMEs. So far none of this seems unusual– so it seems pertinent to justify the basis of this thesis by answering three questions

- Why study EM for LDCs yet again? Why choose Bangladesh? Why ethical trade? Why supply chains?

Why EM in LDCs? There is considerable work on EM in Asia (e.g. Memon, Imura and Shirakawa (2006), D'Sa and Murthy (2006), Hirsch (2006), Mayer (2006), Burke (2006) and Sonnenfeld and Mol (2006)) that covers China, India, Thailand, Myanmar, Laos, Cambodia, Vietnam, Indonesia, Singapore, Malaysia, Philippines and Papua New Guinea. They have looked at one functional area or the other in sectors with external linkages (e.g. EM and civil activists, NGOs and collaborations between development partners and local governments, or voluntary disclosure by state owned "dirty industries"). However, an EM perspective on LDC supply chains has not been developed and remains a significant gap. I agree with Sarkis (1999), in that we need to study the problem of EM in supply chains as a holistic problem. This thesis looks at LDC supply chains as a whole (the structure, the actors, the relationships, the resources, the motives), starting from buyers' pressure, the buying mechanism, the suppliers' response, compliance implementation, auditing and monitoring, and LDC policy bargaining and politics. My thesis looks at the inter-firm (economic networks), intra-firm (management networks), as well as institutional political governance (policy networks) (Coe and Hess 2007).[4] My thesis can be located as in figure 2.1.

[4] Please see Chapter Seven.

Figure 1.2: Situative context of the thesis



The focus here is on structural and functional issues that have not been covered in the LDC EM literature already, such as motivation among LDC firms (moving beyond meso-level studies to LDC corporate cultures), operational conflicts (moving beyond the existing NGO literature on audit failings in supply chains, to what kind of operational conflicts cause these failings), knowledge and expertise (moving beyond studies about innovative policymaking arrangements in East Asia, to what kind of innovations are occurring (or not) on the LDC factory floors), costs (are the buyers keeping the LDC suppliers out of the loop of green profit making?), and power-hierarchies (how do lines of power and negotiation flow through the LDC and DC actors in a space of micro-regulation where the stronger voices are privileged).

Why Bangladesh? The Bangladesh apparel industry is worth studying for two reasons - firstly, existing EM studies tend to cover economies that are well on their way to becoming industrialised (e.g. Thailand, Malaysia, etc.), but do not cover some of the poorest countries in the world that are starting to become industrialised and are in the lower rungs of the supply chain.

Secondly, researchers in environmental policymaking or green management have not studied *any* aspect of Bangladesh, and in that respect this thesis is a first and adds value to existing knowledge on environmental policymaking and green supply chain management in Bangladesh and South Asia. As I shall explain in the methodology and conceptual framework chapters, this uniqueness is a mixed blessing.

Why ethical trade? Ethical trade is undoubtedly an important and relevant topic in contemporary times, but mainstream research on ethical trade focuses on wage rate violations, child labour, sweatshops, worker rights and auditing breaches. These are mostly classified under "social compliance" and "social welfare" issues in the buyer codes. Environmental issues and impact management of apparel production remains under researched by academics, and under emphasised by retailers and NGOs, especially from an EM perspective. In that sense this thesis adds significant value by looking at the greening issues amidst the social issues in ethical trade.[5]

Why supply chains? There is considerable literature on environmental upgrading in supply chains, however there still remain questions about the role of buyer standards and suppliers' management network dynamics (i.e. 'intra firm' governance). This thesis considers those outcomes on the factory floor.[6] Secondly, some aspects of buyer code demands have remained underdeveloped within wider ethical trade literature. Coe and Hess (2007) suggest that study of product and technical standards in supply chains has been neglected. My thesis takes this forward by studying the product and technical standards governance for the RMG chain, and situating the compliance governance within that.[7] Thirdly, some studies by Locke and Roomis (2007) and Locke et al (2006) suggest that effective labour code governance has to be combined with improving root causes (improving

[5] Please see Chapters Three, Five, Six and Seven in particular.
[6] Please see Chapter Five.
[7] Please see Chapter Six.

supplier efficiency, quality etc.); but no study has been done to see if this would hold true in the case of eco content - my thesis looks at that as well.[8] Fourthly, Gereffi et al (2005) in their influential study of GVCs have suggested that there are five forms of GVC governance. This has been variously challenged as being static (e.g. Coe and Hess 2007), and I take that further by examining what kind of chain exists for Bangladeshi RMG, and what forms of coordination exists for compliance within overall modes of governance (Ponte and Gibbon 2005).[9] Fifthly, there is a gap in literature about the convergence of labour codes in chains (Nadvi 2008), and here I trace the convergence of eco-content in the apparel chain and highlight potential for greater codifiability along the chain.[10]

Research question and hypotheses - As mentioned earlier, my main research question is as follows:

Why are export based ready made garments (RMG) suppliers in Bangladesh failing to undertake environmental management?

Based on the earlier discussion on EM, the objectives, mechanisms and institutional dimensions of EM that are applicable to this thesis involve the:

-- Changing role of science, technology, information and knowledge in order to change social and political attitudes about environmental upgrading at the level of firms;

-- Changing role of markets, market actors and private sector initiatives in order to create market pressure and market opportunities for environmental upgrading; and

[8] Please see Chapter Five and Six.
[9] Please see Chapter Six.
[10] Please see Chapter Five.

-- Changing role of the state (away from command-and-control style to a decentralised flexible consensual proactive style), as well as changing social and political attitudes at the level of policymakers and stakeholders.

Each of the EM objectives for environmental upgrading in Bangladeshi RMG industry were tested via three corresponding hypotheses which were derived from an initial review of existing academic literature and policy documents on supply chain greening in developing countries. The **hypotheses** are as follows:

- Poor environmental upgrading in firms will be associated with factors internal to the firms, such as corporate culture, slow changing behaviour, problems with learning environmental information and will be linked to poor competitive advantage gains;
- The most powerful demand for environmental management on Bangladeshi RMG firms is originating from their buyers in global supply chains. However, opportunities for collaboration or assistance from buyers demanding these environmental upgrading initiatives may be low; and
- The regulators (state and non state) are not convinced of the benefits of compliance and do not have the capacity to design, implement and monitor better compliance. The exclusion of the DoE and the RMG firms in this policy network is likely to lead to poorly designed outcomes.

This thesis and EMT have three broad perspectives in common. Firstly, moving away from notions of environmental problems as being intrinsically incompatible with international trade, to seeing environmental problems as challenges for change resistant actors (manufacturing firms, supply chain actors and policy stakeholders). Secondly, giving emphasis to understanding the changes needed in the "core social institutions of modernity", such as

science and technology, the processes of production and consumption, and the process of policymaking. Thirdly, having a vision that is distinct from post modernist, radical and neo Marxist interpretations of modernity and industrial growth in developing countries.

1.6 Conclusion:

This chapter introduced the thesis research question, objectives and hypotheses within the discourse of EMT. The remainder of the thesis is structured as follows: the next chapter formulates a conceptual framework for studying the problem, based on three overlapping networks - management networks within RMG firms; economic networks (supply chains) surrounding the RMG industry; and policy networks governing the first two networks. Chapter Three sets up the context of the case study and describes the Bangladeshi garment industry's set up, strengths and weaknesses. Chapter Three also elaborates on the history of compliance for the garments industry, with specific emphasis on the tension between the social vs. eco aspects of compliance. The next chapter explains the methodology behind the thesis, including why Dhaka was chosen as thesis site; how the thesis design was finalised; how the respondents were chosen and interviewed; and my experiences of interviewing during the compliance related riots in Dhaka.

Chapters Five, Six and Seven consist of empirical findings related to each of the three networks. Empirical findings have been sourced from primary and secondary sources. Representatives from 53 garment factories (8 small, 31 medium and 14 large) were interviewed using semi-structured questionnaires. Several representatives were Managing Directors who also gave crucial background information regarding industry management styles and imperatives. Representatives from 9 buying houses and 4 compliance-auditing companies were also interviewed using semi-structured and open questionnaires. 6 trade union leaders and 5 policy specialists (government

and non-government) were interviewed as elite respondents. A total of 77 interviews have been taken between February and June 2006.

Chapter Five tests the first hypothesis and problematises EMT on the factory floor through the Research Based View and asks how firms are receiving code and government regulation information and reacting (reactively or proactively). The Chapter examines whether they can indeed reach EM's "win win" gains or are they struggling to break even. Chapter Six tests the second hypothesis and takes the findings of Chapter Five further to understand why that has happened - supply chain governance, problems with compliance monitoring and buyers' involvement, and supply chain rationales behind the lack of "win win" gains. Chapter Seven takes the findings of the previous two empirical chapters and tests the third hypothesis. Government regulators and multi stakeholder policy groups are examined to see where the role of the state and private-public partnerships is placed from an EM perspective. Chapter Eight draws some conclusions for ethical trade based on the empirical findings from the apparel sector. Chapter Nine ends the thesis by revisiting EMT, draws conclusions about whether or not EM can work in LDC supply chains, and considers broader implications for theory.

Chapter Two: Ecological Modernisation Framework

2.1 Introduction:

As discussed in the last Chapter, this thesis examines why Bangladeshi RMG firms are failing to meet environmental upgrading demands and considers the implications for EMT in this unique situation. This chapter sets out what I refer to as the EM Network - which is based on the analysis of three intersecting networks - management networks (within firms), economic networks (global value chains for apparel exports) and policy networks (multi level policy makers). The EM network's interconnectivity can be seen at various levels. The three hypotheses presented in the last chapter are interactive in the sense that poor environmental upgrading capabilities within firms (hypothesis 1) is influenced by buyer demands and collaborative opportunities (hypothesis 2) and is also compounded by ineffective regulation and monitoring arrangements (hypothesis 3). Similarly, other causal linkages may be found within other variables in the hypotheses. The theme of interconnected influences and structures runs throughout this thesis, and given the internally networked capacities of firms and their embeddedness in external networks, the thesis gains its conceptual framework from network analysis literature, which focuses on the *actors* involved in networks, their inter *relationships* and resultant *network types*, with special emphasis on heterogeneity of the explanatory variables. Three kinds of networks form the conceptual framework -- the firms' internal management networks, external economic networks (ENs) and external policy networks (PNs). The interconnectedness of the hypotheses and networks is discussed at the end of the chapter.

The EM framework starts with how RMG firms might be structured, and their strengths and weaknesses for environmental upgrading. Management and organisational behavioural science theories are used to show how firms are

organised as a network and what role corporate culture, ability to change, environmental learning and resource constraints play in a firm's environmental strategy. The situational context is important in understanding how firms are facing external upgrading imperatives, therefore relationships between buyers and RMG suppliers are analysed using models from industrial networks literature, with Global Value Chain as an example of an economic network for apparel trade. These relationships illustrate how powerful buyers in global value chains govern the value chain and how the demand for environmental upgrading is part of that governance structure. The second set of external imperatives for environmental upgrading will be explained through policy network analysis to highlight the relationships that external policy makers and regulators have with these firms and their buyers; and to show how state and non-state actors at the individual, micro, meso and macro levels use their relationships to influence and create pressure in policy-games related to environmental management in the RMG sector.

The chapter will end by proposing an overall conceptual framework based on the discussion of the three connected networks, which will be used for testing the hypotheses. Conceptually, all three networks share the elements of heterogeneous interconnectedness through relationships that change with strategic goal seeking behaviour. The overall conceptual framework brings together the notions of actors, relationships and network types to illustrate how resource-power dependencies, bargaining, strategic agenda making, embeddedness and different kinds of uncertainty play important parts in studying the causes behind RMG firms failing environmental upgrading efforts. I begin the chapter by exploring the first of the three networks, which examines how the internal management networks structure RMG firms and can determine its opportunities for environmental management.

2.2 Analysing Environmental Upgrading in Firms:

Choosing conceptual variables for industrial greening to suit the Bangladeshi context is a challenging task,[11] however to understand the EM suggestion of greening strategies leading to competitive advantage, intra-firm greening capabilities and strategy making was examined from the theoretical perspective of the resource based view (RBV) of firms, which looks at how firms use their internal core capabilities for environmental strategy making. The core capacities were expanded upon using behavioural theory to see how corporate culture, organisational change, and learning influence environmental management practices.

Recent theoretical developments have much to say about greening within the "span of controls" within business firms,[12] and recently there has been interesting RBV research on environmental management within these management structures. RBV suggests a theory of competitive advantage born of management actions and performance, based on strategic resources and intangible qualities within a firm that results in sustained competitive advantage. It assumes that the goal of all managerial strategy making is to allow the firm to earn economic rents or above average returns. RBV focuses attention on *strategies* for sustainable competitive advantage, and suggests that firm management can formulate such strategies by successfully identifying certain strategic resources, nurturing these internal competencies and applying them to an appropriate external environment, meaning that it is not enough to have strategic resources and a strategy for competitive advantage, it is also important to utilise those resources to implement the strategy consistently (Penrose 1959 and Wernerfelt 1995). RBV strategic resources include assets, capabilities and organisational processes that must be valuable (i.e. rent producing), non-substitutable (i.e. has to have enduring

[11] Please see Annex 2.1 for details.
[12] Please see Annex 2.2 for a summary of managerial control units, organic and bureaucratic firms vis-à-vis environmental upgrading.

value), firm specific (i.e. not be widely distributed within an industry), tacit (i.e. skill based and people intensive resources, difficult to replicate since they are causally ambiguous) and socially complex (i.e. involving group dynamics) (Hart 1995, Barney 1991 and 2001, Teece 1987, Rugman and Verbeke 1998 and 2002). Grant (1991) classified these resources as physical, human, organisational, technological, financial, and reputational. It may be noted that these categories are not necessarily exhaustive or mutually exclusive, and finding resources that fit the RBV definition fully can be difficult (Russo and Fouts 1997).

RBV also distinguishes between two *types of strategic resources* - tangible (e.g. financial reserves and physical resources such as buildings, equipment, and stocks of raw materials) and intangible (e.g. reputation, technology, and human resources - which includes company culture, the training and expertise of employees, and their attitudes towards competitive challenges etc.) (Grant 1991, Russo and Fouts 1997, Oliver 1997, Peteraf 1993). Recent scholarship on RBV suggests that company reputation and knowledge pool are also important intangible strategic resources. Grant (1991) emphasises levels of durability, transparency, transferability and replicability as important determinants in strategy making for successful upgrading.

The RBV emphasis on strategy making implies that it is not enough to merely have strategic resources, it is the management's ability to identify and use them that results in competitive advantage compared to their competitors. Successful business strategists correctly judge their current resource portfolio and strategise on how leverage the core competencies (the basic informational/technological base) in the organisational networks so as to maintain the competitive edge from these resources (Wernerfelt 1984). Management capability either can be acquired or can be path dependent (Dierickx & Cool 1989, Oliver 1991). Grant (1991) sees this capability of management as another source of uniqueness in a firm, and suggests that the

source of such distinctness is socio-cultural; specially in the case of strong leadership, tacit knowledge, organisational cultures, effective teamwork, etc.

The competitive advantages generated by resources vary with the stability of the business environment: Miller and Shamsie (1996) found that tradable, property-based resources conferred competitive advantage in more stable business environments, whereas knowledge based resources offered greater benefit in uncertain environments. Klassen and Whybark (1999) contend that generally it is the intangible resources that generate more competitive advantage since it is unique to each firm, while McWilliams and Siegel (2000, 2001) suggest that the age of the industry and level of product differentiation also impact competitive advantage gains. Priem and Butler (2001) find that how knowledge management is done within a firm while strategising is an important indicator of how competitive advantage can be gained; Halawi, Aronson and McCarthy (2005) also focus on knowledge management in RBV as an important aspect for leveraging the value of intangible resources.

The theoretical implications of RBV for environmental management researchers are multifaceted, especially the linkages made between the strategic resources and improved economic (i.e. profit making) and environmental performance (i.e. pollution prevention and control), since effective strategy making capabilities can yield improvements and competitiveness gains at multiple levels. Simply put, a firm's environmental strategy making is directly related to the competitive advantage it enjoys and a firm that is well managed is also more likely to have good environmental performance (Hart 1995). There is much evidence of successful company CEOs saying that good CSR yields substantial competitive advantage (IBM 2008), meaning that CSR is best used as a "intelligent marketing" strategy (DaimlerChrysler CEO quoted in World Bank 2002:2), where financially successful companies think of CSR not as a cost or risk mitigation strategy (i.e. reactive thinking) but as a strategic goal that is aligned with every aspect of

their core business strategy, which is assumed to be their core strength (IBM 2008).

Researchers have suggested that *proactive* environmental policies and skills are linked to better economic and environmental performance (cf. Russo and Fouts 1997, Shrivastava 1995a, and Hart 1995). This involves not only proactive strategies, but also having the capacity to implement measures to prevent environmental pollution (e.g. cleaner production technologies, cleaner raw materials, redesigning products and production to minimise waste and packaging, introducing recycling, etc.). Hart (1995) identified two key implementation strategies - ability to undertake continuous management improvements, and effective stakeholder management - as crucial for creating competitive advantage. Further research extended the list of strategy implementation options to include the allocation of physical resources, adoption of green technology from non-substitutable sources; as well as intangible resources, such as political acumen in negotiating profits with green-conscious customers, internal corporate culture, and inter-departmental coordination (Russo and Fouts 1997), which can be referred to as managing EM on the factory floor. To sustain proactive behaviour, a firm needs an internal culture where continuous performance improvement is rewarded (Russo and Fouts 1997) and adequate investments in human resources over capital assets (Hart 1995). A firm wide commitment and support from multiple levels of the firm is also a precondition for proactive strategy making, since adopting more advanced environmental strategies may be more costly, and not win much managerial support (Cordano and Frieze 2000). Top level management also have to be open to strategies of investing tangible resources into nurturing behaviour that sustains pollution prevention, and this would require a firm culture where green-investments are well prioritised. Similar strategies are reported in the recent IBM survey of 250 leading firms (IBM 2008). One can then argue that firms that do not have

these strategies and competencies are likely to prefer reactive add-on solutions.

However, empirical results have revealed a more complex picture. Firms have been found to be a mixture of proactive and reactive, meaning that the distinction between them can be blurry in real life (Priem and Butler 2001). Also, the link between strategic resources and proactive behaviour is not always certain. Aragón-Correa (1998) found that that firms with proactive eco-management policies actually often combined prevention *and* control, whereas some less proactive firms were shown to be using preventative measures. This has two important implications for my thesis. Firstly, that proactive environmental policies and causally ambiguous skills are not always sufficient to explain proactive or reactive strategies. Secondly, ultimately the environmental strategy is limited by practical considerations such as cost and availability of eco-friendly options as strategies (as has been pointed out in the previous chapter as a major greening problem, despite the EM suggestion of cost savings and easy availability of green-technology). As Aragón-Correa (1998) found, proactive firms that opted for cheaper reactive pollution-control strategies got cost effective environmental performance (and market competitiveness), which would go against RBV suggestions. The author defended the RBV by saying that firms that have actively chosen reactive strategies can only see competitive gains *if* prerequisite strategic resources (which includes tangible and intangible resources, including core, distinct knowledge and causally ambiguous skills) are developed as part of continuous broader management initiatives (such as ISO9000 or any other quality management system). A firm that chooses to continuously improve it self via causally ambiguous capabilities, hones particular skills that can be *transferred* by learning, and applied to reactive measures. Consequently, firms that choose reactive add-on greening technology but do not transfer their strategic resources and skills in maintaining it will not see any competitive price gains from their buyers, as found by Darnall (2003).

So if some proactive-skilled firms can still reasonably make profits while using only reactive solutions, why choose proactivity? Empirical findings by Klassen and Whybark (1999) suggest that the key determinant is far more complex, and has to do with the individual circumstance of the firm, which is an interesting idea to contrast with the EM argument that the changing role of markets, social values, science, technology and economic instruments will convince firms to go green. While empirical work by Priem and Butler (2001), Cordano and Frieze (2000) and Aragón-Correa (1998) suggests that economics (tangible resources) is a constraining factor, Klassen and Whybark (1999: 601) suggest that the ultimate proactive-greening strategy motivation is far more complex than just finances: "Because the strength, value, and competitive advantage of continuous improvement varies between plants within the same firm, the use of pollution prevention technology is also likely to vary. Thus, the ability to deploy pollution prevention technology might be achieved through multiple paths." So rather than having a set of strategic proactive skills, it was a firm's *capacity to implement proactive management policies* that resulted in competitive advantage from greening. Their findings were slightly at odds with Aragón-Correa (1998), in that they found that pollution control technology using firms cannot get competitive advantage. According to them, if firms only have the capacity to implement pollution control technologies (i.e. no new skills are developed, nothing is changed), then they are not going to gain competitive advantage, since those skills are not unique or causally ambiguous, or difficult to imitate. This finding is also corroborated by Russo and Fouts (1997), who suggest that a firm's capacity to implement reactive solutions would involve "add on" technology, however, if that technology has a source open to its competitors, then it does not qualify as a strategic resource.

Regardless of conflicting empirical findings, I would like to emphasise a point made by Klassen and Whybark (1999), that it is the capacity to recognise

"win-win opportunities" and *implement* environmental proactivity, and not necessarily environmental policies that are left on paper that is related to strong economic performance and competitive advantage. This capability to deploy proactive technologies has to be learnt by the whole firm, since employees at all levels must be involved if a firm is to implement a policy of environmental management, etc. (Ashford 1993, Hart 1995), thereby necessitating the creation of socially complex and distinctive processes (such as involvement of all employees, cross disciplinary learning, coordination, and an organic flexible managerial style) (Shrivastava 1995b). This aspect of implementation of green-strategy making to get better prices is important for my thesis, given the wide scale criticism made by various trade union associations that the apparel industry CSR is only on paper (Christian Aid 2005, McWilliams and Siegel 2001).[13]

To summarise, there is an important link between environmental capabilities within firms, strategy making, proactiveness or reactiveness, and competitive advantage. Despite proactive or reactive environmental policies, firms may use a combination of preventative and control tools, or simply one type. Regardless of the tools they pick, their action has an impact on their overall market competitiveness, because the same set of strategic resources yield competitive advantages at different levels. To gain sustained competitive advantage, a firm should be looking at their capabilities to implement a proactive policy, because capabilities that are only suited for reactive traditional responses to the ecological challenge will not normally result in sustained competitive advantage, only short term cost savings. So how do companies come up with their environmental strategies?

[13] This criticism will be discussed more in later empirical chapters.

a. RBV and Environmental Corporate Strategy Making:

Firms do not make environmental strategies outside of their normal entrepreneurial decision-making. The importance of environmental strategies being complimentary and consistent with overall firm strategy, in terms of contextual, structural, and strategic issues, is well known, as is the fact that this marriage is not always without conflict. Welford and Gouldson (1993) have suggested that such consistency is not always possible, and often environmental considerations are bound to be diluted in normal business strategy making. Keeping this tension in mind, authors such as Miles and Snow (1978) highlight three dimensions of environmental strategy making: the entrepreneurial, the engineering, and the administrative dimensions.

Strategy making in the *entrepreneurial dimension* relates to choices that business firms make about products, markets, and their competitive strategy. Proactive firms tend to analyse all aspects of their competitive contexts and remain profitable by developing new products, innovation, new kinds of marketing, strategic alliances, etc. These firms tend to have top management that is perceptive of greening signals and proactively manage EM pressures to gain competitive advantage. Similarly, when making environmental strategies, these firms consider the whole of their competitive contexts, (Hart, 1995: 1001) and decide on environmental performance goals. Reactive firms, on the other hand, tend to get defensive of their economic constraints and goals, and are less open to modifying their standardised products and long time markets for environmental reasons (Starik and Rands 1995: 925).

The *engineering dimension* of strategy making refers directly to the role of science and technology in EM - adaptation of new clean technology to save resource inputs and environmental damage mitigation costs - in remaining competitive. Reactive firms do embrace this, as shown in the numerous examples of firms adopting pollution control technology to improve their cost

savings and efficiency, but evidence also shows that proactive firms make more long term strategic decisions about greening that go beyond what their reactive competitors achieve.[14] Different authors, such as Dvir et al (1993) and Hitt et al 2002, show that the most proactive firms are prepared to invest heavily in order to enhance their technological leadership. Correspondingly, the least proactive firms only invested in new technology when they were convinced of its potential benefits. The effectiveness, implications, and costs of green technologies are sometimes subject to doubt (Shrivastava, 1995, Hart 1995, Gouldson and Murphy 1997), making it difficult for ecological modernisation inspired strategy making to become popular in less proactive firms.

The *administrative dimension* refers to the strategy making to address changes in the internal network relationships that manage greening actions. Miles and Snow (1978) call this the choice of structures and organisational processes for reducing uncertainty and permitting innovation. While it is generally acknowledged that proactive firms that are less bureaucratic change easily due to decentralised decision making powers; Starik and Rands (1995:921) suggest that top management have an important role in leading the change, to "empower individuals to engage in sustainability-oriented innovation" (1995: 921) in terms of projects in all levels of the production chain.

So far according to the RBV, we can see that reactive and proactive greening strategy making in firms in highly competitive supply chains will have to begin with top management formulating a strategy to harness the market benefits of refining production that EM predicts. Management will focus on the circumstances of the firm, its tangible/intangible RBV resources, and its core/base competencies; and by mobilising its RBV skills, the firm can achieve competitive gains from greening, if it uses its unique skill and

[14] It must be noted here that research by Aragón-Correa (1998) has shown that proactive firms can also choose to use a mixture of proactive and control technologies as part of their environmental strategy.

resource mix in its greening strategy (Mahoney and Pandian 19920. The skill and resource mix has to be operationalised in the administrative, engineering and entrepreneurial dimension of the firm, and such organisational change will not be without its problems, especially in competition with other tasks that have more direct impact on the profit line. Additionally, the firm will have to learn the environmental information attached to greening and change as an organisation; and stay within its overall aims of being competitive in the supply chain. To understand the role of the RBV resources, capabilities and competitive advantage when it comes to EM driven greening, I consider them in the following categories: (1) corporate culture, (2) organisational change, and (3) learning. These categories problematise the RBV categories of resources (tangible/intangible) and skills (core competencies/base competencies); and using literature from organisational behaviour theories that complement the RBV categories, I can get a more detailed understanding of these often overlapping categories: get a more continual categorisation of behavioural change in firms that allows me to study what the prevalent corporate culture is, how environmental learning and strategy making happens, how RBV resources are used, how skills change, how there are possible midpoints of behavioural responses and how the EM suggestions of scientific information, environmental learning and green values influence the way firms manage EM in the boardroom and on the factory floor.

Corporate culture— Each firm develops according to rules, which are made from cultural beliefs, norms, values, traditions, experiences, identities, customs, routines, conventions and rationalities that are a part of a broader social construct that operates within the firm networks and is propagated by actor network behaviour. These rationalities within firms are called corporate cultures (Dodge 1997, Zwetsloot 2003). They are influenced by the common views about environmental issues held by the staff members, starting from the top management who are responsible for overall goals of a company, to the rest of the management and workers who implement strategies. So for

example, since the traditional view of environmental issues in Bangladesh is associated with natural resources problems and natural disasters (DoE, BCAS, UNEP 2001), it may be expected that awareness about brown environmental issues among Bangladeshi firms is likely to be low.

Firm employees may have low preference for environmental action generally. Andersson and Bateman (2000: 553) explain low environmental proactivity in corporate cultures by highlighting the prevalent "technocentric paradigm of business firms" which has institutionalised certain beliefs about hedonistic resource use and low environmental responsibility by firms. On the other hand, if a firm has strong environmental strategies, then it can be expected to guide the actions of staff (Dutton & Dukerich, 1991).

Organisational behaviour researchers Flannery and May (2000), Starik and Rands (1995) draw on Ajzen's theory of Planned Behaviour (1985, 1991) to understand what behavioural factors determine reactive environmental upgrading. Ajzen's theory is based on subjective norms of managers, which refers to the subjective interpretations of rules by individuals and emphasises individual agency (although Flannery and May 2000 suggest that subjective norms have a mixed impact in predicting environmental decision making in firms and highlight the financial aspect of environmental strategy making as an important factor). Important factors include, individual intentions based on company norms, perceived levels of personal moral obligation for consequences of decisions in a network, internal perceived behavioural control over the decision (self efficacy); as well as external contextual factors: behavioural control factors, ethical climate of the firm; and subjective norms established by influential others (network cohesion, strengths of relationships, etc.). Greening and Gray (1994) have developed this idea of network attitude formation within network constraints by suggesting that firms in highly institutionalised environments respond either by firm compliance directives from top management (coercive isomorphism), by imitating others' responses

(mimetic isomorphism) or by conforming to norms established by external pressures (normative isomorphism).

Organisational change - RBV and EM theories both focus on implementation of greening strategies via sustained organisational change for gaining competitive advantage; and organisational theories suggest that change enabling greening strategy would either promote network wide continual changes (necessary for proactive environmental strategies) or incremental changes (resulting in "add on" reactive solutions). Where the changes begin (as in, whether employees at every level have the ability and space to identify operational areas that need to change for ecological modernisation) have an important impact on the success of the change-initiative. Halme (1997) suggests that such change management for environmental upgrading may be "top down" or "bottom up" depending on where the pressure for change is located (Buysse and Verbeke 2003). The top down view assumes that decisive power lies with top management and change is successful if initiated by them. It is most common in bureaucratic networks, while changes initiated from the bottom up are more common in organic networks, and environmental upgrading will be implemented with greater ease since change is quicker through greater interconnectivity offered in organic structures (as suggested by Dodge's (1997) classification of traditional centralised corporate culture vs. decentralised organic structure). It may therefore be assumed that organic structures will be more suited for proactive environmental changes.

Andersson and Bateman (2000) suggest that environmental change cannot occur throughout the firm if not backed up by top management, regardless of where change is first initiated. Therefore, the change strategy should be made by top management keeping in mind the employees' sense of self-efficacy, and external perceived behavioural control over environmental issues,

according to Ajzen's theory (1985).[15] Chapter One discussed some of the supply chain greening bottlenecks that arise due to these problems: top management commitment is truly tested by resource constraints that are tangible (financial resources, competing budgets, personnel etc.) and intangible (skill-mix, management time etc.) in nature. If top management cannot see immediate short term cost savings from greening then staff time and attention to greening becomes sacrificed if seen as taking away from more profit-generating activities (Cordano and Frieze 2000). However, it is crucial that lower management understand the value of environmental upgrading (especially in situations where awareness of industrial environmental issues is low) and are involved in planning from an early stage so that the best possible expertise can be gathered with respect to all aspects of the work flow (Halme 1997).

Learning – The last chapter discussed how environmental learning is a significant force in EM and ethical trade, and contributes to not only stronger commitment among MNC retailers, but also contributes to green strategy making and implementation: the ability to access and comprehend expert information and or manuals by upper management and the ability of the whole firm to learn what changes need to be made. Firms need to make room for technological and organisational change only if learning occurs across the firm's network (Freeman 1992). Corporate culture and existing paths of change (either top down or bottom up) impact how learning is done in a firm and vice versa. Environmental learning can be an iterative upward spiral process (starting at the individual level and moving up to the collective group level) and changing from tacit to explicit knowledge, involving the cognition of new information, unlearning of old assumptions and finally internalisation of the new knowledge, which will change the actors' notions of self efficacy

[15]See Meima and Welford (1997) for a discussion of the kind of traps top management frequently fall into while designing an environmental strategy. He warns against over-ambitious, over-compensating and over-comprehensive environmental strategies written to "sell" the idea of environmental upgrade to the employees, which inevitably lead to employee dissatisfaction, since it does not deliver on its promises.

and perceived external behavioural control factors, and be expressed through decision making choices (Halme 1997). Actors' ability to comprehend the costs, benefits, uncertainty of returns to ecological investments, etc. influences the decisions that are made during environmental upgrading. If the top management have "expert material" that is easily available, easily comprehensible in terms of business rhetoric, and is financially convincing, then the EM agenda becomes easier to carry forwards (Andersson and Bateman 2000, Hughes 2006).

Different types of network learning (e.g. incremental, experimental, vicarious and experiential) should happen all along the firm, regardless of its position in the bureaucracy/adhocracy[16] continuum of networks (Bierly and Hamalainen 1995, Guillén 2000). Learning is a continual process, and spirals outwards more easily in a decentralised organic firm, and less easily in hierarchical mechanistic networks -- multiple layer hierarchy and bureaucratic networks are not appropriate for cross-departmental knowledge sharing (similar to ideas expressed by Dodge (1997)) and may result in resistance or reactive strategies for environmental upgrading.

A barrier to learning often stems from the nature of technical environmental information (e.g. detailed technical manuals such as Materials Safety Data Sheets). Such "expert information" may be available, but not widely available, or not available in a format that is understandable by people who do not have an academic background in sciences. If a manual is too unwieldy, then it may get discarded, hindering distinctive skills and capacity building for managing changes (Hart 1995). Greening information can also contain uncertainties about outcomes of green strategies, unclear time frames, unclear cost implications, complex technical aspects etc. which is a challenge for managers (Greening and Gray 1994, Gouldson and Murphy 1998, Porter and Van der

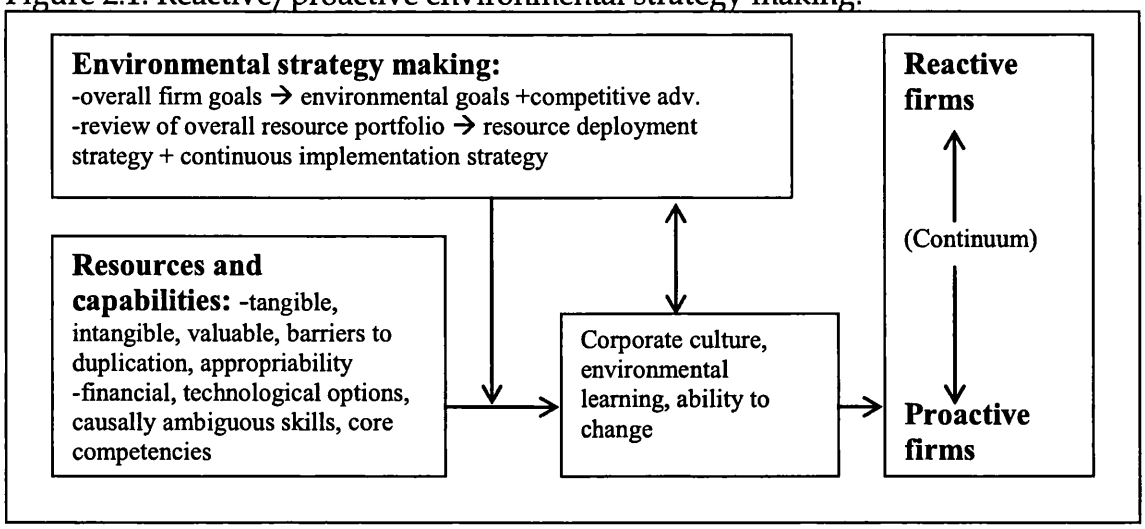
[16] See Mintzberg 1983 and Halme 1997 for discussion of bureaucratic and adhocratic structures of firms. This is based around the notion that firms lie somewhere between these two extreme forms.

Linde 1995). Therefore, if a firm cannot overcome the information shortage (for example, through direct knowledge accumulation, hiring of outside expertise, coordination with external actors to gain guidance, learning from other firms, etc.) then such uneven learning may lead to the difficulties in successful environmental management and loss of competitive advantage, as predicted by RBV scholars.

b. Towards Understanding Environmental Upgrading in RMG Firms:

EM theories emphasise actual changes in firm behaviour as an important starting point towards ecologically benign economic growth. This focus on "win-win" solutions is complementary to the RBV focus on successful strategising to gain competitive advantage. The technological/material and social/cultural objectives of EMT have to be materialised by successful strategies drawing on the inherent strengths and weaknesses within a firm's network. As the discussion above has shown, these strengths and weaknesses occur within well-defined hierarchical relationships structured to attain the firms' multiple goals. The RBV predicts that a firm (organic or bureaucratic structured) that utilises strategies that privilege non-reproducible resources will lean towards proactive environmental upgrading measures, thereby adding to the firm's competitive advantage. Empirical findings have suggested that in reality the cause-effect relationships are less clear, and that whether a firm is proactive or reactive also depends on firm culture, financial resources and available technologies (Aragón-Correa and Sharma 2003). Depending on the kinds of capabilities and resources that are available and the environmental stance of top management, a firm may be more suited towards reactive environmental upgrading. In order to get a more textured understanding of the RBV variables, I have examined the mixture of resources and capabilities in three groups: corporate culture, organisational change and abilities for learning (figure 2.1).

Figure 2.1: Reactive/proactive environmental strategy making:



Behavioural theories were drawn upon further, to argue that success or failure in environmental management in RMG firms should be analysed in terms of their culturally specific corporate environmental cultures, organisational change, and ability for learning. These variables take a deeper look into why firms may take a reactive stance to environmental upgrading or may fail and leads directly to my first hypothesis:

Hypothesis 1. Poor environmental upgrading in firms will be associated with factors internal to the firms, such as corporate culture, slow changing behaviour, problems with learning environmental information and will be linked to poor competitive advantage gains.

The RMG firms' capacity for environmental upgrading cannot be studied fully without looking at its broader context, which is the external economic network, or the global value chain that it is a part of. The pressures that they face from their buyers are a large reason why they undertake innovative business strategies, environmental upgrading being one of them. Therefore I now turn towards external economic relationships that firms are a part of.

2.3 Analysing Environmental Upgrading Pressures in Economic Networks:

In Chapter One we discussed the role of economic actors in enabling EMT's idea of economy-environment decoupling and therefore, we need a conceptual framework that not only sets the situative context of international supply chains, but also explains the chain structure, its power centres, its resource dependencies, its governance styles and its environmental upgrading opportunities (or barriers). The economic networks approach,[17] can be most useful in this case. The greening of supply chains that Bangladesh features in has not been researched before, hence I chose an economic network type that has been used to explain international supply chains, and the situative context-shift when supplier capacities are built up. In particular, the Global Value Chain (GVC) network was chosen because it has been already used extensively to study the labour intensive supply chains sourcing from LDCs and SMEs (Kaplinsky and Readman 2001), especially the apparel chain (Hebb and Wokick 2005). The choice of the GVC theory is even more appropriate given that international standards driven supplier upgrading has been studied using GVC analysis, although the environmental standards angle remains less researched. GVC theory also focuses on the buyer driven nature of chain governance, and especially the governance of upgrading, which is an important feature given that I am interested in social-political aspects of EM.

a. Upgrading in Economic Networks (Global Value Chains):

Industrial relations researchers have theorised on how buyer-seller triadic relationships function; in particular, the supplier-customer-customer (S-C-C triad) and the customer-supplier-supplier (C-S-S triad), explain how multiple buyers and sellers relate in the supply chain, and how fewer powerful buyers result in numerous suppliers in adjusting to demands (Hakansson and

[17] Please see Annex 2.3 for details.

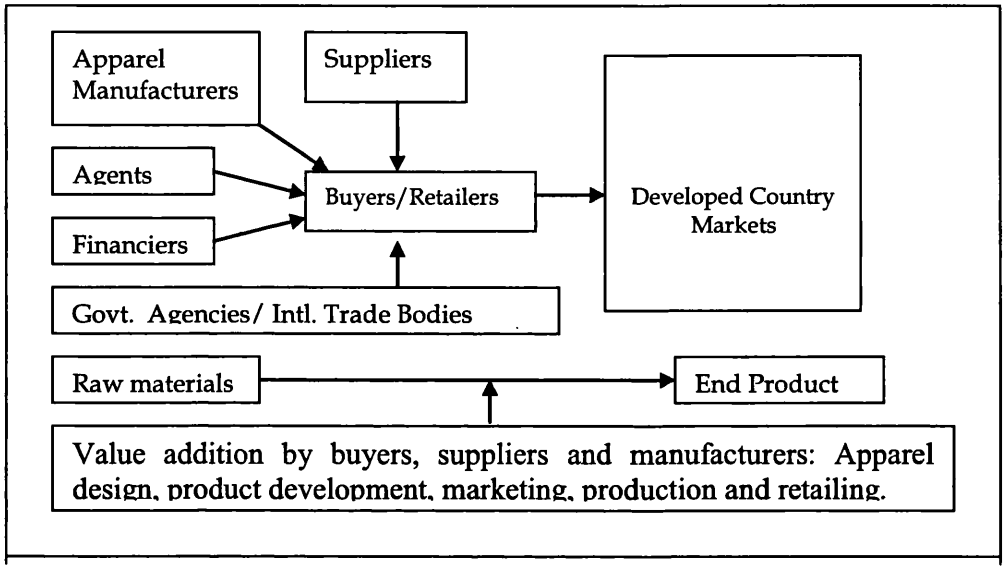
Johanson 1992, Smith and Laage-Hellman 1992, Charness et al 2003).[18] The GVC literature places similar industrial relationships in a global setting for labour intensive export sectors such as footwear and garments (Humphrey and Schmitz 2002). The idea behind value chains is that the range of activities that is required to bring a product from its conception to its end use (including "value adding" activities such as design, production, marketing, distribution and support to the final consumer) is done by various firms located in different parts of the world, networked in a globalised economy, whose governance is undertaken through coordination of economic activities through multi actor relationships (Schmitz 2004). The institutional framework underpinning this theory suggests that key actors (e.g. powerful DC buyers/retailers) incorporate less powerful actors (e.g. numerous LDC suppliers) through their control of market access and resources. These power configurations and coordination mechanisms shape the chain, which is an intricate and decentralised network of numerous suppliers of varying capabilities. Of course, the power hierarchy has been evident in the discussion of ethical trade in supply chains in Chapter One.

GVCs show that participation in supply chains provide suppliers access to markets and opportunities to move up the chain hierarchy (i.e. upgrading) by using new technology, information and learning-by-doing (Gibbon 2001, Schmitz 1995, Gomes 2003). Cooperation opportunities and capacity building between buyers-suppliers can influence supplier strategies and help or hinder upgrading, and lead to competitive advantage, depending on sector characteristics. This emphasis on the bargaining powers and resource distribution favouring the buyers, and its influence on the strategic decisions made by suppliers (Humphrey and Schmitz 2000), gives a politicised context to the RBV lessons on suppliers' strategies for sustainable competitive advantage, in relation to how the firms' internal resources and capabilities are

[18] Please see Annex 2.4 for a brief background on buyer and supplier power bargaining and the scope for supplier upgrading.

influenced by market pressures and buyer actions. Figure 2.2 provides an illustration of how value is added along the apparel GVC, with important buyers connecting the LDC suppliers with DC consumers.

Figure 2.2: Buyer power in the apparel industry global value chain (GVC)



Based on: Humphrey and Schmitz (2002)

The structure of GVCs - The modern value chain is international in nature, due to differences in cost-efficiency competitive advantage of suppliers (Khan 2002, Ponte and Gibbon 2005, Coe and Hess 2007). Characteristically, the retailer or buyer's company does not turn raw materials into finished products; they only coordinate the chain and sell the goods in markets, taking advantage of cheap labour and raw materials in LDCs. Gereffi (1999a: 4), who coined the term "value chains", explains the structure of "buyer driven" value chains as follows:

> "Buyer driven commodity chains refer to those industries in which large retailers, marketers and branded manufacturers play the pivotal roles in setting up decentralised production networks in a variety of exporting countries, typically located in the third world. This pattern of trade led industrialisation has become common in labour intensive, consumer goods industries such as garments, footwear, toys, consumer

electronics and a variety of handicrafts. Production is generally carried out by tired networks of third world contractors that make finished goods for foreign buyers. The specifications are supplied by the large retailers or marketers that order the goods. These companies design and/or market - but do not make- the branded products they order. They are part of a new breed of 'manufacturers without factories' that separate the physical production of goods from the design and marketing stages of the production process."

Buyers and eco-modernisation of GVCs - According to Gereffi (1999b), buyers exert their power over the value chain in three main aspects–

-*Giving birth to the chain within the market* (supermarkets/retailers in the developed countries ultimately decide what goods are to be sold. Their buyers liase with the LDC suppliers and place orders. This opens up the trade network to the suppliers and positions them in the network);

-*Determining the structure of the chain* (the way buyers manage the chain influences the number of supplying firms that are involved in it and what their functions are); and

-*Standard setting, monitoring and control* (buyers set product standards, specify the quality standards, create pressure for product upgrading, monitor supplier performance in areas such as environmental upgrading and hold the power to sanction or reward suppliers based on upgrading performance)(Dolan and Humphrey 2000).

The third function of the buyers is the most important for this thesis (and germane to EMT), since LDC suppliers feel the green market pressure

through this mechanism.[19] Once the environmental and other product standards have been set and communicated, suppliers respond by production upgrading,[20] which involves strategy making and implementing required changes (and which, according to the RBV, will lead to competitive advantage gains if made using the unique and core capacities and resources within a firm, which in turn fulfils the EM prediction of green profit making).

Buyer governance in GVCs - Production upgrading by suppliers change their terms of trade, and buyers respond by changing how they govern, which is a central part of GVC analysis. We have seen in Chapter One why buyers seek to regulate supplier behaviour relating to ethical trade, and GVC studies expand on buyers' risk minimisation behaviour: buyer governance includes transaction costs of monitoring and supervising, providing suppliers with specifications of design, branding and marketing and increasingly, non price factors such as quality, reliability of delivery, response times, meeting of international child labour and environmental standards, etc. GVC governance creates a certain "division of labour" that perpetuates a hierarchy. According to Ponte and Gibbon (2005:3), "Governance is about defining the terms of chain membership, incorporating/excluding other actors accordingly and allocating to them value-adding activities that lead agents do not wish to perform. 'Rules and conditions of participation' are the key operational mechanisms of governance. These may translate into different forms of co-ordination that vary both along and between value chains. Marginalization/exclusion and upgrading/participation are the axes along which resulting (re)distributional processes take place." Rules and conditions are needed to minimise loss risks from supply chain failure. According to Gereffi, Humphrey and Sturgeon (2005), governance of GVCs depends on

[19] See Nadvi and Waltring (2004) for a discussion of a typology of standards based on field of application, form, coverage, key drivers, etc.

[20] This is in addition to two other types of upgrading – functional upgrading (when buyers help suppliers add on more functions to their repertoire, gradually becoming more capable and comprehensive in their product delivery) and buyer succession (when supplies gradually move up to supplying more sophisticated products and want to work for higher end buyers).(Gereffi 1999).

three main variables: complexity of information required for a transaction, extent to which this information can be codified, and supplier capabilities in relation to a transaction's requirements. These factors lead to four different kinds of GVC governance styles: arms length, network, quasi hierarchy and hierarchy.

Quasi hierarchies result when supplier competence is low, and the end product has to meet standards that do not apply yet in producers' own country, which is fairly common in footwear, horticulture, electronics and apparel chains. GVC studies have identified the apparel chains sourcing from LDCs as operating within a quasi hierarchy (Humphrey 2003, Dolan and Humphrey 2004). Since there are numerous "anonymous" suppliers (Vermeulen and Ras 2006), buyers are at high risk and as a result they specify products (and non price standards, i.e. social compliance) to an exact degree. Therefore the buyers' need to control their own vulnerability pushes the quasi hierarchy suppliers towards EM. An interesting question at this point is to ask is how chain governance impacts EM. How might ethical trade requirements affect buyer-supplier technical cooperation? Do standards result in tightening or loosening of technical ties? Do standards impact productivity gains and increased competitive advantage? The answer probably lies within the structure of the supply chain in question. In fact, Jeppesen and Hansen (2004) suggest that the way corporate social responsibility commitments are operationalised along the value chain depends on the mode of governance in place (which is dependent upon actor strength and vertical integration into the production chain). In the quasi hierarchical governance system, it would be then reasonable to assume that specification of quality standards and implementation monitoring will be done depending on the strengths of the suppliers (demonstrated via exchange concentration and competency) on a case-by-case basis (Gereffi and Memedovic 2003).

Buyer-supplier relationship closeness and collaboration – Recent studies in supply chain management suggest that despite the view of a hyper connected global economy, most supply chain coordination is not optimised; supply chains are not structured to handle quick transfer of innovation; chain flexibility is difficult due to short product lead times, cheaper labour dependence, increased product diversity, turn over demands, and penetration of new markets; and that despite governance strategies to manage supplier risk, the fragmented supply chain links are continuing as potential risk sources (Deloitte 2003). Some retailers are struggling with product engineering, sourcing, manufacturing, logistics, marketing etc. all over the globe, but some firms are governing the complexity by carefully synchronising within and across their value chains. They are attempting to leverage their interconnectivity strengths, visible control and technical monitoring, yet retain flexibility (Keesing and Lall 1992, IBM 2008). Where the probability and level of loss is higher than the cost of governance, quasi-hierarchical form of governance is adopted. Recurrent transactions requiring asset specific investments, either in monitoring or in cooperation in product definition, is suitable for these buyers and suppliers (Murphy 2002). At the initial stages of a supply relationship, buyers may feel the need to provide detailed instructions and under-take close monitoring of supplier performance through close collaboration. As the suppliers become more experienced and prove their reliability, the buyers may give more leverage to the suppliers on how to meet them (Humphrey 2003).

Empirical work by Schmitz (2004) showed that upgrading success should not be thought of as happening in the style of an "automated conveyor" where functional and buyer-succession style upgrading is without conflict between actor-interests and power bargaining, instead of collaboration and we have seen some of these conflicts in ethical trade in Chapter One. However, he refers to empirical studies in sectors such as footwear, furniture and electronics that suggest that while there may be problems in buyer succession

style upgrading, there is agreement that in quasi hierarchies, buyer cooperation can provide ample assistance during product upgrading. This assistance results from the dual role of the buyers: they create the pressure but they also need to provide assistance so that these demands are met to minimise their own risks of surviving non-price competition. Much of this assistance takes place in the context of detailed monitoring, i.e. not just exposing failures but also showing how they can be overcome. It is this combination of high challenge and support, which propels the supplier forward and leads to fast environmental upgrading in processes and products (Schmitz 2004).

The extent of the buyers' collaboration efforts will obviously depend not only on the size of the buyer, the capabilities of the suppliers, but also upon the avenues open for collaboration (Nadvi and Kazmi 2002). GVC research shows that buyers create opportunities by providing information and guidance on the standards that are to be met, along with information on monitoring and control. However, this often proves an important barrier since environmental upgrading may be impeded particularly in the area of knowledge flow along the value chain - the generation, transfer and diffusion of environmental knowledge leading to innovation.

It would be reasonable to question the scope for RMG buyers investing financially in their RMG suppliers in Bangladeshi quasi hierarchies, as a means of providing more substantial collaborative opportunities than information provision. Empirical evidence from Jeppesen and Hansen (2004) shows that LDC suppliers of machinery in buyer driven GVCs are achieving rapid environmental upgrading due to informational, financial and technological investment by the market leader buyers. If the buyers are financially able, and if the costs of such long term investment will lead to their long term market viability, then they will invest in environmental upgrading with suppliers who are chosen based on their proven capabilities.

However, other case studies are not that optimistic. While GVC theorists remain optimistic about the role of buyer-seller collaboration resulting in closer ties, productivity gains and increased profits for the suppliers (cf. Humphrey and Schmitz 2002, Schmitz 2004, Gereffi 1999), empirical research by Quadros (2002) on the Brazilian automobile value chain suggests a different picture. Buyers have not made any substantial efforts to help the suppliers with the upgrading to conform to the quality standards nor has chain governance led to technical collaboration in areas such as product and process design. Quality standards have also not led to suppliers making larger profits, because certification alone is not enough to give confidence to customers, even though the arms-length relationship between buyers and suppliers has not increased. Governance remains ineffective, and upgrading changes are being made at costs that are higher than needs be. Overall Quadros (2002) concludes that while quality standards do lead to quality upgrading of production processes, it did not lead to closer ties, or improvements in supplier performance that leads to added competitive advantage.

Nadvi and Kazmi (2002), Nadvi and Halder (2002) have studied similar questions in the case of Pakistan's medical equipment producing industry, and have found similar results to Quadros (2002), in terms of how quality standards impact profitability and buyer-seller relationships. Their findings differed with the Brazilian case in one important aspect: while governing compliance among Pakistani quasi hierarchies, links with buyers become looser and more arms-length in nature. Buyers seem to be content with only demanding compliance, and have not used their power or resources to provide any deeper collaboration or support for local firms in implementing the requisite process standards. Nevertheless, practices amongst leading brand name buyers do appear to differ. There was no evidence that compliance with buyer demands led to improvements in firm performance, or

even competitive advantage. These findings are startling, since they challenge the notions of win-win solutions in greening supply chains (as EMT would suggest) and the notion that if firms have the skills necessary for proactive eco-management implementation, then it would lead to competitive advantage gains (as RBV would suggest).

In summary, the structure of the value chain will be an important enabling factor, as well the sectoral characteristics of the kinds of suppliers that invest into environmental upgrading. Since suppliers' proven capabilities are associated with their investment worthiness and their bargaining power (based on frequency and quality of economic interactions with the buyers), it is a safe assumption that suppliers with some bargaining power stand a better chance of attracting buyer investments. Therefore, I would like to present buyers' efforts to help environmental upgrading as a continuum, between "shallow" environmental collaboration (with little transfer of resources or knowledge to LDC firms) and "deep" environmental collaboration - where resources transferred are significant and include technological collaboration (similar to Jeppesen and Hansen 2004).

b. Towards Understanding Environmental Upgrading in RMG in Economic Networks:

EM emphasises the role of market actors and market mechanisms as important drivers of greening production. Environmental reform along the apparel supply chain under this theory will be encouraged by apparel customers, company shareholders, financial companies, NGOs, etc., making the retailers and buyers more insistent upon environmental quality, which is driving the RMG firms into taking steps towards ecologising production. In this section I examine economic networks for analysing how certain actors gain power in a supply chain and how their partners have to comply. The GVC emphasised the role of buyers in creating environmental upgrading

pressures as well as opportunities and barriers along international supply chains. According to the value chain model, buyers often exercise tight control over the low-capacity suppliers through a quasi hierarchical structure of governance, where the buyers would closely monitor the results of environmental upgrading if the risks of non-compliance to shipment is considerable. In such a situation, suppliers may invest in a proactive environmental management strategy if they feel that it will increase their competitiveness with other retailers.

In summary, analysis of the buyer driven value chains for the RMG sector, reveals the sources of buyer pressure for environmental upgrading and choices for collaboration with chosen suppliers. This leads directly to my second hypothesis:

Hypothesis 2. The most powerful demand for environmental management on Bangladeshi RMG firms is originating from their buyers in global supply chains. However, opportunities for collaboration or assistance from buyers demanding these environmental upgrading initiatives may be low.

The success or failure in environmental upgrading among Bangladeshi RMG firms is incomplete without understanding the broader policy context – the policies and actors that regulate how environmental standards are met in Bangladesh. This chapter now examines that aspect.

2.4 Analysing Environmental Upgrading Opportunities in External Policy Networks:

In the previous two sections of this chapter, I discussed how greening can be understood in factory management networks and supply chain networks, but greening certainly cannot be understood without the EM policy context (role of the state in particular), hence we need to look at variables that would help

analyse the multi-level environmental policy making context for Bangladesh. Analogous to the previous two sections, it may be noted here that there is almost no academic literature on industrial environmental policy making in Bangladesh; and although there are government and donor reports on environmental policy, there is an absence of analysis of decision making styles, outputs and networks.

The process of regulation by public policy generally involves governing private actions through interventions designed to further public interests (Mitnick 1980, Smith 1997).[21] The problem of what public policy is, how policymaking is to be done and studied have been debated extensively by policy scholars and political scientists over the years.[22] A broad analytical framework is needed for this thesis that can identify the environmental policymaking style in Bangladesh based on identifying how certain resources and power dependencies have resulted in weak regulatory pressure and how the policy process continues while perpetuating a system of exclusion/non participation of actors with different access to power and resources. This view complements the social-political view of EM of this thesis, and also corresponds to the hierarchical greening in firm management networks, and the hierarchical power/resource dependent value chain governance of supply chain greening. Below I discuss the elements of policy networks that are relevant to this thesis.

a. Weak Environmental Pressure and Actor Participation in Policy Networks:

Policy networks concern the more or less long-term relationship patterns that exist between resource dependent actors, who use these relationships to attain individual goals in the policy process, using own resources and skills to

[21] Smith (1997) describes regulation as best understood as midpoints between complete control and total uninvolvement.
[22] Please see Annex 2.5 for a discussion on regulation by policy making, and policy cycles.

bargain for policy outcomes most suited to their agenda (Klijn et al (1995), Dowding (1995), Smith 1997). Central to the concept is the notion of dynamic relationship systems, which shares attributes of complexity and adaptable network behaviour by actors - who engage in strategic decision making - with the value chain theory discussed in the previous section.

Theorising expressions of power, resources, spaces and rules - Klijn et al (1995) see networks as being born to provide contexts or spaces, called "arenas", within which "policy games" take place, where actors interact over an issue, given certain organisational arrangements which can change through the different phases of policy formulation to implementation. Their analysis begins with tracing policy games, arenas and networks. Policy games become complex when they occur in various arenas simultaneously (e.g. the child labour banning debates in DCs and LDCs). Conversely, different games may be played in one arena and may impact on surrounding arenas (Bueren et al 2003). The interlinked and overlapping of policy games and actors create and perpetuate a balance of resources involving power, status, legitimacy, knowledge, information, money, etc. (which is similar to the EM criticism of privileging speakers of the business language and experts as having discursive power at the cost of excluding radicals as non-experts, as discussed earlier). The distribution of resources in turn impacts the rules of game. Klijn and Koppenjan (2000a) define network rules as generalisable procedures, which are created jointly by actors to regulate separate policy games and actor behaviour. The rules specify what is relevant and what is not in policy games. Policy arenas become activated surrounding an issue or policy (e.g. environmental regulation for point source polluters etc.) and are located within a larger policy network (e.g. a policy network involving the Ministries of Environment, Industries, scientific research bodies and the private sector). The balance of resources and rules of the game impact the overall policy network, as well as the policy arenas within. In case a policy game stretches over to different policy networks, members of different networks meet in the

same arena, where lack of a common frame of reference, work methods and shared values can lead to friction (e.g. the apparel chain ethical trade issue stakeholder discussions). Another important expression of political power and resources that is especially pertinent for the case of Bangladesh is the issue of corruption in what Khan (1998a and 1998b) terms as "patron client networks". He suggests that patron-client networks surrounding the regulator and the regulated in South Asian subcontinent (involving the bureaucrats, politicians and different private actors) are embedded with substantial political power wielded by the private-sector-actors (what he calls the capitalist and non-capitalist clients). Bureaucrats, the government and their clients are interlocked by unlawful exchanges to redistribute public resources or privileges as demanded by the clients, meaning that "the rights created or allocated by the state became locked into enmeshed networks and were not subsequently easy to re-allocate. This in turn resulted in structural sclerosis." (Khan 1998: 17). This sort of structural sclerosis in environmental regulation for industry licensing in Bangladesh is likely to be an important variable to analyse while studying the role of the state in EM.

Network structure vs. outcomes - The role of institutional factors such as network structures and power relationships are, no doubt, important in determining the nature of the policy networks, the quality of their interactions, their outputs (policy suggestions) and outcomes (as measured by policy implementation evaluation results). However, the linkage between policy outcomes and network structure has been heavily debated in policy networks literature, in terms of whether or not it is possible to predict the outcomes from the prevalent structures or whether the outcomes are determined solely by actor agency.[23] While that debate has much to contribute towards why environmental policymaking outcomes in Bangladesh are often judged to be weak and ineffective, I defer to the middle ground taken by

[23] See Dowding (1995) and Rhodes and Marsh (1998) for a detailed discussion on network structure vs. actor driven agendas as the main factors determining the outcomes of policy networks.

Rhodes and Marsh (1992) suggesting that both, resource-power dependencies and actor driven agendas contribute to network structures and policy outcomes. Whether a policy network is closed or open is more pertinent for my research question, since factors such as network power/resource dependencies, bargaining, network cultures, political saliency and agenda competition are more apposite to studying continuing policy making in a relatively young, protean and mutable policy network, such as the social compliance policy network in Bangladesh. Below I examine how these factors relate to weak regulatory pressure.

Network power-resource dependencies - Policy network outcomes such as weak environmental compliance pressure may be determined by many factors, foremost amongst them is resource-power dependencies. Organisations depend on their comparative strengths in resources such as budgetary allocations, staff competence levels, strong political links to permanent bureaucracies, etc. to attain own goals in policy games. According to Klijn et al (1995), network power is determined by a combination of resources, which actors may mobilise or withhold, combined with their strategic ability to put these resources to use in an actual game. Also, the power of each actor depends on other's perception that the other is powerful. Therefore, power, like rules, is a construct of the actor's perceptions (van Beuren et al 2003). Benson (1980) and Rhodes and Marsh (1992) see policy networks being formed as a necessity for connecting separate organisations through their resource and power dependencies.[24] Organisations set up control structures to coordinate activities based on these resource dependencies, to meet their objectives. The dominant focus here is the relationship between resource-power dependencies and outcomes. Rhodes and Marsh (1992) suggest that the motivated party is the one that stands to gain the most and is powerful enough to induce the other to interact. This

[24] Smith (1997) however, finds this line of argument incomplete -- problematic here is to determine the relationship between outcomes and networks structure.

view of policy network resource and power dependencies is interesting in the context of buyer-driven supply chains where economic actors have resources and access in an economic sense, and their collaboration with policy institutions can result in a powerful coalition for compliance policymaking infrastructure that impacts factories.

Network bargaining - Peters (1998) emphasises bargaining as a factor behind policy outcomes, where organisations may be in competition with each other to maximise own allocation of resources and share of power, in order to achieve its policy output goals. He suggests that resolution of multi actor bargaining is best done through market-like mechanisms. As we have seen in the policy cycle phases, bargaining and negotiations are a crucial component of policy networks. The bargaining position of the actors is a result of resource-power dependencies, and choice of strategies (Smith 1997, Gains 2003). Successful bargaining is important in two ways - it is an indicator of the ability of an actor to act strategically in relation to their perception of other actors' respective resources, strengths and agendas. Secondly, successful bargaining changes the power-resource balance to favour the successful party, at the cost of other actors who were in competition with the winner - which means that the more powerful actor has increased potential to fulfil their regulatory goals (Klijn et al 1995). In practical terms, if a government ministry has weak political authority and is under resourced, then these resource constraints will dilute its bargaining power with other government agencies and with the actors that it must regulate, resulting in institutional weakness and failed policy outcome targets (Gains 2003). This can be seen in cases where environmental goals are less privileged over economic imperatives in national policymaking.

Network cultures - Marsh and Smith (2000) add the dimension of network cultures as predicting outcomes, since structural relationships define roles, prescribe which issues are discussed, how they are addressed, contain

organisational imperatives and contribute towards the maintenance and perpetuation of the network. Van Bueren et al (2003) take a wider angle and mention three aspects of network cultures that may result in poor policy outcomes, which are:

-*Cognitive uncertainty* (different perceptions about nature, cause, effects of problems, or if the causes are too numerous and difficult to pinpoint, poor quality of available knowledge, different perceptions about how critical an issue is, uncertainty about the costs, benefits and time frames of interventions required, etc.);

-*Institutional uncertainty* (lack of supportive and facilitative institutions, such as durable relations, rules, shared convictions, norms, values, shared language, cross network dialogue impairments, etc. or when decisions are made in different places at different levels, from local to national to global and therefore institutional settings for a policy network is highly fragmented); and

-*Network management capacity and strategic uncertainty* (lack of interventions by strong facilitators to achieve collaboration; inability to reach agreements change structure and rules of the policy game; too many actors are involved resulting in conflicting strategies based on individual agendas, which are in turn based on own perception of problems, resulting in conflicts and divergent strategies and unexpected outcomes)

These factors are pertinent given the problems with cognitive cohesion over environmental prerogatives of EM along supply chain actors, conflicting agendas, uncertainty over costs and greening measures, dialogue bottlenecks, value chain complexity, distributive justice, etc.; and result in a complex multi-level network culture where progress is slow.

Political saliency and agenda competition - Gains (2003) and Dudley (1994) use the term political saliency to measure the degree of involvement of a political body in relation to other political bodies in the same policy area. Although Gains' work is based on power dependency theories by Rhodes and Marsh, it can be applied to situations where political bargaining occurs within government agencies with different bargaining power. Low saliency is identified among government agencies that were new, small in size, had highly specialised functions, low contact with public and worked in politically un-sensitive arenas. On the other hand, high political salience is identified when agencies that were established, large in size, had many (and often conflicting) goals, they worked in closer proximity to the Ministries and worked on politically sensitive arenas (Dudley 1994). Low political saliency is also a function of how the policy issues are perceived and valued as being critical or politically sensitive with regards to constituents. Given the fact that policy issues have to compete with each other (depending on how powerful the actor leading the issue is), a fragmented and disputed view of the criticality of environmental issues vis-à-vis economic growth, in addition to low political saliency of environmental agencies would result in policy arenas led by these agencies not gaining momentum, or the agency being sidelined in policy discussions, which brings us to the next point.

Open vs. closed networks - We have seen why state actors may be excluded from the policy core, but the network inclusiveness to non-state (i.e. economic) actors is important to examine, given the EM imperative of including supply chain actors and civil society in dialogue and implementation. The ability of supply chain actors and civil society actors (NGOs) etc. to influence policy networks depends on the closeness of existing relationships and policy cycle changes. Early policy networks studies focused on the role of private actors in influencing public policymaking with the

American tradition of analysing "policy sub systems"[25] which saw networks as either "open" or "closed," (or poorly to highly cohesive) in terms of their membership and institutional linkages. Open subsystems were seen as dynamic and innovative while closed subsystems were status quo oriented and changed incrementally. Government agencies (specially large bureaucratic agencies) were analysed as resisting change in closed policy networks and seeking stability at the expense of the others.[26] This analysis suggests that embedded relationships between actors limit the scope for outside actors to penetrate or influence the policy agenda in closed subsystems. Networks also need to be seen in terms other than how path dependent and change resistant they may be; broader consultative network forms can be at a cost to institutional strength. Marsh and Rhodes (1998) distinguish between a "tight" network (which constrains the policy agenda and tends to result in policy continuity) and a "weak" network (where policy discontinuity happens due to heterogeneous relationships and uncertain agendas, leading to changes in both the network and the outcome.)[27] Weak networks may be more permeable, but suffer from strategic and institutional uncertainty, lack supportive relationships, (which are made durable by institutionalised rules, shared convictions, norms, values, shared language, cross network dialogue, etc.) that only occur with sustained membership and repeated interactions (Bueren et al 2003). Whether policy networks are "open" or "closed", the network can only achieve continuity by adjusting to a new entrant and finding new foundations for collective action (Rhodes and Marsh (1992).

25 Please see Marsh and Rhodes (1992), Howlett (2002), Howlett and Ramesh (1995) for US style issue triangles.

[26] Since "policy cannot be its only cause" policy actors change what they can, if they cannot change what they should (Wildavsky 1979:79).

[27] This feature is later built into their model of policy analysis as "issues networks" and "policy networks" (Rhodes and Marsh 1992).

b. Two Complementary Models of Policy Networks:

In order to answer my research questions regarding the determinants of weak regulatory pressure and the scope of state/non state actors to penetrate closed or open subsystems, I will be looking at two complementary network models that build on notions of resource and power dependencies, uncertainty, bargaining and perception issues between state and non state actors. The Rhodes and Marsh model (1998) is used as a starting point to map policy networks along the dimensions of membership, integration, resources and power. Then the Howlett and Ramesh model (2003) is used to generate a more textured typology of networks that form during different phases of the policy cycle, depending on similar dimensions. In combination, they can show how regulators are weak implementers due to power-resource dependencies, low bargaining power, low political saliency and environmental policy networks culture, since the structural characteristics can explain the policy network outputs. Below is a discussion of each and what it contributes to Bangladeshi environmental policymaking analysis.

The **Rhodes and Marsh Model (RM)** (Marsh 1998; Marsh and Rhodes 1992) assumes that three things define a policy network –the relative stability of a network's membership (is membership salience dependent on the specific policy issue under discussion or do specific actors dominate overall); the network's relative insularity (is it exclusive or inclusive); and resource dependencies (whether actors depend heavily for resources or are most actors self-sufficient).

Based on these parameters, they describe policy networks as continuums where tightly knit *policy communities* are at one end, and *issue networks* are at the other end, where relationships are loose and unstable (table 2.1).

Table2.1: Policy network continuum based on the RM model (Marsh 1998)

Dimensions	Policy Community	Issue Networks
1. Membership:		
Number of participants	Limited. Participants chosen carefully.	Large.
Type of interest	Economic/ professional	Broader range
2. Integration:		
Frequency of interactions	Frequent, high quality interactions	Interactions fluctuate in frequency and intensity.
Continuity	Membership, values and outcomes are persistent over time.	Fluctuates significantly.
Consensus	Share ideology, basic values, policy preferences and acceptance of the outcome.	Certain degree of agreement but conflict is frequently present.
3. Resources:		
Distribution of resources	All participants have resources and relationships are based around resource exchange and bargaining	Some actors have resources, but they are limited. Relationship is mainly consultative. No negotiation or bargaining.
Distribution of resources within participating organisations	Hierarchical, leaders control members' compliance.	Varied distribution and members not regulated.
4. Power:	Balance of power between members exist, although some may dominate, so not everybody benefits all the time but all members see their interaction as a positive sum game, which insures its continuity.	Unequal power, reflecting unequal resources and access. It is usually a zero sum game.

The tightness or looseness is determined by relative stability, insularity and power-resource dependencies. Both types are "ideals" and in reality no network can be assumed to be exactly like these two. Policy communities are closer to closed networks, while issue networks are conceptually closer to open networks. Therefore, policy communities have more capacity than issue networks to control the policy discussions.[28] While networks closer to the policy communities style have more continuity, they can be more rigid and

28 The RM model fits in well with network literature on 'epistemic communities', developed by Peter Haas (1992:3), that describes policymaking as done by networks of professionals with recognised expertise and competence in a particular domain. The RM model also overlaps with Sabatier and Jenkins-Smith's (1993) advocacy coalition model, where policy changes occur through political networks consisting of various kinds of policy activists, including public officials from multiple levels of government, who 'share a particular belief system'.

bureaucratic; issue networks are more open to participation by outside stakeholders, such as outside hegemons, business firms, etc. and are more liable to address a broad range of policy issues (including new issues placed on the table by non state actors).

Bureaucratic policy communities may be more rigid (as they are more dependent on formal institutionalised path dependent network rules) but are more stable, compared to fluid and disorganised issue networks. This model does not predict whether issue networks would produce weak implementation pressure or not, but judging from their emphasis on resource distribution and balance of power as factors determining policy outcomes, the output of the environmental regulators will be weak if they are weak power-resource holders and poor bargainers, regardless of whether the overall structure is has limited members or tight integration (Wright 1988).

The Rhodes and Marsh model outlines two possible shapes of policy networks, but the **Howlett and Ramesh (2003) model** adds value by giving us possible midpoints to the policy community/issue networks continuum. Their model suggests 8 types of policy networks that can materialise - all ranging between closed and open structures - especially during the policy formulation phase of the policy cycle (table 2.2).[29] Since the 8 types are determined by the main source of bargaining power and number/nature of actors involved, it complements the emphasis on power/resource bargaining and membership integration perspective of the Rhodes and Marsh model. The second model opens up the typology to clientilistic policy networks, which is pertinent for studying the economic-state actor collaboration in EM, with particular emphasis on the corporatist elements of EM.

[29] These network types are not exclusive to only this phase of the cycle. In fact, these networks can change into each other and manifest themselves at various points of the policy cycle. This is very important to identify empirically.

Table2.2: policy network types according to Howlett and Ramesh (2003: 130)

Policy formulation led by:	State Agencies	One societal group	Two societal groups	Three or more societal groups
State directed:	Bureaucratic network	Clientelistic network	Triadic network	Pluralistic network
Society dominated:	Participatory statist network	Captured network	Corporatist network	Issue network

Their model suggests that if policymaking is both led and directed by the state, then scope for voluntary participation by non-state is stakeholders low and the resultant policy network is bureaucratic and closed. If only one non state actor group manipulates by directing and leading the policy process then they call it a captured network. As numbers of participants increase, the network becomes looser and is called an issue network (similar to terminology used by Marsh and Rhodes). Therefore, environmental policy networks can be identified as ranging between these types depending on the numbers of stakeholders and their bargaining powers depending on resource/power dependencies. In a pluralistic environmental network setting, the policy network would be guided by the state actors, but the non actors would have an effective voice in steering the agenda to suit their own goals (Howlett and Ramesh 2003).

As discussed before, weak environmental pressure is determined by cognitive uncertainty, institutional uncertainty and strategic uncertainty. Now I look at how decision making styles emerge depending on number of participants, their relationship settings, policy problems, uncertainty and time. Howlett and Ramesh (2003) build on a model by Forester (1984)[30] by suggesting that

[30] How policy decisions are made have been discussed extensively in political sciences, best known among them are the rational, incremental and garbage can models (Howlett and Ramesh 1995). According to Forester's model (1984), a policy network will show rational style decision making if it has less members, closed settings, well defined problems, perfect information and infinite time (see column 2 in table above). The more the variables diverge from these conditions (which is often the case); decision-making will veer towards incremental (Howlett and Ramesh 1995).

the number of actors ("agents") and their resource/power dependencies ("settings") determine the complexity of the subsystem (similar to Rhodes and Marsh); while variables such as problem, information and time determine the severity of constraints surrounding a policy issue (table 2.3).

Table2.3: Decision making parameters in policy networks (Forester 1984 and Howlett and Ramesh 2003)

Variables	Dimensions	Determinants of Policy Decision Styles
Number of Agents	Single vs. Multiple	Determines which of the 8 policy networks will emerge.
Settings (resource-power dependency)	Single, closed vs. Multiple, open	
Problem	Well defined vs. Vague	Determines the severity of the constraints posed on policy issues.
Information	Perfect vs. Contested	
Time	Infinite vs. Manipulated	

This model is useful given the earlier discussion of network cultures and agenda bargaining. It recognises that the factors that increase the complexity of the network, also act upon factors that increase the insolvability of the issue at hand. Both sets of factors contribute towards the policy network outputs and the way decisions are implemented. They suggest that in highly complex networks (which can be either bureaucratic or issue network) with high constraints (such as cognitive, institutional weakness and strategic uncertainty - Bueren et al 2003), high-risk decisions are rare and regulatory pressure on the regulated is weak. Even though non-state actors may find a place in the policy arena, policy making advances in incremental steps, through incremental adjustments. Further decisions are slow and are reactive to the evaluation of past outputs. In the opposite scenario, policymaking is more "rational" since uncertainty is low, more major steps are possible. If the constraints are low in the complex network, then adjustment strategies are likely, through "optimisation" where actors easily adjust to the outputs. Finally where constraints are high but the network is simple, low risk "satisfying" policy outputs are likely, resulting in reactive decision making (Howlett and Ramesh 2003:162). Therefore, one can argue that in a complex

environmental policy network, if the policy constraints are high (e.g. vague problem definition, unclear information, contested viewpoints, low levels of actor interaction, low consensus, unequal power-resource dependency, low bargaining power, etc.) then two things may occur - firstly, weak regulatory pressure from the regulator and secondly, the high probability that despite non state actor participation, policy agenda changes will be slow, incremental and risk aversive, often favouring reactive environmental strategies. Given the sorts of policy constraints that are typical of developing country environmental policy making, a complex policy network model such as this would be appropriate in understanding slow and reactive environmental outputs in Bangladesh.

c. Towards Understanding Environmental Upgrading in Bangladeshi Policy Networks

For the greening of production, EM requires the presence of state institutions with a fully functioning system of environmental monitoring and regulation that has experience in negotiating policymaking with stakeholders and is open to changing towards an approach that would involve more non-state actors. Policy network analysis allows us to empirically track policymaking by identifying a multiplicity of variables, such as numbers of actors, levels of integration, individual strategic agendas, resource dependencies, bargaining powers institutional uncertainty, cognitive problems and political saliency etc. that determine why EM's vision of policymaking may fail. The Howlett and Ramesh model in conjunction with the Rhodes and Marsh model offers a detailed analysis of types of networks that fall between "policy communities" and "issue networks" described in the latter. The Howlett and Ramesh model opens up variables such as open vs. closed subsystems, bureaucratic vs. issue networks in relation to the severity of the policy problem (which is again, determined by cognitive, institutional and strategic constraints) and shows us why the ability of a policy network to be open to new non state actors loosens

the tight structure, but at the cost of weakening institutional set-ups and increases the severity of the policy problem. These bureaucratic networks can also be slow to respond to demands made by these actors, which may explain slow changes made by state actors in pluralistic networks to accommodate problems faced by firms doing environmental upgrading. Therefore, I argue that even though it may be possible for non-state actors to introduce new policy issues into the policy arena, there is no guarantee that policy making will then progress rapidly, or will result in large policy changes.

In summary, a combination of these two models can be useful in mapping the weakness in environmental policy implementation in Bangladesh and the limited scope for inclusive policymaking. This leads directly to my third hypothesis:

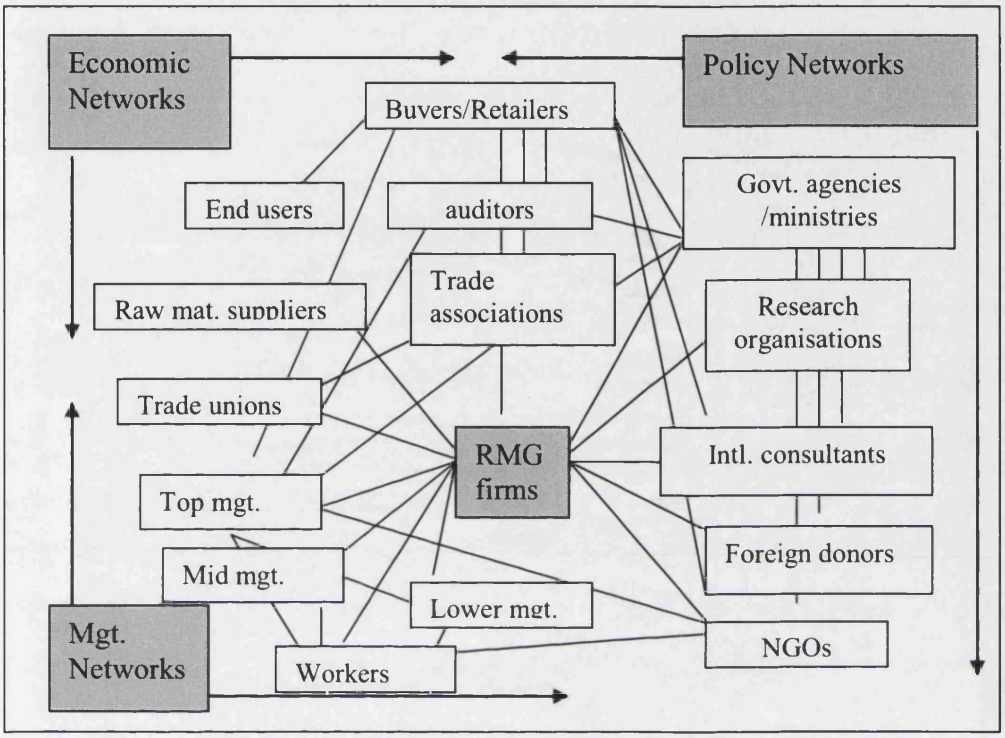
Hypothesis 3: The regulators (state and non state) are not convinced of the benefits of compliance and do not have the capacity to design, implement and monitor better compliance. The exclusion of the DoE and the RMG firms in this policy network is likely to lead to poorly designed outcomes.

2.5 The Hypotheses and Overall Conceptual Framework:

Ideally, the conceptual framework for studying supply chain greening in an LDC such as Bangladesh, should provide the tools for a systematic evaluation of the research question and hypotheses to test EMT. It should be aimed at analysing transformations at the micro-level (at the level of firms), meso level (economic networks of international supply chains), and macro level (national and international policy making involving not only state actors but civil society). Therefore, the conceptual framework should be encompassing institutional analysis in line with structuration theory - a balanced position

that calls for equal weight to be given to the influences of structure (which inherently includes culture) and actor agency in studying change. [31]

Figure 2.3: Relations between actors from the triple-network perspective



Note: Only the most important relationships have been shown.

In the present study, a theoretically informed triple network model is preferred which is directly related to EM. I have so far discussed three overlapping networks (internal management networks, economic networks and policy networks), including their general characteristics and useful theoretical frameworks to study how the networks can change as envisioned under EMT. Generally, EMT is about growing independence (or growing influence, distinction and prominence) of the ecological perspective from the three basic analytical spheres in modern society: political, economic and societal.

[31] See Giddens (1984) on dichotomies between agency-structure. Also see Mol (1995) for a justification of this kind of analysis on EM research.

The triple network conceptual framework can contribute by analysing the extent to which the EM perspective penetrates and transforms the social day-to-day practices predominantly governed by political, economic and societal perspectives. It should be kept in mind that these networks are distinguished in order to conceptualise different mechanisms of, and perspectives on EM in social-political change and economic behaviour. In reality these networks are highly integrated and actors overlap substantially (figure 2.3).

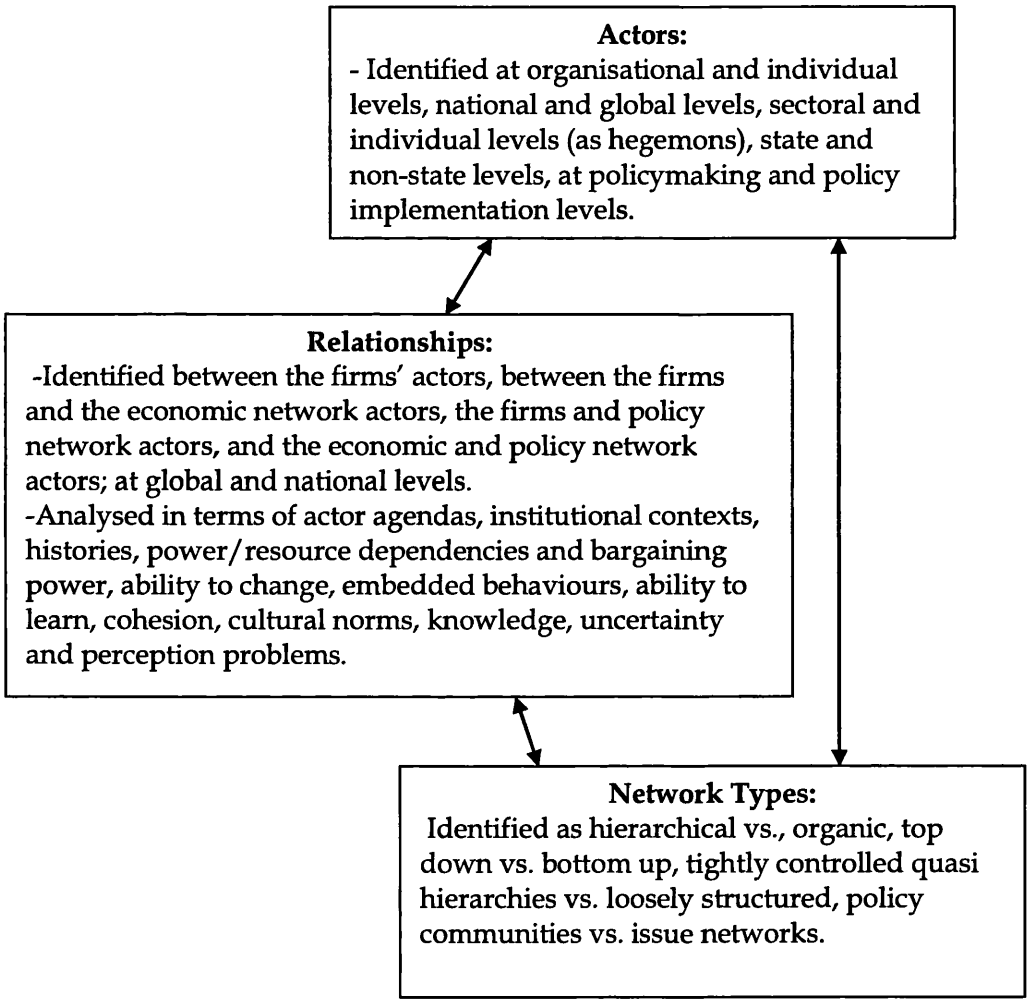
The main explanatory variables that flow through these three networks include the changeable patterns of social, political and economic **relationships**, and the mutually dependent **actors** who form these **networks** around various problems/issues or own agendas. They form the foundation for the all the three networks and are integral to the theories that I have used to frame the hypotheses. Their interrelationships will be examined through network analysis, with regards to the different conceptual variables, building on the theories we have used to frame the hypotheses. In table 2.4, I revisit the links between the hypotheses and the theoretical frameworks.

Table2.4: Summary of theoretical frameworks for hypotheses testing

EM pre-requisites and corresponding Hypothesis	Relevant Network Analysis Theoretical frameworks
EM Prerequisites: Changing role of science, technology, information and knowledge in order to change social and political attitudes at the level of firms about environmental upgrading. Hypothesis 1: Poor environmental upgrading in firms will be associated with factors internal to the firms, such as corporate culture, slow changing behaviour, problems with learning environmental information and will be linked to poor competitive advantage gains	-Resource Based View and Organisational theory to show how corporate culture, organisational change and learning capacity help/hinder environmental upgrading strategy making within firms with a goal of gaining competitive advantage.
EM Prerequisites: Changing role of markets, market actors and private sector initiatives in order to create market pressure and market opportunities for environmental upgrading. Hypothesis 2: The most powerful demand for environmental management on Bangladeshi RMG firms is originating from their buyers in global supply chains. However, opportunities for collaboration or assistance from buyers demanding these environmental upgrading initiatives may be low	-Theories of triadic relationships and Global Value Chains to show how buyers become powerful enough to create demand for environmental upgrading and how buyers can also provide assistance or create barriers to environmental upgrading;
EM Prerequisites: Changing role of the state (away from command-and-control style to a decentralised flexible consensual proactive style), as well as changing social and political attitudes at the level of policymakers and stakeholders. Hypothesis 3: The regulators (state and non state) are not convinced of the benefits of compliance and do not have the capacity to design, implement and monitor better compliance. The exclusion of the DoE and the RMG firms in this policy network is likely to lead to poorly designed outcomes.	-Theories of Issue Networks vis-à-vis Policy Communities; State directed vs. Society dominated policy networks to show the extent of opportunities open to firms and buyers for introducing new policy issues into policymaking agenda.

The conceptual framework above is best analysed in terms of the three key variables that were mentioned earlier - the actors, their relationships and the resultant network types - in order to test the hypotheses empirically through network analysis. Below I summarise how the key variables will be analysed (see figure 2.4).

Figure 2.4: The three key variables within the networks



In this model, *actors* are analysed at organisational levels, both locally and globally. For example, business firms will have to be analysed at the micro and macro levels - the internal management networks within a firm will determine the internal resources and capacities for environmental upgrading, but to understand the firms' collective bargaining power in the external networks, I will need to identify them at the sectoral level, in relation to their

position within the economic networks. Actors in the supply chain will have to be identified at the sectoral level, in terms of buyers, raw material suppliers, financial institutions, various trade associations, etc. Powerful buyers may be identified at an individual levels, as hegemons who have demonstrated strong demands for environmental upgrading in the supply chain and policy networks. Identification of actors in the policy network will be done similarly in terms of their roles in policymaking at the institutional and individual levels, as in government policymakers and agencies involved in implementing policies, such as the Ministry of Environment and the Department of Environment. Non-state actors will have to be identified from the supply chains and will include the firms (as a sector and also a few lead firms with individual bargaining power), buyers and trade associations.

Relationships between the actors have to be first identified and then analysed in terms of the formal roles they play as well as the informal rules that govern them. Within firms, hierarchical relationships will be identified according to the bureaucratic/organic structure of the firm. Their relationships with the external economic and policy actors will be identified in terms of the firms' agenda (profit making, regulatory compliance etc.), and institutional factors (sectoral culture, ways of doing business etc.).

Formal/informal and power hierarchical relationships between the firms and the buyers are very pertinent for this thesis because this is where the demand for environmental management is created and transmitted through S-S-C triads. These relationships change the economic networks (by adding or dropping firms, by making some firms powerful by providing them with financial assistance for upgrading, etc.) and partially determine firms' adjustment responses and buyer-seller collaboration outcomes.

Relationships between the firms and policy network actors are more numerous and complex. At the national level, these are of the regulator and

the regulated. At the international level, these relationships occur when firms feel and react to regulatory pressure by global policymakers, but those relationships are only indirectly relevant for this thesis.

Lastly, the model will identify which *kind of network* is operational, taking into the actors and relationships contained within it, so that the network outputs can be better understood. The above-mentioned relationship variables will help determine whether the three networks are equipped to handle the EM challenges. Analysis of the network processes is a more complicated matter, and I will try to analyse whether the network decisions were arrived at *incrementally* (low risk decisions taken due to unmanageable issue complexity and large number of contesting actors) or *rationally* (high risk decisions taken quickly due to low uncertainty, or high solvability or lesser stakeholders).

The model will also look at the overall EM network that is the amalgamation of the three separate networks. This will be done in terms of its *interdependence* (functional, power structures, knowledge structures, intertemporal, stability vs. development), *connections/relationships* (relationships based on economic goals vs. non economic goals; consequent actor and activity based connections), *atmosphere* (overall power/resource dependencies, mistrust, conflict, etc.), and *network changes* (changes to maximise or control access to resources, structuring tendencies vs. heterogenising tendencies, hierarchy enforcing tendencies vs. hierarchy loosening tendencies).

2.6 Conclusion:

This chapter presented the conceptual model for testing my hypotheses, based on the RBV, organisational behavioural theories, GVC, industrial relations theory, and policy networks theory. In order to test the EMT suggestion that greening of supply chains will happen due to green profits and will be aided by green market signals, a supportive policy environment

and strong committed social-political change, I have used theories that complement the economic and social-political EM notions. The RBV and behavioural theories suggest that greening strategy making can lead to competitive advantage gains, but needs to be made organically in a bottom up structure with adequate environmental learning and green corporate culture. The GVC theory suggests that greening along the supply chains can be aided by the governance styles of the powerful buyers and their responsive suppliers due to the need for risk minimisation and asset specificity. The policy networks theory suggests that depending on network membership, power/resource dependencies, actor participation and actor agendas, environmental policymaking can rationally progress to the kind of policy environment that EM calls for.

The theories inform the overall conceptual framework, which has three networked parts (management, economic and policy), which are interactive in the sense that what happens in management networks, is dependent on the economic networks, which are in turn dependent on the policy network outcomes and vice versa. The overall model borrows the concept of *outcome determining interconnectedness and interdependence* from all three networks, particularly from the Rhodes and Marsh (1998) model, which assumes that actors, relationships and the network types determine the outcome by restricting or enabling entry, changing the network structure, changing balance of power and resources and the issue direction. Also emphasised is the *temporal* and *continuum* aspects of networks - that every actor's behaviour is the result of their histories, and may fall between two possible extreme categories suggested by models.

In the next chapter, I introduce the contextual background that informed the choice and design of the conceptual framework. The Bangladeshi RMG sector is briefly sketched in terms of its strengths and weaknesses and what ethical trade, compliance and greening means to the Bangladeshi RMG sector.

Chapter Three: The Bangladeshi Ready Made Garments (RMG) Sector and Ethical Trade Compliance

3.1 Introduction:

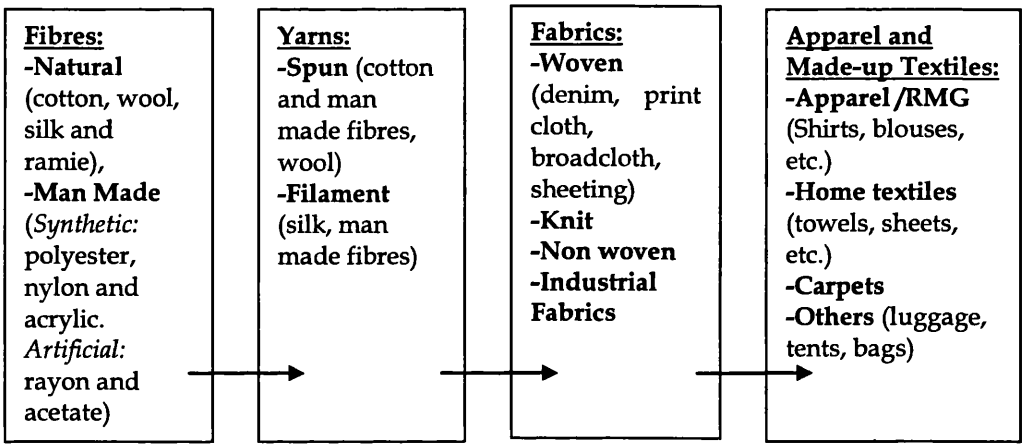
The last two chapters described the context of EM driven supply chain greening in LDCs, and this chapter takes that analysis forward by focusing on the Bangladeshi RMG sector and the apparel supply chain that it is part of. I begin by describing the supply chain using GVC research, which introduces the supply chain actors and defines their relationships regarding compliance governance. Then I look at the Bangladeshi RMG sector in terms of its end products, general role in the economy, and its recent performance problems that contribute to its position as a weak bargainer and supplier, with particular attention to characteristics that impact ethical trade performance.

Next I examine what ethical trade means in the Bangladeshi RMG sector and how greening is sidelined in the discourse and in practice: the meaning of social compliance has changed over time but the early policy network had a distinct core-and-periphery structure that privileged certain voices and agendas over others. Not only were some actors excluded over labour rights debates (which tended to dominate), some state actors and agendas were also excluded because of issue perception and low political saliency – chief among them was the issue of environmental performance and agencies like the Department of Environment (DoE). An important new initiative in social compliance policy making began with the formation of the national Social Compliance Forum (SCF) in June 2006, and this chapter traces the policy background till its formation. Chapter Seven takes up the discussion again with the formation and function of the SCF and empirically examines how the SCF and DoE relate in terms of poor greening efforts and EM performance.

3.2. Global Value Chain (GVC) in Textiles and Clothing:

The apparel sector broadly involves the processing of fibres into yarns and fabrics through the intermediary services of spinning, weaving and dyeing, until the final services of cutting, sewing and finishing turns the fabrics into final products (called "apparel" or "garments"), as categorised under Apparel and Made Up Textiles (US ITC 2004). The basic production steps are shown in figure 3.1.

Figure 3.1: Basic Apparel Production Steps (based on US ITC 2004 and US DoL ILAB 1996)

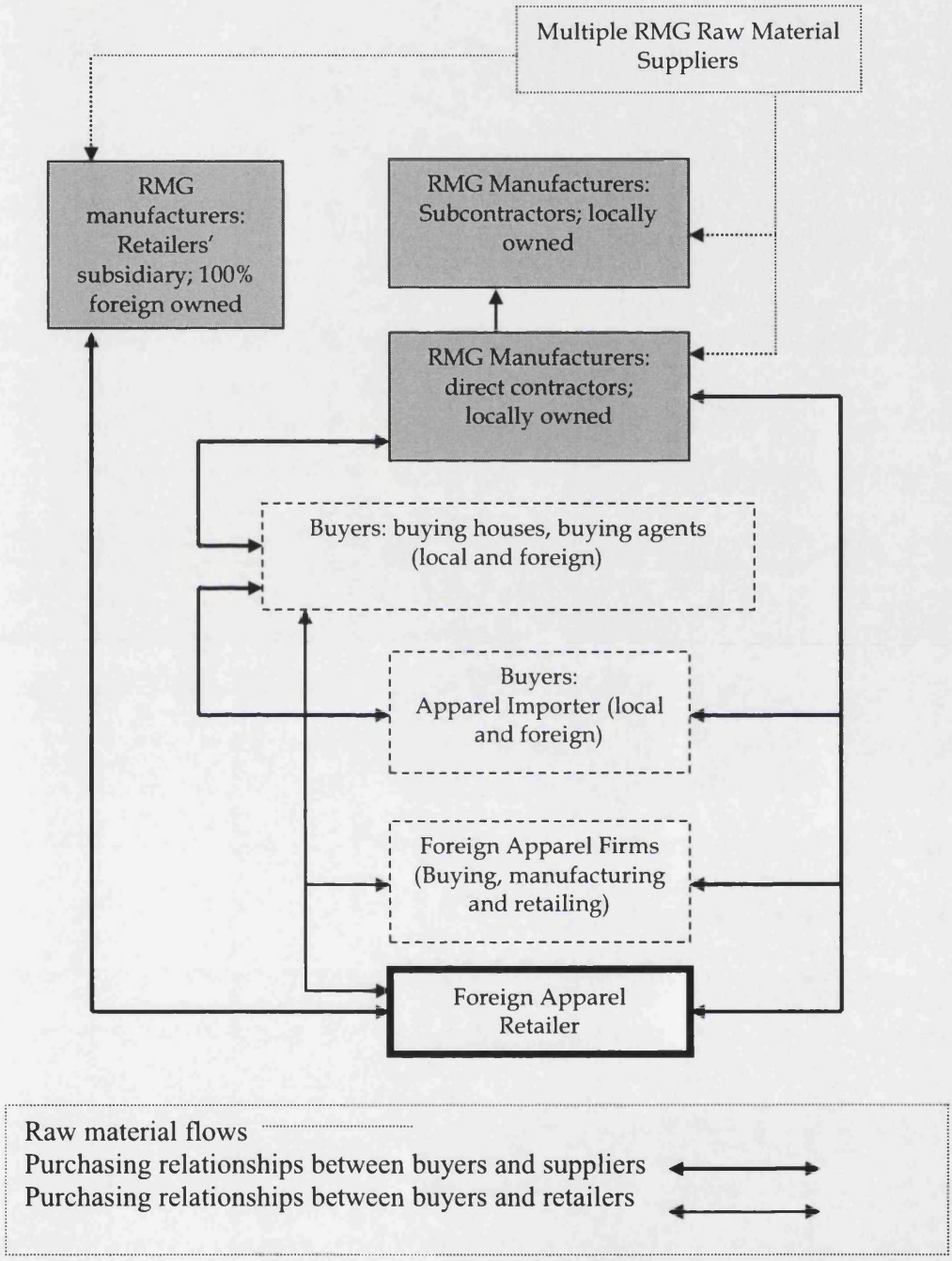


The apparel GVC changes its structure and characteristics considerably between upstream and downstream production. The process starts by being capital and knowledge intensive (during yarn preparations and spinning) and ends with more labour intensive operations (during cutting, sewing and trimming) where scale of operations decline. The number of downstream firms is higher and their sizes also get smaller. They are typically more dispersed and often located in LDCs, while the upstream firms are often located in the newly industrialised countries (US ITC 2004, Gereffi 2001, GTO & PPMA2002).

Gereffi and Memedovic (2003) view the apparel GVC as having networked parts - raw material supplies, production networks (garment manufacturers and their subcontractors, domestic as well as overseas), export channel networks established by trade intermediaries, and marketing networks at the retail level. Figure 3.2 takes a simplified view of the interlocking networks highlighting the main relationships along the production process that are relevant for this thesis. The industry actors can be divided as follows (US DoL 1996, Hassler 2003):

Apparel Manufacturers/Suppliers - These firms are the primary focus of this thesis. They primarily design, cut and sew garments from fabric; or procure yarn and knit final products. Some are contractors or subcontractors, whereby they manufacture apparel from materials owned by other firms. Larger manufacturers can subcontract orders to smaller manufacturers in their home countries and abroad. Vertical integration can vary greatly. Some large sized integrated firms produce the yarns, produce fabrics, sew or knit into apparel and also retail them (CPD 2003c).

Figure 3.2: Basic Structure of Apparel GVC Relationships (based on Gereffi and Memedovic 2003)



Buying Agents/ Buying Houses/Buyers – These firms locate, qualify and inspect garments made by overseas RMG firms and often monitor production for quality compliance. They may be independent firms servicing retailers/manufacturers, or may be a part of the retail company's own staff (US ITC 2004).

Retailers -These firms are primary involved in selling the goods and are responsible for distribution, merchandising and sales to customers. Department stores, discount stores and mail order catalogues all fall under this category. In most cases, these are in DCs (GTO&PPMA 2002).

The relative ease of setting up garment manufacturing factories and the prevalence of DC protectionism in the form of trade quotas has led to an unparalleled diversity of garment manufacturers in the LDCs. Rapid development of backward and forward linkage helps account for the large number of LDC workers employed in the sector (Gereffi and Memedovic 2003, Ahmed 2002, Quasem 2002). Table 3.1 shows the net exports for importing and exporting countries. The USA and EU are the main importers, while China, India, Taiwan, India, South Korea, Pakistan, Turkey, Indonesia and Bangladesh are the major exporters.

The most influential policy instrument that has structured the apparel GVC is the Multi Fibre Arrangement (MFA), which regulated the apparel trade between 1974 and 2005. Since 80% of global apparel trade was within its ambit when it was phased out in 2005, its influence in shaping the apparel GVC has been considerable, especially in dictating the territoriality of trade and introducing price and non-price factors. Annex 3.1 examines the impact of the MFA and its phase out, with special attention to the rise of non-tariff demands by buyers, such as ethically traded apparel.

Table 3.1: Net apparel exports in billion USD between 1992 and 2002

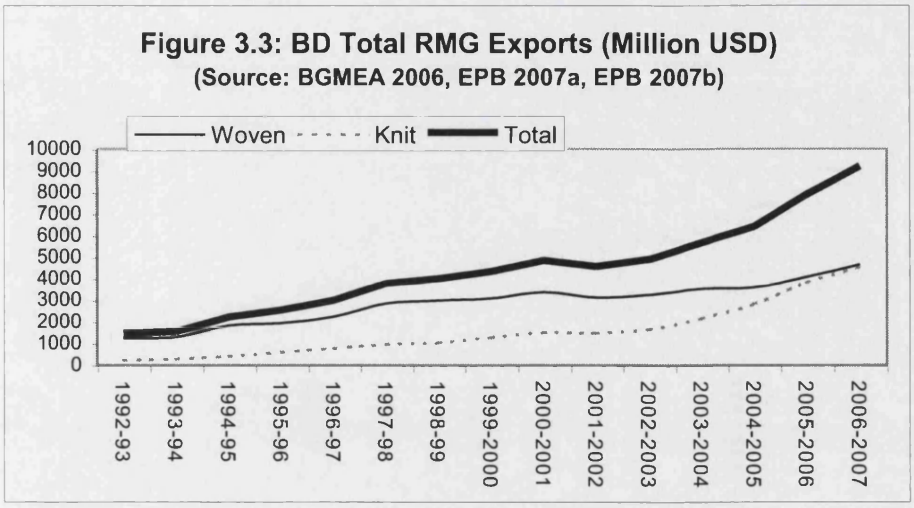
Exporters	1992	1997	2002
United States	-31.778	-46.871	-68.591
European Union	-12.349	-20.102	-26.645
Hong Kong, China	-13.490	-22.309	-19.830
Japan	-5.916	-12.204	-12.877
All Other Industrialized Countries	-5.735	-7.018	-6.927
North Africa & All Other Middle East	-5.642	-4.231	-4.531
Canada	-3.865	-3.743	-3.731
Former Soviet Union	-1.752	-2.520	-2.921
All Other Latin America & Caribbean	-0.709	-4.124	-2.307
African Growth & Opportunity Act eligible	-0.758	-1.042	-1.241
All Other Sub-Saharan Africa	-0.682	-0.714	-1.023
Eastern Europe	-0.563	-0.548	0.040
All Other North Asia	-0.046	0.056	0.160
Andean Trade Preference Act	0.554	0.309	0.492
Macau, China	1.002	1.163	1.103
All Other South Asia	0.512	1.381	2.066
Mexico	0.076	3.164	3.305
Caribbean Basin Trade Partnership eligible	1.164	3.780	3.660
Thailand	4.002	4.510	4.090
Bangladesh	0.703	2.102	4.174
All Other Southeast Asia	0.674	1.921	4.540
Pakistan	2.483	4.917	5.864
Indonesia	3.715	5.549	6.603
Turkey	4.493	6.859	9.389
South Korea	12.273	13.067	9.666
Taiwan	11.275	14.274	9.757
India	6.061	10.635	12.091
China	34.300	51.786	73.623

Source: ERS Bilateral Fiber and Textile Trade Database[32]

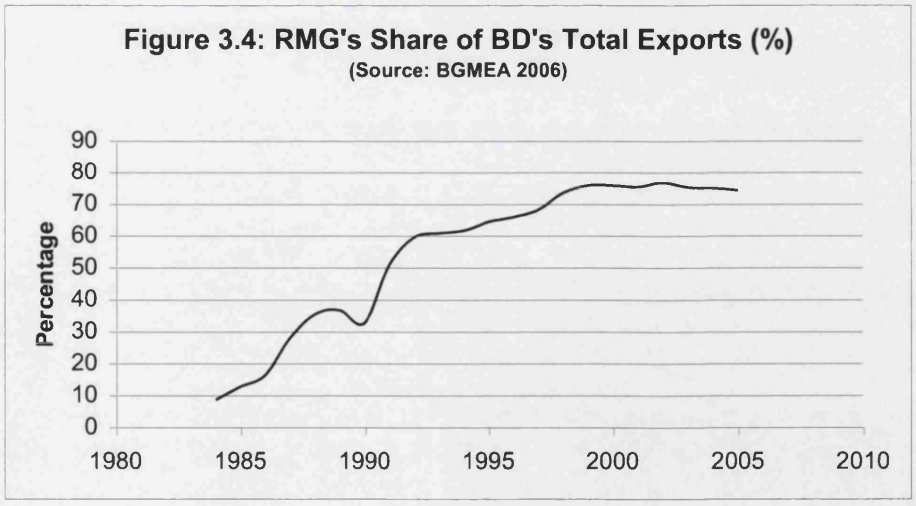
3.3 The Bangladesh RMG Sector:

The Bangladeshi RMG sector is the country's biggest export dollar earning industry and is an important step towards its industrial development from an agrarian base. The sector began in 1978 with just 9 factories, and by 1990 its exports were worth USD 0.64 billion; within a decade it was USD 4.86 billion in 2001 (GTO&PPMA 2003a), by December 2007, RMG exports stood at USD 9.2 billion (EPB 2007b). Despite some fluctuations, the overall sectoral growth has been 14.65% per year over the past decade (figure 3.3).

[32] Source: http://www.ers.usda.gov/data/fibertextiletrade/ accessed on 14 February, 2006



Over time, the RMG sector became vital for the country's economic stability, as its share of total exports grew steadily (figure 3.4) with an increase in employed labour force. In 2004, 74.15% of the country's gross foreign currency income came from RMG. More than 1.5 million people were directly employed in this sector in 2000 and another 10 to 15 million were employed in sectors indirectly benefiting from it (Spinanger 2000, EPB 2007a).



Bangladesh RMG's stellar performance can be traced back to three sets of influences: factor costs, domestic policy measures and external trade environment. A densely populated and capital-scarce country such as

Bangladesh is ideal for the expansion of a labour intensive industry such as RMG. The production skills can be mastered easily without requiring formal education. The low standard of living in Bangladesh enables the wage rates to be kept at a level that is one of the lowest among competing countries (World Bank 2005, Absar 2001, Sattar and Ahmed 2004). The modest capital requirement enables easy entrance to the industry. Rented accommodation for factory sites is available, therefore negating the need for investment into building infrastructure. Successful entrepreneurs find it relatively easy to expand their operations by reinvesting profits into production capacity (Rahman 2002). Among the domestic policy tools that helped RMG grow, trade liberalisation was the most important. Given the heavily protected trade regime of past decades, the rapid growth of RMG would not have been possible without some compensating support mechanisms such as the duty drawback system, the bonded warehouse facility, and the introduction of the back-to-back letter of credit (LC) system. The removal of the protection-related costs enhanced the competitiveness of the sector and contains many opportunities for future contribution to the rapid expansion of Bangladeshi RMG in the post MFA era (Antoshak 2001,World Bank 2005, CPD 2003a, Applebaum 2004). The external trade environment's impacts has to do with the MFA's role in encouraging quota hopping by older RMG supplying countries which gave birth to the Bangladeshi industry, as discussed in Annex 3.1. Particularly, the Bangladeshi suppliers were favoured heavily further through quota restrictions which meant that retailers were forced to source garments from Bangladesh.

End Products:

RMG exports are made up of two separate categories - woven garments and knitted garments according to the GTO&PPMA (2003a) classification, although the World Bank (2005) classified the sector into three categories - woven (e.g. shirts, blouses, trousers, etc.), knitted (t-shirts etc.) and sweaters

(wool, cotton, acrylic and other polyblend sweaters). The most important end products include men's and boys' shirts, ladies blouses, men's trousers, jackets, rompers, jogging suits, ladies gowns, skirts, pyjamas, socks, etc. In 1991-92, 94% of total exports were of shirts, trousers/pants, knitted shirts, ladies blouses, children's dresses, jogging suits, jackets, baby wear, rompers and lingerie. The other 6% was made up of windbreakers, ladies gowns, skirts and pyjamas (GTO&PPMA 2003b).

The product range has shifted considerably as the sector adapted to the MFA quota ceilings. The woven sub sector dominated initially with a 85% export share in 1990, but it decreased to a 70% share in 2001, as the knitted sub sector became more competitive and increased export volume (GTO&PPMA 2003a). During the first 8 months of the fiscal year 2004-05 the share of knit increased further to 43% with an equivalent decrease in the share of woven (World Bank 2005). Assuming this trend persists, the value of export of knit apparel will exceed that of woven, suggesting that Bangladesh's competitive advantage lies with the knitting sub sector (Spinanger 2000).

Industry Structure:

According to the Bangladesh Garment Manufacturers and Exporters Association (BGMEA) Members' Directory 2004-2005 (BGMEA 2005b) there are 4300 member firms with the following breakdown: 700 knitting factories, 525 sweater factories, and the remaining 2275 are woven garment units. However, according to the World Bank (2005), a BGMEA internal survey found that some 1300 of these firms were closed or inactive (the so-called "sick firms"). On the other hand, Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA), lists another 860 knitwear firms, of which some 300 are believed to have dual membership with BGMEA, leaving 560 units with exclusive BKMEA membership. Thus the adjusted structure with active firms has been summarised in table 3.2:

Table 3.2: Structure of RMG industry (World Bank 2005).

Garment category	Number of firms (adjusted)	% Share	Employees
Woven	1673	47	836,500
Knitwear	1495	42	747,500
Sweaters	392	11	337,120
Total:	3560	100	1,921,120

The World Bank (2005) report quotes Export Promotion Bureau (EPB) data on RMG exports for 2004, which highlights how the industry is led by a few hundred firms based on export volume. Out of the 2,387 firms that were exporting apparel in 2004, the top 500 firms exported 74% of total garment exports; the top 650, up to 81%, which means the remaining 1737 firms contributed only 19% between themselves. That leaves some 1200 firms (out of 3560) that did not export at all or perhaps sub-contracted. Among these firms, some could be facing closure or operating on irregular orders. According the EPB, the bottom 200 firms whose export volume is less than $50,000 per year, cannot survive all year. Firms in the bottom section are the hardest hit by post MFA GVC restructuring and social compliance demands.

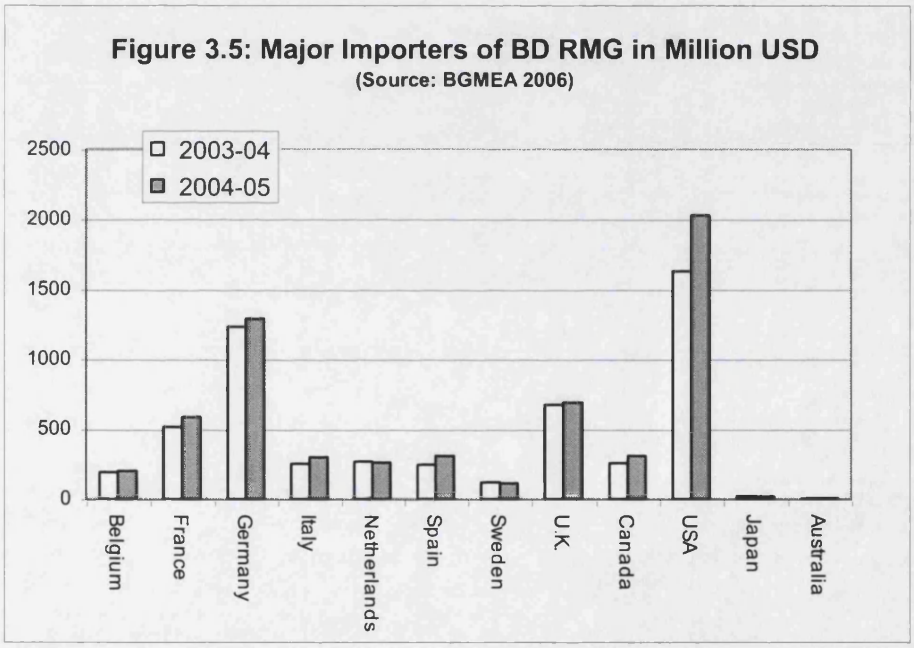
A more nuanced reading of the industry structure and bargaining advantage is highlighted by a 2001 Ministry of Commerce (MoC) study quoted in the World Bank (2005) report. The study classifies firms into 4 categories according to production capacity: the first group consists of about 15 large companies that own 220 manufacturing units, each with a minimum capacity of 10,000 dozens/month. These 15 firms are well integrated into the GVC - they source their own fabric and have direct marketing links overseas. The second group is largely not governed by powerful parent companies, and has 550 manufacturing units with a production capacity of 5,000 - 10,000 dozens/ month. They are more dependent on intermediaries for business, rather than being directly in touch with retailers or buyers. They work mostly (60 %) on a cutting and making (CM) basis for importers or buying agents. The third group consists of an estimated 1993 units, with a capacity of less than 5,000 dozens. They are financially weaker and work mostly on a sub-contracting

basis. Finally the fourth group consists of about 200 units that are sick and not currently operating. These would correlate to the bottom 200 firms in the EPB study mentioned above.

Bangladesh's Position as a Supplier:

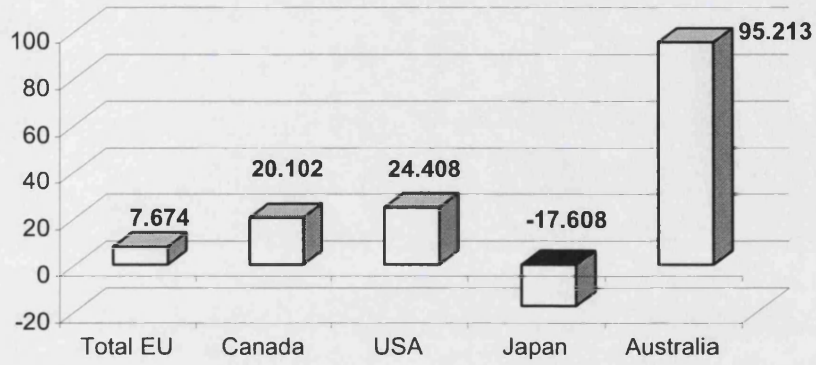
Under the MFA quotas, Bangladesh has been exporting clothing to the US, the EU and Canada. In 2001, the EU was the major importer of Bangladeshi RMG with 51% of the exports, followed by USA (44%) and Canada (2.5%) (GTO&PPMA 2003a). Figure 3.5 shows how the USA and EU continue to be the most powerful external influences for Bangladesh in the apparel GVC.

Figure 3.5: Major Importers of BD RMG in Million USD
(Source: BGMEA 2006)



Globally, the EU, the USA, Japan, Canada and Mexico are the largest garment importers, totalling at about 88%. This market share has been relatively constant through the 1990s and looks to continue in the future (GTO&PPMA 2003a).

Figure 3.6: Growth (%) of RMG Exports to Major Importing Countries (FY04 to FY05) (Source: BGMEA 2006)



Given the industry structure outlined above, I now turn to specific characteristics that contribute to Bangladesh being a weak second tier RMG supplier in the GVC. These weaknesses would then help explain the barriers and compulsions behind social compliance upgrading.

Low value and quality -Value and volume data suggests that on average, Bangladeshi RMG products are 40 to 100% cheaper than the Chinese counterparts exporting to the EU market. In the American markets, Bangladeshi exports are 30 to 70% cheaper. This is due to the fact that quotas limited volume, not value. India and China have managed to move on to higher value added and better quality clothing, which Bangladesh has not done; therefore while it remains price competitive, its product quality and value addition remains low (CPD 2003c). However, production of basic items remains Bangladesh's competitive strength (e.g. see US ITC (2004) assessment), which shows no sign of changing. According to trade analysts, the decision and opportunity to earn higher profits by moving up the value ladder should be based on the profit calculus of each entrepreneur, and not on such concepts as "higher value addition" (US ITC 2004, World Bank 2005, Khaled 2004). This has considerable significance for eco and social compliance, as we will see in Chapter Six.

Low skill and high vulnerability -Most of the RMG firms in Bangladesh offer only stitching capacities on what is known in the industry parlance as cutting and making (CM) or cutting, making and trimming (CMT). This requires the least amount of skill and makes them vulnerable to the vicissitudes of the market, and less able to withstand adverse shocks (World Bank 2005).

Low profits and low upgrading -Despite having very low labour costs, Bangladesh has remained price competitive by reducing profit margins; wage levels have gone up, but working efficiency has not. Profit margins for small to medium sized firms are about 5%, which is set to decrease sharply after 2005 (Spinanger 2000). This situation will get worse as production costs rises to accommodate new supply chain demands, such as social compliance (Absar 2001).

Table 3.3: RMG exports in terms of value (thousand takas) (EPB 2006)[33]

Commodities	April 2006	July-April 2004-05	July-April 2005-06
Knitwear	22622785	138062355	200265916
a) T. shirt	12637938	66665344	93691527
b) Sweater	4266849	43180240	54452311
c) Others	5717998	28216771	52122078
Woven garments	20553519	177365140	216868755
a) Shirts	4860115	52332828	57176890
b) Trousers	12208882	81594427	114300614
c) Jackets	1044357	19740284	19719146
d) Others	2440165	23337601	25672105

Low prices and poor capacity -Unit price realisation analysis of Bangladeshi exports shows that prices realised by the Bangladeshi exporters are among the lowest of all importers, in many cases lower than new entrants to the importing markets. According to the buyers, there is a direct relationship between price and quality. Their perception is of Bangladeshi firms is as suppliers of cheap basic products, exported in bulk, without product

[33] Source: EPB website data page at http://epb.gov.bd/Statistics2005-06.html, accessed July 7, 2006.

innovation. This view is obviously hurting the leading Bangladeshi RMG firms because they do offer diversified products, from established market positions, and at superior prices (GTO&PPMA 2003a).

Weak marketing and interaction - Bangladeshi firms' low bargaining power is also due to a lack of matured industrial interaction with the international market. Most of the companies (about 75%) are solely dependent on buying houses and intermediaries for orders. Only a few firms work directly with the retailer, offer designs changes, create new products, etc. Not surprisingly, most firms are pessimistic about the future since they are dependent on buyers sending them orders. 55% of the woven firms surveyed by GTO&PPMA (2003c) said that they had no idea about their future sales growth due to such passive marketing.

Poor management and innovation -Due to the way the RMG industry grew as Bangladesh's first few steps into private sector led industrialisation, the early companies were family owned and managed. Newer entrants successfully replicated this model during the RMG boom (Ahmed 2002), which institutionalised forms of behaviour that is heavily influenced by cultural templates. Company management is described as lacking proper technical training. There is a shortage of formal education and prior technical training among middle management staff. Training is typically obtained "on the job". Most companies are reluctant to adapt to new operating systems. Take up of management information systems, production planning, product costing systems, etc. has been very low (GTO&PPMA 2003c). Overall, we have a situation where majority firms are risk averse, poorly trained, passive actors with low interest in active marketing, have little opportunity for direct bargaining and have weak strategies to cope with upcoming supply chain challenges at the firm level.

Bangladesh's position after the MFA phase out:

In the context of the RBV of firms, the Bangladeshi RMG sector is not exhibiting any of the strategic skills that would drive them to gain competitive advantage over their competitors, since their strong points (makers of cheap low cost basic clothing items) are not unique, and their management profile is not that of a proactive innovative entrepreneurial style. Interestingly, RMG strategy papers are not asking for RBV skills for survival in the post MFA market either. Better quality, value added, cost efficiency and short lead times are still the prescribed elements of a successful post MFA coping strategy, along with the ability to anticipate non-price demands and meet them without compromising cost efficiency(Quasem 2002, Quddus and Rashid 2000). Most Bangladeshi firms do not meet these criteria (box 3.1). The most often cited advantage that Bangladeshi manufacturers have of low cost production is insufficient since buyers will always exploit Bangladeshi firms' reputations for low prices and it will be harder for them to move up along the post MFA GVC. Other than that, there are many weaknesses within the firms themselves, and the government's policy framework is has been criticised for lacking vision and restricting the competitiveness of the industry (GTO&PPMA 2003e).

Box 3.1: The main threats to Post MFA competitiveness:

-Long and extended lead time delays due to heavy reliance on imported fabric
-Local fabric suppliers produce fabric that is of costly and of inferior quality
-Poor performance at ports and at customs
-Competition from other countries
-Poor image of Bangladesh exporters perceived by buyers due to quality consistency problems, delivery unreliability and low prices
-High cost of finance availability for the industry
-Low productivity, quality inconsistency
-Limited technical and management skills at all levels
-Poor marketing skills and knowledge
-Non compliance with international social and labour regulations

As Bangladesh was approaching the MFA phase out, there were a number of strategic advisory papers regarding management actionables, policy reform, institutional change, and infrastructural investments. The Ministry of Commerce (MoC) commissioned the "Post-MFA Development Strategy and Technical Assistance for the RMG Sector (GTO&PPMA)", which developed strategic recommendations for the Government that were finalised through a National Seminar in January 2003 (Stuart-Smith and Shefali 2003). The GTO&PPMA (2003) study, along with studies by the CPD (2003a), MFAF (2005), Ahmed (2002), Bhattachariya (1996), BGMEA (2005), Sattar and Ahmed (2004) and the World Bank general equilibrium model in its 2005 study predicted sharp export shocks and economic welfare losses for Bangladesh. Over three-to-four years after the MFA phase out, the World Bank model predicted, the economic welfare costs could run to $370 million. In terms of jobs, Bangladesh could stand to lose 17 % of the current workforce in apparel and 5% in textiles. However, reality was not as dismal as predictions made by trade experts. RMG exports from Bangladesh in the post-MFA world did not decline; rather, data show that export growth during January-July 2005 was 12% (BGMEA 2006), with knit garments registering phenomenal growth of 31%. However, deep-rooted challenges to improving capacity and productivity remain for Bangladesh, and strategic options for coping remain a critical issue for Bangladeshi RMG (box 3.2).

While the fiscal and infrastructure challenges are interesting in themselves, they are only relevant to this thesis as they provide a context for the concerns of the industry. It is more interesting to note that major strategy papers all brought attention to the growing value chain pressures for social compliance.

Box 3.2: Main World Bank (2005) recommendations for competitiveness:

Policies to enhance global competitiveness:
- Minimise anti-export bias of trade policy and remove behind-the-border constraints to overall export competitiveness;
- Raise RMG productivity by courting foreign direct investment (FDI).

Policies to reduce time to market:
- Reduce lead time;
- Take advantage of regional accumulation;
- Negotiate FTA with India.

Striking government-industry partnership to develop forward linkages:
- Product and market diversification
- Image building and brand development
- Performance rating database
- FDI or joint ventures
- Specialised units
- Human resource development

Taking advantage of external policy environment:
- seize opportunities for preferential market access.

The papers recognised that Bangladesh's failure to conform to social compliance (as well as other international standards of product quality) was a major barrier to post MFA competitiveness. In the post-MFA era, Bangladeshi manufacturers must be able to respond to and harmonise their views with buyers in order to address the challenge. While the GTO&PPMA (2003c) recommended adoption of SA8000 standards and the setting up of compliance clusters with common effluent treatment plants and legal reforms to safeguard labour conditions; the World Bank (2005) also made similar recommendations, reflecting the almost negligible social upgrading changes that had been made till then despite serious buyer pressure that was almost a decade old. Reflecting these concerns, I now focus on exactly what social compliance entails for Bangladeshi RMG.

3.4 Bangladesh's Early Experiences with Social Compliance:

In Chapter One I have introduced the concept of ethical trade for supply chains and highlighted some problems with ethical sourcing by DC retailers and ethical trade implementation by LDC suppliers. Although the term ethical trade gained visibility around the 1990's (Welford 1995, Welford 1997,

DfID 2003), ethical trade considerations are not necessarily new in South Asia: Indian companies like Tata, Godrej and Birla can trace their CSR heritage back to decades of corporate philanthropy. However, this does not mean that there is consensus about what ethical trade means or entails, as we saw in Chapter One. To recapitulate (and without going into the different approaches to ethical trade), ethical trade in supply chains most commonly means that retailers are sourcing their products from suppliers who guarantee basic labour and human rights, as set out in the suppliers' national legislation and/or set out by international standards and retailers' specific codes of conduct. The most influential international ethical standards codes for the apparel chain (SA8000 of Social Accountability International (SAI), Base Code of the Ethical Trading Initiative (ETI), Fair Labor Association (FLA), Fair Wear Foundation (FWF), Business Social Compliance Initiative (BSCI), Worldwide Responsible Apparel Production (WRAP), Joint Initiative on Corporate Accountability and Workers' Rights (Jo-In) and the US Apparel Industry Partnership (AIP)(GTZ PROGRESS 2007d)), as well as the retailer-specific buyer codes focus on worker conditions and human rights in apparel supplying companies. For example, the ETI Base Code (2007) has nine main principles that deal with bonded labour, freedom of association, safe and hygienic working conditions, child labour, living wages, reasonable working hours, worker discrimination, and inhumane treatment of workers. The AIP Workplace Code of Conduct also covers these main areas (AIP1997). A World Bank (2003) report on company codes in the apparel industry also found that the key provisions emphasised were "forced labor, child labor, wages and benefits, hours of work, discrimination, harassment and abuse, freedom of association and collective bargaining, and health and safety issues" (World Bank 2003:12). This emphasis on worker rights is reflected in what is commonly understood as "social compliance" in the Bangladeshi RMG sector parlance.

International NGOs such as the Clean Clothes Campaign (CCC), Fair Wear, Ethical Trade Initiative UK, Oxfam International, Sweatshopwatch, etc. have been highly visible in the compliance debates in Bangladesh. Broadly speaking, and leaving aside the debates regarding defining NGOs or "civil society" (Lewis and Kanji 2009), the supra-national apparel sector NGOs function in intersecting networks, and are involved in drawing up policy guidelines, coordinating the activities of networked affiliates, disseminating information, undertaking solidarity action and lobbying intergovernmental organisations and institutions to further the interests of workers through decisions made at international levels. However, the reach of these non-state actors in Bangladesh is only as strong as their relationships with powerful local NGOs. This is especially true in the case of RMG labour rights (Paul-Majumder and Begum 2006, Buckland 2003).

At the national level, the role of civil society and or NGOs in RMG compliance has to be understood in the context of the capitalist, middle and intermediate classes in Bangladesh. Civil society and NGOs should not be conflated for each other, and neither should their role in monitoring the role of the state and capitalist classes be seen as an abstract "good thing" (Khan 1998a and 1998b). Civil society in LDCs such as Bangladesh is likely to be populist opponents of the comparatively recent capitalist project in their societies, however, their role in demanding accountability from the private sector, their regulators or policymakers needs to make room for the possibility that the agglomeration of interest groups that comprise civil society might also have an interest in capitalism and can yet monitor and keep in check the self seeking sectors. According to Rahman (2006) and Asaduzzaman (2004), civil society in Bangladesh became visible as the voice of citizens' ideology in political modernisation around the 1980's. The boundaries between the civil society and state-private sector institutions were often hard to distinguish but the presence of the third sector was definitive in Bangladeshi politics, governance, participative development, human rights, etc. However from

within civil society itself there was criticism about their adopted formality, autonomy and power, as they were accused of becoming partisan in politics, without focus and ineffective in voicing peoples' rights to a healthy and equitable life. It would be reasonable to assume that voicing concerns from a Bangladeshi cultural context about environmental preferences was also similarly neglected. Consequently, according to Rahman (2006) and Rahman (2007), the NGO sector in Bangladesh has shifted their mode of operation from that of social mobilisation and activism to apolitical economistic development, providing poor people with access to resources or services to improve their condition. Reasons behind this shift include donor pressure and a local environment that is inimical to unpartisan political criticism or activism (Rahman 2006). Government discouragement and ambivalence within Bangladeshi elites and NGOs about political activism has also contributed to the co-optation of civil society and delegitimised their political activity. As a result there is only a faint voice demanding the cessation of patron-client network corruption for better environmental quality or pro-EM changes.

Trade unions are another powerful driver of social issues with their unique set up of bringing together the workers and the formal policymakers (Roberts 2002b). The US based International Textile, Garment and Leather Workers' Federation (ITGLWF) has been active in building a policy network of CSR across apparel retailers and their suppliers as well as LDC governments and smaller trade unions. For example, ITGLWF is affiliated with a number retailers who source in Bangladesh, who they have networked with a number of Bangladeshi trade unions, such as Bangladesh Homeworkers' Women Association (BHWA), Bangladesh Independent Garment Workers Union Federation (BIGUF), Bangladesh Jute Textile Workers Federation and Bangladesh Textile and Garments Workers League (BTGWL).[34] The ITGLWF

[34] Source: ITGLWF website at http://www.itglwf.org/pdf/05-11-08%20-%20ITGLWF%20Affiliates%202.pdf, accessed July 7, 2006

also works with the developed country retailers in translating labour concerns into practicable action through private sector initiatives. For example, as a result of ITGLWF's involvement, the Clothing Manufacturers' Association of the United States of America (representing RMG MNCs as employers) and the Amalgamated Clothing Textiles Workers' Union (representing American workers) signed a national branch collective agreement in 1996, which included a code of conduct applicable to enterprises within the US and their subcontractors in LDCs, which established minimum standards regarding the initial list of issues, which included wages, hours of work, forced labour, child labour, freedom of association, non-discrimination, occupational safety and health (US DoL ILAB 1996).

In the initial stages of social compliance policymaking, governments were active only while formulating, negotiating and enacting international level legislation with LDC governments and NGOs, but the social compliance policy network was changing. The US Department of Labor (US DoL) was a pioneer in opening the policy network to include LDC suppliers. The DoL, with the help of various American apparel producers' coalitions took numerous steps to "clean up" the sector at home and abroad. It stepped up its inspections along the international supply chain, which opened up the network to enable the western media to monitor progress and influence decisions at the policy level (US DoL ILAB 1996).

LDC governments remained important policy actors. They reacted unfavourably to concern for labour rights, as they were simultaneously bargaining quota benefit and duty free access to ensure the lifeline of the industry in their country. LDC governments such as Bangladesh saw social compliance as "an unequal contest of strength with the developing countries" (Bhattacharya 1996: 28). The motivations behind uniform and unitary labour standards were examined with suspicion among Bangladeshi policymakers, who shared the view with many LDC governments.

Development agencies also cautioned against the uniform and mandatory nature of labour demands. The 1995 World Development Report suggested that linking trade with labour issues raises two very important points - the distinction between "basic standards" vs. "historical standards", and the cost implications of these linkages for the supplying countries and the labourers. While the LDCs could understand sanctions on violations of basic labour standards, they argued that interpreting evidence of such infractions opens up the possibility of miscarriage of justice due to cultural differences and the lack of clear evidence (Bhattachariya 1996).

However, to understand the scope of social compliance issues, coalitions of actors, their changing relationships and policymaking networks, this thesis will examine Bangladeshi social compliance in three phases: child labour; wages and worker safety; and the national Social Compliance Forum (SCF). This categorisation is based on a temporal progression of issues -buyer pressure on child labour set off the first round of compliance policymaking, followed by the second phase when factory fires forced regulators to implement worker safety and wage laws. These two phases resulted in a policy network with certain characteristics that not only set the context for the third phase (formation of the SCF) but also heavily influenced EM's chances of success or failure.

Phase One: Child Labour in Bangladeshi Garment Factories:

Among the apparel sector compliance issues, the most stringent requirement is the banning of child labour (Bhattacharya 1996). Unfortunately child labour has been a chronic problem in Bangladeshi factories (US DoL ILAB 1996, Choudhury and Hussain 2005, Haworth et al 2004, Hewett and Amin 2000).[35] Labour by children within Bangladeshi households and work units where many family members are involved is largely accepted as the norm, or is

[35] Please see Annex 3.2 for ILO definitions of child labour.

simply invisible. Such work is not regarded as "child labour" in the sense it is defined by international conventions or western morality (Wright 1997, ILO-IPEC-BGMEA 2004, ILO 2004, Paul-Majumder and Begum 2006, Huq 2002). Although various observers differed on the precise number,[36] Bhattachariya (1996) estimated that in 1994-95, there were between 50,000-55,000 children working in garment factories. According to a sample survey by Chaudhuri and Paul-Mazumder (1991), the share of child workers between the age of 10 and 14 years was higher among females (16%) than in males (8%). According to their survey, 19% of factories employed child workers (although they do not correlate that to factory size). About 66% of child labourers had migrated from the villages and 45% had never been schooled (Chaudhuri and Paul-Mazumder 1991).[37] Bangladeshi laws, however, disallow child labour. Relevant laws include the Workmen's Compensation Act (1923), Employment of Children Act (1938), Children (Pledging of Labour) Act (1933), Payment of Wages Act (1936), Bengal Employment of Children Rules (1940, amended 1976), Factories Act (1965 and 1968), Employment of Children Act (1938 and 1974), Tea Plantations Labour Ordinance (1962), Shops and Establishments Act (1968, amended 1974), and the Industrial Relations Ordinance (1969).[38] These regulate wages and employment conditions, trade union and industrial disputes, labour administration and related matters. Among them, the Factories Act of 1965 explicitly prohibits the employment of children below

[36] Entrepreneurs and the government agencies argued that about 2-5% of RMG workers were children, but NGOs, both local and international, argued it was more close to 10-20%. This became a key point when the government and the firms were bargaining against sanctions in the child labour policy negotiations, as we will see later.

[37] The pattern of RMG child labour revealed two important socio-economic patterns: rural parents had preferred sending their daughters to work in urban factories over early marriage; and a large number of school dropouts suggest that these children came from the poorest of families, which could not afford to send the children to school. The survey also found that most RMG child labourers were recruited by a senior relative who was also an RMG employee. Child workers work as sewing helpers (66%) and finishing helpers (15%), which were also the lowest paid jobs in the industry (Chaudhuri and Paul-Mazumder 1991).

[38] Source: http://www.bangladesh.net/article_bangladesh/investment_and_industry/inv_07_manpower.htm accessed on March 13, 2006.

the age of 14 in any factory (US DoL ILAB, 1996).[39] However, implementation was weak until international pressure threatened economic sanctions on the RMG sector.

Pressure on Bangladeshi RMG factories began in 1992, with the introduction of the Child Labour Deterrence Act in the US Senate by Senator Harkin in response to US apparel manufacturing industry concerns over the impacts of cheap imports on American apparel producers. This debate became a direct threat to Bangladesh in 1993, when American television newsmagazine "NBC Dateline" broadcast a programme about child labour in Bangladeshi factories supplying Wal Mart. This prompted the retailer to cancel its contracts with the Bangladeshi firms and other US retailers began to pressurise Bangladeshi suppliers as well, since the Wal Mart story was affecting sales (US DoL ILAB 1996, Armour 2003). The firms and the workers were deeply threatened and became united in resisting the "foreign" idea of banning child labour in all its forms (CPD 2003a, Wright 1997). Meanwhile in anticipation of the Harkin Bill being enacted, the RMG firms took drastic measures to protect themselves by dismissing more than 40,000 child labourers almost overnight in 1992 (Williams 2004). Some other reports suggest over 50,000 children were made unemployed (DoL ILAB 2006, US DoC 2002 and 2003).

At the national level, the government started legal reforms in 1993 (via the National Labour Law Commission to harmonise labour laws (Wright 1997)) but at the international level, the government and the BGMEA defensively negotiated with the US Senate in the initial stages of the Harkin Bill debate. The government's position was that numbers were inaccurate and that these children were not engaged in actual factory-work.[40] At the DoL's

[39] This law also stipulates that workers who are above 14 years of age can only work a maximum 5-hour day and only between 7 a.m. to 7 p.m. The penalty for violation of this Act (Article 44(1)) is a fine up to Tk 1,000 (US DoL ILAB, 1996).

[40] In May 1994 the BGMEAP resident stated that only 1% of the total work force are children, numbering an estimated 8,000 - 10,000; a figure that was contradicted by studies by US labour

International Child Labour Hearing, the Bangladesh representatives further explained that the presence of children in the factories is a consequence of the lack of childminders at home while the largely female workforce leave home for work. US DoL and State officials, AAFLI representatives, and other NGOs, however, contradicted these findings (US DoL ILAB 2006).[41] The US senate stood fast in its demands, backed up by the support of the business lobby, international agencies, NGOs and consumer groups. Gradually the BGMEA's policy stance changed due to sustained pressure from external actors leading to further negotiations with the ILO and UNICEF, culminating in a Memorandum of Understanding (MoU) signed on August 4, 1995 requiring the BGMEA to remove children under 14 from more than 2,000 garment factories, and to place the children in educational programs (Sajhau 2000). However, power struggles over differing ideologies came to a head over the signing of the final version of the MoU. After prolonged negotiations during late 1994 and early 1995 between the BGMEA and the US Officials, a first draft of the MoU was prepared to be signed by the BGMEA, AAFLI, UNICEF, the Centre for Development Research Bangladesh (CDRB) and the American-Bangladesh Economic Forum (ABEF). At the final stage, the BGMEA refused to sign it, and subsequently the AAFLI and the Child Labour Coalition declared that they would resume campaigning to ban Bangladeshi RMG imports to the USA. The BGMEA General Member firms objected to the clause enabling NGOs to inspect factories for underage workers. Although the BGMEA eventually retuned to the policy discussions, they made it clear that it would prefer to work with the ILO and UNICEF, rather than the international and national NGOs. The AAFLI subsequently issued a press release rejecting BGMEA's claims that "protectionism" is the underlying motivation for US NGOs being involved in the RMG sector and not in informal sectors where child labour was more common. In May 1995, the

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research organisations, such as the Asian-American Free Labor Institute (AAFLI) as well as independent sample surveys (e.g. Chaudhuri and Paul Mazumder 1991).

[41]Source: http://www.dol.gov/ilab/media/reports/iclp/sweat/bangladesh.htm, accessed on March 16, 2006

BGMEA, US Embassy, the ILO and the UNICEF drafted a revised MoU. Finally on August 4, 1995, the BGMEA signed the MoU to formally eliminate all child labour from Bangladeshi RMG factories by October 31, 1995 (Bhattacharya 1996, ILO BGMEA 2003a, 2003b, Wright 2003).

The chief output of the MOU was the BGMEA/ILO/UNICEF Child Labour project - a world-first in which an entire industry pledged to free its workplace of child labour (ILO 2005, Jenkins et al 2002).[42] Network relationships at the national level solidified with programme design and implementation. The early interactions during the MoU signing set the initial "rules of the game" and it impacted how the successive ILO-IPEC-BGMEA projects were conceived and implemented.[43] According to the ILO evaluation of the comprehensive Phase III project in 2004 (ILO-IPEC-BGMEA 2004), the project design and commissioning stages were problematic due to lack of BGMEA capacity and promised funding; also, communications during project negotiations was fragmented and heavily bottlenecked, causing delays that were remedied by last minute shifts to project goals that affected project effectiveness. The Chief Technical Advisor (CTA) left the project in the middle of this period and the BGMEA could not replace the CTA or provide alternative management support for 11 months, causing further delays and loss of focus in the project. Lack of coordination and commitment within BGMEA project staff in charge of implementation was cited several times in the ILO evaluation report. For example, the MOU Steering Committee did not meet during the second MOU and did not provide any management to the BGMEA projects, resulting in poor coordination, and the BGMEA did not provide any explanation as to why. Poor BGMEA capacity for enforcement was to be addressed through ongoing capacity building for BGMEA staff

[42] Source: http://www.ilo.org/public/english/standards/ipec/about/factsheet/facts01.htm accessed on October 2005.

[43] In July 1995 BGMEA, UNICEF and ILO signed a MoU, which was the beginning of a series of collaborative projects to remove and rehabilitate child workers in the garment industry. A second MOU was signed in July 2000 and ILO/IPEC implemented 3 projects that contributed to the fulfilment of the MoU's objectives.

involved in the ILO-IPEC-BGMEA projects, but according to the final evaluation report:

> "Little was done during BGMEA Phase III to develop BGMEA's capacity to manage the monitoring system and BGMEA were reluctant to take on the responsibility.... The future of child labour monitoring in the majority of BGMEA factories is uncertain after January 2004.... The child labour monitoring system is not yet sustainable without ILO's support. The sustainability of the skill training is in the trainees. Many of them are using the skills learnt and will continue to benefit from their training with no further input from the projects." (ILO-IPEC-BGMEA 2004: vi).

The BGMEA was (and continues to be) the lead agency for child labour, and the ILO project evaluation reports cited them as being ineffective, unconvinced of social issues, non-committal and unreliable. Since every network is as strong as its weakest link, it seems reasonable to wonder how sustainable the social compliance network would be once the donor projects are over or if unforeseen market shocks were to hit the garments sector requiring creative and credible policy alternatives at short notice.

Phase Two: Worker Safety and Wages in Bangladeshi Garment Factories:

Bangladeshi national legislation extensively covers the conditions of employment, payment of wages, legal settlements of disputes and conditions of redressing of worker complaints (such as the Shops and Establishments Act 1965, the Employers' Liability Act 1938, the Employment of Labour (Standing Orders) Act 1965, Payment of Wages (Amendment) Act, 1980 etc.). The most cited laws governing the RMG workers, management and owners are covered

specifically by the Factories Act (1965) and the Factories Rules (1979).[44] By law all factories have to meet these requirements, based on number of workers employed and the kind of production they are engaged in. According to the Factories Act, garment factories are required to act on worker health, hygiene, fire safety, worker welfare, working hours, special leave categories, and make special provisions for accidents and operation of dangerous machinery. Even though the laws exist, there is no clear indication of which laws supersede other pieces of legislation in the matters of compliance, and within the space of such ambiguity, laws are flouted regularly (Word Bank 2005).

After the child labour issue, the biggest RMG compliance issue has been worker safety, especially fire safety. There is an undisputed understanding among the RMG trade associations, NGOs, trade unions and government agencies that RMG is one of the more unsafe sectors in Bangladesh. According to the Bangladesh Occupational Safety Health and Environment Foundation (OSHE)[45] the RMG industry is the most hazardous sector for workers by far (table 3.4).

Table 3.4: Workplace Mortality in 2004/2005 in Bangladeshi Industries

Sector	2005	2004
RMG	120	25
Construction	80	69
Transport	14	6
Ship Breaking	11	8
Rice Mill	9	6

Source: OSHE 2006

OSHE's findings are based on an audit of the country's 16 leading newspapers, and while there is a possibility that the actual figures are higher, the numbers are indicative of the kind of mortality risks the workers face. It is

[44] Annex 5.2 and Chapter Five discusses how these laws pertain to factory environmental compliance.

[45] The Bangladesh OSHE Foundation is and NGO and research body, part of the Asian Network for the Rights of Occupational Accident Victims (ANROAV), coordinated by Asian Monitoring Resource Centre (AMRC).

also indicative of how the understanding of compliance issues changed from the early days of child labour to worker safety inside the factories (Daily Star 2006a). Box 3.3 highlights some of the landmark fire accidents in the sector, while Annex 3.3 features more details.

Box 3.3: Factory fire and stampede related deaths in Bangladesh RMG

2000 - Globe Knitting factory fire, 12 dead
2000 - Choudhury factory fire, 48 dead
2001 - factory fire, 24 dead
2004 - Misco Supermarket factory fire, 9 dead, 50 injured in stampedes
2005 - Specturm factory fire, 62 dead
2006 - KTS factory fire, 61 dead
2006 - Phoenix factory collapse, 22 dead

Fire accidents cost lives and caused injuries; it also caused property damage and hurt the sectors' reputation among buyers. International media and NGOs became active with local NGOs in protesting for safer factories in 2000. The chief onus fell on the BGMEA (because of the ILO-IPEC-BGMEA programme) to lead this new issue. They began conducting fire safety drills and workplace safety awareness campaigns since the establishment of the BGMEA Compliance Cell in 2001, despite the institutional and issue commitment problems with the Cell. Outside of the workplace safety initiatives for the BGMEA member factories, the Cell organised courses for own staff and invited buyers to train BGMEA officials on code requirements and began auditing factories in 2003. However, until September 2004, only 56 factories had been visited. BGMEA's Safety Measures Cell organised training courses in fire fighting with 13,805 participants of 999 garment factories in Dhaka and Chittagong from 1997 to 2004 (BGMEA 2004). After the KTS factory fire in 2006 (which had 61 mortalities), the BGMEA undertook a crash programme on fire safety and made new rules for all members (box 3.4). However, up to date data on their progress is not available from the BGMEA Information Cell.

Box 3.4: Post KTS fire policy action and programme (Jabbar 2006)

New Regulations: All garment factories are to have two fire staircases and gates of each stairway are kept open during working hours. If any exit to the main stairway is found closed during inspection, they will be fined. A third time default will lead to the cancellation of BGMEA membership and the factory will lose its export licence.
New Measures: BGMEA launches its crash programme in April 2006:
-conduct fire drills in all the garments units;
-check if gates are open or locked during working hours;
-check whether exits are clear or not;
-check whether adequate fire equipments are in place in the RMG units;
-check whether fire safety teams are in place in the RMG units.

Such recurring accidents tell the story of continued weaknesses relating to structural problems: overburdened and weak regulatory network, low civil society protest for worker safety, poor understanding of a complex issue, change resistant modes of non-compliant behaviour among private sector actors, unsupportive infrastructure, and corruption: in March 2006, Mr. Abdus Salam Murshedi, acting president of BGMEA, said in a newspaper interview (Daily Star 2006b), that the main problem of monitoring compliance lies with the growth pattern of the RMG industry. Most factories are situated in commercial buildings that are not built to house factories, and consequently they are in violation of industrial safety guidelines. They frequently have electrical wiring that are overloaded, creating dangerous fire hazards. While the newer medium and large factories are housed in purpose built factories, away from residential areas, the smaller factories (who are large in number and financially vulnerable) continue to operate in unsafe buildings and have significant problems in making compliance upgrading investments, and tend to avoid compliance by negotiation and bargaining with regulators. (In Chapter Five we will see how these rented-premises are causing bottlenecks in environmental compliance implementation.)

Institutional weakness among regulators other than the BGMEA is also responsible for this situation: the Department of Inspection (DoI) is responsible for the implementation of the Factories Act 1965, covering aspects such as occupational health, safety and working conditions; and the

Department of Labour (DoL) is responsible for ensuring compliance with the provisions of labour law relating to labour welfare, trade unionism and industrial relations. However, the level of enforcement of the Factories Act and labour laws in *any* industrial sector is widely believed to be not at all satisfactory (Bailey 2000). In a newspaper interview in March 2006, Dr. Mohammad Serajuddin, Chief Inspector of Factories, DoI, blamed weak staff capacity for RMG compliance monitoring failures by DoI (Daily Star 2006c). According to him, 20 inspectors are responsible for inspecting about 50,000 registered factories in the country, 4 of whom are working at the head office, 6 at Dhaka divisional office (which has about 15,000 registered factories) and the rest are at Chittagong, Khulna and Rajshahi divisional offices. The DoI does not inspect numerous of small, unregistered factories in various sectors at all. Another agency held responsible for worker safety problems is RAJUK (Rajdhani Unnayan Kartripakkha, a statutory agency responsible for urban development planning in Dhaka), whose failure to check illegal construction by RMG factory owners was the main reason cited in the cases of the Spectrum (2005) and Phoenix building collapses (2006) (Bangladesh Today 2006).

Alongside child labour and fire safety, another critical RMG compliance issue is working wage. Despite existing laws and regulations applicable to the RMG sector (although Bangladeshi minimum wage scales have remained unadjusted with inflation rates for decades), poor working wages, forced overtime, non-payment of wages, illegal termination, lack of trade unionism etc. are long running problems caused by a similar set of causes behind the worker safety issue. Ethical trade activists, DoL, BGMEA, BKMEA and the ILO have been negotiating better working conditions but worker dissatisfaction due to wage disputes in individual factories occurred frequently, regardless of factory size. In mid 2006, the issue came to a head, following just a few weeks on from a series of major factory fires and collapses (the KTS factory fire killed 61 workers, and the Phoenix factory

collapse killed 22 workers). Long running wage disputes in one factory led to worker unrest on May 20th, which led to a month of agitation and street riots by garment workers and trade unions. The issue became front page news as riots resulted in street barricades, civilian property damage, worker injuries, worker deaths, looted and torched factories. The damage to the sectors' image in front of foreign buyers was considerable.[46]

The BGMEA as well as affected factory owners expressed their dissatisfaction at how quickly worker frustration with wages had turned into mass factory lynching (often affecting factories with no wage problems), instead of peaceful dialogue or non-violent protests (Daily Star 2006d). However, at the official levels, the narrative turned towards denial of responsibility and blaming outsiders, even a foreign conspiracy (Holiday 2006), similar to the official rhetoric during child labour debates. Given this atmosphere of mistrust and conspiracy theories, the social compliance policymaking network was, perhaps, at its most volatile. After the riots a multi stakeholder "Minimum Wage Board" was formed in June 2006, headed by the Ministry of Labour and Employment, to deal exclusively with reviewing current legislation and updating minimum wage scales (New Age 2006a). At this point, a divide between the trade unions operating in the RMG factories became evident. At the national level, trade unions were unhappy with their representation in the wage commission and resorted to fresh street agitation. The policy process went ahead without them, and there were allegations by excluded unions that the unions participating in the compliance meetings were invited because of their membership alliances with the political party in government (ibid.). Meanwhile the RMG sector continued to battle with various other debilitating issues such as power shortages, port strikes, port closures and political instability that resulted in back-to-back general strikes in 2006.

[46] Please see Annex 3.4 for wage riot details.

Phase One and Two of Social Compliance and Ecological Modernisation:

At this point, it would be useful to analyse the nature of actors, relationships and networks surrounding social compliance, since it is the same set of actors, codes, quality standards etc. that provide the space for EM imperatives in the Bangladeshi RMG sector. According to the policy network typology discussed in Chapter Two, the policy network in Phase One (early 19990's onwards) and Two (early 2000's onwards) can be summarised as below:

Table 3.5: Early Social Compliance Policy Network Characteristics

Dimensions	Characteristics	Similarities
Membership	Membership was fairly limited to actors who are politically, legally or economically powerful. Participants are chosen carefully.	Policy community
Integration	Infrequent, irregular interactions surrounding the crisis of the day; interactions fluctuated in quality and intensity. Membership and agendas were stable; outcomes were stable in the sense of chronic underperformance. Ideology, basic values, policy preferences and acceptance of outcomes were frequently in conflict.	Issue networks/ policy community mixture
Resources	Participants had marked differences in their resources. Core relationships were based on resource exchange, with much bargaining. Actors without resources were in consultative roles only. Resource and power leaders controlled direction of bargaining and compliance by members.	Issue networks/ policy community mixture
Power	Balance of power among actors existed in the core; but between the core and periphery members the balance was more distinct and their interaction was seen as a zero sum game.	Issue networks/ policy community mixture

Based on: Rhodes and Marsh Model 1998

Leading the network - A bureaucratic and rigid network is not beyond changing, but requires leadership by a strong resource rich actor. In this empirical case, strong external actors led the network change to begin with (US Senate, American retailers, NGOs, ILO, UNICEF, etc.), with structural support provided by the government, which is similar to a clientilistic network.[47] Despite the network being led by resource and political power rich actors (and the low complexity of the network, since the overall number of

[47] See Howlett and Ramesh (1995) in Chapter Two.

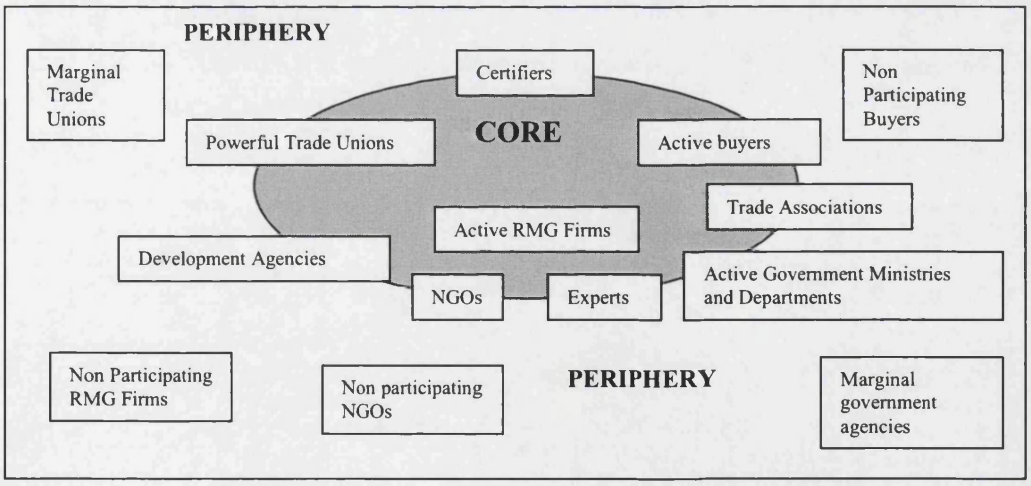
actors was quite small), the bureaucratic network was ultimately dependent on formal institutional path dependent rules and norms, which explains the difficulties faced by the child labour banning projects, that were distinguished by the lack of commitment, skills and funds. During the second phase the network continued to be clientilistic, but this time led by the Bangladeshi non-state actors, BGMEA. The main source of authoritative/bargaining power was held by the BGMEA at this time, since they had past experience from phase one. They successfully bargained for their agenda and excluded the trade unions and NGOs that they disfavoured. They also brought their institutional weaknesses highlighted in phase one, in dealing with worker safety and wage dispute settlement.

Decision making in the network – Given that the complexity of the network changed from phase one to two (medium to high level, as member numbers and complexity of settings increased), and that the constraints also increased (cognitive contestations, institutional weaknesses, strategic uncertainty, vague issue definition, time constraints, issue competition with more dire sectoral needs, etc.), rational, high risk decisions were rare; decisions were reactive, and made incrementally; network hierarchy was unchallenged by decision styles; and there was a demonstrated tendency to reinforce the status quo. Compliance related decision making only happened after problem identification and damage caused (loss of lives, worker injuries, factories burnt, stocks looted, etc.), and a loosely structured issue driven policy network formed which then quickly ran out of steam, rather than forming a stable network as a reflection of maturing policy dialogue (as we will see in Chapters Five and Seven, the reactive policy style and weak regulatory pressure is creating significant environmental upgrading bottlenecks).

Core vs. periphery – The phase one and two network had a marked core and periphery, which had important political implications in the next phase of policymaking, the SCF. Legally empowered and resource rich state actors

(such as various powerful ministries and their departments) and the trade associations (who have direct contact with the factories) have been at the forefront and core of compliance policymaking. The second group in the core were participants who were invited to join. Their voices were privileged as having expertise necessary for the projects led by the government agencies and trade associations. They included the comparatively more powerful trade unions (with clear affiliations to political parties in government), better funded NGOs, technical experts, brand name buyers, certifiers, active RMG factories and often in the coordinating and funding role, donor agencies (such as DfID and SEDF (Fox and Prescott 2004)).[48] At the periphery, were politically insignificant trade unions, critical NGOs, ignored government agencies (DoE), large number of non compliant RMG factories and their customers (buying houses and buyers who were uninterested or incapable of participating in any policy discussion for compliance (figure 3.7).

Figure 3.7: Social Compliance Policy Actors – core and periphery



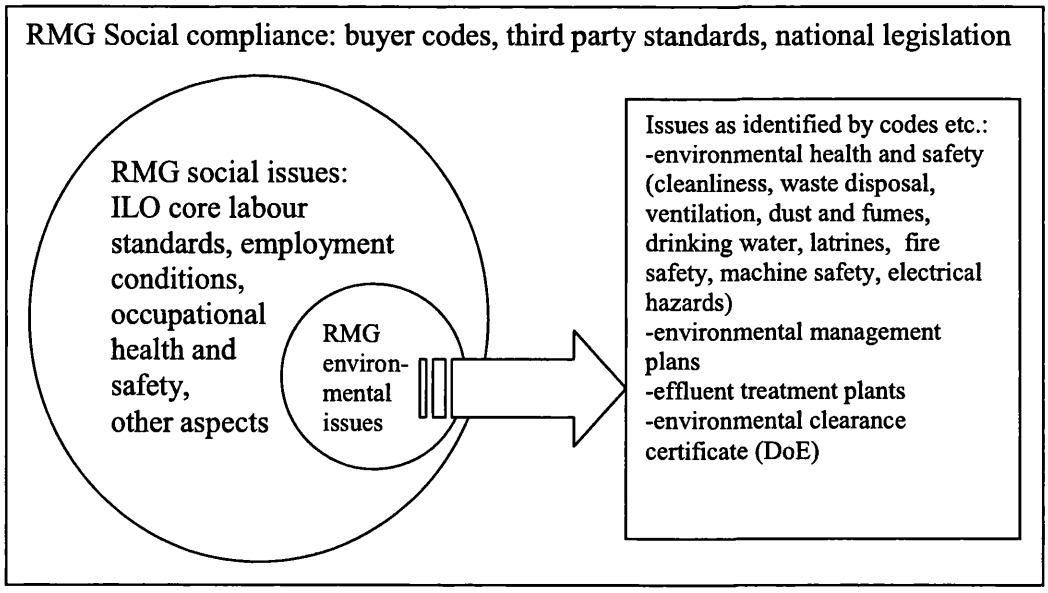
Potential for EM in the early days – For EM to succeed, the compliance network should be a midpoint between an issue network and a policy community (Rhodes and Marsh 1998), and should also be pluralistic (Howlett and Ramesh 2003), instead of the clientilistic, closed structured and

[48] Please see Annex 3.2.

bureaucratic networks (that is structured like a policy community but functions like an issue network most of the time) that are preferred in Bangladesh. The policy momentum is often lost in the midst of bigger challenges and threats to the sector and the economy (e.g. port strikes, political violence, general financial and economic infrastructure problems, energy crisis, competition from China, etc.). It is not reflective of changing attitudes or mindsets through ethical considerations or market pressure, which is an EM requirement that is at odds with predominant and embedded Bangladeshi political and working culture.

Social compliance vs. environmental upgrading – It would be appropriate to question where "greening" fits in with what is implied by ethical trade in the case of Bangladesh, considering that the absence of greening rhetoric might mean that the supply chain led greening has not begun in Bangladesh at all. However, as marginalised ecological issues are in the ethical trade rhetoric as applied to the Bangladeshi garment factories, it would be incorrect to analyse the situation assuming an absence of greening imperatives (figure 3.8).

Figure 3.8: Environmental issues in RMG social compliance



The greening issues as conceptualised by the buyer codes (e.g. Gap, Nike, Marks and Spencers), and high profile third party certificates for ethical trade at best focus on waste management, effluents treatment, and occupational health and safety (although SAI, ETI, FLA, FWF, and Jo-In mention environmental considerations only indirectly, according to the review by GTZ PROGRESS 2007c). Bangladeshi national legislation (Bangladesh Labour Law 2006 and the Environment Conservation Rules 1997) together cover waste treatment aspects (although leading brand name buyer codes do not cover these issues). Taken together, the requirements in Bangladesh do not fulfill the broad ecological concerns as envisioned by Christoff's (1996) version of strong EM, and in fact, it falls short of mainstream EM, which calls for proactive refinement of production, reduction of inputs, recycling and reuse, etc. What the codes and national legislation call for can be broadly summarised in the figure above (and is discussed in detail in Chapter Five and in Annex 5.1 and 5.2).

Further, the weak ecological issues in ethical trade are eclipsed by emphasis given to social issues: emphasis and importance given to worker rights, wages, and safety are much more specific and often go beyond what is legislated; in comparison, environmental issues are vaguely defined (often packed under "environmental health") and defer to the environmental legislation in the suppliers home country. The compliance network becomes active after a shock (e.g. Harkins Bill, media expose, factory fires, worker deaths due to factory collapses, street riots over wages, etc.) and since ecological issues have not resulted in similar shocks, greening issues do not as yet pose a reputational risk to retailers or suppliers, and remain in the periphery of the policy arena. Meanwhile, the compliance network focuses mainly on social issues since the problems are comparatively identifiable and a threat to on-time shipment, as opposed to ecological problems.

In phase one and two of the compliance network we have seen how the network has a distinct core-and-periphery design in terms of participants and agendas. The same design also excluded ecological issues: the DoE was noticeable in its absence in any project to do with environmental quality in the RMG factories, except for briefly in August 2005, when TV coverage of DoE inspections of RMG factories caused the BGMEA to plead reputational damage of the RMG industry, and the DoE agreed to stop TV coverage. Following that, the government decided to formulate a committee, Committee for Eco Compliance of RMG Factories, comprised of government and non-government representatives, to oversee environmental compliance in the apparel industry, which would involve the regularisation of the DoE EC system. The committee was to be comprised of representatives from the BGMEA, BKMEA, Bangladesh Textile Mills Association (BTMA), and Bangladesh Terry Towel and Linen Manufacturers and Exporters' Association (BTTLMEA), headed by Director General of the DoE. The committee was to be funded by the DoE with the goal of setting up ETPs in factories over two years. The State Minister for Environment and Forest was to supervise the entire project. In September 2005, the Stockholm Environment Institute (SEI), University of Leeds (UK), BTMA and BGMEA co-organised a seminar on, "Supporting improved effluent treatment and dye practices in the textile sector in Bangladesh" (New Nation 2005). However, none of their policy recommendations were taken up at the programme level and the DoE led committee also never materialised. A new phase of compliance policymaking began with the formation of the SCF, and Chapter Seven empirically explores policymaking support to greening RM factories in line with EMT.

3.5 Conclusion:

This chapter has covered much ground in terms of the nature of the apparel supply chain, the vulnerable place of the Bangladeshi RMG sector, and its early experiences with ethical trade issues. Although the Bangladeshi social

compliance network is over 15 years old, the range of issues addressed is still focused on social issues, and not enough attention is given to the issues of greening, because of the nature of compliance demands, compliance discourse and the exclusion of the environmental agencies in compliance demands. The multi stakeholder approach so far is riddled with bottlenecks, along with more predictable problems such as low institutional capacity and commitment to social compliance. The resultant policy network on social compliance contains the rules and capacities that influence EM requirements, and it is interesting to ask whether these institutions of modernity have the capacity to break free from behavioural norms to make EM a reality. After setting the context for the thesis, the next thesis chapter explains the methodology that was used to collect data to examine the validity of the hypotheses and robustness of network analysis presented in Chapter Two.

Chapter Four: Research Methodology

4.1 Introduction:

This chapter sets out my empirical research methodology, which was designed to identify the key variables (the actors, relationships and networks in relation to Bangladeshi RMG firms' environmental upgrading efforts), and test the theoretical framework in an empirical situation. I discuss the sampling strategy, interviews and the main types of secondary data resources that were useful and why. Finally, I discuss my experiences carrying out this work, and offer observations relevant to others conducting similar research.

4.2 Research Design and Setting:

In this thesis, I test EMT as it applies to LDCs such as Bangladesh by deriving three propositions, which were expressed via three hypotheses. In order to test the hypotheses, I adopted a mixed inductive-deductive methodology. I collected primary and secondary data in order to first identify the three key variables - the actors, relationships and policy network types (i.e. the "outcomes") - and then I looked for explanations in the inherent power resource dependencies, strategic decision making, bargaining positions and network changes. Then I generalised those findings to infer general principles about EM in Bangladesh in general. I used a mixture of secondary and primary sources of data, details of which are in section 4.3.

Setting:

In Chapter One I discussed the value of studying EMT in Bangladesh from a theoretical perspective. Setting the thesis in Bangladesh adds significant value to our knowledge on EMT, ethical trade, CSR, value chains and Bangladeshi green policy dynamics because hardly any academic research has been done

on social compliance in Bangladeshi RMG factories, or on environmental policymaking for industries, or on greening problems in any Bangladeshi industrial sector.

As a resident of Dhaka and a long time observer of environmental policy for urban industrial neighbourhoods in Dhaka, I was interested in how environmental policy for apparel manufacturing was apparently lacking any relevance to modern day market realities. The size of the industry was expanding rapidly at the time, and presumably, so was its ecological impact on the environs of Dhaka and beyond. I was personally interested in the scope of environmental management systems for Bangladesh, and the RMG sector was an obvious point of interest given the other quality standards they had adopted. My network of contacts and knowledge of local policy makers put me in an advantageous position to study this particular subject,[49] so researching in Dhaka was an obvious personal choice. Outside of these parochial benefits, Dhaka was a good choice because not only are majority of RMG factories situated in Dhaka, it is also the centre of almost all policy-making on environmental regulation in Bangladesh.

When I started my research, there were news reports that the government was forming a committee to address RMG wastewater pollution and install combined ETPS, which was the first initiative ever of its kind at the time (successive governments and their ministries had failed repeatedly to move beyond policy discussions with donors and factory owners to resolve the severe pollution caused by the leather industry due to political and legal problems over land acquisition and compensation issues, among other complexities). However, the committee was short lived and nothing has come of it so far, but the inaction itself has yielded much material for enquiry and analysis. Lastly, Dhaka is also home to the head offices of the RMG buying houses, foreign retailers offices, various trade associations, trade unions,

[49] This is discussed later in section 4.5.

various government agencies, auditors, donor agencies and consultants working in this topic. These actors are not only the main powerhouses, they are also my primary sources of data.

Research Design:

The cost of travel to and from Dhaka meant that my research had to be phased and sequenced. On one trip I field-tested the questionnaires for the RMG firms. The main fieldwork was conducted in Dhaka between February 2006 and July 2006. My research design had to change quite dramatically as some unforeseen accidents happened in the RMG sector.[50] New actors became active which added data sources. Interview lengths also increased because interviewees suddenly had a lot of opinions worth expressing.

I wanted my research design to yield lessons for EMT refinement, and so I chose a descriptive case study research design that allowed me to dig deeper, using primary data to analyse and draw lessons about the applicability of EMT in Bangladesh. I also decided to track-back the past decisions and events that led to the current state of affairs, which made my research partly retrospective in nature. To ensure there were no significant gaps in the historical record, I spent much time and effort going through newspaper archives for news items on past decisions taken on RMG compliance initiatives. The online archives of the Daily Star and New Age Bangladesh newspapers were particularly invaluable in this case.[51]

Every researcher has to keep in mind the principles of triangulation (Gaskell 2002). Triangulation refers to the use of a combination of research methodologies to study one phenomenon. By combining multiple theories, data collection methods and materials, researchers attempt to "cross check"

[50] Details are discussed in Chapter Seven.
[51] The quality of internet websites hosted in Bangladesh varies greatly. These two newspapers were outstanding in that their archives were "found" online everyday.

their findings so that their empirical findings do not have intrinsic biases and the problems that come from single method, single-observer, single-theory studies, specially case studies (Yin 1989). There are different kinds of triangulation, but I have gone for mixed method triangulation for my thesis. Firstly, I used multiple data sources (both for primary and secondary data) and secondly, I used quantitative and qualitative measurements to measure some of the same variables (even though overall my research is qualitative). In crafting my research design, I also needed to keep in mind issues related to internal validity, external validity, construct reliability, and reliability of my data (Yin, 1989). Internal validity relates to a researcher's own ability to accurately establish a causal link between two "outputs". No pattern-matching framework has been developed in the case of EM, so I had to be careful when making the assertion that EM has failed or succeeded in Bangladesh. External validity focuses on the generalisability of the results to other situations. Given that each country has unique cultural, social and political systems of institutional policy making, results from Bangladesh may be cautiously applied to other developing countries. Construct validity relates to the breadth and depth of the research design - whether data gaps exist or not. For my thesis, this meant that I had to be careful in including the diverse range of actors who had input in policy-making or environmental upgrading at the level of RMG firms. In depth interviews with elite respondents were very useful in overcoming construction validity problems, since certain kinds of information was only known to a handful of elite interviewees. Finally, reliability refers to the replicability of the findings by another researcher, following the exact same research design and sampling strategy. While it is unlikely that any research involving so many face-to-face interviews will yield exactly same results, I have tried to minimise replicability problems by updating my research design on a regular basis and keep records of design changes.

4.3 Data Collection from Primary and Secondary Sources:

Secondary Data:

Data on the RMG sector's economic characteristics are widely available from the BGMEA, EPB, MoC, and policy research organisations. There have been several studies about the working conditions in RMG factories by NGOs such as Oxfam (GB), Verite (USA), trade associations (BGMEA and BKMEA), policy research organisations (CPD) and international donor agencies (ILO, GTZ, SeDF and UNICEF) focusing on gender issues in the RMG work force, labour working conditions and child labour. Some studies mention buyer requirements for environmental certification or EMSs, but no mention is made of the environmental impacts or emissions standards, etc. WTO regulations on environmental standards for Bangladeshi trade have tended to focus only on the Agreement on Agriculture and the frozen fisheries sector (CPD 2003c). Data on RMG industries' environmental performance is non existent.

However, the two and only sources of information on environmental requirements are the Government Gazette Publications related to environmental quality in all factories, and the RMG buyer codes. Much information was already gathered from the buyers in my early Dhaka trips, however, as codes tend to be revised, I maintained contact with the buyers and kept on collecting updated versions. Further secondary sources of data became evident research progressed and includes reports by research organisations, such as Bangladesh Centre for Advanced Studies (BCAS) and CPD.

Primary Data:

My main data source was face-to-face interviews. Interviews can be simply conversations with a purpose of collecting information about a specific topic,

issue or event. Interviews are often seen as extensions of conversations between two parties. Kvale (1996) defines interviews as professional conversations. Conversation is a basic mode of human interaction and the research interview is based on the conversations we have in daily life. He further defines its purpose as obtaining descriptions of the life world of the interviewee with respect to interpreting the meaning of the described phenomena. According to Gaskell (2002) qualitative interviews are useful for mapping and understanding the respondents' accounts of reality. The qualitative interview provides the basic data for the development of understanding of the relations between social actors and their life experiences. The objective is a close understanding of the beliefs; attitudes, values and motivations in relation to the behaviours of people in particular social contexts. Therefore interviews were judged to be the most appropriate research tool for my thesis.

Different kinds of interviews are used in social sciences depending on the nature of the topic, nature of the respondent, time and other resources. Interviews can be done in groups (focus groups) or face to face (individual interviews). Face to face individual interviews can be narrative (where the subject narrates his/her experiences) or episodic (where the respondents are interviews about a specific event) (Kvale 1996). Given the cultural mindsets of the potential interviewees and their time constraints, I chose face-to-face episodic interviews.

Structured and semi structured interviews can be useful for data gathering in an interpersonal situation, where knowledge evolves through dialogue. Gaskell (2002) distinguishes between the different points of formality in the continuum of rigidity of structures that interviews can have. Interviews can be "structured", having a structured questionnaire that the interviewer goes through with the interviewee. One or two topics are covered in great detail here. The "semi structured" interview is more informal and has more open-

ended questions. Ordering of questions is less important here and the interviewer is free to follow the narrative arc of the respondent, instead of following the predetermined schedule, as is the case with structured interviews (Gaskell 2002). I used a mixture of structured and semi-structured interviews. RMG factory management were given semi-structured interviews, while elite interviews were open structured.

At this point I would like to mention a few things about respondent bias. Respondent bias occurs when respondents answer questions in the way they think the questioner wants them to answer rather than according to their true beliefs. The significance of this bias is great in the case of this thesis where the issue of socially responsible economic growth has moralistic overtones over issues such as employee well being and environmental quality vis-à-vis need for profit making. I attempted to overcome respondent bias by carefully wording my questions that did not have "leading questions" (e.g. "Do you not think that environmental upgrading should be the choice of every moral person?") and instead has "value neutral questions" (e.g. "Do you believe that buyer pressure for environmental upgrading is inadequate, adequate or more than adequate?"). I have also avoided asking "double barrelled questions" where it is unclear which variable I am seeking their opinion on. I also avoided using double-negatives, since most interviews were done under time constraints and simpler questions are easier for comprehension.

Another aspect of respondent bias was manifest through the reluctance of interviewees to ultimately take part in the research despite prior agreement, and also in the tendency to give answers that were politically correct yet obviously false. In the first instance, I tried my best to pursue the respondents for interviews by reassuring them that I was a neutral observer and that I was not affiliated to any government body, foreign NGO or foreign buyer. Verbal reassurances about the confidentiality of the research outputs were appreciated. At this juncture, my nationality, ethnicity, cultural similarities

and linguistic abilities were advantageous. In the second instance, respondent bias was more difficult to deal with. RMG factory management and buyers were eager to give answers that they thought would sound right rather than what the reality may have been. I sought to overcome this problem by interviewing actors who could tell the story from the other perspective, such as trade union leaders.

Self selection bias is another aspect of respondent selection that I had to keep in mind while designing my research. Self selection bias refers to distortions in empirical findings due to the particular characteristics of respondents who chose to participate. Self selection bias was corrected for in two ways. Firstly, the respondents were not offered any incentives for participating, and secondly by use of the random sampling method. Although RMG factories and buyers who were more proactive were relatively more eager to being interviewed, I was careful to include respondents who were less proactive as well, since their lack of experience in upgrading was a valuable insight into why RMG firms are unable or unwilling.

Respondent bias resulted in the blanket anonymisation of all RMG, buyers and trade union interviewees (even those who did not wish to be anonymous) post-fieldwork, since the political sensitivity of social compliance had reached high levels during and since my fieldwork. In January 2008, Labour Behind the Label reported that Mr. Mehdi Hassan, a labour rights researcher, was detained in Dhaka under emergency laws for conducting research for the Workers Rights Consortium. This is in the background of emergency rule in Bangladesh, where, according to Labour Behind the Label, social activists are going into hiding following a crackdown on local and foreign activists and researchers who are seen as international conspirators and anti-national forces. According to their website,

"Unruly workers, 'outsiders', unionists and rights activist all have been blamed to the extent that an 'international conspiracy' has been 'discovered' as the cause of the prolonged unrest. Even the deaths of workers on duty get lost in this deliberate construction of reasoning... Against this backdrop, the arrest of Mr. Hassan and the implication of others have the potential to escalate a situation that would seriously damage the operation of the garment industry."[52]

In consideration of the safety of my interviewees, I have anonymised names in all chapters.[53]

Number of Interviews and Sampling:

There is typically a trade-off between quality and quantity of interviews, and the nature of the hypothesis and resources like time and money constraints also determine how many interviews are taken (Gaskell 2002). Below I highlight the sampling strategy for each type of respondent.

I. The RMG firms:

Source:

The primary respondents for this thesis were from RMG firms. In total, 53 RMG respondents were interviewed. Only top and middle management were interviewed for three reasons - they were the natural first point of contact for non-business related queries in firms; they were the most knowledgeable

[52] Source: Labour Behind the Label website at: http://www.labourbehindthelabel.org/campaigns/urgent/bangladesh/90-bangladeshcrackdown/229-bangladesh-risk, accessed March 12, 2008

[53] Mehdi Hassan was subsequently released in early February 2008 by the special intelligence forces after buyers from Wal-Mart, Tesco, M&S, H&M, Inditex, Next, Nike, Levi Strauss, Gap, Walt Disney company, Jones Apparel, Tchibo and Carrefour sent a letter to the government, according to the Accountablity website: http://www.accountability21.net/blogs.aspx?id=1830&blogid=42, accessed July 11, 2008.

about environmental upgrading problems (specially when it comes to long-term issues) since they deal with buyers and regulators; and access to lower management and workers is severely limited due to lack of research permission and or time constraints of potential interviewees.

RMG Firms Sampling:

A simple random sampling of RMG firms was done from the BGMEA Directory of RMG firms (2005-2006) (BGMEA 2005b), which is the only comprehensive database of RMG firms in Bangladesh. It may have been more useful to classify firms according to stratified sampling principles (sort them into groups based on company size or production type or buyers serviced for example and then do a proportionate allocation in samples). However, that was not possible because the BGMEA directory lists companies alphabetically – there is no publicly available list of firms sorted according to type of production (knitwear/woven/t shirts etc.) or size (by machines, employees or net exports). In fact, the information that the Directory has on the alphabetically listed companies' size, age or production is frequently incorrect or found to be out of date during empirical enquiry. Therefore the basic conditions for grouping members of the population into relatively homogenous subgroups before sampling did not arise for my thesis.

Firms were manually selected at random from the BGMEA Directory, giving each firm an equal probability of being included in the sample, with an equal probability of being small/medium/large, etc. The BGMEA have no data on compliance statuses (or DoE certification) of factories in the Directory. The DoE has records of all industrial facilities that have been granted Environmental Clearances, however, such records are not accessible for research purposes. Therefore the random sampling from the Directory had an equal probability of generating compliant/non compliant/certified/non

certified factories. Majority of the listed 3,600 factories were in Dhaka, and all sampled firms were physically accessible for interviewing during fieldwork.

Firm types based on production type- During my initial fieldwork, I realised that a classification of firm according to production type (since that would determine upgrading requirements) would be highly relevant for my research question based on the input that I received from initial RMG contacts. Therefore, I have classified RMG firms as follows:

-Type A: Firms that outsource their washing to independent washing plants, or only do "cutting and manufacturing" which does not require washing, making them "dry factories" in effect. They are not exempt from environmental upgrading, but are exempt from having ETPs;
-Type B: Firms that have their own washing units but only do detergent washes, for which the buyers do not require wastewater treatment. These firms are overlooked by buyers or regulators because detergent effluent of any quantity is not judged worthy of impact mediation; and
-Type C: Firms that have their own washing units and do chemical washes and or dye their textiles, for which the buyers require ETPs and environmental management plans.

Based on my initial fieldwork, I realised that majority of the RMG firms fall under types A and B. This is not related to company size, since large firms may also outsource part or all of their washing, and many medium or small factories do chemical washes. The BGMEA directory does not distinguish between dry or wet process firms. Therefore, I classified respondents as type A and B firms by asking them about their washing facilities. As expected, the random sample from the BGMEA directory yielded mostly type A and B firms, since type C firms are relatively few.

Environmental requirements and performance of the factories, as we will see in Chapter Five especially, did not fall into any pattern that could be linked to their type A/B/C status.[54] Empirically it was more interesting to study type C firms that do chemical washes. These firms tend to be fewer in number and produce high value added specialised products. Sampling of these firms was done on word-of-mouth basis from RMG sector contacts, since simple random sampling was not yielding enough data points of this type. Once contacted, I persuaded these firms to give me in depth interviews. These in-depth face-to-face interviews yielded rich specialised knowledge on actual problems with higher end environmental upgrading.

Firm types based on factory size - RMG firms can be classified as small, medium or large based on many different parameters, such as number of machines, number of workers, total export value, etc. Currently there exists no official method of categorisation based on these parameters and no organisation seems to agree on how many firms fit in where; in fact, lack of official, up-to-date, and reliable statistical data is a severe problem while studying the RMG sector, as has been pointed out in various research papers, most notably the World Bank 2005 paper.

To begin with, *the total number of factories* is widely disputed, since the trade associations (BGMEA and BKMEA) do not maintain updated databases that distinguish between operational and "extinct" firms. Some firms maintain registration, despite not being operational; some firms register as a new member to use tax benefits given to startups, when actually only importing machinery for the parent firm. Additionally, most firms (both knitwear and woven) are registered with both BKMEA and BGMEA, but some knitwear firms are only registered with BKMEA. However, the BGMEA members' directory is still the most comprehensive database since most RMG firms are registered with them. The BGMEA is responsible for providing RMG related

[54] See Chapter Five more details on this aspect.

data (although export volume data is maintained by the EPB), however, they do not publish data on factory sizes based on number of workers, export volume or number of machines. While data on RMG firms according to product category is available courtesy of the World Bank (2005) report, I was more interested in correlating the environmental upgrading efforts of firms with that of their size. To that end, I have used the size classification published by the ILO-DWPP (2005a and 2006b) reports, which cites a 2004 internal report from the BGMEA to the MoC, which sets the total number of RMG firms at 3,986 and classifies RMG firms according to number of workers, which is presented in Table 4.1.

Table 4.1 Characteristics of sampled RMG firms

Firm Size (according to number of workers)		
Number of workers in firms	Size distribution in Sample (%)	Size distribution according to DWPP 2004 data[55] (%)
Small (0-199)	15	29
Medium (200-399)	58	38
Large (400+)	26	32
Firm Type (according to product category)		
Knitwear	29%	53%
Woven	71%	47%
Level of Integration into GVC (according to order types)		
	Distribution in Sample (%)	Distribution according to DWPP/Gherzi 2003 data[56] (%)
Direct orders only	73%	30%
Subcontracts only	7%	20%
Both types	7%	50%
Kind of Production among sampled firms		
A: Dry process (cutting and sewing only)		77%
B: Wet process (detergent wash only)		13%
C: Wet process (detergent and chemical wash)		9%

In this sample, 14 firms (26%) are large companies, while 32% of total firms are large in the industry. These firms are the most experienced in compliance, they also tend to be most proactive about the future, more integrated into the

[55] This is the most recent classification of RMG firms according to number of staff, as specified in the ILO 2005 project "Decent Work Pilot Programme" (DWPP) briefing note, "Enhancing employment and Global Competitiveness Through Decent Work: post MFA Challenges and Opportunities". The BGMEA information cell provided confirmation of this data being the most recent.

[56] This is according to the above quoted DWPP paper, which in turn quotes the Gherzi & PPMA (2003) report on the Bangladeshi garments industry, as referenced in the bibliography.

apparel value chain, better bargainers with their buyers, better funded towards environmental upgrading, more involved with trade association level policymaking and most importantly for research purposes, the most proactive about being interviewed.

31 firms in this sample (58%) are medium sized (to compare, 38% of RMG firms overall are this size). This segment is important because the future of the industry has fallen to the medium sized majority to make or break the sector. Their compliance experiences range from hostile to reluctant participants. They are still dependent on middle agents for getting orders and as a result, do not always feel the pressure for environmental upgrading, although child labour experiences made them sceptical of non price buyer requirements. They are typically poor bargainers and are not vocal at the level of trade associations.

Out of 53, 8 firms in the sample (15%) are small sized (to compare, 29% of Bangladeshi RMG firms are small, although there is some dispute about this since many small firms are extinct in reality, or are seasonally in operation, yet still registered, which inflates their total number.) This segment is not represented as much as I would have liked, however, it was difficult arranging interviews when most of the randomly selected small firms had shut down. However, these interviews yielded important perspectives: they face the greatest and the least problems with environmental upgrading - they are primarily concerned about staying afloat, and consequently being environmentally complaint is a low priority.

RMG Interviews:

Most factory managers do not speak English fluently; hence the interviews were taken in Bangla. I used semi-structured interviews (with "prompts" and some closed ended questions). Due to other demands on their time, I tried to

limit the interview to 30 minutes, however they frequently ran to an hour or even longer. Please see Annex 4.3 and 4.4 for the questionnaires. RMG respondents are referenced in empirical chapters by their serial number as R1, R2 etc.

II. The Buyers, Trade Association Officials, Trade Unions, Auditors, Consultants, Donors, and Government Officials:

Source:

The random sample of buyers was generated by manually selecting names from the EPB's "List of Buyers and Buying Agents"[57] which has over 600 listed companies. Similar to the RMG sampling, interviewees were chosen by "blind picking" of alphabetised names. The EPB list is not comprehensive, or fully accurate, and random sampling yielded many buying houses that are no longer trading.

Trade associations (BGMEA and BKMEA) are important political actors in RMG policymaking, as are the large number of government ministries involved in RMG compliance. Trade unions recently went underground once police backlash began against them after 2006 riots. They became a valuable source of information for my thesis. Auditors, donors and foreign consultants were also interviewed for their perspective from inside the policymaking and implementation circle. Interviewees from these groups were selected on the basis of personal contacts.

Sampling:

[57] The list is available online at: http://www.epb.gov.bd/PDF/CMC/List_of_Buyers_and_Buying_Agents.doc, last accessed on December 12, 2006.

Sampling in the each case consisted of those people who were willing to be interviewed and it was impossible to have a true random sample. Opportunity samples of this kind are acceptable as long as the make up of the sample is clearly stated and the limitations of the data are realised (Bell 1993).

There are different kinds of buyers/buying houses in Bangladesh depending on relationship with end retailer in DC countries.[58] Interviewees from buyer offices were selected on the basis of their experiences with compliance demand and monitoring in their supplier factory, as a result I got a mix of people who do audits themselves, and management who review auditor findings. See Table 4.2 for a list of buyers interviewed and Annex 4.8 for the questionnaire.

Table 4.2: List of interviewed buyers

Anonymised Name	Type	Years of Business in Bangladesh	Sources clothing for end country
L	Trading company that works for foreign retailers without direct representation in Bangladesh.	10 to 15 years	EU and USA
C	Buying house that services hypermarts and department stores	4 years	Only EU
F	Buying house	5 years	Only USA
H	Brand name buyer, own label	10 years	EU and USA
M	Brand name buyer, own label	4 years	Only EU
G	Brand name buyer, own label	8 years	EU and USA
I	Buying house	10 years	EU and USA
KAP	Buying house	20 years	Only EU
K	Buying house, own labels	14 years	Only EU

Compliance auditors were also interviewed from three of the four auditing companies that operate commercially in Bangladesh. The fourth audit team is part of a research organisation that is undertaking a compliance audit pilot programme and were kind enough to allow me access to their audit visits. These interviewees are as follows.

[58] See Chapter Three and Six for details.

Table 4.3: List of interviewed auditors

Name	Interviewee	Certifications Offered
Moody International	Aslam Khan, auditor	WRAP, ISO8000
Systain International	Karl Borgschulze, general manager	WRAP
Interteck Labtest (ITS Labtest Bangladesh Ltd.)	Md. Arif Uz Zaman, manager CSR	WRAP, ISO8000
Bangladesh Centre for Advanced Studies (BCAS)	Shahsun Nahar, Research officer and Mahbub A. Mahmood, Project Manager	Kardst Quelle 3P Project

Please see Annex 4.2 for auditor questionnaires. I also interviewed representatives of trade unions that are active in Bangladeshi garment factories. The trade unions are as follows.

Table 4.4: List of interviewed trade union representatives

Name	Interviewee	Type of Organisation
Sommilito Garments Sromik Federation (Awaj Foundation);	Anonymous	Registered trade union, medium sized
INCIDIN Bangladesh	Anonymous	Registered trade union and NGO, large sized
Bangladesh Independent Garments Workers Union Federation (BIGUF)	Anonymous	Registered trade union and NGO, large sized
Bangladesh Centre for Workers Solidarity (BCWS)	Anonymous	Registered trade union, small sized
National Garments Workers Federation Bangladesh	Anonymous	Registered trade union, small sized
Sromik Nirapotta Forum	Anonymous	Registered NGO for labour rights

Please see Annex 4.11 and 4.9 for trade union questionnaires. In depth face-to-face elite interviews were taken with policymakers, foreign consultants and donor representatives as follows:

Table 4.5: List of elite interviewees

Name and Designation	Organisation
Mohammad Reazuddin, Director, Technical Department (Industrial Licensing)	DoE
Ghulam Hussain, Joint Secretary, and former Head of the national Social Compliance Forum	Ministry of Commerce (MoC) Social Compliance Forum (SCF)
Lutfor Rahman, Second Vice President	BGMEA
Alan Roberts, Head	MFA Forum (MFAF)
Indranil Chakraborty, Social Development Adviser	Department for International Development (DfID)

Please see Annex 4.1, 4.5, 4.6, 4.7 and 4.10 for questionnaires.

Interviews:

While some contacts had agreed to be interviewed before my fieldwork started, the final list of interviewees was vastly different, since many more actors were interviewed than initially thought was necessary. Elite respondents were interviewed using the semi-structured method, using more open-ended questions. These interviews ran for much longer than 30 minutes, depending on the number of open-ended questions. These interviews were mainly conducted in Bangla.

Formalities of Interviewing:

Verbal consent was taken from interviewees before interviews were conducted, and they were reassured that the data was to be used solely for research purposes. Kvale (1996) recommends that the respondent be briefed and debriefed at the beginning and the ending of the interview. Accordingly, I provided the interviewees with the context of the interviews, and a cover letter explaining the broad research aims. Whenever possible, interviews were recorded with the permission of the interviewee. This helped in verifying the responses, although using a semi-structured interview where the responses have been circled by the interviewer was very useful in verification and analysis of the data. Prompts listed under the questions were used as sub headings and provided structure to note taking. Whenever possible, interview statements and specially quotes were verified with the respondent (Bell 1993).

4.4 Transcribing, Coding and Analysis:

This thesis aims to create new understanding of a situation by exploring and interpreting complex data from interviews, observations, field notes, policy documents or news reports. Methods for analysing data were determined when data collection instruments were being chosen to enable smooth analysis. Methods commonly used in the social sciences involve examining text (primary and secondary data) and recording growing understanding through making annotations or memos, coding and reviewing coded material by topic, rigorously searching for patterns, building theories or explanations and grounding them in the data, displaying models and producing a final thesis (Gaskell 2002).

Since the interviews were conducted in Bangla, I translated the interview transcripts into English. After translation, coding and analysis was done broadly according to content analysis principles guiding the following steps:

1. Choosing the level of analysis.
2. Deciding how many concepts to code for.
3. Deciding whether to code for existence or frequency of a concept.
4. Deciding on how to distinguish among concepts.
5. Developing rules for coding texts.
6. Deciding what to do with "irrelevant" information.
7. Coding the texts.
8. Analysing the results.

(Bell 1993, Gaskell 2000 and Kvale 1996).

4.5 Limitations:

I have previous experience of conducting interviews in Bangladeshi garment factories outside of this thesis, and had sufficient knowledge of practical field conditions. In addition I field tested my questionnaires, etc.[59] However, I would like to say a few things about my research limitations that readers and future researchers might find useful:

Reflexivity, positionality, power relations and fieldwork - Research for this thesis was undertaken in my hometown of Dhaka, and I was very much at home in the kind of urban spaces that the factories and offices were situated in. Furthermore, due to my previous degree and employment, I was already familiar with the institutional politics and social contexts that impacted the research process. From the perspective of a *Dhakaiya*[60] female academic undertaking research in Dhaka, I would like to mention a few things about how my fieldwork was produced in what Sultana (2007:375) refers to as "negotiated spaces and practices of reflexivity that is critical about issues of positionality and power relations in multiple scales". No ethical research should be exempt from considering its origins, politics, commitments and impacts along axes of differences and similarities between the researcher and the subject (Nagar 2002). During my fieldwork I was fully aware of the reflexive aspects of my endeavour: reflection on self, process and voice/representation. I critically examined the dynamics of interviewee access and relational markers (educational background, class markers) that impacted the often unspoken power differences that preconditioned the research process (politics of knowledge production in long-established categories and narratives among my interviewees and myself) (Hardy et al 2001, Alvesson and Skoldberg, 2000). Being reflexive from the start to finish allowed me to

[59] This was done using RMG contacts in my family who patiently allowed me to try questionnaire designs. They were not interviewed for the thesis, and they helped gather addresses etc.
[60] *Dhakaiya* technically refers to the people of Old Dhaka, but is broadly used in the sense of having family that go back generations in Dhaka.

maintain ethical commitments and be clear about where to situate the knowledge created and the research process.

Although ethnically I had much in common with my interviewees, I felt like the "other" due to my class privileges (e.g. material and educational markers) during my interactions, and had to constantly negotiate the various locationalities and subjectivities of my position. This was particularly felt during my interviews with trade union workers who I felt apart from ("How do you expect to understand us factory workers when you look like the factory owners?"). The other side of our class difference was that some unionists immediately placed me in a location of respect, since working class Dhakaites are conditioned to be deferential to educated elites. Some RMG managers and policymakers also granted me access because of class commonalities, and spoke to me with class politics intact.

Another set of dynamics concerned insider-outsider roles and politics of representation, across borders of common ethnicity (Mullings 1999). During the early days of my fieldwork, interviewees gave frank opinions, but after the wage riots in June 2006, the dynamics changed and my role as a compliance researcher was seen as a problem. Factory managers plainly told me that they did not want to talk to me since I am from a UK university, the unsaid implication being that they did not trust organisations from the EU (e.g. Oxfam, Clean Clothes Campaign, etc.). My outsider status was made clearer when one factory manager told me that the BGMEA had sent out a circular asking factories not talk to compliance researchers from foreign NGOs, since the researchers were campaigning to smear the sectors' image abroad. I believe that the riots and the consequent politicisation of the debate contributed to significant research problems of respondent bias. I cannot naively assume that over time as the controversy lessened, and over continued interaction with the actors, the insider-outsider borders disappeared. However, some respondents saw the riots as an occasion to talk

frankly and perhaps justify their position as non-compliant organisations, changing my locationality to that of a sympathetic Bangladeshi who can understand their situation better than westerner ("You are a Bangladeshi, you will understand what is what, let me tell you how things really are"). My ability to speak the local dialect of Bengali and hold long conversations about local issues helped negotiate tension and I got access when a non Bangladeshi researcher would have had difficulty. My insider position was also felt during frank discussions about compliance, where rather xenophobic and nationalistic comments were made. A non Bangladeshi would probably not be privy to such frankness. Overall, my insider-outsider status was a mixed blessing, and in my mind it was a constant question of negotiating my different locationalities and personal political positionalities to build interviewer-interviewee rapport without compromising the ethical research lessons taught in the classroom. I must also mention that the ever nebulous interviewer-interviewee positionality, subjectivity and power-relations changed over time: during the post riot crackdown on trade unionists, one important source called me to say that our phone calls are likely being recorded and that for the sake of her safety I should not call her again. For her, being in contact with a compliance researcher from the UK was a dangerous thing, whereas in the early days she was an open and eager participant.

In a patriarchal society like Bangladesh, a female researcher cannot escape "othering" due to gender politics (Nagar 2002). In my case I was not unprepared for these attitudes and faced much condescension and patronising behaviour from factory personnel and elite respondents. These biases were reflected in their answers to me, as they were on topics women are not supposed to understand, and they were more interested in social discourse. In one particular instance, a technical expert promised me data in exchange for socialising; feeling uncomfortable (there are boundaries to interviewee-empathy building), I brought a chaperone to our next meeting,

and he summarily denied me access to data. How far a researcher will go for interviews in a male dominated society was also tested during the wage riots, when I had to drop interviews for fear of being harassed by the Special Forces policemen. The knowledge thus produced in this thesis should be therefore understood in the context of the inter-subjectiveness of participants (myself included) and the positionality of that time and space.

Time constraints - Time constraints during the fieldwork period may have contributed to some limitations in this study. I had planned on participating in a seminar to present my thesis findings to some major groups of interviewees (mainly donor agencies and the trade association members, since these were the groups who expressed most interest in my findings), but limited time in Dhaka meant that I could not do so. I believe that my thesis would have benefited enormously from their input. I also would have liked to collect data (follow up interviews) a year after the main policy initiatives had been implemented, but due to practical considerations of a research deadlines, this was not possible. However, this might be an interesting follow-up study.

Choice of theoretical framework and research focus - While EMT is personally very interesting to me, it may have been ambitious to try to fit it into a LDC context without having the benefit of a larger sample of data-points, in order to test the theory in more than one industrial sector. No attempt was made to contrast the EM attempts of the RMG industry with any other sector in Bangladesh, even though more polluting sectors may have more experiences regarding greening. Also, no efforts have been made to contrast the RMG factories within and outside the Export Processing Zones. The Bangladeshi RMG sector was also not contrasted with neighbouring India, Pakistan or Sri Lanka, where the EM issues may also yield interesting results and lessons from a South Asian perspective. A longer-term study may indeed find it fruitful to explore these possibilities.

Choice of research design – As explained earlier, I had decided on relying on face to face interviews because of the social norms in Bangladesh, where questionnaires received by post would be summarily be dismissed or ignored. However, interviewing had its own limitations, which I have discussed earlier; and I have taken best possible care to address problems of random selection, validity, respondent bias, interviewee bias and self selection bias (section 4.2 and 4.3), but one cannot be totally sure that all errors have been corrected for by research design.

Sample taking and data collection – I faced some problems with sampling of RMG firms, as discussed earlier in section 4.3, and much of it was outside of the realm of my control. However, if I had to do this study again, I would spend more time and cost towards selecting a much larger sample (of about 400 firms) and would collect interview data with a team of researchers in collaboration with audit firms or research organisations. A larger number of samples would have made the findings more generalisable, and it would have been useful to have a few in-depth case studies of firms who were laggards and leaders in social compliance. However, I am satisfied with the sampling of all other interview groups. There were some data collection problems, as discussed in earlier, but additionally, my efforts to collect policy documents and evaluation reports (secondary data) were unusually frustrating not only because the reports were simply unavailable from the start, but some papers were made unavailable to me because I informed them of my research topic, which was perceived as sensitive. I believe that given enough time and social networking I could have accessed more relevant material for my thesis.

Measurement of variables – Since my thesis looks at internal firm skills and policy maker behaviour, much of it cannot be quantified or measured quantitatively. However, I have tried to ensure reliability and validity of my findings by triangulation (section 4.2) and have attempted to maximise data validity, and reliability, to the best of my capabilities.

4.6 Conclusion:

This chapter explained how the theoretical framework of Chapter Two was tested empirically and presented a justification of the research design. It also described the process of interviewee selection, explained why and how interviews were undertaken with state and non-state participants, and how the results were analysed using content analysis principles, as well as some limitations of the research design and lessons for future researchers. In the following chapter I present my empirical findings by testing the first of three hypotheses.

Chapter Five: Eco-Compliance Upgrading and Bangladeshi RMG Firms

5.1 Introduction:

In Chapter Three we saw how eco-compliance requirements in the apparel value chain are close to what Christoff (1996) called weak EM. This chapter develops that thought empirically by examining how factory managers operationalise those requirements across entrepreneurial, engineering and administrative dimensions (Miles and Snow 1978), which involve not only technological/material changes, but also social/cultural changes. For EM to work, managers would need to strategise for profit generating eco-proactive measures (and not just reactive end-of-pipe ETPs). This would need to be driven by EM principles of "scientific information" and EM enabling management systems. I begin by testing the hypothesis that:

Poor environmental upgrading in firms will be associated with factors internal to the firms, such as corporate culture, slow changing behaviour, problems with learning environmental information, and will be linked to poor competitive advantage gains.

This chapter problematises EM on the factory floor through the RBV, which suggests that a firm's proactive/reactive environmental compliance behaviour is associated with its *strategic and core resources* (which are unique to the firm, and are often knowledge based, socially complex, and causally ambiguous), and that whether a firm can achieve competitive advantage from greening behaviour or not depends on its *strategy making* (that can be either proactive or reactive, utilising the firm's unique strategic skills, and tangible and non tangible resources) which should include not only the ability to spot "win-win" opportunities (to be provided by changing market signals) but also on the ability to *continuously implement* the strategies. An important RBV suggestion for this thesis is that a firm that uses only non-RBV skills for greening tends to have reactive strategies. Since non-RBV skills are the

opposite of strategic and core resources, they are also held by competing firms, and therefore cannot lead to competitive advantage.

I begin with briefly summarising the main environmental impacts of RMG production and then talk about the environmental demands of compliance, since the demands are what drive the proactive vs. reactive strategies. I divide the demands into two parts - the buyer and third party codes, and national legislation. In Chapter Three I talked briefly about how environmental issues are crowded out by the social/labour/worker rights issues, and in this chapter I bring out the marginalised issues of environmental issues in codes and laws.

Then I look at the RMG responses (environmental clearances, third party certification, environmental management systems, effluent treatment plants, etc.) and examine how the proactive/reactive strategies corresponded to the elusive "win win" gains. The lack of environmental upgrading success is further examined at the level of the boardroom and the factory floor. Before that, a brief summary of my findings is presented in table 5.1.[61]

[61] Some of the information in Table 5.1 has already been presented in Chapter Four. It is repeated here for providing context.

Table 5.1: Characteristics of Sampled RMG Firms

Firm Size (according to number of workers)				
Number of workers in firms	Size distribution in Sample (%)	Size distribution according to DWPP 2004 data[62] (%)		
Small (0-199)	15	29		
Medium (200-399)	58	38		
Large (400+)	26	32		
Firm Type (according to product category)				
Knitwear	29%	53%		
Woven	71%	47%		
Level of Integration into GVC (according to order types)				
	Distribution in Sample (%)	Distribution according to DWPP/Gherzi 2003 data[63] (%)		
Direct orders only	73%	30%		
Subcontracts only	7%	20%		
Both types	7%	50%		
Production type				
A: Dry process (cutting and sewing only)		77%		
B: Wet process (detergent wash only)		13%		
C: Wet process (detergent and chemical wash)		9%		
Overview of Environmental Performance, selected target indicators				
	Large%	Medium%	Small%	Total%
DoE Certification	100.0	100.0	37.5	84.9
WRAP Certification	50.0	29.0	25.0	32.1
SA8000 Certification	21.4	0.0	0.0	5.7
ISO9000 Certification[64]	21.4	32.3	0.0	24.5
OKOTEX Certification	0.0	3.2	0.0	1.9
ETPs	3.0	16.1	0.0	15.1
Environmental Management Systems (EMSs)	21.4	35.5	0.0	26.4
Own Environmental Policies	21.4	0.0	0.0	5.7
Environmental benefits from compliance	100.0	90.3	50.0	81.1
Increased orders from compliance upgrading	57.1	48.4	0.0	43.4

Selected descriptive data for all 53 factories is presented in Annex 5.1. Overall, it is difficult to draw general conclusions about factory types (factory size - small, medium, large; product type - denim, woven, knit; or production style - wet or dry, type A/B/C; buyers serviced - EU or US) and eco-performance.

[62] This is the most recent classification of RMG firms according to number of staff, as specified in the ILO 2005 project "Decent Work Pilot Programme" (DWPP) briefing note, "Enhancing employment and Global Competitiveness Through Decent Work: post MFA Challenges and Opportunities"(Choudhury and Hussain 2005). The BGMEA information cell provided confirmation of this data being the most recent.

[63] This is according to the above quoted DWPP paper, which in turn quotes the Gherzi & PPMA (2003) report on the Bangladeshi garments industry, as referenced in the bibliography.

[64] SA8000 and ISO 9000 are quality assurance management standards and have no eco-components. These are included here to show factories' comparative interest in being certified.

There are large, financially stable, denim weaving factories that do not have ETPs (e.g. Ha-Meen Group Ltd.); then there are large woven factories that do (e.g. Opex Group). Regardless of size or financial stability, some factories' need for ETPs is ambiguous: many factories do not do their own washing (they subcontract to "washing plants") or they subcontract on an irregular basis or they subcontract for one of their factories but not the others. Their eco-performance also cannot be tied to the buyers they work for either: factories typically work for a mixture of US and EU buyers since factory owners are risk averse to international economy fluctuations.

5.2 Environmental Impacts of RMG:

A 2007 study of the RMG sector's eco-efficiency needs by GTZ-PROGRESS summarised the energy demands of the RMG processes and eco-impacts (table 5.2).

Table 5.2: Major energy consuming equipments in RMG

Process Application	Equipment	Eco-Impacts
Compaction Machine	Calendars, Motors	Electricity, Steam, Compressed Air
Dryer Machine	Motors, Heaters	Electricity, Gas, Compressed Air
Dyeing Machine	Motors, Agitators	Electricity, Steam
Electricity Generation	Gas Engine Gen Sets	Electricity, Gas
Air Compressor	Motors	Electricity, Water
Water supply, distribution	Pumps, Motors	Electricity
Steam Generation, distribution	Motors, Burners	Electricity, Compressed Air
Ironing	Electric- Steam Irons	Electricity, Gas
Lighting	Bulbs, Fluorescent Tubes	Electricity
Sewing	Sewing Machines	Electricity
General Ventilation, Air conditioning	Fans, Air conditioners etc.	Electricity

Source: GTZ PROGRESS 2007c:16

In addition, the report also identified that RMG production consumes large amounts of water (steam production for boilers, especially in dyeing segments, washing garments, steam production to run irons, equipment cooling, space cleaning, etc.), natural gas (fuel for the boilers, power generators, garment dryers, stenter machines, etc.) and chemicals (dyes

containing caustic soda, sodium chloride, sodium carbonate, sodium sulphide, sodium hydrosulphite, hydrochloric acid, other acids, alkali and salts).[65] Buyers have banned some dyes, as they are known to release amines during processing, which are potentially carcinogenic. Without going into details of the chemical processes involved, it is easy to say that the RMG production process (for knitwear, sweaters and woven) has ample opportunities for proactive and reactive eco-management; particularly in areas of increasing recycling (solid wastes sold off/recycled), using renewables (renewable energy such as solar panels for indoor lighting, since heavier load renewable energy options in Bangladesh are nascent), treatment of toxins (using ETPs consistently), reducing energy use (better use of machines, heat conservation, improving processes towards less energy consuming alternatives like cold pad batch dyeing, modernisation of hardware, steam pipes, steam traps, condensate recovery, etc.).

5.3 Buyer Codes and Environmental Strategies:

CSR research has consistently shown that CSR means different things along the supply chain (Welford, Chan and Man 2007) and therefore a critical analysis of apparel codes was undertaken. The buyer codes included: Adidas-Salomon AG, Gap Inc., Hennes & Mauritz AB (H&M), Levi Strauss & Co., Liz Claiborne Inc., Marks & Spencer (M&S), Nike Inc., Phillips-Van Heusen Corporation, Reebok International Ltd., Wal-Mart Stores Inc., Fruit Of The Loom, Sara Lee Corporation, Caters' Corporation, Jones Apparel Group Inc., JC Penney Inc., VF Corporation, Warnaco Group, Gear For Sports Ltd., and Sears Roebuck and Company. In addition to these retailers, key third party international codes were reviewed: Clean Clothes Campaign (CCC), Ethical Trading Initiative (ETI), Fair Labor Association (FLA), Social Accountability

[65] The study did not measure any eco-impacts using water or air quality standards.

International (SA8000), and World Responsible Apparel Production (WRAP).[66]

Literature on convergence of code content in chains is extensive (e.g. Nadvi 2004) but not much was known about the convergence of apparel chain codes' eco-content. Despite the existence of common codes (Jo-In and WRAP), there is a contestation of standards as they tend to cover similar themes but add to the overall complexity of monitoring and emphases.[67]

Detailed cross comparison of code content is presented in Annex 5.2, however, eco-content is more pronounced in company codes that source denim and footwear - two of the lines that are generally acknowledged as being the more polluting within the RMG product range.[68] For example, Levis Strauss and Co. included eco-provisions in their supplier codes as early as 1991 and was the first company to implement global effluent guidelines for their denim suppliers in 1995. Unfortunately for EMT, the majority of codes are less articulate or specific about environmental concerns: they usually pack greening into "environmental health and hazard reduction" issues and do not say anything explicitly about a specific "environmental policy" for the suppliers, a phased time frame for implementation (which directly encourages one-time reactive strategies), recycling-reuse-reduce principles, proactive waste management, or hazardous emissions.

[66] Please see bibliography for details of the codes reviewed.
[67] Chapter Six and Seven examine this in more detail.
[68] No studies have been done on the pollution loads across the Bangladeshi RMG product line to date.

Table 5.3: Environmental content in buyer and third party codes

Aspects	Third party standards	Brand leader buyers	Non brand buyers
General Environmental Policy within the Codes?	Low stringency; mainly emphasis on occupational health and safety.	Low stringency; mainly emphasis on occupational health and safety, OSHA[69] codes. Some have specific requirements.	Vaguely defined. Most do not mention the environment at all.
Emphasis on national regulatory standards?	Yes, often does not go beyond it.	Yes, sometimes goes beyond it.	Some do.
Timeframe for becoming compliant?	None.	None.	None.
Focus on raw materials used?	None.	Few, but mostly none.	None.
Focus on hazardous emissions:	None.	Few.	None.
Focus on waste management:	Yes, but non-specific on operations.	Some do, but for high value added lines only. Marked preference for reactive strategies.	None.

Some brand buyers that are under media scrutiny and reputational risk pressures, emphasise eco-proactiveness but that is coupled with a preference for control technologies, like ETPs. Another shortcoming is that they concede to *national legislation* in environmental controls, which is a serious weakness given that governance by codes was born because of the weak environmental performance capacity and weak LDC regulations in the first place.

Regardless of the code shortcomings, their importance in strategy making is beyond question. In this survey, 28% of all interviewed firms were ISO9000 certified, 32% had WRAP, and 5% had SA8000. These were all large and medium sized firms, meaning that small firms are either less pressured or unable to go beyond minimal efforts. Interestingly, ISO14000 and UN Global Compact are not popular in the RMG sector: none of the interviewed auditors

[69] US Occupational Safety and Health Administration's (OSHA) supply chain standards are popular among US listed companies like Nike, etc.

have audited for these standards, and according to the UNGC website, no Bangladeshi RMG firm is participating in its programme. [70]

5.4 National Laws and Environmental Strategies:

The environmental aspects of Bangladeshi RMG factories are covered by the National Factories Act (1965) and Factories Rules (1979) which cover environmental quality in and around the factory building (that are emphasised by the codes as "health and safety"); the Bangladesh Environmental Conservation Act (ECA 1995); the Bangladesh Environmental Conservation Rules (ECR 1997) and the DoE's EIA Guidelines for Industries (1997) (Saifullah 2005a, 2005b and 2005c, SEDF 2001). The last three set the regulatory requirements for Environmental Clearances (ECs) based on environmental impacts (such as liquid emissions and waste disposal), aspects that are emphasised by some larger buyers (please see Annex 5.2).

The EIA Guidelines (1997) are intended to give RMG entrepreneurs a sense of what environmental impacts may potentially arise during the design, construction, operation and emergency situations; and how identified impacts are to be quantified and mitigated. The Guidelines are vague about proactive measures, and leans towards prioritising economic growth over greening: it recommends "Competent design to minimise/offset adverse effects based on realistic operations assumptions" (DoE 1997: 72), and in particular, measures such as reducing effluent water to DoE (1997) standards, discharging to municipal sewers, or joint disposal with other industries, in order to achieve "economy of scale plus better environmental protection" (DoE 1997: 73) and simplified monitoring. The document does mention proactive strategy making:

[70] Source: UNGC website at: http://www.unglobalcompact.org/ParticipantsAndStakeholders/index.html, accessed on July 17, 2008.

> Along with the mitigation measures, suitable project modifications may also be considered to minimise the severity of impacts and to reduce cost of mitigative measures. This can be achieved by providing some engineering controls. A few of these are mentioned below: siting, buffer zones, lay out designs, resource substitutions, resource minimisation, process or storage modifications, dust control, assess control, labelling, temperature control, monitoring of hazardous gases, shut down; and secondary containments. (DoE 1997: 17).

Along the pipe measures are not explained clearly anywhere in the document, while ETPs are emphasised in line with the ECR making them mandatory. Also, proactive managerial options (e.g. modifying lay out design, recycling, reusing, reducing, etc.) are never linked to environmental damage avoidance or to cost savings. Therefore, if RMG firms took their environmental strategy cues only from national legislation, then they would be left with predominantly reactive end of pipe strategies.

Overall, the codes and national legislation are creating incentives for a mixture of proactive and reactive strategies: buyer codes usually pack environmental issues with "health and safety" and require on-going changes in areas of worker health and safety, the idea being to prevent environmental degradation, accidents or injuries *within the factory premises*. Therefore, codes are resulting in proactive strategies when legal liability is directly provable, but not in the case of effluent management or air pollution, where there is the possibility of passing on environmental responsibility to the community.

5.5 Environmental Upgrading Strategies on the Factory Floor:

The discussion so far shows that the environmental upgrading demands are not very ambitious from a strong EM perspective; it has the hallmark of a corporatist model of EM where greening incentives are diluted to the benefit

of the private sector, at the cost of ecological protection. In the absence of strong and specific greening requirements from buyers that supersede national legal requirements (as happened with wage rates, working hours, chid labour, etc.), RMG firms have evolved a strategy of loophole hunting and reluctance to go beyond making minimum effort which further weakens the EM goals, as we shall see below.

Environmental Clearance Certificates (ECCs):

According to the ECA and ECR, RMG factories are Orange B type, and are thus required to submit Initial Environmental Examination/Environmental Management Plan reports along with layout plans for an ETP, with fees, to obtain an ECC.[71] The DoE does not distinguish between RMG process types (e.g. denim factory vs. a "fabric stitching only" factory). The financial cost of certification is dependent on total capital investment of the firm (table 5.4).

Table 5.4: Cost of DoE ECC (Source: DoE 1997)

Capital Investment into Industrial Unit	ECC Fees Payable to DoE
Tk. 100,000 - 5,00,000	Tk. 1,500
Tk. 5,00,000 - 10,00,000	Tk. 3,000
Tk. 10,00,000 - 50,00,000	Tk. 5,000
Tk. 50,00,000 - 10,000,000	Tk. 10,000
Tk. 10,000,000 - 2,00,000,000	Tk. 25,000
Tk. 2,00,000,000 - 5,00,000,000	Tk. 50,000
Above Tk. 5,00,000,000	Tk. 1,00,000
Note: renewal fees are 25% of ECC fees.	

However, certification costs also include arranging the IEE, EMP, ETP plans, emergency relocation plans, etc., which costs money and management time (other requirements such as project feasibility report and no objection certificate from local authorities are also required by the BGMEA for trade registration, so do not cause additional pressure on the firms). The preparation of the IEE, EMP, ETP design and emergency relocation plans require specialist professional input (hiring outside consultants), the costs of

[71] Details are given in Annex 5.2

which are to be counted towards becoming environmentally compliant. The maintenance of the EMP is a continual process and requires the training of upper and middle management (as well as workers) to realise its intended benefits - this requires staff commitment and tangible and non tangible resources.

The rate of compliance with DoE certification was quite high (84% of all firms said they were compliant). The most cited reason for investing tangible and non-tangible resources into certification, was to get a gas connection (79% of all firms); the second most cited being threat of failing a DoE audit (39% of all firms). Buyer motivation was the third most popular reason (18%) but all of these were medium and large sized firms that work for higher end buyers, which would explain the breakdown in supply chain pressure among the lower rung suppliers. Only 3 firms (all large, but none of them involved in denim manufacturing) said that they sought certification due to ecological concerns. Interestingly, DoE audit failing was cited most by medium and large factories; one manager of a large factory said that they did not need to wait for buyers to ask for ECC, as a high profile operation, they were fully aware of legal responsibilities and had all applicable government certificates. Another manager simply said,

> *Our company does not wait to be told to be compliant.*[72]

So, is the ECC as unproblematic as that? It would seem far from it: the biggest barrier is meeting the costs of the legally mandatory ETPs. It is safe to assume that individual ETPs, regardless of factory size or production type, present a major cost barrier for RMG firms, when compared to the option of government run common ETPs where factories share running costs. Most RMG factories do not have ETPs. Since they are operational with gas connectivity and trade licenses (for which they require ECCs), it is safe to

[72] R12

assume that it is possible to ignore aspects of the certificate. This reveals that unrealistic policymaking resulted in such high cost barriers, that RMG firms began finding ways of bypassing it.

The RMG firms have found other ways of achieving "cheap and quick" compliance: the issuing process of ECCs has an element of "grand fathering" built into it. Since ECCs were guaranteed for all pre-existing (and new Green category) industrial units, it creates a legal loophole that allows RMG firms that were opening up new factories to get low cost ECs by showing pre-1997 registration dates. According to my interviewees, this is fairly common. Furthermore, the ECR has a built in discretionary element which allows for more short cuts. According to the DoE (1997: 26):

> (4) For industrial units and projects falling in the Orange - A, Orange - B and Red categories, firstly a Location Clearance Certificate and thereafter an Environmental Clearance Certificate shall be issued: Provided that the Director General may, without issuing a Location Clearance Certificate at the first instance, directly issue Environmental Clearance Certificate if he, on the application of an industrial unit or project, considers it appropriate to issue such certificate to the industrial unit or project.

Although the certification process was a pale version of what it ought to be by law, the firms still had great difficulty in getting a certificate. All firms faced certification problems. 51% thought DoE was generally an unhelpful and inept organisation, but the biggest problem cited was the need to pay bribes to get anything done - 79% of firms admit to having given bribes for certification. Firms are concerned about being fined by the DoE for not having a certificate or for non renewal because fines are seen as an avenue for bribe seeking, and so they prefer paying a fixed amount for certification and avoid fines. One respondent said,

We pay baksheesh[73] *to government officers, and that is not a problem. But what is a problem is that the DoE baksheesh is for no use. If you don't give baksheesh then there is even more suffering.*[74]

Repeatedly respondents expressed their frustration at the ECC as being paperwork that can be annually used to exert more baksheesh, with no service given to the factory in exchange. While most companies seemed to be resigned to the system of paying bribes to grease certification processes, some respondents were less tolerant.

The second biggest problem was the certification process itself. 37% of firms found the process to be too bureaucratic. The third biggest problem cited was the inability of the DoE staff to advise on environmental assessments, etc. Since "paper compliance" is so cumbersome, RMG firms are reluctant to go any deeper: *none* of the DoE certified firms had submitted the mandatory IEE, which is the first step towards getting certified, and only 14 firms had home made EMSs, which is also mandatory.

Minimal efforts are enough, especially since regulatory oversight is nonexistent: 40% of the certified firms said that the DoE never came round to inspect their premises, even though an inspection or two is mandatory before certification, according to the interview with the head of the Technical Department of the DoE. When asked about what the inspections entailed, the 60% of firms whose factories had been physically inspected by the DoE, said that the DoE inspectors wanted to walk around the factory with accompanied by factory staff; some firms thought that inspections were a good opportunity for maintaining cordial company relations with the regulators. These inspections are never unannounced, so the factory is always prepared and

[73] Baksheesh denotes a gratuity or a tip, but in this case it is more substantial than a tip.
[74] R7

alert. Some respondents said that inspections tend to be preceding religious holidays, and sometime involve the factories paying informal "fees" to the inspector. This reveals a high degree of agency capture, where the regulator is happy to not ask for too many changes or find fault, while rushing through with paperwork. Most firms seem to accept this as part of the cultural norm of doing business around religious holidays.

The DoE certificate has to be renewed annually, with the EMSs updated. 84% of the firms said that they apply for certificate renewal every year, while the rest said that certification was a "one time thing". Therefore, it is possible to recycle their first DoE certification during renewing their trade licence every year with the BGMEA. A few respondents said that it is possible to show DoE certification obtained for one factory site when getting a gas connection for a second factory, or a second trade licence, which points to how easily authorities turn a blind eye to environmental certification irregularities.

RMG firms that did go beyond minimal paperwork revealed a disconnect between their greening strategies and the DoE. In this survey, firms with ETPs and EMSs said that although they had mentioned ETPs/EMSs in their ECC application, their decision to have ETPs/EMSs was mainly because of buyer requirements, and not driven by national legislation requirements. While this statistic underlies what we already saw - that DoE certification is not strictly followed - it also points to the fragmented nature of environmental upgrading that is likely happening outside of an integrated framework that is supported by the nation-state, in line with EM prescriptions. Currently, upgrading problems will remain the lone responsibility of the firm, which increases the risk of upgrading initiatives slowing down or halting.

Environmental Management Systems (EMSs):

EMSs can be a good indicator of proactiveness within firms (that can lead to competitive advantage, according to RBV), and are mandatory for ECC. Since 84.9% of the interviewed RMG firms had DoE certification, it was interesting to ask whether the EMSs were fulfilling their potential for proactive strategy making. However, most ECC firms did not know what an EMS was. Only 14 out of the 53 said they had operational EMSs - 11 medium, 3 large firms and none of them in the denim sector.

Designing an EMS requires expert input, however, *none* of the 14 firms have employed outside experts in designing the EMS; instead only their top management were responsible for designing it. They did not receive any help or information on it from the DoE, peers or buyer manuals. Top management possibly created homemade EMSs to speed up the buyer audit qualification process, save on consultant fees, time and costs of genuinely changing to eco-friendly practices. In that case, these firms are either unaware of the benefits of having an EMS, or they are actively looking to avoid proactive greening strategy making.[75]

So what does the state of EMSs tell us about the RBV skills or green profits? Given the home-made EMSs, one cannot reasonably expect displays of RBV skills. None of the 14 firms could cite examples of strategies that have been implemented as a by-product of their EMSs. Most of them agreed that keeping EMSs ongoing was troublesome - it was difficult to monitor, too time consuming and often forgotten under the pressures of running a business. Predictably, running the EMSs has not been profitable: none advertised their EMSs as a selling point when attracting new buyers; and 11 out of the 14 respondents said that the financial benefits (in terms of cost savings from

[75] None of the 14 firms agreed to show their EMSs.

EMSs) were unclear. This is hardly surprising, since the cost-savings to be made from a proper EMS were probably not evident in these cases.

Environmental Health Measures:

Under threat of failing buyer audits, firms of all sizes have designed and implemented a number of on-going preventative strategies (albeit, performing only moderately well at it, and only being proactive on-site, where legal accountability encourages a precautionary approach). These are:

Cleanliness - This involves managerial and operational changes to ensure that factory floors are swept every day of considerable amounts of fabric wastes. This involves low financial investment, however, according to Ms. Shamsun Nahar of Bangladesh Centre for Advanced Studies (BCAS), who is undertaking a compliance training programme in 15 RMG factories, everyday things such as cleanliness and "keeping the factory floor in presentable conditions" are the hardest for the factories to maintain. One manager gave the perspective from the other side,

> *Tell me what to do? These buyers keep harassing us for so many things, and there are so many things I have to keep my eyes on, that the rules for floor sweeping and drain cleaning seem like extra harassment. If I follow what the buyer says then the whole floor has to be swept every two hours. If I do that then the floor will be full of cleaners and not workers.*[76]

Disposal of wastes and effluents - Solid waste disposal is not a problem in factories, according to the auditors, since waste is sold off as "factory jute" to traders who recycle the material. In fact the trade in factory jute is fairly lucrative, and factory jute trading rights are sometimes part of wage negotiations with labourers. Liquid wastes are mostly disposed without much

[76] R36

attention to its environmental impact. According to a CEO the problem of effluents is only partially addressed:

> *The water pollution from garments industry is a lot worse than you think. You should take a walk around this neighbourhood [where there are many washing plants] and look at the drains. Its hard to breathe. Many factories do not do their own washing and rely on washing houses that are not covered by buyer audits. The DoE or the BGMEA are not focusing on the washing houses, even though they [the washing units] live off the garments industry.*[77]

Therefore, it is possible for RMG factories to pass off their responsibilities of water pollution to washing units and pass on the costs of environmental pollution to the community, since the washing units directly dispose untreated wastewater to public waterways.

Ventilation and temperature - Considering that most factories are situated in buildings not purpose built for accommodating manufacturing units, installing ventilation fans pose financial and infrastructural challenges for older and smaller factories. It may be noted here that auditors do not check air quality for particulate matter or temperature during audits.

Dust and fume – The cutting and sewing of fabrics produces "fabric dust" inside factories. Such indoor air pollution is causing respiratory illnesses among workers, as reported in the 2006 Fair Wear Foundation Study[78] on Bangladeshi RMG factories. Codes single out "dust control" requirements and require the installation, operation and maintenance of exhaust fans, which involves financial investment as well as management commitment. In some cases, buyers ask that workers wear masks. Auditors interviewed said that

[77] R47

[78] Available online: http://www.fairwear.nl/tmp/Background%20study%20Final%202006.pdf, accessed on October 1, 2007.

masks were rarely worn. RMG firm management confirmed this when asked if their employees wore dust masks.[79]

Chemical hazards - Certain RMG processes require toxic chemicals (such as chemical dyes and treating agents for cloths), which necessitate careful storage and handling. Consequently buyer codes insist upon materials safety data sheets (MSDS) which require trained personnel to identify and label the chemicals correctly, along with information on how to store it, where to store it, expiry dates, and what to do in case of emergencies. This requires investment into management training to run a MSDS system, which is inspected by the buyer or the compliance auditors. According to the auditors, MSDS are almost always not up to date, but more seriously, often chemicals are stored incorrectly, creating fire hazards.

Drinking water - The provision of safe and clean drinking water has become one of the more contested areas of compliance, since brand name buyers are dissatisfied with the potability of Bangladeshi tap water and insist on suppliers providing the workers with mineral water in the factories - a practice which is absent in other industrial sectors in Bangladesh. Factories are responding by having contracts with mineral water companies who stock water coolers on factory floor. However, there are questions whether these coolers are regularly filled with mineral water or not, and whether mineral water is really as safe from contaminants as it should be and if not, then whether providing mineral water is beneficial to worker health.[80]

Latrines and urinals - Buyer codes insist on latrines facilities in proportion to worker numbers, something that is also covered by national legislation and often flouted. This is a major challenge because most factory buildings were not built following the Factory Act specifications, or are situated in buildings

[79] This aspect it covered later in this chapter under the sections on Learning and Organisational change.
[80] Please see Khan (1992) for a discussion on naturally occurring arsenic levels in Bangladesh's bottled mineral water.

that were not purpose built for RMG factories, as a result they do not have enough latrines for hundreds of workers. Firms supplying to larger brands are either taking this aspect into consideration when constructing new factories, or investing in re-constructing their venues - sometimes at considerable additional cost - and introducing management changes such as appointing a person in charge of toilets, hiring cleaners for cleaning all the toilets every two hours and maintaining a logbook which is managed by the factory compliance-in-charge. Compliant factories now need to employ male and female staff solely in-charge of cleaning male and female toilets, therefore driving up compliance costs. Performance audits in 2004 by the Fair Labor Association (FLA)[81] of large suppliers under contract with Puma and Reebok found that toilets were uniformly unsanitary and insufficient in numbers. The auditors I interviewed corroborated this. The RMG firms that were interviewed also mentioned the requirement of toilets and upkeep of facilities as unrealistic demands given the significant costs and management challenges. One CEO said,

> *In our new factory we have enough latrines, as requested by Levis and Wrangler. Now days we have fitted our floors with mineral water coolers. We let workers take bottles of mineral water home. I don't see any difference in the health of the factory workers now versus workers in the old factory. What is the difference when they share toilets at home and drink tap water?*[82]

Another owner said,

> *In this factory we have been asked to provide toilet tissue in every bathroom. I tried explaining to the buyer that we are Muslims [meaning that workers use*

[81] Source: FLA website online reports at http://www.fairlabor.org/all/transparency/charts2004.html, accessed August 23, 2006.
[82] R1

wet latrines, not tissue]. But they don't want to understand. I am not happy about spending money for no good reason like this.[83]

Equipment maintenance - Management is required to conduct regular machine safety and maintenance checks and maintain logbooks submittable to auditors. Of particular interest are the needle guards in the over-locking machines and the pulley guards. According to the interviewed auditors and factory management, these guards are frequently inoperable or left unused, reflecting management lapses. Some buyer codes require the use of personal protective equipment (PPE) by workers, such as steel gloves, aprons, hair nets, overalls, dust masks, etc. Concerned factory owners said they were reluctant to invest in PPE since they believe their workers will not use them regularly, given the heat and humidity of Dhaka's urban areas that make the thought of wearing overalls, aprons and masks rather unattractive. One RMG manager said that they bought PPE but not in enough numbers since they do not insist that their workers wear it (with the assumption that the discomfort or cultural strangeness will make PPEs unpopular) and only use them during audits. Therefore, even though these RMG firms may have proactive strategies (i.e. preventing harm, reducing risks), their implementation is irregular.

Overall, the firms are taking some proactive strategies but are still faring poorly: tangible resource constraints (such as cost problems of infrastructural shortcomings) and intangible resource constraints (such as management skills, etc.). Proactive strategies were also being hampered due to a lack of strategy making towards human capital building (e.g. training staff members to handle MSDS requirements, etc.) or using any unique skills (RBV skills).

[83] R23

Third party certification (WRAP etc.):

Third party certification (TPC) is seen as a significant badge of achievement among RMG peers and buyers, and it was interesting to see which firms strategise for such certification, using what skills, and why. In my sample, 34 firms had TPCs that had environmental requirements built into it. All of these firms were large and medium sized. A denim factory in my sample did not have any TPCs, but their parent company did. Out of the 34, 3 firms had multiple certifications. WRAP is the most popular, followed by ISO9000. Only 3 firms had SA8000 certification, and only 1 had the most environmentally demanding OKOTEX certification. None had ISO14000 certification. WRAP is approved by the members of the American Apparel and Footwear Association (AAFA), and is accepted by around 700 apparel-sourcing companies, which, according to RMG interviews, is the main motivation for getting certified.

Firms that did not have TPCs mentioned cost as an entry barrier, and TPC holding firms also believe that is the case: 21 out of 34 TPC factories felt that the cost was prohibitive. Cost estimates given were sketchy, since many respondents did not have accurate data at hand, but generally, it was revealed that WRAP certification can cost about USD 750-1500, while SA8000 costs about USD 8000,[84] overall the costs were thought to have been significant.

These firms actively advertised their TPC status to buyers (a stark contrast to their DoE certification); 16 out of 34 said that they advertise it through their company portfolios. 12 firms said that buyers directly asked them to get certified in order to maintain order share, and an equal number said that they did it without being asked to, but in consideration to maintaining market competitiveness.

[84] Certification costs vary depending on which level of certification is applied for, the size of the company, and number of field audits needed, etc.

So did the credibility translate into competitive advantage? The respondents did not cite a direct rise in cost savings, but they mentioned indirect benefits such as attracting better buyers, continued orders from existing buyers, more confidence in negotiating with buyers on price issues, and getting larger volume orders. Rarely did the RMG firms say that these certifications led to higher prices per piece, but it led to being allowed into the "big league", as one manager put it,

> *Getting certified helped us. We started working with better brands, but only in one case we got better CM, since Dockers pays more if the factory has WRAP certification. That certification was a good idea? For sure.*[85]

Several RMG factories said that these certifications were something to be proud of, since it shows that theirs are some of the most well managed and ethically conscious firms in Bangladesh. A compliance manager said,

> *We gained moral satisfaction and a better confidence in negotiating with buyers by getting certified (by third parties).*[86]

Several interviewed factories said that they had started the WRAP certification process but then abandoned it. One manager said that it was too cumbersome and demanding, especially since the repeat audit team visits meant that it could not be handled in the same way as the Do ECC. Costs of certification were seen as exceeding the tentative budget this company had. The manager said WRAP certification cannot be done with bribes, which is why his factory eventually backed out. Another firm said that they had gotten the papers for it during a season of low orders, but then they got a large contract from a (non brand) buyer, and decided it was not worth it. So, getting

[85] R5
[86] R28

TPCs is related not only to the business cycle, but also relational to the other certification systems applicable to the factories.

The strategic and operational requirements of TPC schemes and high-end buyers codes are similar; only that TPCs like WRAP involve more paperwork at managerial levels. According to a WRAP certified RMG manager, they have to read the handbook, do a self assessment of compliance performance related to WRAP and applicable legal requirements, and then prepare paperwork stating they accept the WRAP principles, do a breakdown analysis of shortcomings and formally write a strategy paper on corrective actions. Then the WRAP auditors check the factory and typically give them more corrections, and the management documents the changes made, and then are finally certified. WRAP basically forces the company to be more organised and manage compliance better, although WRAP does not require any additional operational measures, such as creating inter-firm networks for peer learning or alliances with NGOs, etc.[87] So why did these TPCs result in competitive advantage? The answer may lie in the "blanket brand value" of TPCs among buyers, and in the fact that RMG firms that sink high costs into TPC mobilise more of their staff time and effort into continued implementation to ensure continued returns from investment.

Effluent treatment plants (ETPs):

RBV suggests that reactive strategies such as ETPs cannot yield competitive advantage, but my findings are not so straightforward. 8 firms in this sample had ETPs, 3 were large companies and 5 were medium sized. One of the companies with an ETP was in operation for 14 years before installing an ETP. When asked about why it took them so long, the respondent replied that the requirement for ETPs is fairly recent (ECA of 1998) and additionally, they had

[87] The auditing integrity has been questioned and is covered at length in the next chapter, which calls to question whether WRAP certified firms are indeed performing better on compliance.

to wait till they could afford to invest in it. Two other firms went into production with ETPs, but in both these cases, the firm was an extension of an existing parent company that was financially strong and had long market experience in RMG, and could afford to make a new fully compliant "full service" factory.

Interestingly enough, the denim RMG factories relationship with ETPs is unclear: most of the denim factories are part of large and well established RMG companies (several of them are in fact part of different multi-sector conglomerates, for example Shanta Denim Ltd. is part of the Shanta Group that also owns two international private schools, a real estate company, one of the largest private hospitals in Bangladesh, in addition to several large RMG factories). Most of the parent companies have other (and typically older and well established) non-denim RMG factories and "washing plants" which are presumably used for non-denim products as well. Some, not all, such parent companies have ETPs (e.g. Jamuna Apparels Ltd, Partex Denim Ltd. and Shanta Denim Ltd.). However it is never entirely clear whether the ETP is connected to the washing plant or the denim factory. Yet on paper the denim factory is linked to an ETP.

Regardless of product type, the main reason cited for not installing ETPs was the cost. ETPs require a large cash investment as well as factory space, both of which are prohibitive for most companies, but especially for factories in rented premises that may not get permission to install an ETP from the landlord. Depending on the money spent on land that is needed, plus the machinery and the engineering costs, firms in my survey stated that the cheapest ETP set up costs were between USD 500 to a mid range of USD 200,000 to a higher figure of USD 450,000. The recurring cost of keeping the ETPs running was also cited as a barrier.[88]

[88] Ahmed et al (2002), Clemett (2003a and 2003b) mention similar difficulty of calculating ETP cost estimates for Bangladeshi textiles.

ETPs being uncommon among RMG firms, the firms that were planning for ETPs could not learn from their peers, as they had done with other compliance measures (e.g. lighting, ventilation, chemicals handling, etc.), so there was little word of mouth experience to start with. Only one factory said that they turned to the DoE for guidance, the others said that the DoE was not involved at all, instead all outside help was in the form of engineering consultants.

Whether a firm has an ETP or not is not always dependent on factory size or supply chain integration, since many medium sized factories had ETPs, while many large well-integrated factories did not. The most cited reason for installing the ETPs was buyer request and broader market competitiveness. Buyers had not guaranteed future orders if ETPs were installed, but the firms were large enough to be competing for the best orders, and thought it financially worthwhile to invest in ETPs without guaranteed orders. Although the respondents said that they felt it gave them a *slight* market edge over their non-ETP competitors, post installation they could not directly link increased orders to environmental upgrading, although having ETPs enabled them to enter an elite group of high end suppliers, which TPCs alone could not achieve. Non ETP firms were not convinced of ETP led competitive advantages, and held the view that ETPs are only for the large firms who can afford to run it while winning out chiefly on price factors, not greening strategies.

In the Bangladeshi RMG case, the RBV prediction of reactive technologies (plus non-unique skills and resources) creating no competitive advantage did not hold true. Firms who are financially strong and have much experience in other proactive strategies install ETPs, and enjoy (albeit slight) competitive advantage. A possible RBV explanation might be that ETPs have such huge "entry barriers" (in terms of tangible and intangible resource problems) that it

can be called a strategic resource, thereby creating imitation barriers and giving the ETP owning firms some competitive advantage, even though ETPs in themselves are a reactive solution.

5.6 Understanding the Barriers to Upgrading:

Earlier in the chapter we saw how the greening pressures were calling for a weak corporatist version of EM. In the last section we saw how the firms were further diluting the weak EM requirements. There were no scientific-technological breakthrough in innovative greening adoption, no revolutionary management paradigm shift that brought in social change, no demonstratable cost savings (not even the low hanging fruit), and no straightforward competitive advantage gains. Firms were overall reluctant participants, sometimes apathetic, sometimes long term strategists who chose reactive strategies when they could. Whether firms earned competitive advantage or not was irrelevant to the lack of RBV skills. In this section of the chapter, I take a more nuanced and balanced view of why easy solutions do not seem to work, by looking at management structures, skills and capacities to see where greening strategies (proactive and reactive) go wrong.

The management structure of Bangladeshi garments factories has not been written about by management researchers; however, field interviews with factory personnel, trade unions leaders, auditors and factory auditing visits gave me a sense of Bangladeshi RMG firms as being top management dominated in terms of organisational goal setting and managing change. When the sector began in the mid 1980's, Bangladesh was mainly an agrarian country, with a small industrial manufacturing base. The garments boom was fuelled by low capital investment requirements, which was an invitation for a generation of first time entrepreneurs to start small firms with family loans. From the very beginning the entrepreneurs were working under tremendous pressure to keep costs down in a family business. Most ran tight ships where

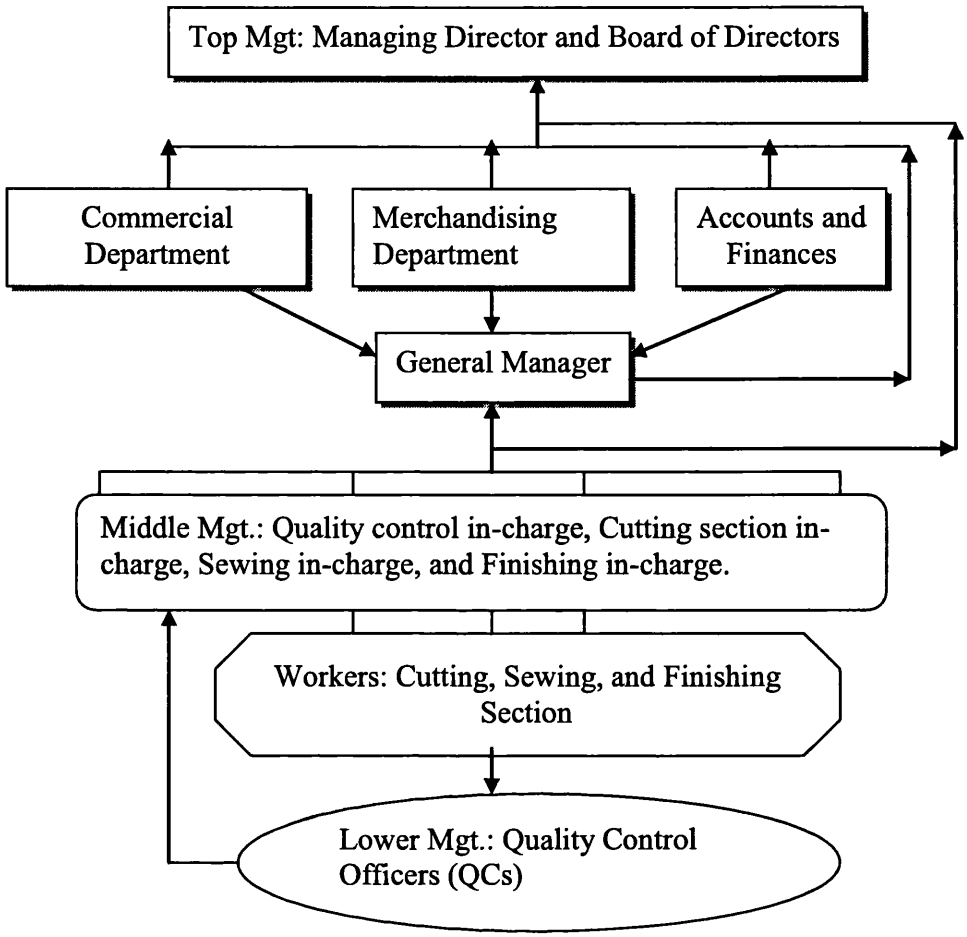
the top management made all the financial and operational decisions, and only hired management to supervise the workers. Over the years, the number of firms and range of apparel produced grew and changed; more sophisticated management was needed which was met with a larger resource pool of people with work experience in the sector. Many ex-managers took small loans and started their own factories. According to a CEO of one of the first RMG companies,

> *The private sector culture finally begun to take shape in Bangladesh in the middle of the 1980's. The garment industry today is still based on old philosophies, and is run by top management who make all the decisions and spend the money. A lot of people working in the garments offices are not from management schools, so the top management makes the decisions. There are no Bangladeshi garment firm that has shareholders and the "corporate set up" in the western sense in entirely missing.*[89]

Below (figure 5.1) I present an organogram representing a typical middle sized woven factory, based on interviews with 7 RMG Managing Directors (MD). Top management is comprised of the MD and the directors, the accounts and finance officers, the commercial department (in charge of shipment clearing, L/C issuance, etc.), the merchandising section (in charge of processing buyer orders, sample making and approval etc.). The MD and directors make the strategic financial decisions, and gradually firms are hiring professionally qualified people for the accounts, finance and commercial departments.[90]

[89] R1
[90] This is supported by recent trend of business schools opening up in Dhaka.

Figure5.1: Organogram of a typical mid sized woven factory



The middle managers are in charge of the processing sections - cutting, sewing and finishing, respectively. The person in charge of the quality control section is also middle management, and is responsible for picking out faulty products from the cutting, sewing and finishing sections and has the power to send a batch of products back for corrections. Middle managers are often do not hold any formal degrees and most of their qualification is on-the-job-learning. Frequently they are former factory workers.

The third layer of management is the lower management officers who work as "line QCs" - they are in charge of inspecting the process of cutting, sewing and finishing, and report to the middle management QC. Frequently, line-QCs also have no formal education.

Feedback on strategy is only solicited from middle management on production issues. Top management decides irregular issues, such as compliance, specially if there is cost involved. Decision making is mostly done on the basis of best available information and best economic rationality. Reorganising of work roles and functions happens as dictated by top management, who realign roles and responsibilities according to the task/need at hand. Middle management has very limited leverage in deciding who takes on new tasks.

Factories thrive on a fast paced production cycle and seem well equipped to deal with last minute changes to orders placed by a buyer. According to the RBV, learning and organisational changes are likely to be top-down and time dependent in these sorts of set ups. The monetary resources for environmental upgrading are tightly controlled by the top management. According to a factory MD:

> *We have a tendency of holding tight reins of the money, and when it comes to compliance expenses, factory people might misspend the money if we don't keep a strict eye on it, often these expenses don't have receipts.*[91]

Greening strategy making and responsibilities lie squarely with top management in my sample of firms: All the initiatives/decisions about upgrading were taken by the top management, with the middle management only involved during implementation. The firms did not formally ask the opinions of workers while designing compliance initiatives. Also, only 2 firms had designated compliance managers. Most firms said that the role of managing compliance was spread across the departments and tasks were given on an ad hoc basis. Therefore, the core of the network regarding environmental compliance is very much biased towards top and middle management and leaves the workers in the periphery. Next I examine in

[91] R22

detail the barriers that the firms' culture and organisational capabilities pose, making them not only reluctant actors, but also poorly equipped to become proactive actors.

Corporate Culture as a Barrier:

Environmental awareness - Interviewees from RMG firms were asked how they felt about environmental issues in industrial production in Bangladesh. Their attention had to be drawn to "brown issues" since they automatically associated environmental problems with natural disasters (floods and tornadoes) and the arsenic problem in Bangladesh.[92] Respondents mentioned deteriorating environmental quality in their urban neighbourhoods, and even climate change. One respondent said,

> *A few years back there were news stories about the contamination of the river by the Ghorashal (fertiliser) factory. Closer to my home in Dhanmondi is Hazaribagh. Water there is contaminated by mercury. The soil is also polluted. Bangladesh needs to implement stricter laws to control this kind of pollution, and improve waste disposal.*[93]

The most polluting sectors were perceived to be tanneries, fertilizer factories and textile mills (all were in the news for effluent related accidents). 58% of the respondents said that they felt environmental problems stemming from industries were of moderate importance, while 24% felt that they were insignificant. 16% said that these issues were critical. Their responses indicated that EM thinking was not prevalent. Respondents from large and medium firms tended to think environmental pollution as critical to moderately important, while smaller firm representatives tended to think of "brown issues" as not important. Overall, environmental awareness is low

[92] The attention given to natural disasters and natural resource degradation is perhaps unsurprising, judging by the tone and content of DoE publications on Bangladeshi environmental problems, e.g. DoE, BCAS, UNEP 2001.
[93] R33

about "brown issues" and RMG is not thought of as a polluting industry in comparison to other sectors, perhaps because there have been no environmental accidents in the sector, or perhaps because it typically does not generate point sources of pollution (since liquid wastes are released via municipal sewerage systems and is not visible to the naked eye as coming from a RMG factory).

Preference for compliance action - RMG managers were asked how they saw social compliance pressures in general. Most firms (58%) agreed that compliance is an important issue and that it was fair that they were being asked to address it. 18% agreed that (0% large, but 22% of medium and 25% of small firms) that compliance was an unfair burden; and 7% (0% large, but 6% of medium firms and 25% of small firms) agreed that compliance standards were unfair because they were not sensitive to the Bangladeshi context in mind. Interviewees were asked whether they felt compliance is positively linked to competitive advantage: 32% thought in future it will lead to better quality of orders; however, 49% said they were sceptical. Large firms seemed most positive about compliance issues leading to financial benefits; medium and small sized firms were less so. Although respondents were referring to compliance as it mostly relates to social issues, their responses are indicative of their concerns about competitive advantage gains via non-price factor investment. This might explain the reluctance in allocating resources for eco-compliance as well, particularly in light of their low environmental awareness.

Behavioural factors at the individual level - Interviewees were asked about their own sense of eco-responsibility as top management. Once again, most respondents stated that they did not think RMG was a polluting sector, but 56% said that they were influenced by the environmental attitudes of peers, 20% said they were partially influenced, and 23% said they were not influenced at all. Overall, their individual sense of responsibility seemed low

- only 32% (57% of large firms, 29% of medium firms and 0% of small firms) believed that their decisions made an impact on the firm's environmental performance, while the rest thought ultimately they had no impact. This shows low ownership of greening considerations, and that perhaps EM's prediction of a change in values has not come true.

Organisational Change as a Barrier:

Change resistant bureaucratic organisations - EM literature suggests that market signal and eco-values driven changes in firms happen in an organic fashion, with cross-departmental resource and knowledge sharing. RBV literature suggests that proper management (i.e. strategising and implementing change) is a critical strategic resource (RBV skill) that involves entrepreneurial innovation, strong leadership, effective teamwork, etc. My findings show that the RMG sector is not suitable for EM style changes; and RBV skills of strong eco-teamwork are absent from it. 88% of the firms said that only top management is involved in compliance strategy making and management. 11% said that top and middle management were jointly responsible. None of the firms mentioned involving lower management or consulting workers, although feedback from worker-training seminars on compliance is used for designing further training. The fact that upgrading strategy making is done only on a "top down" basis was also highlighted by the trade union leaders that I spoke to. They complained that the workers were expected to change their behaviour without being consulted at the strategy design stage.[94] The problem of such compartmentalised hierarchical behaviour can be explained by the prevalent management structures in the sector.

Top management attention and commitment - EM benefits have to be clear to the top management if the strategy is to be properly implemented.

[94] Further details in Chapter Six.

Previously we saw how RMG managers are not convinced of the financial benefits of compliance, much less from greening. Consequently, top management do not pay much attention to greening, especially since their time and attention is taken up by production aspects that have direct financial impacts.

Greening problems at the top level have many reasons: 60% firms cited management capabilities as the main problem, while the rest cited cognitive/learning problems as the biggest barrier. Medium and large factories mostly felt held back by management time constraints, smaller firms cited lack of financial resources (87% of small firms) as the biggest barrier to compliance strategy making.

Top management are also closed to compliance implementation complaints from lower rungs of the company: 60% managers said that workers have never complained about compliance measures, but such views are more telling of indifference towards employee concerns, rather than a sign of upgrading changes going smoothly all along the firm. In the earlier sections of this chapter we saw how factory workers did not want to wear PPEs or keep factory floors clear of fire hazards. Given this, it is reasonable to expect that top management are aware of problems or complaints coming from workers about the measures being undertaken in response to greening strategies. However, 57% of large, 70% of medium and 25% of small firms said they faced no problems or got no comments from the workers regarding the changes they would need to comply with. If top management does not take worker feedback into their greening strategy making, then it will most likely remain faulty and weak.

Some firms stated that compliance did not involve the workers, assuming they meant that change instructions would be handed to them and be

expected to be followed without any problems, or that it is not expected that workers might want to say anything. One manager said,

> *Workers aren't required to understand about social compliance measures.*[95]

Another said,

> *Workers had no comment. WRAP is a management issue.*[96]

This seems surprising, not only in light of my own findings, but also based on the enormous amount of literature available cataloguing the workers' complaints about compliance implementation by management. Earlier I mentioned how the BCAS audit team found that workers had trouble accepting dust masks. This latter view is corroborated by my observations made during factory visits with compliance auditors in Dhaka. The workers did not speak up when urged to by the audit team, who were in the presence of the top management representatives. At the same time, the workers had visibly not been following the safety training instructions given to them earlier. This silence of workers and lower level management or "no problems mentioned" statement, which is reported by top management interviewees, is indicative of many things. There is a definite problem in the way the top management are communicating their greening strategy to the lower management and floor workers. Either the environmental upgrading changes explained to them were in name only because it was not seen as a high importance issue, so there really was not much to change at the factory floor level (meaning the compliance is really only for paper purposes); or that workers are unable/unwilling to communicate with the top management about compliance issues. Top management has no mechanism for listening/registering worker issues, which means that the application of

[95] R51
[96] R45

compliance is going on in an environment where communication is only one way, so change is likely to stop abruptly and win-win benefits are likely to dry out fast.

Lower management/worker understanding and awareness – Firms that did report problems or simply change related feedback had surprising things to say. Some managers were sensitive about the issue of change problems, for example, a compliance manager from a large factory explained cultural locationalities behind compliance,

> *Most of the workers in my factory have come from the villages. Some came a year ago, some have just come this month. They are still adjusting to working in a factory. Factories are new to them; they are learning about machines and production details, they are under so much pressure. I can't expect them to overnight understand why boxes have to be stacked in lines like that and why they must only eat lunch in the cafeteria. Only recently they used to have lunch sitting together in the open in their village. Marks and Spencer's cancelled some orders because they found turmeric stains in some shirts. How do you explain that? I can't expect workers to understand that. I can only ask them to wash their hands twice after lunch. I can't go further, neither can they understand further.*[97]

Some managers were very one sided about the cause of change problems, for example,

> *We faced some problems while explaining changes to workers. They don't understand that these changes are for their own good. They keep violating the rules.*[98]

[97] R12
[98] R52

Some managers pointed to the difficulties of changing behaviour, for example,

> *The workers did complain about the compliance measures. We asked them to wear dust masks, but they said that it's hard to breathe, and they don't wear them.* [99]

Several managers (of all factory sizes) said that the workers were happy with the suggested changes, for example,

> *We've had no complaints. Workers are in fact very happy to be working in a factory that is safe for their health, where they are looked after.*[100]

Learning Problems as a Barrier:

EM's view of science and technology translates to the availability of information on IEE and EIA, ETP design, implementing EMSs etc. Management comprehension of eco-friendly technology alternatives, recycling and reuse options, etc. are also relevant to EM learning. Was there a dearth of reliable information? How did top management go about getting eco-information? How did they help employees learn? Did they get the necessary training and improve management skills for greening?

Knowledge sources - Most firms said that their primary source of information for compliance upgrading was buyers (68%), followed by in house knowledge (40%) and peer groups (22%). This is interesting because the primary sources of information seem to be non-state sources. Information and instructions are gathered from the buyers' codes, as well as from "word of mouth" from other firms facing similar challenges, as well as mined from the work experience of own staff. The fourth most relied upon source was

[99] R35
[100] R53

"outside consultants" such as engineers (20%). BGMEA was the second least favoured source, which is unusual because BGMEA has put in considerable efforts in disseminating compliance information. None of the firms said they got any information from the DoE; the state seemed to be failing to provide firms with greening knowledge.

Large firms tended to rely the most on "in house knowledge" (64%), rather than the overall favourite, "buyers" (57%), perhaps reflecting on the larger skills base their management would have compared to smaller firms. Of all the other categories, large firms also tended to rely the most on outside consultants. Medium sized firms relied most on buyers (67%), followed by in house knowledge (35%). Small firms said that they relied the most on the buyers (75%) as a primary source of information. This pattern is interesting because it shows how dependent the firms are on the buyers for information and how large and medium firms are more reliant on their own resources for getting information about compliance requirements.

Methods of information dissemination—Firms of all sizes said that they used middle management run seminars to train workers about compliance requirements. The frequency of follow up workshops varied greatly between firms. Follow up workshops indicate continuing learning, which is important given the high worker turn over rates, and also for sustaining EM. The second most favoured method was the training of trainers, where outsiders (such as BGMEA or the fire services staff) would come to the premises and train middle management, who would in turn train the workers through seminars. The third most popular method was the use of notice boards to display the list of regulations to be followed. Given the low literacy levels among the workers, the efficiency of notice boards may be questioned, but they are commonly a prerequisite to getting certified by auditors or BGMEA's safety cell. Usually firms use a combination of these methods. Large and medium sized firms said that they most commonly use seminars and trainer

training, which is more demanding on management resources. Small firms said they relied on trainer training and notice boards.

Learning problems - EM emphasises changing mindsets towards ecologising of behaviour, but leaves the area of learning relatively underdeveloped, without which information/arguments will not be processed. When asked about the low literacy levels hampering compliance training, all firms maintained that it was not a hindrance. An important imperative for continual learning would be linking the financial necessity of compliance with continued implementation of compliance measures. Overall, 77% of the firms interviewed said that they explained the link between passing compliance audits and getting more orders. However, while 100% large firms said that they did this, 83% of medium firms and only 12% of small firms said they did this.

The firms were asked if they continued with their compliance training on a regular basis: overall only 56% firms said that they re-designed training material to reflect lessons learnt or updated CoC requirements. Large and medium firms fared better at this (at 64% and 67%), while none of the small firms said that they were continuing with a programme of regular training and monitoring, meaning that learning of such non price issues were ad-hoc and not sustained.

5.7 Disconnect Between Buyer and RMG Management Views of Skills as Compliance Barriers:

The RBV suggests that skills mix determines a firm's competitiveness. While it is difficult to exactly identify these skills, certain internal skill weaknesses in the RMG sector have become evident so far. To get a better view into these shortcomings, I interviewed buyers on their views on the structural characteristics of a compliance-proactive firm.

Firm Structure and Corporate Culture:

Buyers emphasised firm structure over firm size or firm age as a factor influencing proactiveness in strategy making. According to the representative from H:

> *Firm structure is very important in the sense that a well organised company is more likely to have good policies and also the related organisation to have good implementation of those policies.*

Buyers' views in this regard tend to match the RBV, that a well managed firm that is mindful of remaining competitive in the market is also mindful of making profits from proactive greening. Buyers unanimously complained about the lack of middle management in most factories as a compliance barrier because a top management heavy approach is slow to change. They also mentioned that RMG firms suffer from a lack of human resources – RMG firms are typically short of staff who can be given compliance monitoring responsibilities. An old firm with good management structure that has a solid middle management and environmentally aware culture will do much better than a new firm with bad management and ignorant culture, according to the buyer from G,

Unsurprisingly, most buyers said that top management attitude is holding back the sector in becoming compliant. According to the buyer from G:

> *Attitude of the top person is the main thing. If there is no vision at the top level then there is little buyers can do to pressure from outside.*

Within the RMG firms, the biggest point of weakness is that in-house attitude is not proactive towards any kind of management, as a result there is no

incentive for the nurturing of proactive green skills or attitudes, since skills in a particular area are a part and parcel of the broader attitudes of the company. According to the representative from L,

> *They don't have the "can do" spirit. Every little change is because of many many nudging. They don't have that hunger to do better than last year. Also, strong mid management culture is missing in Bangladesh.*

Some buyers thought that newer firms were more conscious of compliance as a marketing tool. The buyer from F said that new firms are more interested in social compliance because they have entered a crowded market and are looking for good orders to set them in the market. However, M took a broader outlook by saying,

> *We work with manageable sized firms so that we can see what changes are happening to make compliance work. If a factory is too large then it's hard to manage. If it's very old then the set up is too hard to change, changing infrastructure is always difficult, always. Good compliance is related to no shared premises, no multi-storeyed factories, no supermarkets.*

The buyers linked poor management skill with not only troubled implementation of compliance, but also poor conceptualising of it. The buyer from L said:

> *Management mentality is very important don't you think? How they understand compliance is important. Secondly, very often they have improper knowledge about their local laws. Thirdly, ability for long-term thinking is important. They tend to think about compliance only during buyer's visit. This won't do. Fourthly, they need in house compliance – self-improvement, the ability to change ones own employees is needed. One example I can give you is of "line marking" of factory floors. It's often not followed even though the marks are made on the floor.*

According to buyers, the most important thing holding back a proactive corporate culture is the lack of awareness and understanding by top management. The firms do not understand the arguments for compliance, or the non-financial benefits of compliance. Many factories are unable to think of compliance as anything beyond a cost burden. One reason behind their unawareness, according to the buyers, is how "sheltered" they are, being passive players in the apparel supply chain. The firms do not have direct access to buyers, therefore, firms do not have any awareness or they do not know who to learn proactively from. The buyer from K emphasised the need to create awareness and explain the supply chain to them, because left to themselves, they are reluctant to learn about the larger picture.

The buyer from M took a more **cost** based view of profitable corporate culture:

> *Corporate culture is important but you have to understand, price is still the main reason for businesses. There is little incentive to get social compliance done. In this case, good corporate culture can help. It comes from good international exposure, they have to have seen the world abroad, that is the starting point. Willingness to invest is another point. They need that mentality you know, to invest in something, and to do something right.*

Some Bangladeshi buyers are more sceptical of the factory management or hopes of a green corporate culture. The buyer from F said,

> *They don't have a corporate culture in the way you are talking. As for their ability to change and learn – you can yourself see the newspapers and answer your own question – do you see them changing and learning?*

Cost, Uncertainty and Confusion as Barriers:

Buyers disagreed with the garments firms when it came to the role of cost, uncertainty, and confusion over multiple codes as barriers to compliance.

Most of the buyers thought that cost was not a good enough excuse. Although the buyer from F sympathised with the factories somewhat by saying,

> *They will always complain about cost. They are in this for profit, so the bottom line always matters. If they think there is confusion and uncertainty about compliance then they need better training and teaching methods. They need to become familiar with the concepts of compliance.*

The buyers thought that confusion and uncertainty ought not to be a barrier but in their experience, it was. Given the fact that most of the compliance code content is already covered by local laws and that so many codes are asking for the same minimum things, buyers do not see why confusion should be an issue. They also do not see why firms should feel hampered by uncertainly of outcomes when buyers are more than happy to provide guidance and information on compliance.

According to the buyer from L:

> *I don't see why confusion would be a problem when 90% of these issues are covered by local laws. If firms say that they don't know enough about compliance then we are willing to teach them, give guidance, but in my experience, the same issues are failed again and again. Then you know that this is just bad mentality among the factory management. As for compliance cost burden, I don't agree. We don't see cost as a compliance hurdle. We explain clearly that we are not asking for a rise in costs. We ask firms to follow the local laws. So why are you saying that we are asking factories to raise costs?*

What the buyers do point to is management inactivity. Despite enough guidance being available to them, the management do not take the time to carefully go over the requirements or learn from their peers. This attitude slows progress. According to the K representative:

> *There a barrier because of a lack of information. What to do, how to do it and why to do it -- they are a mystery to the factory management. If we bring a new product to the factory, they ask us for institutional support. They ask, "What is an auditor" etc., it slows things down. Later on, they ask us "Now what to do?" However if the management is proactive, then with help and guidance they can learn faster.*

Another buyer pointed out to the past history of the industry as a reason why such attitudes have become the norm. According to M,

> *Cost is not the main thing. Lack of knowledge is the main problem. They don't know what to do. Past buyers have not educated them. The earlier buyers had the "We want cheap garments only" attitude. They didn't talk beyond price issues.*

Other Change Barriers:

K highlighted the historical image problem of the sector as a change barrier:

> *The image of Bangladeshi garment factories is that they give buyers profit cheaply. Cheap production is not socially compliant production. So it blocks progress.*

As long as Bangladeshi garments factories do not move up to higher value added production and prove themselves to be proactive thinkers, their image

will not change in the eyes of buyers. As long as that does not happen, they will not be able to ask for higher CM to offset some of the costs of compliance, but that same proactive good-management skills and competencies that is needed to make that shift is the same set of skills that is needed for good compliance behaviour. One cannot happen without the other.

M highlighted the "blame someone else culture" as a factor that is holding firms back. According to that buyer,

> *Weak infrastructure, exposure to global supply chain is less, they always blame lack of education for everything, and they have a bad mentality of blaming everybody else.*

5.8 Conclusion:

This chapter took forward the issue of weak EM style eco-pressures on the firms, to show how the factories have strategised and implemented an even paler version of EM. The hypothesis that the Bangladeshi RMG firms will be unable to achieve successful environmental upgrading via proactive greening strategy making and find competitiveness (thus achieving EM's "win win" solution) has been proven mostly correct. However, environmental upgrading strategy making and compliance-skills barriers were more complicated than originally thought.

Compliance strategies were determined by CoC and regulatory requirements – both sources prescribe a mixture of reactive and proactive strategies. No one firm was purely proactive or reactive, unlike the binary categorisation of strategy in RBV. Firms adopted some proactive strategies; but not when it is possible for them to pass on the legal responsibility and all costs on to broader society. Therefore, cost transferability is an important determinant behind reactive-proactive strategy making.

Key findings of this chapter did not corroborate the RBV: reactive ETPs provided (although indirect) competitive advantage because the ETP costs are so high that they act as an entry barrier to competitors, despite RBV claims otherwise. Secondly, on-going proactive changes (in the case of environmental health and hazards mitigation) did not lead to competitive advantage, because all firms were doing it, so as per RBV, it did not yield any competitive edge. EMSs ought to have yielded some market advantage, but did not, because they were home-made; and also because they were not implemented. TPCs yielded some competitive advantage, either because of buyer perception of TCPs as effective badges, or because these firms were, in fact, some of the better-managed firms who had used their RBV skills for a well managed compliance system. The use of RBV skills in strategy making was also shown to be related to the business cycle, meaning that if enough orders existed that did not need the development of strategies in line with RBV, then firms preferred not to exercise RBV skills.

The interviewed RMG firms reveal two kinds of performance -compliance on paper, and compliance on the factory floor, the latter being much more problematic and different than what is presented on paper. Broadly, all factories are non-compliant on the factory floor to different degrees, and this is primarily due to unambiguous shortcomings - financial, infrastructural and human resource shortages are the biggest barriers, especially for ETPs and TPCs. Compliance and its seriousness as a barrier is related to its relationship to the financial health of the firm. A firm that is successfully managed and is therefore profitable will find it easier to make strategic management decisions to become proactive in compliance, fulfilling the RBV prediction. Of course, compliance barriers are also linked to shortcomings of intangible resources. Buyers mentioned that certain distinctive and core capabilities and attitudes are missing. Lack of "environmental awareness" in RMG corporate culture, low top management commitment to greening production and the inability of

management to adequately implement behavioural change and environmental learning among workers are major human resources barriers. It may be noted that these same firms display excellent management skills and proactivity when it comes to upholding product quality; therefore, it may be argued that compliance-management is not one of their distinctive and core capabilities, and that skills do not transfer from sector to sector (as in from the production side to eco-management side).

Overall, the Bangladeshi RMG firms are indeed struggling to achieve the "win win" gains of EM; some kinds of compliance strategies yield indirect competitive edge, but generally a eco-compliance strategy (reactive and proactive mixed) is needed for continued market access. Bigger sized firms have more of what RBV calls core skills and competencies (not to mention financial resources) invest in strategies that yielded indirect competitive advantage (ETPs and TPCs), regardless of whether it was reactive or proactive. At several points in this chapter, we have seen how buyers and auditors influence the factory floor outcomes; this is because the factories, buyers and auditors cannot be understood without their positioning in the supply chain. In the next chapter, I will look at how EMT applies to economic actors, their governance relationships and networks.

Chapter Six: Eco-Compliance Upgrading and Economic Networks of Bangladeshi RMG Firms

6.1 Introduction:

Chapter Five showed how the RMG firms were responding to weak EM requirements by further diluting them. The state of compliance on the factory floor was quite different from compliance on paperwork. RMG firms were using their skills and competencies (unique or not), and strategies (proactive or reactive), while keeping an eye on overall competitive gains. In this chapter I analyse two important aspects of that process - market gains (competitive advantage or higher prices) and strategy monitoring (audits) which involve actors from wider economic networks (buyers, auditors, etc.). Ethical trade NGOs have campaigned about the auditing process, and we have heard from the RMG firms how buyers were not rewarding them with green profit possibilities. Somewhere within the buyer-supplier-auditor relationship, the promise of EM is lost.

In this chapter I explore three things: firstly, how supply chain governance happens with regards Bangladeshi RMG suppliers; secondly, what are the monitoring and governance problems from the buyers' side; and thirdly, how does supply chain management explain the lack of green profits? Together, these questions test the second hypothesis in this thesis:

The most powerful demand for environmental management on Bangladeshi RMG firms is originating from their buyers in global supply chains. However, opportunities for collaboration or assistance from buyers demanding these environmental upgrading initiatives may be low.

GVC literature has covered much ground in researching how buyer driven supply chains help LDC firms upgrade (production, process and functional upgrading) by insertion into the chains. Buyer-supplier governance relationships may be arms-length or closer, depending on the nature of the sector (maturity, location), innovation points, buyer capacity and supplier worthiness in quasi hierarchies. Studies of the Vietnamese and Indian RMG sector, the Pakistani surgical instruments sector, Sinos Valley footwear sector, Brazilian horticultural chains and various Latin American apparel sectors suggest that the buyer-supplier governance relationship can have positive impacts on upgrading (Gereffi 1999); but others show that one must not take such "benign escalator" style upgrading assistance for granted, and that depending on various factors, upgrading can be hindered (Lee et al 2004, Nadvi 1999, Nadvi et al 2003, Nadvi and Kazmi 2002, Nadvi and Thoburn 2003, Nadvi and Halder 2002, Giuliani, Pietrobelli and Rabellotti 2005, Bazan and Navas-Aleman 2004, Rabellotti 2004, Bair and Gereffi 2001 and 2003, Gomes 2003, Nadvi and Wältring 2002, Quadros 2002 and 2004, Knorringa 1999). To test my hypothesis, I am interested in locating weak collaboration (e.g. only provision of basic upgrading guidelines, cursory attention paid to audits) and strong collaboration (e.g. provision of technological assistance) as a feature of intra-firm and inter-firm governance in the chain. I begin by examining the governance style for Bangladeshi RMG in terms of frameworks suggested in GVC literature and find a complex and changing scenario. Then I locate the actors and governance relationships for price factors (these are the primary relationships as they relate to quality and technical standards) and non-price factors (social compliance) within the broader economic networks, since the primary relationships provide important rules of governing CSR as well. I argue that weak collaboration has resulted in continued compliance failure and ethical trade lapses in the RMG supply chain, that the compliance improvement behaviour is not tied to any broader moves for improvement, and that time-bounded modes of operation is significantly

hindering any improvements. (The interviewed buyers are referred to by their anonymising codes as explained in Chapter Four: L, C, F, H, M, G, I, KAP, and K).

6.2 The Broader Economic Network of Supplier and Buyers:

The Bangladeshi RMG sector growth has followed a pattern similar to those of other second tier producer countries (Ramaswamy and Gereffi 2000). It began as a simple assembly oriented captive model of apparel manufacturing, specialising in low input prices and cheap labour (which did not give them a unique competitive edge as per RBV predictions). The number of firms was small and only a handful of buyers were placing orders for low value added basic apparel items. Gradually the economic network grew, and created new opportunities for entrepreneurs (Chapter Three). Some factories successfully upgraded their production and moved towards higher value added products (having undergone process and product upgrading), although many are still making basic low cost products. A handful of the largest factories have become vertically integrated and have expanded into producing yarn and textile.[101] Literature covered in Chapter Three suggests that post-MFA Bangladeshi RMG is halfway between the captive and the relational model, since the large and medium sized firms have upgraded production from basic cutting and sewing to higher value full package production, while smaller firms continue basic production.

Buyers are driving and governing the RMG supply chain in Bangladesh by means of a buyers' hierarchy. The *brand name buyers* (such as Nike, Reebok, Adidas, Marks and Spencer's, Hennes and Mauritz, Gap, etc.) are most powerful. Their orders are for more specialised products and yield more profit for the

[101] While it would be useful to have official data on how many firms transitioned, accurate data on Bangladeshi firms and statistically robust studies are scarce.

suppliers. They tend to have local offices and place direct orders (i.e. no subcontracting allowed), therefore have a more "hands on" form of governance. They can do spot inspections of factories, etc. Another buyer type is the *non-brand name buyers* (sometimes called "importers" in the business), who are often as large as the brand buyers (in terms of total turnover), but they supply to large retail chains, sometimes outside of their company. These include CarreFour, Karstadt Quelle, Vendex/KBB, Metro, Migros, Otto, Sears, etc. Their orders are also specialised and yield high profits for suppliers. Since they have their own offices in Bangladesh, their governance is as close as brand buyers. There are, of course, *smaller non-brand buyers* with the same kind of links to retailers, who place orders for less specialised clothes (i.e. bulk and basic items, like plain t shirts) and consequently work with smaller suppliers and offer lower profit. Another kind of buyer is the "*buying house*". A buying house represents many different retailers and is as powerful as the clients it represents. E.g. Li and Fung, VF Asia, PF Clipper Concept, Seidensticker, and New Wave are internationally placed buying houses that represent brands like Levis etc. These powerful buying houses operate much like the big brand name buyers, and prefer close monitoring when it comes to product quality and manufacturing details. Then there are a large number of buying houses that represent smaller brands or retailers. These are less powerful, and are relaxed about governance: their orders have narrow profit margins and often deal with surplus "stock lots". In these cases the buying houses do not have to specify any production details, and they only negotiate the prices of finished products.[102]

[102] While it would be useful to have data on the relative size and numbers of these categories of buyers in Bangladesh, no such survey has been done. Interviews with RMG personnel did not yield conclusive estimates either.

6.3 Governance of Product Quality (Price Factors):

The nature of governance between Bangladeshi suppliers and their different buyers over product manufacturing (design, raw materials, technical details, etc. that impact the final product price) is a complex phenomenon that has evolved over decades of buyers negotiating risk minimisation with their suppliers of different capacities, and is not as static as that suggested by Gereffi et al (2005). My findings are somewhat similar to Ponte and Gibbon (2005) where they say that a chain can have different forms of coordination in segments, but within one form of governance. That is certainly true in Bangladeshi RMG, as I will show below.

Buyers said that there is a marked difference in their relationships with Bangladeshi suppliers, depending on the buyers' risk minimisation strategy, which in turn, depends on the nature of the buyer, the quality of the product, and the capability of the supplier. The more the buyer values the multi-national working relationships, the more they act on protecting their investment. This is reflected in the degree of monitoring buyers do and the degree of flexibility the suppliers have in deciding on production matters, such as sourcing raw materials (deciding on quality suitability, country of origin, etc.). According to the representative from a major buying house L,

> *Our business is to make sure we get the best product at the most competitive rates. Every buyer will tell you the same thing. How we interact with the factories depends on these two things. We monitor as closely as is required to make sure the quality goods are delivered on time, at the agreed prices. Our head office has clear policies about this. We are hired because of our understanding of the sector and what aspects of production are important and critical to on time shipment. You can call it governing if you like, but this is only daily business for us.*

Irrespective of how complex (or high value added) the order is, buyers of all sizes (brand or non brand) try to minimise costs and non-shipment risks by preferring to work with RMG firms who have a proven track record of performing under pressure, have the minimum production capacity required for a particular product line, are financially and managerially equipped to upgrade production capacity to include newer technology and can be trusted to reliably monitor own production quality at the minimum levels. In response to this kind of governance preference by the buyers, RMG suppliers are motivated to invest in production upgrading by installing expensive specialised machinery to make customer specific goods, such as denim cutting machines, CAD CAM enabled sewing and embroidery machines, etc. in order to make higher profit margin products for the smaller number of big brand buyers.[103] Therefore, as buyers strive to protect their multi-national asset specificity, they also try to lower transaction and monitoring costs of governance; simultaneously, suppliers' asset specificity, management sophistication and technical capabilities (e.g. use of CAD CAM machines) increase in a bid to continue being part of the value chain.

Lower value added segment and close governance - How buyers deal with factories is influenced by product characteristics and supplier capabilities. Smaller and some medium sized firms that manufacture low value added products, using generic machines, tend to have multiple buyers. These suppliers are typically passive actors with low bargaining power, as they are heavily reliant on buyers coming to them with design details and orders, and they have no contact with overseas end users or even buyer head quarters. Buyers (in particular, KAP, G, I, and F) indicated that their interactions with this segment of the chain involved detailed instructions on product quality, production and

[103] CAD CAM refers to "computer assisted design" and "computer assisted manufacturing", and are types of software used with higher end cutting, embroidery and sewing machines.

monitoring. They are at a *close-governance* state which is similar to the situation described in the Gereffi, Humphreys and Sturgeon (2005) model as captive networks. Here buyers take responsibility for supplying all inputs used by local contractors - where to source the fabrics, yarns and accessories, how "cutting and making" is to be done, etc. As these suppliers have low capacity in terms of financial investment into non asset specific machines and management skills, (which the RBV theorists would suggest as being non-competitive, and which GVC researchers characterise as "low road" suppliers locked into captive networks), buyers minimise transaction and monitoring costs by only giving them low value added (basic quality, low risk) orders.

Higher value added segment and arms-length governance – In contrast, some of larger and medium Bangladeshi RMG firms are evolving towards higher value added products. These are the financially well-off firms with highly skilled and experienced production management teams that manage higher end apparel manufacturing machines. These firms are much more active in searching for higher profit orders. They are interested in "full package production", which requires them to develop their capabilities and claim more autonomy - the capability to interpret designs, make samples, source the needed inputs, monitor product quality, meet the buyer's price, and guarantee on-time delivery. These suppliers tend to work with the more powerful buyers (brand, non-brand or large buying houses). They sometimes liaise directly with the buyers' head quarters and undertake international travel to attend trade shows etc. They are building personal relationships and participating in intense interactions is required for exchanging tacit information with their buyers. Some are becoming vertically integrated in production. This changes the structure of the supply chain by increasing backwards linkage, compared to contributions made by simple assembly. This is close to the relational model, as described in Gereffi, Humphreys and Sturgeon (2005). Buyers (in particular M, G, L) said that their

interactions with these firms are different (since the firms are more capable, proactive and better bargainers) but are no less intensive, since higher quality (or specialised) products require close monitoring of quality assurance, which is typically done by the buyer. For example, one buyer said that imported denim material for jeans is expensive enough to warrant close "over the shoulder driving" by the buyer's office. My findings are different from that of Ponte and Gibbon (2005) in one aspect - Bangladeshi RMG buyers did shift emphasis from direct monitoring, but did not make demands for less tangible properties of quality, such as compatibility of vision or "internalising buyers' work culture".

Production and process upgrading governance—Production upgrading (making better quality higher value added products) and process upgrading (improving the process of manufacturing an management skills) are important determinants of price-factors (i.e. influencing the per piece price suppliers get) and non-price factors (social and environmental compliance). While the buyers are happy to work with proactive and capable firms who can achieve production and process upgrading that relates to price-factors,[104] none of the interviewed buyers were interested in collaborating for process or product upgrading, regardless of how close or arms-length their relationship was in matters such as product design, raw materials sourcing decisions etc. This was true of buyers of all sizes. The main driver of process, product and functional upgrading when it comes to price-factors, has been always *supplier motivation* - improved supplier competence and the need to stay afloat in the post MFA market. According a medium sized buyer C, production upgrading is not the buyers concern,

> *Why are you confusing production improvements with buyer dealings in factories? Factories have improved over time because of their own compulsions. It*

[104] E.g. invest in CAD CAMs to reduce manufacturing costs, specialised machines for fabric end cutting, hydraulic die cutting, specialised buttons etc.

is something that factories have thought out for themselves. This has nothing to do with buyers suggesting ways for better manufacturing. Why should they?

The interviewee from L explained it in terms of sector development history,

In the early days, Bangladeshi garment factories got a head start because of Korean firms investing in this country to set up factories to be run by locals. Do you know what happened then? The people trained up by Daewoo left to start their own factories. That was the last I heard of foreigners investing foreign dollars into Bangladeshi garments. Of course we now have foreign firms operating their own factories here. Like you have the example of Youngone and a few others. But that is not the same as what you are looking for. We will not pay for their CAD CAM machines. That is their responsibility.

At the early stages of the sector, foreign RMG manufacturers did invest financially in factories and management skills training, but since that arrangement did not work out; there is reluctance among buyers to go beyond providing manuals and advice (except in 100% foreign owned factories). Some thought that production upgrading should happen via indirect encouragement and mentoring from buyers, via shallow-collaboration, with buyers providing cues for technical upgrading, and the bulk of transactions were production quality related.

One buyer representative said that his company was extremely encouraging of the changes they have seen over time, and said that they have thorough checking systems in place and make repeated visits to the suppliers' premises to answer questions and undertake inspections of newer systems or machines. They were generally impressed with the performance of Bangladeshi firms, but none have invested technically or financially for suppliers' production upgrading. Buyers

also found the suppliers to be able to handle challenges themselves. Another factor was the huge number of factories who already had the skills and capacity needed for low value added clothing, which meant that for a lot of firms, upgrading was not an imminent requirement. Another buyer said that he felt there would be no point to collaborating because his company could not offer the same investment opportunity to all his suppliers. They also mentioned that financial investment with suppliers would complicate their dealings with suppliers, which is a transactions cost barrier. So the buyers (regardless of their size or country of origin) have more or less continued to closely monitor product quality, but have contained their involvement to shallow collaboration in a quasi hierarchy, which was adequate in terms of risk management, and created some definite productive gains for suppliers (easily seen by the increasing RMG exports).

6.4 Governance of Compliance (Non Price Factors):

The main types of buyers governance along the higher and lower value added spectrum of the apparel supply chain (i.e. arms-length and close governance, respectively) is related to factors discussed above. It is interesting to ask how these relationships and organisational linkages influence environmental compliance on the factory floor. In the last chapter we saw how compliance on paper is different from compliance in reality, so how do the buyer-supplier relationships over green compliance influence the outcomes? Have the compliance demands brought buyers and factories closer, or has an arms-length approached evolved? Do buyers govern "social" compliance differently from "green" compliance? Do buyers feel the need to collaborate with suppliers to achieve standards set by buyers themselves? Do suppliers have the space to negotiate and bargain for better prices on the back of compliance levels or green performance?

Compliance auditing (social and environmental) is part of the larger buying process, and in theory, passing the audit is mandatory before orders are placed. The buying process is not a linear set of transactions and it varies greatly depending on product type and the buyers' work practices. The buying process begins when the buyers' merchandiser contacts the factory with design details. The Merchandising Section of the factory meets internally to go through the order details and then the Sample Section manufactures samples and submits them to the buyer for approval. If the buyers are satisfied with the product sample, then they set up an initial audit of the RMG factory. The aim of the audit is to see whether the factory has the technical and managerial capacity to carry out the production order. If the buyers are satisfied with the physical set up of the factory (whether they have enough "machine lines", enough workers, etc.) then they start negotiating with the top management regarding price per piece (CM), quality of raw materials, supply timings (called "lead time"), and other supply logistics. The outputs at this stage are the buyers' initial approval based on the negotiated targets for the quantity to be supplied, quality of raw materials, price and delivery dates. The buyers' local representative passes on the initial audit results to their head quarters to get final approval. In some cases, buyers specify that the imported yarns/threads have to be Azo dye free in which case that is negotiated with the Merchandising Section. Higher end suppliers have the capacity to source organic fabrics etc. Environmental considerations at this point can increase the CM, but this is not part of the overall profit margin negotiations.

Compliance auditing begins after the initial audit is approved. Compliance auditing has two main components - the first involves a desk review of all compliance related licensing documents ("compliance on paper"), and the second involves a physical examination of factory premises. If the buyer has a relaxed attitude towards compliance then the audit only extends to checking

submitted paperwork, and production can start then. This kind of buyer-supplier relationship perpetuates the "compliance on paper" situation.

However, some buyers require a factory inspection, to check if physical and operational aspects that relate to the environmental quality of the factory which are particular to the retailer/buyer, are in order (such as number of toilets in the factory, number of spittoons to be kept on each floor, the need for ETPs etc.). If the auditing is done by the buyers' own staff then the audit does not cost the RMG supplier, however the supplier pays the cost of TPC, and buyers naturally prefer TPC because of own cost minimisation considerations. TPC costs depend on how many factory visits are required and on the size of premises.[105] After the desk review and factory inspection, the auditor and upper management meet and the supplier is asked to submit a corrective action plan (CAP) with a time frame for making implementing compliance changes. The auditor submits their findings to the buyers (and if applicable, to the buyers' overseas headquarters). If the CAP is approved by the buyers, then suppliers get final approval to go ahead with production while making CAP changes. However, if there is no compliance auditor sign off or approval, no L/C will be opened for that order, and no order will be placed.[106] Therefore, the social compliance audits take place after CMs are set, and do not influence the profit to be made in that particular transaction. Additionally, the audit has to be cleared under extremely time pressured conditions: if lead time is not met, the order might need to be exported by air (instead of being shipped), which compromises profits made on that order.

GVC studies have variously shown that depending on a multitude of factors, buyer-supplier relations can become tighter (i.e. better collaboration leading to

[105] Please see Chapter Five on TPC

[106] L/C refers to "letters of credit". In the RMG business, the L/C is a letter from an importer/buyers' bank informing an exporter that they will be paid for a shipment upon presentation of the specified documentation and is payable upon the presentation of specific documents.

productivity gains and higher profits from upgrading). I argue below that the Bangladeshi RMG case is less optimistic. There have been no productivity gains; profit gains are unclear; and the ties have not become closer, there is simply an additional layer of ties. Overall the system is geared to the benefit of the supply chain drivers: buyers' monitoring costs are low, demands are codified and transferred at low costs, TPCs are rising, and transaction complexity of supplier monitoring for compliance is falling.

a. Compliance on Paper vs. Substantive Compliance:

How buyers govern code implementation is a complex phenomenon. Their approach varies from close monitoring to arms-length to complete overlooking of loopholes.

Brand name vs. buying houses - The buyers (regardless of size or country of origin), stated that a desk review of compliance documents is mandatory. The bigger brand name buyers (M, G, and H) said that they were fully aware of the DoE requirements and checked for it during their compliance desk audit. The picture is different for buying houses since they work for various retailers. According to the them (F, C and I), they will ask for environmental documentation as required by the end retailer, which means that green issues are mostly not part of the standard requirements. This is a significant loophole in ethical sourcing practices along the value chain. Brand name buyers agreed with the trade union leaders that buying houses that are not checking for environmental documentation or asking for environmental changes are creating the *first* loophole for ethical sourcing identified in this thesis. A trade union leader from one of the largest federations said,

Social compliance checking is something that the big label buyers do, and you think that is enough, but we are concerned about the buying houses. They regularly do not ask for any social compliance or worker health issues, and there are many factories where the conditions are inhuman and unhealthy. Even if these factories have some sort of compliance for a big label buyer they used to work for, they don't keep up with the maintenance once the order has been exported. Their compliance is dependent on which buyer is asking for what kind of compliance.

It may be noted that while there is no reliable estimate of what percentage of orders supplied by Bangladeshi RMG factories are for end-retailers who are flexible about checking DoE clearance, it is safe to assume that a large portion of trade is for such non-branded buyers. So buyer pressure in this case is significantly absent for the EM of the apparel chain.

Reputational risk and collaboration - How in depth the buyers go while monitoring compliance is directly revealing of how seriously they view non compliance related risks to their reputation, which corresponds with the GVC suggestion that buyers' main motivations in a quasi hierarchy chain is to minimise risks of production failure. In this regard, the buyer interviews revealed two extremes. On the one hand are the EU based brand name buyers, (M and H) that enjoy a high profile in the west for being ethically conscious. They are in practice more thorough than most about compliance auditing. According to M's compliance manager,

Firstly we do a preliminary visit to look at technical aspects, to get a first impression, you know and see the basics they offer. We look at the factory's work experience, get their feedback on how they will handle our standards, and then judgement is made on whether we go ahead or not. Then the garment factory is told to write an action plan with a timeline in it for correcting any compliance

issue that we may have found. The action plan has to strike the right balance; it can't be too long or too unrealistic. The range of topics in the corrective action plans includes technical issues, compliance, quality assurance, etc. the initial audit results in the CAP, which has to go through the factory process and discuss how the ETP will be installed, or how it is already there. After this self audit the factory must acknowledge or accept the [company name] environmental conditionality. The frequency of testing water quality is not part of our audit that has to be done as frequently as national law demands. Our audit checks if the national laws are met or not.

M is exceptional in that they have a social environmental compliance guideline made for Bangladeshi RMG factories. The handbook is made available to each of their suppliers before they are vetted for supply contracts. Other big brand name buyers from America have a similar step-by-step process. According to one such buyer from G,

We check for the production capacity, the factory set up and compliance. There are two kinds of audits. The principle is the smell test – we go and visit the factory and get a sense of how things seem. First audit is the technical audit, we check the machines, working systems etc, and this takes 1 to 2 visits to find out. Second is the compliance audit, where we check if the factory is compliant or not, this takes about 3 to 4 visits. For environmental compliance, we are very strict. ETPs is our main concern, where we give most importance. Any factory doing a wet process must have an ETP. If a pre-approved factory wants to do wet process products for us, they have to install ETP within an agreed deadline, then reapply for compliance audit. We go to the DoE and independent auditors for testing ETP water quality as part of our monitoring. We help the factories by suggesting labs for water testing. There are a few good ones.

Interestingly, buyer-supplier relations in this case get *closer* when supplier capacity is higher than most others in the market, instead of an arms-length pattern.

At the other end of the spectrum, are EU buying houses that work on bulk orders, frequently for mail order companies resulting in them having less of an active consumer-retailer interface. One interviewee from buying house C said,

> *For most cases, we audit the product through our sampling programme. The garment factory makes the sample, we send it to our foreign buyers, if they approve then we place the order.*

Clearly, compliance audit is not a high priority for this mail order company. I interviewed a buyer from C, a large buying house that was in the news when one of their contracting factories collapsed and burnt down in 2006. They even collaborated with EU NGOs in ensuring compensation for injured workers. However, despite their brush with international media, their approach to compliance did not get any more stringent - reputation risk is different for buying houses, since to an extent they are "faceless" to the western consumer. The C interviewee said that their main consideration is with the quality of the production samples submitted. They have an exceptionally "no fuss" attitude to compliance, except for when they place orders for brand labels such as Levis (when they require ETP owning, TPCed suppliers). While this is not common procedure among all buying houses, such no-fuss buyers also operate very large successful businesses in Bangladesh.

Lead time - Lead time refers to the supply time schedule that suppliers and buyers have to maintain to the satisfaction of the end retailer. Considering the increases in the number of "clothing seasons" in a year (in some cases retailers

change shelf stock once a week for high trend youth segments of the market) suppliers are under tremendous pressure to meet delivery deadlines, sometimes having to opt for own-pocket air-freight delivery, which leaves them with no profits or even huge losses. Bangladeshi firms have no choice given that Latin American competitors enjoy less lead time problems as they are geographically closer to the end market. Lead time pressures seriously impact compliance, especially around issues of worker overtime hours and wages. While US buyers (especially Wal Mart and Target) are more concerned about labour overtime transgressions in their codes, they are also putting huge pressures on shortening lead-time, which leads to workers complaining about long 20 hour workdays, not being paid adequately for overtime, being physically abused for making mistakes on the factory floor, or even being punished by their quality control supervisors for complaining of illness. Ethical trade NGOs have long fought for these overtime violations.

Lead time pressures also mean that compliance steps are rushed through or simply overlooked. According to the buyer from C,

> *No this is not a major issue. You must realise something, we work in an office with a lot of production deadlines. Do you think we have time to get into every production line compliance problem? Do you think we can ask for all these past history details of what compliance has failed? Do you think we have the time or the manpower? We are busy with production and shipment. This is not our headache. Shipping on time is a headache worth having. However, compliance is an HR issue, so they will highlight to our RMG suppliers if there is an issue.*

As an adjustment, the buyers and the auditors give a "sign off" when a CAP is only agreed and not implemented. According to the buyers, the CAP implantation time depends on the kind of changes needed, as well as how that

fits into the date of final delivery. Typically, if there is a construction issue, then they get a few months, but if it is a smaller change, like buying fire extinguishers, then they get a few weeks. However, for smaller buying houses like F, CAP time depends only on delivery date,

> *Once the auditor has been asked to audit and has given their findings, the time given to the firms for changing, adjusting etc. depends on the final shipment date.*

K gives time frames depending on how urgent the issue is. According to them,

> *It depends on the amount of correction needed, if it relates to worker health and safety, then we ask for immediate changes and expect it to be done by 7 to 14 days. If its infrastructure changes, then we give them more time.*

Therefore, it is common practice for suppliers to be auditor certified in paper while undertaking compliance changes, which allows them to rush through with production deadlines. Under these rules of the game, we find the *second* loophole where ethical sourcing is compromised along the supply chain. It is not uncommon for garment factories to have accidents that reveal them to having been noncompliant while making clothes for recognisable labels, because they were officially undergoing the process of making compliance changes when the accident happened. Green compliance measures are most likely as rushed through with social compliance measures, perpetuating the "compliance on paper" and "compliance on the floor" divide.

Zero-tolerance and non-cooperation - I asked the interviewees if they would discontinue working with a supplier if a third party revealed the factory to be non-compliant. Generally, buyers (brand name or not) do not discontinue working with a factory over non compliance, unless a zero tolerance issue has

been triggered. Most buyers said that they will black list a firm if they find child labour or forced labour. According to K, they will not work with a factory that will not cooperate with social compliance. According to US buyer, G,

> *Cutting off working relationship is a serious matter. I suppose it depends on the issue. If factories are violating over time rules very much, then we give a warning but if this continues over a period of time then we will not work with them again. If we detect child labour, then we immediately deactivate relationships.*

Smaller buyers like C have a more relaxed attitude. They said,

> *If something happens then we will finish working the season with them and then not give any more orders.*

KAP had a more helpful attitude than the others. According to their representative,

> *There must be efforts on their part to improve. Why should we leave them like that? Its not a solution. Best to stay and help them improve.*

Since green issues are not on the zero tolerance list, it can be safely assumed that suppliers being judged environmentally non compliant will not have their orders threatened either.

Reauditing - Reauditing helps avoid accidents and keeps continuous environmental upgrading in check, and is an important tool for long term EM success. In theory, buyers are supposed to periodically examine CAPs and match it to actual performance, before making further CAP changes if needed. However, according to the trade union interviewees, reauditing is never done in the Bangladeshi RMG sector. My interviews with buyers did not exactly match

the trade unions' view: buyers were found to be inconsistent regarding reaudits, but their behaviour could not be matched to their size, or country of origin. Non-brand buyers (KAP and C) said that they never reaudit. Buying houses have a more mixed picture: F said that they only do reaudits when they place orders for certain big retailers, such as Wal Mart, and that reaudits were never on the same scale as initial compliance audits. However, most buying houses do not have any system in place for reaudits. Brand buyers (M, G, H) and some of the largest non brand buyers (L, K) do reaudits, and they are sometimes unannounced (needless to say, trade union interviewees disagree with this assertion). L's reaudit happens after 3-4 months of CAP approval; K's reaudit happens after 2-3 years. Buyers said that reaudits happened in the presence of top management and that factories usually passed without problems. The representative from L said:

> *They often pass [re audit] inspections. We have a "three strikes and you are out" rule for factory compliance. However before the final suspension, we may give a conditional approval, there may be a grace period.*

Therefore, the large number of non-reauditing buyers, as well as the non regularised and half-stringent system of reauditing among some buyers is the *third* ethical trade loophole that this thesis identifies. This loophole is allowing factories to continue production while being only compliant on paper.

Auditing integrity - Some apparel suppliers said in their interviews that they have been audited multiple times in a year, and sometimes by the same auditing company on behalf of different buyers. While RMG firms maintain that multiple audits divert management time and resources, and disrupt workflow, trade union representatives challenged this view by arguing that the potential benefits outweighed the actual costs. However, they were also sceptical of the integrity of the auditing process, suggesting that several loopholes exist within the auditing

system and that multiple auditing may not be pinpointing them, since it is merely "more of the same". Their scepticism is in part due to how the compliance auditing mechanism is placed within the larger scheme of things - meaning the buying process and the loopholes that I have mentioned already in this chapter. Often compliance auditing is hurried to its detriment. One RMG manager said,

> *If there is time pressure then auditors look the other way, we also look the other way and they only inspect "paper compliance". Sometimes the order is so short that we would not have had time to make all the changes to be compliant for that buyer. Its an unspoken understanding.*[107]

Time shortage is not the only problem. Another RMG manager who has an ETP said that they cannot afford the running costs of chemicals and only run the ETP on buyer audit days (which are pre-announced). He also said that most auditors are not technically trained to detect ETP under-performance and that it was a matter of "managing the audit tour" of the ETP.[108] This view was corroborated by other non ETP RMG factories, when I asked them about their own eco-responsibility. It is therefore possible to pass for being ecologically responsible due to the faulty audit process.

Trade unionists are vocal critics of the auditing process. According to them, the main objective is passing the audit, rather than addressing the substantive issues with serious commitment; none of the interviewed trade unionists thought that the RMG firms were perhaps short of intangible causally ambiguous skills for compliance strategy making (as RBV would suggest), and took a more operational and instrumental view of the problem. The trade unionists blame

[107] R3
[108] Personal communication with interviewee.

both the factory owners and the buyers - the garments factories have to pay for the audit, which means that buyers feel that they have done enough by providing codes to be followed; they are not fulfilling any supply chain responsibilities.

Discussions with trade union workers brought to light the fact that the buyer-factory worker relationships is predominantly ignored in the current quasi hierarchy governance scheme, regardless of whether arms length or close. This is discernable through the fact that the workers are not shown the codes, and audit (and reaudit) findings are not shared with them. According to trade union leaders, this is lending an air of secrecy to the auditing process and making the workers mistrust the audit results. According to a trade unionist,

> *The buyers say in seminars that social compliance is going to happen all over the garments industry. But they make no noise about having a more coordinated mechanism for compliance auditing that involves input from the workers about how compliance is actually done. Compliance auditing cannot be truthful if it is done by a few factory visits in a few hours time.*

In her experience, auditors from buyers offices or third party offices only liase with the top management and keep workers at a distance - the mechanisms for worker complaints and worker designed training programmes are almost always absent. Her colleague said,

> *Buyers only talk to people wearing the pressed clothes. They prioritise auditing papers over our workers. We are being kept marginalised. We have no access to the audit reports and we cannot influence the re auditing results either. Compliance is just eyewash, it is controlled by big business. Stakeholders were not*

involved in writing the buyers' codes. Where were these code written and for whose benefit?

This gap in the hierarchy is an extension of the one-way communication pattern that we saw in the last chapter between the workers and the factory management when it came to workers' feedback on compliance implementation.

Multiple codes vs. multiple realities - Multiple codes mean multiple confusions; suppliers and trade union interviewees allege that buyers make contextually and culturally insensitive demands in their codes, which are often in conflict with each other as well. Depending on factory size and production characteristics, a supplier might need to comply with more than a dozen codes/standards in a 6-month frame, which adds an extra layer of complexity that perpetuates compliance reluctance. This also creates a burden on management time and resources to be spent on passing multiple audits, and RMG managers complained about loss of productivity.

Some EU brands (e.g. Karstadt Quelle, Vendex/KBB, Metro, Migros and Otto) use EU common codes (e.g. the Brussels based Business Social Compliance Initiative (BSCI) code). Other brand buyers have their own codes. Earlier we have seen that multiple-retailer driven buying houses use different codes for different orders on the same factory. Then we have buying houses like L, which audits factories using the retailers' code as well as their own code. While the basics of the codes are the same (i.e. focus on the ILO conventions on child labour, worker rights, etc.) codes on occupational health can vary greatly (e.g. what kind of floor paint to be used on the factory floor, how high can boxes be stacked, etc.). One RMG manager said,

One buyer came to my factory and said that they want no lights in the store room where we keep the cloth because it's a fire hazard. No electrical lights are allowed, but battery operated lamps are fine. Now, around the same time we got an order from another buyer who wants all areas to be very well lit, they even gave us lighting units to abide by. This is obviously applicable to the cloth storeroom as well. Now are we going to give up orders because of this nonsense? We had to negotiate with the auditors because the buyers were not listening to any of it.[109]

Many RMG factory managers thought that buyers' expectations were unrealistic especially for factories in rented accommodation that cannot be easily amended to the satisfaction of multiple buyers. Ironically, factories that do not have their own premises tend to have multiple buyers who give them short term orders, where there is no opportunity for buyer-supplier relationships to strengthen towards even weak collaboration. This situation was becoming unsolvable given the multiplicity of codes to be followed, not to mention the new buyers that were entering Bangladesh. Suppliers also talked about a clash of expectations and attitudes towards fruitful responsibility. According to the Compliance Manager at one of Bangladesh's largest factories,

It's a little bit pointless for buyers to worry about the risk of drinking water pipes being too closely laid to the toilet pipes in my new factory, and asking me to change the plumbing design by breaking the walls again, delaying my production dates, costing me additional money installing new pipes, when no one can guarantee what quality drinking water the workers will drink once they go home. The Bangladeshi garments factories are not dormitory style, where the factory owner guarantees quality living conditions in the dormitories built to house the workers. Factories like that exist in the Middle East where the workers are imported from overseas. Buyers go there and pay high rates for clothing, which

[109] R8

pays for running costs of the dormitory. There it makes sense to spend money on reinstalling water pipes. Today if I make my factory with pipes laid in one way, what guarantee do I have that tomorrow somebody wont want the pipes to be laid in another way?[110]

Another RMG CEO said,

Now there is a new demand, based on the C-TPAT, which is a counter terrorism measure for garments exports. They want me to make changes, some of which is to my factory infrastructure, which will then contravene the other fire hazards regulations. Now it is up to me to find out a middle ground solution to operational problems.[111]

While buyers recognise the conundrum this creates, they do not get involved and maintain an arms length position, leaving it up to the RMG firm management to come to a compromise on compliance actions. This often involves bribery, while buyers look the other way.

When asked about the multiple code confusion issue, the interviewed buyers said that most of the clauses in their codes are national legislation supported and hence there was no space for factories to say that the codes created confusion. A few buyers (C, I and F) said that this was not their problem. This suggests that buyers tend not to get involved with ironing out conflicting compliance details. Suppliers are left to either work out a compromise with the audit official or schedule different audits on different days that allow the factory to show the auditor what they need to see. There is a strict arms length relationship here: a

[110] R14
[111] R24

communication break-down, a formal dismissal of practical issues, and no room for negotiations.

Weak auditing of subcontracting factories – When factories are (of all sizes) overbooked and cannot deliver orders on time, rather than cancelling the order with their buyers, they subcontract on a short-term sport order basis with factories that have free capacity at that point. Subcontracted orders usually do not make profits for the main supplier and firms that survive mainly on subcontracted orders tend not to be profitable overall since profits are very slim. Since subcontracting happens only under tough time constraints, compliance auditing can get overlooked in these cases, presenting an important loophole in apparel value chain greening.

Compliance during subcontracting is linked to the kind of buyers whose orders it is. Brand name buyers (G, M and H) have explicitly said that they do not allow subcontracting and only give direct orders to factories that have enough capacity to avoid subcontracting because of social compliance reasons. According to a brand name buyer, G,

> *We know our supplying factories inside and out. We are in constant contact about how much capacity they have and how much future load they have. We check all these things before we place orders because we don't want overtime issues. Keeping track of production capacity means that we automatically have the information for knowing when somebody is at risk of doing subcontracts of our orders. If we feel that our suppliers are unable to handle the load, we give them less orders, but we don't want overtime irregularities and subcontracting.*

US buyers are very strict and prefer immediate deactivation if illegal subcontracting is found. Some of the large buying houses said that they allowed

subcontracting and had a system in place for such situations. The representative from L said that the standard market rule is for RMG companies to notify their buyers when they are approaching full capacity before subcontracting. Then buyers will either furnish the firms with a list of factories pre-approved for subcontracting, or the buyers will initiate fresh compliance auditing for the subcontractor. In such cases, compliance auditors are sent to the factory on a priority basis.

According to the representative from C, subcontracting approvals are only given if the workload is light. They can do compliance evaluations exclusively in the beginning of the working season – which begs the question what will happen if subcontracting evaluation needs arise mid season. Also, it is questionable how thoroughly buyers do a compliance check (which would take at least a few working days) before subcontracting factories get approval to go into production.

Interviews with apparel suppliers reveal that subcontracts are rarely monitored for social compliance. According to a manager,

> *Some buyers are not as strict as others, or if we are behind schedule by a little on compliance, they are willing to look the other way until we finish our improvements. If we have to give subcontracts out, buyers should be looking at the compliance in those factories as well, but they don't and we also don't ask questions, we get the work done.*[112]

[112] R9

Another factory manager said,

> *We work with Walmart, they have it in their contract that we are not allowed to subcontract their orders. Local buying houses give subcontracts to smaller firms. They don't have social compliance codes, and they don't do audits either.*[113]

However, one representative from C said about subcontractor compliance auditing,

> *This rarely happens in reality. If an order reaches sub-contracting situation we are already under a lot of time pressure to finish the production. We often look the other way. Everybody does, but they don't want to.*

Therefore subcontracting suppliers are overlooked by buyers of all sizes. This is the *fourth* loophole that was identified during my research where ethical trade was being compromised in the Bangladeshi apparel chain.

b. Compliance vs. Financial Rewards:

In Chapter Five, the RMG interviewees stated how they could at best see indirect competitive advantage from environmental upgrading, so why are the buyers keeping an arms length distance from this problem?

Price negotiations vs. compliance negotiations – One explanation is in the price negotiations that determine the CM for a particular order, and its distance from compliance negotiations (social *and* environmental issues). According to one RMG CEO,

[113] R17

Buyers audit teams are typically from their compliance unit. They don't do CM calculations. They are not involved with their marketing division, and are unaware of what the order situation is. The first step is for my factory to pass the compliance audit. The buyer negotiates prices etc. only after that, but it has nothing to do with how much it has cost me to become compliant. That is not reflected in the CM being offered to me. My competitor probably gets the same CM for the same item, even though their compliance costs less.[114]

This buying process disconnect happens because the price of the order is set during the initial assessment (which is based on product quality, product price offered by the supplier, factory set up and managerial capability), the satisfaction of which is followed by any compliance negotiations. Environmental management literature suggests that environmental management costs are dependent on the firm that is undertaking it, meaning that an older factory will need to make more expensive changes, compared to a factory that is incorporating eco-friendliness in its initial design. Price and contract negotiations between RMG buyers and suppliers do not seem to acknowledge that suggestion. There is no mechanism for revisiting the CM based on the compliance costs of the supplier, regardless of how expensive the compliance costs are on the factory.

Quality and relationship longevity – The second explanation is the higher preference given by buyers to product quality. Buyers that were interviewed were not altogether unaware of the fact that CM negotiations at the current time were not giving any space for negotiating higher prices based on the suppliers' compliance costs. Buyers are well aware of suppliers' demands for higher prices but maintain that higher prices will need to correspond to better quality. According to F,

[114] R29

The merchandiser has to come back from the factory with a good price offer. It is ultimately the merchandiser's decision. Price is the main thing for buyers. If a factory is managed well and have good compliance, then obviously their profit making will be higher. We are not going to give higher prices directly because of compliance.

According to C,

If a supplier perform good [sic] on our code of conduct issues they have an advantage but there is also other issues like quality, lead time and so on that they are also measured against.

I asked a large EU buyer how this might change and he said,

As long as my company strategy is based on quality, price and lead time, I have no choice. I don't know, maybe our (HQ based) Compliance Director needs to fight it out with the Sourcing Director.[115]

So what happens to EM in this situation? Firms have no space to bargain for higher prices based on compliance cost calculations. Suppliers have to wait for future negotiations with the same buyer to push for a higher price. However, if the nature of the order is such that there is no chance of a sustained working relationship (i.e. low chances of increasing supplier's bargaining strength), then the supplier might not want to invest substantially into the CAP. In some cases, even in longer term buyer-supplier negotiations, bargaining for higher prices to reflect compliance investments may not happen. According to one manager of a denim firm that has an ETP,

[115] Personal communication with the buyer from K.

Buyers don't give us any credit for having long-term relationships. They don't categorise their suppliers in terms of proactive or regressive firms. They have no list of preferred suppliers, no gold stars. We have been doing environmental compliance for 6 years and they still don't give us any cost benefits.[116]

GVC studies in RMG have shown similarly that ultimately buyers are more concerned about product quality than compliance, and that in itself is not surprising, but what is interesting is the stalemate situation that flies in the face of EMT: after getting the order, the factory is left hoping for better prices next round to offset past compliance costs. Both EMT and GVC have no way of explaining how upgrading is to happen in this kind of "chicken or egg" situation that will not change without the whole supply chain power structures changing.

Past behaviour - Interviewed buyers (regardless of size) maintain that even if they increase prices because of compliance, there is still no guarantee that the factories will become compliant, instead of investing the profits into factory expansion. Such scepticism was also shared by some RMG managers themselves and trade union workers, with reference to the high growth rates in the sector and continuing compliance accidents. One buyer explained this scepticism by pointing the larger profitable factories that have had compliance related problems, sometimes costing worker lives. This is also supported by Chapter Five findings on corporate culture and low preference for proactive compliance strategy making. Overall, the buyers' view is that a compliant factory is a better managed factory and those superior management skills will lead to a host of RBV driven management innovations and successful strategies that will collectively lead to higher profits. This would be perfect for a sector that is equipped with RBV skills; unfortunately the Bangladeshi RMG sector is not.

[116] R8

c. Green Signal Myth vs. Reality:

Eco-content in codes is akin to weak EM, as we saw earlier. Is buyers' pressure for as stringent as it can get? In particular, since the banning of child labour owed much to considerable buyers' pressure it is perhaps surprising that when it comes to environmental compliance, the green signal is weak, which is discordant with the messages disseminating from the ethical trade movement that says that DC green consumerism is rising.

High end apparel, profits and Bangladesh – Firstly, strong green signals are tied to high-end consumer preference for ethically traded clothing (no sweatshop labour, recycled fibre and organic content, etc.). The buyers unanimously said that they were mainly motivated by improving their image in front of their consumers/shareholders via ethical trade and CSR. This is especially true of brand name buyers with a visible media image of being ethical. According to a leading UK retailer,

> *We are more concerned about the benefits resulting from [company name] good image. The culture and thinking of UK customers is so high that its very important to us. As a result the customers are doing good things for the Bangladeshi suppliers.*

According to their yearly sustainability reports, their ethical product lines are showing healthy profits year on year. However, green consumer signals are not translating to profits in the same way for all retailers, such as K, whose representative said,

Our company's image? Yes. Our profit levels? Not so much. Consumers in Europe want socially compliant goods, of course, but they don't want to pay increased prices for it. There is no EU wide market study on apparel compliance that I can refer you to, our marketing department did a study of our customer base and this is their finding.

K is a leading multi billion dollar German company with retail stores, speciality stores and a EU wide mail order catalogue business. They have much experience in environmentally sustainable sourcing and their CSR policy emphasises sustainable forestry and climate change. The K representative in Bangladesh saw suppliers' social compliance fall within the greater momentum of K's sustainability policies. According to him, such matters do not have a momentum of their own, and the greatest challenge remains that of convincing the consumer that her purchasing decision can make a real contribution. The K representative was aware of certain segments of European consumers who are willing to pay for ethically traded apparel, but maintained that "green clothing" is a niche market. Another European buyer, KAP, broadly agreed regarding profitability of green consumerism in both EU and USA.

Buying houses have a more complex relationship with green profits: unlike buyers who source for their own companies, buying houses are one step removed from the end customers and hence view their profitability vis-à-vis social and eco-compliance as mainly hinging upon risk management. They are concerned about their profit levels which is contingent upon the profit levels of the end retailers. Whether or not their suppliers are compliant influences risk of non shipment, which is the responsibility of the buying house. Therefore buying houses are concerned with compliance as long as it minimises risk and streamlines production. The interviewee from L said that they want to protect their business reputation as a reliable and ethically conscious buying house in the

eyes of their customers, so they insist on a mixture - national laws, their own codes and retailers' additional demands. However, L is a rare example of a pro-EM buying house.

Buyers like K are sceptical of green consumerism as driving compliance in Bangladesh. For their Bangladeshi operations, the main concern of buyers (regardless of size or supply chain position) is to avoid large-scale accidents in factories supplying to them, in the manner of the Spectrum factory disaster. They do not source high end apparel lines from Bangladesh and so the green market signal from consumers is not as strong as it could be for all buyers who source clothes from Bangladesh. It would be logical to argue that as long as Bangladesh is part of the value chain on the basis of cheap labour and low value addition, the green signal will continue to be weak, regardless of how much EM is happening in other parts of the apparel chain.

Green code content – The second aspect of weak green signals can be seen in the message that is given to the RMG suppliers from the buyers with regards to what is actually acceptable in the name of compliance. As it is eco-content is very weak on paper, and many buyers are not strict about eco-compliance in practice: it is reasonable to assume that this discrepancy in the messages is not helping an industry wide compliance drive to happen when many factories are happy to survive without taking orders from compliance-demanding buyers. This remains another serious loophole in the compliance scenario. I asked the buyers what they thought of this. According to L:

> *Maybe their profit levels are lower so they can't afford to be so strict about who they source from. Those buying houses with a larger profit margin can afford to be picky.*

However, other buyers refused to comment on their colleagues' behaviour.

d. Risk Minimisation Threshold and Shallow Collaboration:

Finally, EM along the Bangladeshi apparel GVC is faltering due to the buyers' risk minimisation strategy and consequent approach to supplier-buyer collaboration. Deeper collaboration had the potential to make the RMG more proactive in their attitudes and strategies based on closer (and adequate) compliance monitoring and audits by buyers (e.g. child labour), closer technical help (e.g. production details) or financial help (e.g. in foreign owned factories).

Interestingly, it is impossible to distinguish between governance of social issues from green issues: according to the interviewed auditors, a compliance review looks at all "non price" issues together and auditors do not distinguish between social and environmental issues in the CAP, or at any follow up stage. The buyers also considered social and environmental issues together while discussing compliance monitoring. The lack of differentiation is not only conceptual, it is also operational: most buyers govern occupational health and safety measures within the same set of transactions with their suppliers as child labour or worker rights. The buyers in my sample that requested ETPs also closely monitored the CAP audits, but that is also matched by their close monitoring of social "zero tolerance" issues such as child labour.

In this chapter we have seen that buyers use a mixture of arms-length and close-governance when it comes to dealing with production monitoring, depending on whether it is high end production or low-capacity first time contractors (close governance) or lower value added production or repeat contractor (arms length standardised governance measures). However, in the case of CSR, buyers are satisfied with an *arms length approach*, compared to a closer relationship of tighter

production monitoring when it comes to specifying *other* parameters – such as design details, sourcing of raw materials, sample approval, shipping dates, etc. – that have a more direct impact on profit levels for buyers and retailers.

The main explanation for this is risk minimisation. If risks from non-compliance with quality assurance measures is *considerable* for buyers (and threatens stock market share prices, profit margins and market reputation, as happened with child labour allegations) then sufficient market-survival pressures can convince buyers to engage in policy networks, contribute funding, and engage multi stakeholder institutions to address the problem. However, in a situation where the process already in-place for governing the standards and codes is accepted as being adequate to meet any legal claims, or to prevent any loss of retailers' reputation due to non-compliant suppliers, then the pressures/incentives for closer governance is less. This is not encouraging news for EM, since the risk threshold has never been crossed by green issues in the apparel GVC.

The RMG buyers in Bangladesh prefer only shallow collaboration for CSR, especially information provision (by means of compliance code documents, booklets, website references etc.), rather than case by case technical or financial collaboration. In fact, none of the RMG firm representatives could recall instances of technical or financial collaboration, although technical and financial collaborations are common within factories owned by the buyers' parent company. Although those companies demonstrate the benefits of buyer investments for compliance, it has not inspired other buyers to similarly invest into their top tier of suppliers. According to the buyer from L:

> *The hundred percent Korean owned factories run by Youngone are a different story. Their vision is different. They came to Bangladesh in 1979 and have made 16 factories here, each factory is purpose built, and compliance spending is part of*

setting up costs for Youngone. Their business model is an inspiration, as you say, but you have to realise, it's a different business model. We cannot invest with money or procure exhaust fans or machines for compliance in my client factories. They ask for help all the time. But not financial, technical, yes. If a firm has good production skills, good quality machines, then we give guidance on compliance. Our suppliers have access to our own technical people, the LNF technical department is there to help.

Brand name US buyers and large EU buyers (some of them are brand name) are leaders in knowledge sharing. They understand that knowledge and skills for compliance are intangible intuitive values that have to be nurtured, especially in a cut-throat business environment. According to the K buyer,

If its got to do with quality standards, then we give them books, manuals, things to read. But firms learn by doing. So regular workshops on product quality and compliance are being done by K where factory management has to demonstrate learning. If there is no awareness in a firm management about compliance, and if you give them a book, then there will be no effect.

Not all buyers were so progressive as to hold workshops with the first tier managers in factories on compliance. Some buying house interviewees said that they were unaware of other buyers conducting seminars or giving guidance on compliance. All (but one) buyer said that they had not collaborated with suppliers on compliance and that they have no immediate plans to do so.

I had asked the RMG suppliers if they had ever asked buyers for any financial assistance for compliance upgrading. They were unanimous in saying that it is not a possibility and it would be unprecedented. One supplier connected it to personal pride,

We shouldn't expect help from buyers for compliance. We are doing it for ourselves, for our country, not for the buyer. We are not beggars. It would be like taking charity from masters. If they invested in garment firms, the owners would steal that money. It would be welcome if buyers gave up higher CM orders if we became compliant, but that is not a realistic thing to wish for. There are no such guarantees in such a competitive global market.[117]

A manager from one of the oldest RMG firms said that keeping collaboration expectations low has to do with Bangladesh's overall position in the apparel value chain,

We don't expect buyers to invest or assist us in any meaningful way. If they feel that Bangladeshi firms are asking for investment, they will quickly go elsewhere; like Sri Lanka or India.[118]

The buyers broadly agreed with the RMG firms on this and eco-compliance is no exception. However, buyers might invest in socially beneficial projects of their own, as highlighted by one RMG CEO,

I haven't heard of buyers doing that, although some buyers are philanthropic and invest because of that. The real reason is perhaps they get tax benefits if they invest in the host community etc. For example, Marks and Spencer started a special school for handicapped garment workers. We send people there and after they graduate, we employ them. If you can play your cards rights, the buyers might match your investment in social causes.[119]

[117] R18
[118] R25
[119] R13

Most suppliers are not as savvy as this CEO: most have not demanded any closer collaboration other than information, because the market is highly competitive already and the Bangladeshi product range is generally not specialised enough to prevent orders moving to competing countries. This shallow collaboration shows that earlier GVC research results that buyers engage in deep collaboration (technical and financial) are not borne out in Bangladesh. Until structural characteristics and market requirements (and product portfolio for Bangladeshi factories) change, deeper collaboration will be unlikely.

6.5 Conclusion:

It is a reasonable assumption that since buyers are leading the drive for social-environmental compliance, and that since compliance strengthens buyers' risk portfolio, buyers would to want to collaborate closely with their favoured suppliers to help them achieve the compliance codes. However, my empirical findings have proven to be more complicated than that and demonstrated that EM principles do not fully apply to the Bangladeshi case due to the nature of the network and the rules of the game within the "cheap clothing" supply chain structure.

The Bangladeshi RMG industry is caught halfway between a *captive-model* and a *relational model* of production governance, where buyers decide on modes of governing depending on how sophisticated the supplier was - some have an arms length approach to governance (when supplier is making low quality basic products that do not need intensive production monitoring), and some have more intensive governance (when the supplier is making high end products that are high value added enough to merit close monitoring). However, when it comes to CSR, most buyers favour an arms-length arrangement. Buyers are only

close with their suppliers with respect to CSR when expensive orders are involved (e.g. denim factories).

The buyers are choosing to remain uninvolved in solving problems that could be overcome through communication and negotiation. The buying process is riddled with loopholes that allow for overlooking substantial compliance improvements to be made to meet the buyer codes. This buyer attitude is perpetuating a system of bribery and falsified audit documents. The custodians of the system are looking the other way as lead-time driven orders are rushed through. Additionally – the weak green signal from end users in developed countries, the often confusing code content, multiple codes, a flawed compliance auditing system, a non participatory stakeholder system of auditing, overlooked subcontractors, etc. – that are at the heart of why buyers and compliance auditors are not being able to deliver what the buyer codes promise.

Overall, buyers have set in place a system where their monitoring and transactions costs are low (shallow collaboration and reliance on superficial auditing systems, reliance on TPCs, rare reauditing, etc.), and they have no huge risks to reputation (since most clothes from Bangladesh are not sold in niche markets). Meanwhile, the GVC and EMT suggestions of better economic network collaboration leading to easier quality upgrading, productivity gains and higher profits for the suppliers have not materialised. RMG factory interviewees could not identify direct production gains (or even profits) from buyers' shallow collaboration and in fact, have repeatedly stated how productivity is being hampered due to conflicting code requirements. The rigidity of the buyers and the supply chain structures (where the suppliers are highly substitutable and greatly outnumber the buyers) has meant that profit gains are due to product quality and price, and not due to greening. Both EMT and GVC have no solutions for such bottlenecks and stalemates.

In the broader sense, the hypothesis in this chapter is correct, that buyers are not interested in deeper, meaningful collaboration when it comes to compliance upgrading. The issue lies in how social and eco-compliance auditing is placed within the buying process and in the way the auditing is done. The existing "rules of the game" is supporting the continuation of this situation. Given this, it is pertinent to ask how things can possibly change; and for that we should look towards a bigger network where the power hierarchies might be addressed to change through public policy on compliance, which is the subject of the next chapter.

Chapter Seven: Eco-Compliance Upgrading in Policy Networks Surrounding Bangladeshi RMG Firms

7.1 Introduction:

In a democratic political system, EMT succeeds via a state regulated market economy that receives policy level support and guidance to green production chains via social and political changes in market incentives and attitudes. EM therefore assumes that the state agencies are not only themselves convinced of ecological goals (i.e. attitudes among policy makers will become environmentally proactive), but they will have efficient institutions to engage in mature dialogue with stakeholders (e.g. private sector, civil society) for designing, implementing and monitoring policy and economic incentives for greening. Analytically it may be argued that the EM prerogatives for policymakers is fairly demanding even in Western democracies, where environmental policymaking institutions are better equipped than in a country like Bangladesh, where industrial environmental policymaking priorities are fairly low. So how does EM fit in with the Bangladeshi political culture and policymaking structure?

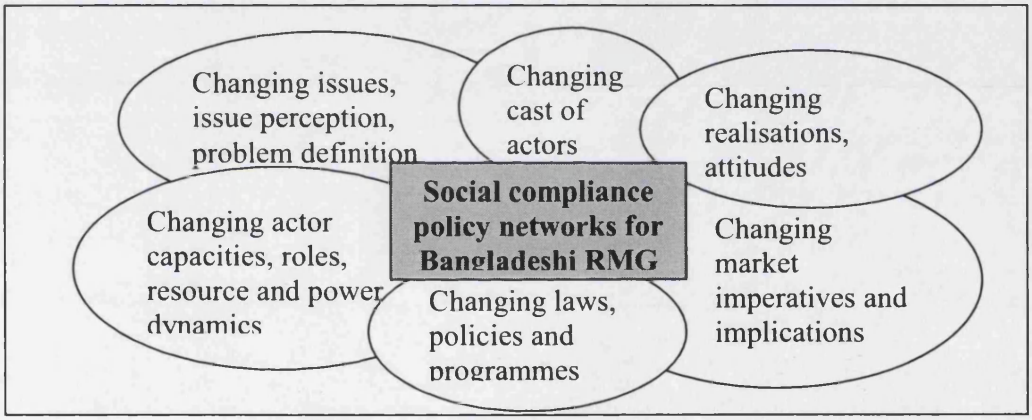
As noted in Chapters Three, Five and Six, Bangladeshi compliance regulators have not performed well in line with EMT. In this chapter I examine why and how this happened to test my third and final hypothesis:

Hypothesis 3: The regulators (state and non state) are not convinced of the benefits of compliance and do not have the capacity to design, implement and monitor better compliance. The exclusion of the DoE and the RMG firms in this policy network is likely to lead to poorly designed outcomes.

In order to understand the policy network changes for EM, I will be referring to the variables explored in my review of policy network literature in Chapter

Two. The analytical lens of this chapter is wider than before – it includes the RMG factories, buyers, trade unions leaders, auditors, etc. from the last two chapters, but the unit of analysis is now the *compliance policy network as a whole*, which includes many new actors (state and non-state) as well as old (from the early days of compliance); together they are involved in realising the non price demands in buyer codes. I refer to it as the "compliance network". I begin with the formation of the SCF, which is the most recent attempt in Bangladesh to regulate compliance issues in the RMG sector.[120] In line with Chapter Three, I refer to this as Phase Three of EM imperatives (figure 7.1).

Figure 7.1: EM imperatives for the Bangladeshi RMG sector



7.2 Phase Three: the National Social Compliance Forum for Bangladeshi RMG:

By mid-2006, Bangladesh had reached a gridlock on compliance. General strikes were called, factories were looted, people were killed, activists arrested, factory owners and trade associations on the defensive, government agencies and buyers extremely worried. The donor community came forward to mediate in this time of crises. The new initiative on compliance policy making began on June 27-28th 2006, when the MFA Forum[121] and the UNDP

[120] Earlier two phases were discussed in Chapter Three.
[121] MFAF are a UK based initiative comprising of apparel brand buyers, retailers, international organisations, donors, trade unions and NGOs.

jointly held a conference in Dhaka titled, "*Forum on the Future: an Internationally Competitive Textile and Garment Industry*" (FFF I), that launched a project to identify a road map to a profitable and socially responsible garment industry (MFAF 2006e). At the first conference, the main policy challenges were iterated as follows:

—Compliance with international labour standards and national labour legislation is key to market maintenance. The main problem areas are freedom of association and collective bargaining, employment contracts, living wage, reasonable working hours, weekly holidays and health and safety measures, including fire safety;
—Ignorance of international labour standards, national labour law and industrial CSR best practice is a major barrier to progress at all levels;
—The multiplicity of demands from different retailers compounds the confusion and creates hesitancy among firms;
—The paucity of capacity in the enforcement agencies is a further cause for concern; and
—The reluctance of stakeholders in accepting responsibility is stagnating the policy arena. There needs to be an end to denying responsibility, and deadlock creation through waiting for others' initiatives (MFAF 2005a).

Policy discussions at this point linked compliance with market competitiveness (MFAF 2005b and 2005c), which is encouraging from an EM point of view if greening is viewed together with "social" issues, and not delineated as a clear priority area. The FFF I also highlighted problems within the existing issue network: understanding the relevant issues, poor institutional capacity and weak network structure with low built-in accountability. There was an emphasis that the ad-hoc policy making style of the past would need to be replaced with a more rational system with less information gaps to facilitate informed decision making (Jabbar 2006).

Shortly following the FFF I, a Social Compliance Forum (SCF) was formed to review policies, ascertain necessary reforms, expand the compliance policy network by appointing "focal point officers" at relevant ministries or agencies and to create stakeholder teams to monitor factory floor compliance (MFAF 2005d). A senior level government official, Mr. Ghulam Hossain, Joint Secretary, Ministry of Commerce (MoC) was appointed as member-secretary and SCF Chair.

Given the MoC's influence on the RMG sector over price-factors, their lead in the SCF was intended to give a strong message that compliance monitoring would be more stringent than before. A change of hands was expected to provide new momentum, according to Mr. Ghulam Hossain,

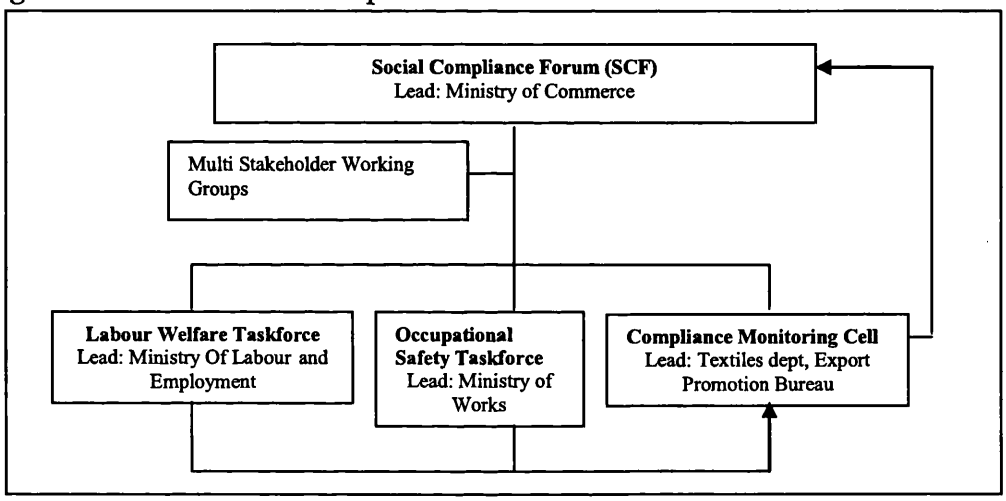
> *The SCF structure is unusual in that it is headed by a government agency, and not lead by donors or the BGMEA, this time we have taken the lead. This was done deliberately to demonstrate government commitment to compliance, and provide stronger bureaucratic backing to any SCF programme. This will only succeed if other government departments lend full cooperation. In the past they have been reluctant in the taking responsibility.*

The SCF design had the legal, political and operational potential to address the core vs. periphery design of the earlier compliance network, and had the scope for broadening the compliance agenda to include greening, facilitate clearer understanding of greening apropos to the Bangladeshi context vis-à-vis buyer expectations, and change outdated eco-legislation and implementation arrangements. The MoC being in charge also created potential for the compliance network to change from the earlier clientilistic structure.[122]

[122] Chapter Three details the earlier problems with the BGMEA leading the compliance network in Phase One and Two.

The SCF included representatives from ministries of Home, Labour, Jute & Textiles, Works, EPB, BGMEA, BKMEA, NGOs, development partners, and buyers. Two issue based Taskforces and a Compliance Monitoring Cell (CMC) were set up (figure 7.2). RMG firms were to implement compliance requirements based on their own best-informed strategies based upon existing laws (with or without loopholes). The two task forces were responsible for physical audits. They report to the CMC, which is headed by the EPB. The EPB CMC reports directly to the SCF (headed by the MoC) and results are to be shared between working group members (MFAF 2006a).

Figure 7.2: Institutional components of the SCF



Source: MFAF 2006f.

The Labour Taskforce focuses on the high risk issues, which were the most persistent and high-risk social issues (e.g. child labour resurgence, working hours, maternity benefits, regularisation of the worker appointment system, freedom of association and collective bargaining rights of workers, etc.). Similarly, the Occupational Safety Taskforce is constituted of the Department of Fire Service and Civil Defence, RAJUK, Ministry of Environment and Forest (MoEF, represented by the DoE) and the Department of the Chief Inspector for Factories and Establishment.[123] They were to audit for fire safety, building safety and worker security, including, and rather optimistically from

[123] See Annex 7.1 for SCF details.

an EM point of view - working environment and environmental aspects of RMG (EPB 2006b). However even at this point, eco-issues were not given separate consideration in policy dialogue.

Initially, the SCF took a supply chain perspective which was encouraging for the ideas of an EM network by establishing a Buyers Group to regularise code content and establish a common code. The Group was also going to set up a process for improving the link between compliance and purchasing practices (MFAF 2006b and 2006c). The Group included buyer representatives from Asda, Carrefour, The Co-op, Cotton Group, Gap Inc., H&M, Inditex, Karstadt Quelle, Levi's, Marks & Spencer, Nike, Tesco, and Walmart. The ITGLWF, Oxfam International, ETI (UK), Social Accountability International, and the Fair Labour Association are also part of this Working Group. Secondly, the SCF formulated the Joint Initiative on Corporate Accountability and Workers' Rights (Jo-In code), in November 2005 that is a common code to be adopted by the buyers placing their orders in Bangladesh (MFAF 2006d).

However, it was not long before the old problems of sidelining greening, network exclusivity and weak policy outputs reared their heads. During the project negotiations in January 2006, for example, it was revealed that the two task forces had drafted worker safety and labour standards without any participation from the trade unions or civil society (MFAF 2006e). The SCF Chair explained that civil society representation had not been resolved due to an absence of a unified self-nominated trade union and NGO actors who would participate (MFAF 2006f). The agendas of the trade unionists and NGOs were heavily questioned by the task forces. Conflict over actor agendas also became apparent along the lines of Bangladeshi and non-Bangladeshi (MFAF, the donors, the buyers). By the end of July 2006, the MoC called the first meeting of the SCF, where the MFAF was not invited but was able to participate only through lobbying by the BGMEA and UNDP. No trade unions or NGOs were invited (ibid).

The BGMEA remained politically powerful and their old reluctance to take compliance responsibility and preference for blaming "foreign forces" reared its head, similar to the ILO child labour negotiations. At the August 2006 SCF meeting, the BGMEA called for a level playing field when it came to non Bangladeshi compliance demands across the supply chain (MFAF 2006f). An example of anti-Bangladeshi bias was cited through the uneven attention given to the Bangladeshi owned Spectrum factory accident versus the sacking of 500 Bangladeshi workers overnight by Taiwanese employers.

At the operational level, updating of compliance laws saw some progress with the MFAF pushing for the common Jo-In code. By the end of the SCF meetings in September 2006, the Jo-In code concept paper was agreed in principle by all stakeholders, with the implementation to be negotiated in Dhaka. The concept note focused on three key areas for policy making which represented a broadening focus on implementation etc., but a narrowing focus on eco-issues. Following on, the SC met in Dhaka to formulate a plan for mobilising resources and institutionalising mandates behind the three key areas for social compliance. Among the core SCF members (broadly the steering committee (SC) members), the problem of wavering commitment to the SCF goals became apparent at this stage, echoing their pre-SCF behaviour patterns. It was brought to the attention of the SC that government agencies were not according a high enough priority to their SCF work after the initial agreement of the early days. They were not following up on their tasks, agreeing to release matching funds, or even attending meetings - collectively it may be taken to mean that non-price issues were not of high priority for the government agencies. Network interactions were becoming bottlenecked and a core vs. periphery structure began to emerge, along with a shift in network leadership.

At this stage, the donors and the MFAF staff were unofficially leading the SC, instead of the MoC. Only the MFAF staff met with the Buyers Group; the SC general members did not regularly meet or exchange input with the buyers. This was reflective of the network tensions along the lines of Bangladeshi national interests vs. foreign values especially surrounding the buying practices. The BGMEA and BKMEA expressed the view to the SC that the concerns of the RMG factory owners regarding the changes they expect from the buyers were not being reflected in the policy discussions. Discussions reached a critical point when trade associations threatened to withdraw from the SCF. Implementation of the Jo In code was another contentious issue: the trade associations disagreed with the SC general members over the freedom of association, subcontracting arrangements, wages, and hours of work requirements.[124] The trade unions were not asked for input over the Jo-In issue, firmly placing them in the network periphery. The trade associations instead pushed for the new Bangladesh Labour Code 2006 to replace the Jo-In code; a move that ultimately succeeded. The task of getting the Buyers Group to retain interest in the SCF was continuing to be a challenge: their lack of response and participation in meetings pointed to their level of commitment, and allowed the BGMEA and BKMEA to steer the agenda.

The acceptance of the Bangladesh Labour Law 2006 over the Jo-In code had no impact on EM: since the Jo-In code focused on workplace standards that were judged to be high priority in the industry, and did not include environmental issues even by way of referring to national legislation. The Labour Law 2006 was similar in scope.

[124] The trade associations were defensive because the political volatility of these issues was impacting the member factories who voted for the associations' Board of Directors. Trade associations traditionally discourage trade unionism in Bangladeshi factories. Workers are not allowed to form unions inside EPZs and in under other conditions. Trade associations are also reluctant to handle compliance of subcontracting factories due to operational complexity of tracing firms who sometimes do not declare subcontracted income. Lastly, wages and acceptable work hours were already political high risk issues from Phase Two of compliance policymaking.

After October 2006, progress on the compliance programme became very slow due to broader political instability and violence that made Bangladesh come to a standstill in winter 2006. Bangladesh went under a Caretaker Government and a State of Emergency was declared in December 2006 that continues at the time of writing this Chapter.[125] During the early days of the Emergency, compliance policymaking came to a halt, since all government ministries were headed by non-regular acting chiefs, and there was no system in place to continue policymaking. In fact, the GTZ PROGRESS team said that project outputs scheduled for early 2007 donor meetings were pushed back to June 2007, depending on elections.[126] It may be noted that as of July 20th 2008, the Caretaker Government of Bangladesh has not set any dates for the next general elections.

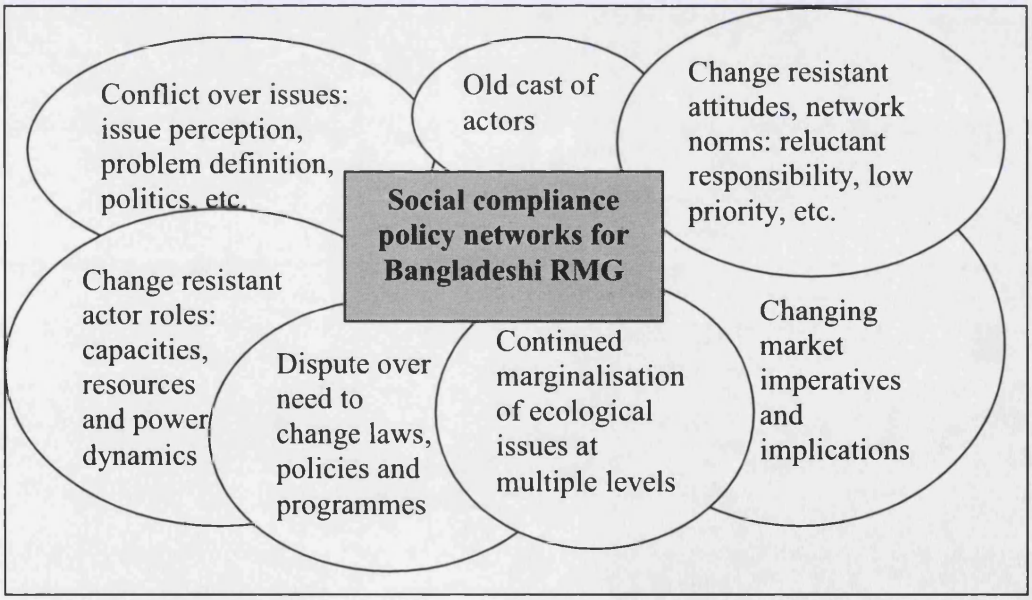
In April 2007, the MFAF met in Toronto. The SC of the SCF was renamed as the Multistakeholder Forum Bangladesh (MFB) with the BGMEA and BKMEA officially in the lead. In May 2007 a new compliance project was announced by the BGMEA/BKMEA for the RMG sector based on the different compliance levels of their member factories.[127] The new programme concentrates on supporting the government (awareness raising, advocacy and monitoring), strengthening stakeholders (workers, managers and buyers), and strengthening third parties (BGMEA, BKMEA, NGOs and trade unions) (MFB 2007). The BGMEA/BKMEA formally circulated the log-frame and questions were raised again about the non participation of trade unions and NGOs at this stage, especially in the ongoing programme of implementing minimum wage (also headed by the BGMEA). The stakeholder meeting reviewed the progress made since the Toronto meeting, and concerns were raised regarding living wages, right for collective bargaining, freedom of association and working hours by the non-Bangladeshi members. The MFAF members

[125] The caretaker Government Regime lasted for 2 years and ended with the general elections in December 2008. This thesis was submitted for examinations prior to that.
[126] Personal communication with GTZ officials.
[127] Source: the Daily Star, available online: http://www.thedailystar.net/2007/05/09/d70509050158.htm, accessed on July 20, 2008.

(ETI and GTZ) felt that living wage had to be addressed, but the Bangladeshi members insisted that the new Labour Law 2006 covered minimum wages adequately and that living wages were off the table for discussion (MFAF 2007). The trade associations were emphasising market conditions for compliance, while the MFAF were emphasising improved working conditions and legal trade union activities in factories. The BKMEA president said that downward pressures on prices had made compliance impossible and that compliance pressures are unjustified unless falling prices are not arrested (Daily Star 2008). His argument neatly tied the price factors as subsidising, in a sense, with the non price factors, as highlighted clearly in Chapter Six.

Given these policy negotiations, the network in place is not adequately equipped to deal with the realities and problems delineated in Chapters Five and Six, summarised by figure 7.3 below.

Figure 7.3: EM realities for the Bangladeshi RMG sector



The SCF took on the familiar core vs. periphery structure: excluding NGOs, trade unions and government agencies with low political saliency; continued marginalisation of greening issues, unchanging attitudes to social issues (lack of commitment, coordination, cognition and cooperation); dispute over the

specific legal and programme level changes; and the inability (or unwillingness) to expand the policy network for a discussion without suspicion and blame. The Phase Three policy network was very similar to the Phase One and Two networks: business lobby led policy community that operated like a mixture of an issue network and a policy community; the bureaucratic network was ultimately dependent on formal institutional path dependent rules and norms.[128] The kind of social-political changes that EM assumes of the policymakers, economic actors and broader society did not materialise here.

What was the fate of policy driven greening? It would be interesting to analyse the DoE vis-à-vis the SCF through the lenses of EM. The DoE were invited to the SCF meetings, but were absent in all dialogue. Environmental issues were addressed as a part of the Occupational Safety Taskforce, but were absent in the Steering Committee discussions. What are the factors that make the DoE such a weak (and ignored) state agency for leading EM of the RMG sector? Does the SCF fare any better as a regulator, assuming they overcome their present bottlenecks and carry on? The next section attempts to understand these two sets of questions.

7.3 Determinants of Weak Ecological Modernisation Capacity:

a. Uneven power-resource dependency and institutional problems:

Implementing EM is a political project (Berger et al 2001) and analysing the success or failure of EM needs to take into account the power-resource dependencies that have determined the poor state of environmental compliance vis-à-vis social compliance. The DoE's place in the political hierarchy of regulation is fairly weak: when an agency is resource dependent on others, it consequently has less power to bargain for its own agenda, and

[128] See Table 3.5 for details on the Phase One and Two network characteristics.

when the environmental agency is weak, it sends out a weak message about the seriousness of compliance.

-Department of Environment (DoE):

The DoE is a relatively new government agency, set up in 1989 after the reorganisation of the Department of Pollution Control under the MoEF. The DoE has a head office in Dhaka and six divisional offices located in Dhaka, Chittagong, Khulna, Bogra, Barisal and Sylhet. The DoE has been implementing the ECR (1997) and is focused on green issues - environmental sustainability programmes for natural resource use and protection of the natural environment. Other projects include climate change, air quality improvement, refrigerant recycling, coastal biodiversity management, monitoring cross boundary pollution, phasing out Persistent Organic Pollutants. On the urban side, the DoE has successfully banned polyethylene shopping bags in Dhaka in 2002. The DoE also banned three wheelers (with two stroke engines) in Dhaka in January 2003. While granting industry licenses is part of their core functions, they do not have any ongoing projects for improving industrial compliance. Environmental regulation of the toxic industrial pollutants discharged into Dhaka's rivers and especially the Hazaribagh tannery area remain key failures for DoE. According to the IWM 2007 report, rapid expansion of industrial processing and manufacturing activities in the Dhaka watershed over the last 15 years has left the rivers dead (extremely high BOD and COD values in rivers), leading to existing water treatment plants being rendered useless and a growing dependence on groundwater for Dhaka's citizens, not to mention lost earnings and human suffering from waterborne illnesses. Controlling industrial pollution is, of course, not only DoE's responsibility - there are additional complexities such as unplanned industrialisation, heterogeneity in industrial clusters, and a powerful industrial lobby.

The DoE is not one of the better-funded government agencies, [129] and is heavily dependent on outside funding which weakens their position and agenda when faced with competing government agencies and donor agencies. Currently, 12 of its 13 projects are funded by donors, such as the UNDP, CIDA and World Bank (DoE 2006). The relationship between the DoE and the donors is not without conflicting interests and power-bargaining either. According to Mr. Mohammad Reazuddin, Director (Technical Department head) of the DoE,

> *There is a problem in the donors perception about environmental problems in Bangladesh. They decide what to fund. They think they know too much since they give the money and push the agenda. We do not agree with them on their agendas, what areas to fund or how things should be done. But we cannot do without donor guidance either.*

There have been several donor driven projects (specifically under the UNDP's Sustainable Environmental Management Project and the CIDA's Bangladesh Environmental Management Project) on building DoE capacity that includes a revision of environmental legislation applicable to industries, engendering improvements in the regulatory framework at the national and regional levels and providing technical assistance to the DoE for the development of EC skills and the management of environmental safeguarding of industrial development. The DoE's problem is not a lack of donor funds or capacity building initiatives - the problem is overcoming institutional inertia regarding weak management capacity, low technological skills and low policymaking proactivity in non-donor driven areas. This has serious EM implications. E.g. the DoE uses the same EIA criteria/guidelines for the textile and RMG sectors, despite marked differences in pollution generation patterns and loads. The DoE has also not changed ECR requirements of mandatory

[129] According to the Government of Bangladesh Budget 2006/07, the MoEF received BDT 185 crores (approximately), whereas the higher budget ministries were Finance (14301 crore BDT), Internal Resources Division (42299 crore BDT), Economic Relations Division (12128 crore BDT), Defence (694 crore BDT) (MoF 2006).

ETPs regardless of blatant non-compliance by industries and technical recommendations made by foreign research bodies, such as the Stockholm Environment Institute (SEI) and University of Leeds. This proclivity towards adapting ill-fitting policy is out of line with EM requirements.

Mr. Reazuddin pointed out that DoE's reluctance to deal with ecologising economic growth is not DoE's unique problem. According to him:

> *Our projects require co-operation from a large number of government offices and NGO and private stakeholders. There are many levels of government and various departments with separate areas of responsibility. We don't hold jurisdiction over everything environmental. So we are dependent upon them very much to get results. To get co-operation, each project team has to develop capacity within DoE, and also within our stakeholders. We have to train and motivate inside and outside. But co-ordination and consultation with stakeholders can be difficult. Training components in projects often only have provisions for DoE staff training, leaving outside the awareness and skill building in other government ministries. Infrastructure for communications is poor. Many stakeholders do not have access to email and staff turn over rates is a problem.*

He pointed to the overall situation: rapid expansion of the industrial base is not the problem; the lack of management of such growth is the problem. Other factors highlighted by the DoE Technical Director included: institutional failures by multiple agencies, lack of coordination or a shared vision over priorities, lack of communication or dialogue, lack of interest by industries towards volunteering for compliance without regulatory pressure, weak monitoring procedures by DoE, absence of land use guidelines for siting of industrial units, perfunctory attitudes about greening at the national level, overall eco-apathy, etc. The Dhaka City Corporation was also singled out for failing to look after industrial pollution, as were other government agencies

such as the RAJUK (they have no environmental guidelines for designated industrial zones), Board of Investments (they provide permits for service provision before EIAs), local government units/ pouroshobhas (they approve siting of industries without considering environmental impacts), the Industry ministry and the Bangladesh Small and Cottage Industries Corporation (low eco-priorities and awareness). This is keeping not only EM's agenda in the backburner; it is also not helping the DoE's agenda in front of powerful competing ministries unless wider change towards EM happens initiated by other ministries. According to Mr. Reazuddin:

> *That is true for every country. You cannot blame Bangladesh. Other ministries are not as open to recognising environmental problems. Everyone has their own policy agenda. They are not ready for it. We are in competition with them.*

So what is the scope for the DoE in providing cross-ministerial guidance on ecologically benign growth? Mr. Reazuddin expressed his scepticism about the benefits of having a permanent cross ministerial environmental focus group comprising of Joint Secretary level bureaucrats who will be trained on project EIA etc., along with their regular duties. He thought such an arrangement would not be viable or sustainable, preferring a needs-based approach,

> *Cross ministerial working groups are need based. If they are needed then they will be formed. Sometimes issues are identified by the MoEF, then moderation is done by us. Often other ministries take the lead.*

This fits in well with the existing culture of policymaking in Bangladesh where efforts are issue based and piecemeal.

Another factor weakening the DoE's position is the shortage of technically skilled and experienced staff who are capable of designing and executing a combination of sanction-based and compliance based approaches for pollution control. According to Mr. Reazuddin,

> *For an organisation like the DoE, the staff members would require considerable training in environmental issues as well as environmental management. Staff training is an ongoing issue, there is not enough of it but it is not a barrier exactly.*

However, the interviews in Chapter Five adequately highlighted the skills gap within the DoE for effective and efficient regulation: there are limitations in knowledge of alternative modes of regulation, attitudinal barriers to change and a perception that a confrontational approach is the most effective with industries. It was felt that the DoE needs to strengthen their ability absorb new approaches and technologies so that they have the ability to collaborate with factory owners, industrial associations, etc. The lack of environmental training among the technical core staff (most of who are recruited at the cadre level and not based on their educational/technical background) is rendering the DoE "toothless", as one anonymous DoE official called it. The inability to interface with industries were demonstrated during negotiations surrounding the 2005 Committee for Eco Compliance of RMG Factories. As discussed before, it was a short-lived dialogue, which was characterised by pressure from the BGMEA *against* the DoE fulfilling its legal mandate. According to Mr. Reazuddin, attitudinal change is a matter of time,

> *You cannot expect things to happen overnight, the committee is still being formalised. The technical barrier is huge. No one is ready mentally for national level compliance. So far the committee has DoE, the BGMEA and the BCCI. ETPs for RMG factories is part of existing policy. However we need to enforce it. Basically it is seen by everyone as a trade barrier. Media pressure is*

awakening the RMG, that compliance is a good thing. Eventually they will see ETPs differently. There is reluctance on their part, we need time for that to change. Government wanted a solution to water pollution and we at the DOE provided a solution.

When asked about the DoE's involvement in the SCF, he said he was aware that the DoE was a part of the Task Forces but that no one from the Government had sent what he called proper invitations, and hence DoE is not actively involved in the policy making or project implementation. When asked about DoE participation in the Occupational Safety Task Force under the Compliance Monitoring Cell, Mr. Reazuddin said that the DoE will not get involved in the CMC's compliance drive:

No we are not (involved in the BGMEA/CMC compliance drive). Fire safety is a social issue.

Even at the DoE then, there was clearly no recognition that ethical trade compliance in RMG includes eco-compliance issues, which highlights the difference between the DOE's agenda and the EM agenda.

The DoE's weaknesses and skill-gaps are complimented by the reluctance among private sector actors in engaging with them, as we saw in earlier chapters. Many managers have said they have no wish for better or more engagements with the DoE. One RMG CEO said,

DoE's cooperation with RMG factories is not a high priority for any one. They should focus on more pressing problems, such as water quality. Why don't they concentrate on improving the water quality in the rivers? What private sector dialogue are you talking about? DoE's dialogue with RMG factories will help no one. The DoE is doing their job quickly after getting their bribes, it's a system that works. We pay the bribe for getting technical help. If you

remove it, the whole process will only get longer, which will cause more bottlenecks.[130]

Another manager took a sympathetic view,

Sometimes genuinely concerned officials come to visit our factory. Not everybody at the DoE is about taking bribes. If they do ask for bribes, I don't blame them. Look at how much they are paid. They have families, children, fees to pay. Some ask for indirect bribes, some ask directly. They have set up a nice system where we have to make cash payment and somebody from the DoE will contact a consultant on our behalf and get the required reports written and submitted to the DoE. We are certified that way. It's a procedural issue. We need to have 13 certificates in order to get a trade licence, this is one of them.[131]

The RMG factories seemed reluctant to turn to the DoE for compliance issues, and in fact, would rather the DoE did not participate at all. When asked what would be their message to the DoE, one manager said,

I would like to tell the DoE that for the sake of God do not take uninformed decisions. Leave us alone.[132]

One manager was especially sceptical of DoE's role. He was experienced in running an ETP in his factory and liased with foreign donors regarding technical requirements of ETPs and environmental management for his factories. In these repeated interactions he has never approached the DoE. In his experience, the DoE does not have up to date technical capacity to deal with the fast changing chemical needs of the higher end RMG factories, such as the one he runs. His factory does "wet processing" which involves:

[130] R8
[131] R14
[132] R37

garment wash/power rinse, silicon wash, enzyme wash, enzyme stone wash, stone wash, bleach wash, chemical stone wash, double ice wash, destroy wash, micro-sanded green wash, retro- reactive and tie dye. His wet process machines are from China and Singapore and were imported at considerable cost. He does not believe that the DoE technical staff have any understanding of these machines. He was reluctant to involve poorly trained staff in the running of important expensive machinery. In the future he envisions an expanding range of production including more complex washes in the sector. According to him,

> *The DoE is working in a policing role; they are not in the advisory role. They don't have the whole picture. If they tried to get into advisory role, what will happen? All the factories will have to shut down while they study the situation and make up their minds about what advice to give. Such interaction is not wanted. It's a bad choice.... There is no point to it (DoE dialogue with other ministries regarding environmental policymaking in a coordinated form). They have to sort out issues of self-capacity. No point talking to somebody who has no idea about the whole issues.*[133]

The medium and smaller sized factory managers were unconcerned about DoE participation or had no opinion on the need for such dialogue on environmental technical advice. This seemed to indicate the low importance of the agency in the eyes of its regulated factories, or even a degree of agency capture of a powerless regulator. When asked about the DoE's image problem with the RMG factory owners, Mr. Reazuddin said,

> *We inform them (RMG factories that apply for environmental clearances) of DoE policy and rules when they come to us. Water standards are given. We don't give them technical help. We tell them to go to consultants for that. We help motivate and educate. I know what the popular perception is among*

[133] R32

garment firms about the DoE, that it is a den of bribery; that our inspectors are millionaires, that they throw down money and we give them a certificate, that anybody can get a certificate. But what they don't know is that we also decline a lot of certificates. Any factory that is on rented property with no stairs will not get a DoE certificate.

However, during my fieldwork, I visited many DoE certified factories on rented property. In fact, ownership of premises is not mentioned in the ECR as a precondition for getting a licence.

-Social Compliance Forum (SCF):

Power resource dependency and institutional weaknesses are also present within the SCF, but along different dimensions than that of the DoE. Here the skill-gaps, attitudinal bottlenecks and power dynamics are more complex, since it is a collection of state and non-state actors who already have a shared history of sharing resources and power over policymaking before the SCF was formed. However, here as well, EM is a political project, to be understood in terms of individual power hierarchies and agendas.

Each organisation also has a history of institutional problems (weak capacity, corruption, low commitment, etc.), as evidenced during the fire safety and wage negotiations.[134] There were certain "rules of the game" that were also imported into the SCF, as seen earlier in this chapter. This combined history of shortcomings and network culture has influenced the direction of policy change in the SCF. That in itself is not surprising; what is interesting however is the participants' views on power-bargaining.

Theorising power in the SCF is difficult: it seems to be drawn along the lines of legal power, but the real battle was between two different types of market

[134] See Annex 3.4 for background.

power (the MFAF and the trade associations). The most powerful actors were the donors (initiative funders), the MFAF (strategic secretariat, liaising between buyers and the Bangladeshi actors), and the government ministries (legal powers to enable cross ministerial working groups to work together). The BGMEA and BKMEA ultimately proved to be powerful because of their working relationship base with the sector that went beyond compliance. As a result, the compliance network remained clientilistic and corporatist.

Among SCF participants, there was a general appreciation of MFAF's role in managing and coordinating the different interests of the Forum. Much of the coordination had to happen while Dhaka was beset by the worst political unrest since independence, which made it hard to move the agenda forward. In some senses, it was beneficial to have a non-Bangladeshi organisation in the moderating and coordinating role - given its impartial third party status, free of past history of resource dependencies, negotiations and agenda bargaining with the Bangladeshi actors. There was recognition among the participants that the steering role success came from the powerful backing the MFAF received from the donors as well as the Buyers Group and the MoC.

However, some scepticism was expressed regarding the longevity of network that emerged, especially due to the marked unevenness in power-balance. According to one trade union activist who was heavily involved,

> *Few of the buyers are behind this. That in itself is not enough. I don't feel that the MFAF will be strong enough to take a leadership role.*

An anonymous participant from a donor agency said,

> *The people behind the MFAF are thinking too much of their role. For this to work in Dhaka we have to begin with an agreement of the need for the Jo-In codes, that is more backed up by the local agencies and more garment buyers.*

This person further said,

> *The trade unions that come to these meetings are totally bhua*[135] *– they come and look gravely insulted during the negotiations and yet don't have any credibility to bring to the table. They don't represent the workers. Most of them are former thugs hired by the factory owners themselves to quell factory disputes. Now they have become respected trade union representatives as soon as foreigners called the meetings. They are all politically backed and nominated. Nothing to do with workers. Talk to them and you will see they are busy attending seminars in Thailand and London. They won't bring any useful discussion points on social compliance but are busy giving interviews.*

Power wielded by the Buyers Group was sometimes thought to have been one sided. According to the buyer from L,

> *There is very little engagement between buyers at the national level. The few major brands that have a large stake in this are pushing the Jo-In code. They are typically already very experienced in corporate responsibility, so they can give inputs, other brands are not as involved.*

Several times there was conflict over power sharing along nationalistic lines. The Bangladeshi actors resisted the foreign sourced Jo-In code as not being suited to the Bangladeshi context. I asked the head of the SCF how the government ministries negotiate setting policy goals and implementation mechanisms better suited to the Bangladeshi local situation, when the popular perception is that an unpopular agenda is being forced by non Bangladeshis. Mr. Ghulam Hossain said,

[135] "Bhua" in Bangla means "impostors".

Very congenial atmosphere. They are our development partners and this is a fully joint collaborative initiative.

However, on condition of anonymity, a high-ranking SCF official from a Task Force ministry said,

There are many things that you will not hear about the closed door negotiations that happened yesterday. Behind closed doors I can speak to the MFAF people freely. I told them this won't go far. They have no idea what they are expecting and what is reality. They think throwing money is enough.

The conflict of financial muscle and local knowledge was also mentioned by a few trade unions and NGOs; incidentally they were excluded from the steering committee.

Although greening issues was left off the SCF agenda, the SCF is perhaps better suited to enable RMG eco-compliance over the DoE because unlike the latter, it does not have funding problems or low bargaining power vis-à-vis RMG firms or other ministries. However, both the SCF and DoE have different institutional issues, corruption allegations and commitment problems. Plus, they are both seen as pushing non-price factor compliance that is against national industrial growth goals. The resistance to "anti-Bangladeshi" ethical trade demands (and by extension greening demands) does not fit in with the EM assumptions of changing social and political attitudes and greening values.

b. Cognitive, institutional and strategic uncertainty:

EMT suggests that a clear understanding of eco-profits will translate into committed action towards changing institutional set ups and policy outputs (design of economic incentives for greening, for example). Cognitive,

institutional and strategic certainty is tied to clear green signals, availability of market incentives and the knowledge of what the regulated need. In the following section we will see that without these certainties, regulating for EM failed.

-Department of Environment (DoE):

It is not a matter of cognitive uncertainty for the DoE, since there have been many technical assistance projects and studies done on the environmental impacts of the textile and RMG sector, most notably by the SEI, the University of Leeds, and GTZ. Not only are DoE officials unconvinced by the expert information and technical recommendations, neither are the other stakeholders or factory neighbours. The undeterminable and unwritten rules of environmental politics are potentially also a major contributor behind DoE's inaction on industries: the most glaring case involving the Hazaribagh tannery cluster that is being slowly relocated upstream of the Buriganga river (to the EPZ in Savar) due to unchecked pollution dumping (chromium, sulphur, manganese, lead and chemical dyes) at the present site having contaminated the land and the aquifer to practically irreparable levels (IWM 2007). DoE's inaction in the comparatively less polluting RMG sector is perhaps less surprising.

It is perhaps more a problem of institutional and strategic uncertainty, made worse by institutional weaknesses. In Chapter Five, we saw that the DoE is not doing enough to despite acknowledgement within the institution that the eco-certification procedure is flawed. Judging by the quickly shelved discussions on Eco Compliance of RMG firms, DoE has considerable problems overcoming its institutional and strategic inertia and reluctance to actively promote its own legal mandate. However, the extent of these problems affecting its weak powers as a regulator is hard to analyse since they have been so little involved in the RMG greening policy core.

-Social Compliance Forum:

Earlier we have seen the lack of agreement over cognitive certainty regarding eco-compliance among RMG firms and even buyers. Whether there is comprehension among policymakers about what is an acceptable solution for greening these factories is hard to gauge given the absence of eco-issues in compliance. Since there was no corum either over the social issues, it may be reasonable to expect a lack of consensus over greening given past network history. If greening has to happen it will need to be executed within this same compliance network. In the months following the formation of the SCF and Task Forces, some old institutional, strategic and commitment uncertainties have made their presence felt. In order to get a deeper understanding of the kinds of uncertainty facing the SCF, I spoke to a range of SCF participants, both from the core and the periphery.

According to Mr. Ghulam Hussain, who was the Head of the SCF at the time, the problem of uncertainty is more complicated than mere institutional uncertainty or strategic confusion or wavering commitment. He suggests that these aspects cannot be understood without understanding skills and communication problems within the policy hierarchy. He said,

> *There are three main problems. Firstly there is the issue of having the technical capacity to run a industry wide compliance programme. It should be the full time jobs of qualified people who have enough training, currently we don't have that. The second problem is with my own staff. They don't understand the intricacies of the compliance issues. Garments production is not a simple thing and compliance cuts very deep. Not many people understand that. This level of ignorance is particularly bad because it doesn't motivate people while taking on the additional job of monitoring compliance. Thirdly, we need*

training officers, who are themselves thoroughly knowledgeable of the problem and have the skills for teaching others. Right now the way things are, you can expect a 6 month delay because of no training officers. We are trying to get trainers who are qualified but this will take time. We also need training among my department staff on how to handle the MFAF people. They work differently and want things that my department staff does not know how to give them. There are too many strong agendas at clash sometimes.

The SCF is aiming to reduce the uncertainty and confusion by pooling together a group of experts to the best of its ability. According to Mr. Ghulam Hussain,

This time the government is involved in a direct way in monitoring the compliance audit progress. We never did that before. This reflects the government's seriousness at high levels. This is an opportunity to address weaknesses such as government commitment, accountability and transparency. This is the chance to prove that the government cares about compliance. The technical leadership is in BGMEAs hands. The bottom line is this – compliance has to be lead by experts – doesn't matter if it is government or not. We want the job to be well done.

Given past social compliance enforcement experiences, they have gone for the "best possible fit" solution in terms of legal reach and access to RMG factories that are provided by the trade associations.

The "best possible fit" is still beset with problems. During the London meeting of the SCF, I asked BGMEA representative Mr. Lutfur Rahman about the weaknesses that the BGMEA is addressing within itself to better lead the technical aspects of compliance regulation as a part of the SCF. He said,

We can't say we have failed. If you say that we failed then how can we have achieved so many things? You have visited Bangladesh over the years. You

have seen the conditions 10 years ago and then you can see things now. 2005 to 2006 has seen tremendous improvements. In 1995 child labour was a major threat and the ILO and BGMEA acted together in a project. How can you compare Bangladeshi RMG sector with other countries and say that the BGMEA has failed? There are fires in hotels too. We are dealing with factories in rented venues here. Eventually they will shift to commercially fit buildings.

This reluctance to accept responsibility for institutional weaknesses and regulatory failure is part of a blame shifting culture, which is prevalent in actors forming the SCF's core. However, all actors do not share the blame-shifting attitude. According to Mr. Ghulam Hussain,

Law enforcement has not been perfect, I agree. We are a developing country. Many things about social compliance are covered in national laws. We need an SCF working group on law harmonisation. Why have we allowed the garments factory accidents to happen? There is a serious capacity problem. There is a problem with implementing the written word. We don't have the capacity to even understand the issues and the magnitude of non compliance. We don't have that mentality yet.

Given the unchanging low-commitment attitudes of the BGMEA officials (which was also widely criticised by the ILO evaluation reports of the joint ILO-BGMEA project that set up the BGMEA's Social Compliance Cell), and the legally contested participation of trade unions in the SCF, should the government take a more direct role in implementation monitoring, rather than leave it to the "best possible fit" actors? Mr. Hussain said that it is a matter of network functionality rather than issue commitment,

The government has serious capacity problems when it comes to monitoring. We have no choice but to leave monitoring to non government organisations. We can only facilitate and give official backing.

Therefore, the government ministries can only leave actual implementation to "best fit" actors whose institutional strengths and commitment have been questioned heavily in the past.

The commitment of the non Bangladeshi actors was important in overcoming strategic uncertainty. I asked the MFAF head Mr. Alan Roberts about the gradual build up of pressure from the non Bangladeshi players in the compliance network. He said,

> *Twenty five years ago when the apparel supply chain started, working standards were very poor. Buyers have gradually built up pressure on their suppliers. Meanwhile at the corporate level CSR practices are rising. Buyers may have taken advantage of low standards in the past, however it is now the buyers who are giving the opportunity to the suppliers to get better.*

Buyers are pushing for social compliance in the absence of home grown pressure, and that is remarkable indeed. However, strategic uncertainty among the buyers as a whole is still a problem, since the MFAF Buyers Group only includes the proactive big brand names, and not the buying houses operating in Bangladesh (in Chapter Six we have seen the loophole created by the buying houses' differing compliance demands), therefore overall commitment towards compliance from the periphery buyers remains to be tested.

Strategic and institutional uncertainty among the trade unions has been a big barrier in implementing the SCF agenda, as has been reiterated repeatedly in the SCF meetings in Dhaka. According to a senior labour leader and secretary of a national labour union, the trade unions could not get strategically organised because of security problems. It may be mentioned that in April 2006, he was stabbed in connection with his role in mediating the labour dispute with the government and the RMG factories (New Age 2006b). Trade

union representatives interviewed by me have repeatedly said they feel persecuted by higher authorities and the powerful business lobby. Allegations of death threats for trade unions labour leaders are fairly well known. According to one high profile union leader, during the wage riots in June 2006, her office was surrounded by the paramilitary police forces, who physically stopped her colleagues from going to any labour meetings; one colleague died in police action, and another colleague was detained without any warrant. Such intimidation results in the weakening of strategic participation of smaller trade unions. According to a member of INCIDIN, a labour rights research group, strategic uncertainty of trade unions is directly linked to the legal status of the unions in RMG factories,

> *The civil society view of the garment supply chain is different from that held by the people inside it. CSR has to be an equally shared global perception. We need labour rights outside of the garment factories in the EPZ. If the majority of the factories had allowed trade unions then there wouldn't be street riots and so much uncertainty about how to usefully channel the force of the trade unions.*

Therefore, the issue of strategic and institutional uncertainty of trade union participation and effectiveness in compliance monitoring can be tied back to their legal status and broader legitimacy in the broader policy network.

c. Intractability of the problem:

The intractability of the social compliance problem has certainly resulted in low regulatory pressure on the RMG firms, as evident from the quotes from Mr. Ghulam Hussain about how staff in government departments do not adequately understand the complexity of garments production and consequently they do not understand the complexity of the problem. In Chapter Five and Six, the complex and cross cutting the range of buyer

demands were noted. The complexity of the problem is made worse by the involvement of a multitude of stakeholders who do not see eye to eye (increasing the complexity of the network and resulting in risk averse, reactive and slow decision making at the policy level), yet whose sustained cooperation is necessary. The intractability of the problem remains unresolved because social compliance is not a "deal breaker" in terms of the factories getting more orders from buyers, as buyers and RMG managers explained in Chapter Five and Six. Greening is even less of a deal-breaker, but no less complicated.

However, that is not to say that the problem cannot be solved. In Chapter Five we saw how the firms were handling environmental compliance without involving the DoE too much. The RMG factories, asked about issue intractability, said that they recognised that the problems have to be solved by first changing the policies, but that they never banded together strongly enough to push for the changes from the DoE.[136] Therefore, the DoE remains without any pressure from the private sector to solve their problems.

7.4 Determinants and Consequences of Low Actor Participation on Policymaking:

Network analysis literature and EMT both greatly emphasise the peripheral actors in policymaking. However, my findings suggest that while non-inclusive policy dialogue hampered greening, participation of actors in the periphery is not as simple as that. There are two sorts of actors in the periphery - those who were in the periphery despite trying to be part of the process (such as trade unions) and those actors who simply did not wish to participate, even though they are impacted by the policymaking (e.g. RMG firms themselves). They are major actors who have not accessed the policymaking - what is the consequence of keeping them voiceless? Why

[136] This is related to RMG apathy for greening, as discussed later.

were some actors simply not interested? Either way, non-participation has impacted the outcomes. Below I examine the nature of non participation as it relates to network characteristics.

a. Involuntary non-participation:

In Phase One, Two and Three, the network was a tightly knit policy community with powerful core members steering the agenda, while ignoring the periphery actors who felt sidelined. Such exclusion of participation indubitably results in policy outputs that are perhaps less well thought out or even less acceptable to those who are sidelined at the policymaking stage and yet the sidelined actors are expected to work with the outputs at the implementation stage. Repeatedly peripheral members mentioned agenda hijacking and questioned whether compliance meant for the buyers or the workers.

Interviewed trade unionists have expressed their scepticism at being sidelined to the benefit of those who are part of "the compliance system", meaning actors who ask for compliance (buyers) and those who check compliance (the auditors and trade associations). These trade unionists regularly participate with foreign labour NGOs (such as the Clean Clothes Campaign, Make Trade Fair Alliance, and the Maquita Solidarity Network). Despite their SCF participation being promoted by the MFAF, they were having difficulty getting involved in closed-door policy meetings because powerful Bangladeshi actors were questioning their legal legitimacy and political affiliations before refusing to negotiate with them, while the political affiliations of the powerful Bangladeshi actors remained unquestioned. Political affiliation became an important tool for sidelining organisations given the political instability Bangladesh was going through that allowed trade unions affiliated to the opposition parties to be summarily excluded. Some were also kept out because they were judged to have been

institutionally weak (in terms of funding, expertise and human resources). Similar criteria were used to sideline the DoE as well, which had the immediate impact of green issues being absent from what could have been the first ever opportunity of integrating greening requirements into a cross ministerial network of compliance implementation and monitoring.

b. Voluntary non-participation:

The lack of interest among RMG firms in compliance dialogue is an interesting phenomenon in the context of network analysis and EMT. Neither mentions anything about actors who are impacted by outputs and yet are apathetic to the process. However, EMT would suggest that changing of mindsets among economic actors has not happened fully in this case. Can this be a lost opportunity, or has this made no impact? Why such apathy?

The complexity and intractability of the issue has contributed to the lack of mature understanding and rhetoric about compliance. During the 2006 wage riots and SCF meetings, there have been public allegations of foreign conspiracies of ethical trade and speculation about the hidden political agendas behind the wage riots by the Bangladeshi trade associations and certain government officials. At the second Forum For the Future meeting Mr. Alan Roberts, head of the MFAF said in his speech,

> *The Spectrum disaster was an important catalyst and we have made remarkable steps since then. However, now is not the time to become complacent. China is a looming threat to the Bangladeshi garments industry. It is time to get it right. It is time for streamlining the institutions and better coordination of external and internal assistance. Above all, it is time for mature understanding and mature dialogue on social compliance. It is time for taking control and taking action, for institutional memory, for demonstrating determined mature commitment.*

The fact that BGMEA staff were publicly making statements about compliance being an anti-Bangladesh conspiracy and a trade barrier, has acted as a disincentive for the average RMG factory to participate in the policy network because this sort of nationalist rhetoric colours the compliance issue as being something that needs to be resisted, or even ignored. As it is, social compliance had initial problems of gaining acceptance among the RMG factory management and workers. There was reluctance to accept responsibility, reluctance to understand what social compliance meant, and greater reluctance to make changes, as discussed in Chapter Five.

Secondly, the issue was never a long-term threat to the health of the RMG sector. Its criticality waxed and waned, never gathering enough momentum. The current policy initiatives were only jumpstarted after the tragic accidents in 2006, the fatalities of which caused the policy network to form. Nothing concrete was happening before that. RMG factories are used to the past history of start-stop measures over the last decade and have gotten complacent about inaction and non-participation. Greening is even lesser of a threat.

Thirdly, as Chapter Six showed, compliance is not the ultimate criterion for the buyers in placing orders in practice. The non-criticality of the issue helped bury it in the agendas of the RMG managements' list of high priority tasks. Policymaking and implementation in the more critical areas (such as lead time maintenance, raw material procurement, transport strikes, Chittagong port work stoppage, government tax regulations, finance problems, recession, tsunamis, etc.) were moving much faster and yielding more frequent outputs and problem solutions. The RMG firms were more directly involved in those policy issues.

Fourthly, there is little trust of other actors involved in social compliance (including eco-compliance, especially the DoE). The garment factories have misgivings about not only government agencies (where allegations of corruption and bribe giving are fairly common and publicly admitted to), but they are also sceptical of the intentions behind NGOs and trade unions. In fact, RMG firms were firm in their standpoint that NGO inspection of factory premises would be a deal breaker during the child labour banning negotiations. The most important factor, perhaps, behind the RMG's voluntary non-participation, is their views of the trade associations. The role of the BGMEA as an able representative at the policy level is not contested among the majority of the RMG factories that were interviewed (55% of the total sample, most of them medium sized firms). Most of the garment firms interviewed saw BGMEA as doing enough on compliance; they were aware of the BGMEA's crash programme on fire safety and child labour; and majority did not feel that there needs to be more avenues for the firms to directly access the policymaking. This is perhaps, more an indication of the firms' very low ownership of the policymaking process, rather than a comment on the effectiveness of the BGMEA. A few said that they would prefer if they had direct access to the Ministry of Commerce, but in the absence of such channels, they were content with the BGMEA as the network leader. A few RMG factories also said that they preferred BGMEA take the lead because they did not trust NGOs getting involved.

Some were critical of BGMEA's effectiveness in the SCF, given its previous foot dragging on other compliance issues. For example, the buyer from L said,

> *BGMEA should immediately sort out the wage issues rather than have long meetings. It is shameful that workers had to demonstrate like this, people died, factories burnt. BGMEA should have prevented this disaster. Now they want to write a common code, but we need action now.*

Another buyer, K, has been working with the BGMEA intensively in formulating the Jo-In common code for Bangladeshi garments factories, and the K buyers are aware of BGMEA's successes and strengths. They said,

> *Normally we would expect BGMEA to be the leader in ethical trade since BGMEA gives trade licenses to export. Our company has been in dialogue with BGMEA. They need to pressurise for compliance control and they need a fitter support system from other organisations. It is a matter of BGMEA image. They have the force to do it. They need to pull up their socks. They need more public accountability.*

The other buyers (mainly non branded smaller buying houses) were unsure about whether the BGMEA should be the lead in specific matters relating to compliance. This shows that the BGMEA is the only option for an industry that does not trust non state actors (e.g. NGOs, trade unions) or state actors (e.g. the DoE). Such allegations of rent seeking behaviour by state actors are also keeping the RMG firms away from active participation.

Fifthly, and perhaps because of these factors, the RMG firms have not been invited directly in the SCF talks, further isolating them from participating in policy dialogue. Time constraints on the RMG factory management is also a factor in them not being interested in actively following policy making in this arena.

Finally, sometimes the issue is "too overwhelming" to solve for the RMG factories. According to Mr. Ghulam Hossain of the SCF,

> *Lack of understanding and awareness are problems. Garment firms aren't coming forwards to the ministry with their problems. But it's more than that. The BGMEA is trying its best to what it can. If you are non compliant, then*

this is a big challenge to come to the BGMEA's table, but if you are close to compliance, then the new demands are not such big problems.

So perhaps, non participation also has to do with individual factory's past experience with compliance success. Therefore, its not that the firms cannot access the policy-making arena, it is more the case that they are not convinced of the benefits vis-à-vis the costs. Also, they do not have enough "issue ownership" to participate, and consequently are making do with their representation via the trade associations, as faulty as it may be.

7.5 Conclusion:

This chapter aimed to find out if environmental regulation in Bangladesh is equipped to deal with EM principles. The answers were much more complicated and surprising than originally assumed, but overall revealed that the Bangladeshi environmental regulatory set-up is not equipped to meet the prerequisites set by even weak EM.

The scope for EM to succeed at the policy level was scant at the very beginning (Phase One and Two, as discussed in Chapter Three). The formation of the SCF was hopeful for the cause of EM because of the freshly constituted network of compliance actors that had adequate power: legal, financial and political. Eco-issues were included at the early days (in the task forces). However, the SCF (and the subsequent MFB) interactions gave us important lessons about power and EM: the historical power-resource hierarchy that was in place from the first day became more pronounced. The historical behavioural patterns, rules and mentalities kept EM out of the agenda - the buyers did not push for greening, nor did the DoE and neither did the private sector or civil society recognise the "win win" gains of ecologising that was lost. The hierarchy dictated the policy core and the periphery. As the core became stronger, the size of the network began to

shrink, both in terms of the number of agencies involved in the task forces set up for doing crash programmes, and also in terms of the agencies/actors involved in further policy making in the steering committees. The lead also changed, as it turned into a clientilistic group where one group of actors (the MFAF/buyers) held the navigational reins. Gradually power transferred to the BGMEA, turning it into a corporatist-clientilistic network. EM was and continues to be hidden from view.

The reasons behind DoE's failures to drive EM in the RMG sector and the factors behind the marginalisation of EM in the SCF/MFB had some similarities: power-resource hierarchy disfavouring environmental issues over economic growth priorities, institutional uncertainty, strategic uncertainty, and cognitive uncertainty. There were four interesting phenomenon worth noting in the case of DoE and the SCF/MFB- network behaviour is marked by long institutional histories of embedded rules and mentalities that resist EM/pro-compliance change. Secondly, non participation is more complex than simple exclusion-inclusion politics - sometimes actors had the platform for influencing policy agendas, but they chose not to participate (garment factories); some self elected to stay away (the DoE); and some were excluded due to political mistrust (certain trade unions and NGOs). Thirdly, network power issues were ultimately settled between the two factions that both had financial power, but of different kinds (powerful buyers who controlled market access vs. powerful trade associations that represented the factories and had political and legal backing of Bangladeshi actors). Fourthly, "market image" was a big factor behind holding back EM - the RMG firms see the DoE as corrupt, technically deficient, and overall ineffective. They have no wish to collaborate with the DoE. The DoE also commanded very little attention from other compliance stakeholders. As the BGMEA had performed well in other RMG issues, they had more faith in the BGMEA despite its long and well documented history of compliance implementation failures. The trade associations and NGOs were

historically and universally viewed with suspicion – not for corruption or inefficiency – but for their agendas that were sometimes seen to be politically coloured rather than humanistic.

Overall, I can argue that my hypothesis is mostly correct. Greening failures have happened on the factory floor and in the supply chains, but the policy network has also contributed to the case by not rectifying the problems in the other two arenas. In fact, we can see a clear disconnect between the policy issues being discussed and the practical problems found in Chapters Five and Six. The policymakers, regardless of their status in the core or in the periphery, did not change their mindsets (priorities, attitudes, commitment, acknowledgement of responsibility, etc.) about compliance (be it greening or social), and did not recognise the importance of designing new policy tools to enable the RMG sector champion CSR, especially since Bangladeshi RMG caters to the "cheap and basic" garment items that look set to continue. The firms face comparatively little pressure from the regulators, but the lack of an open policy network is not the biggest hindrance to the participation of the DoE and the RMG firms in environmental compliance – it is more to do with issue apathy (towards social and ecological issues), institutional weaknesses, cognitive and strategic uncertainty, a trenchant power-resource hierarchy unfavourable to ecological and social investments, coupled with the substantial price factor challenges faced by the sector that impact its survival directly.

Chapter Eight: Ethical Trade Conclusions

8.1 Introduction:

The aim of this thesis was to examine the applicability of EMT in supply chains involving LDC firms, who are making green management responses that adhere to certain social and environmental standards of their consumers in DCs, as part of greater ethical trade concerns. In the preceding chapters, I presented empirical evidence from the Bangladeshi RMG sector, using the perspective of three networks discussed in Chapter Two - management networks (top, middle, lower management and workers), economic networks (supply chains) and policy networks (issue networks/policy communities). In this chapter, I analyse my findings in terms of the Bangladeshi EM network as a whole, made up of all these intersecting and interdependent networks, and delineate some characteristics of the actors, relationships and changing networks. I conclude that ethical trade has faltered because its tools are not suited to the network characteristics and LDC realities highlighted in this thesis. The problems of ethical trade implementation may be seen as failings of EM as well, and the implications of this are discussed in the next chapter.

8.2 Moving From Three Networks to One:

As presented in Chapter One, the main research question for this thesis was:

Why are export based ready made garments (RMG) suppliers in Bangladesh failing to undertake environmental management?

The relevant EM objectives import for the research question were identified as the:

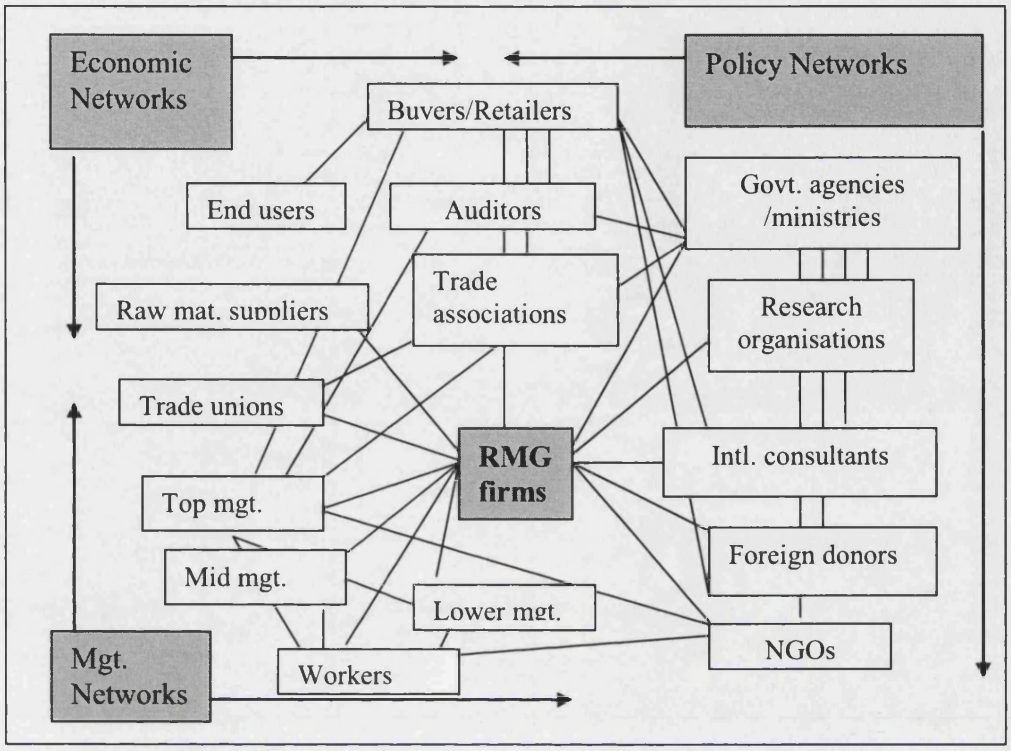
- Changing role of science, technology, information and knowledge, attitudes and organisations;
- Changing role of markets, market actors and private sector initiatives; and
- Changing role of the state (away from command-and-control style to a decentralised flexible consensual proactive style).

Each of the EM objectives was tested via three hypotheses corresponding to three networks that are interlinked within a larger EM network. The hypotheses were as follows:

- Poor environmental upgrading in firms will be associated with factors internal to the firms, such as corporate culture, slow changing behaviour, problems with learning environmental information and will be linked to poor competitive advantage gains;
- The most powerful demand for environmental management on Bangladeshi RMG firms is originating from their buyers in global supply chains. However, opportunities for collaboration or assistance from buyers demanding these environmental upgrading initiatives may be low; and
- The regulators (state and non state) are not convinced of the benefits of compliance and do not have the capacity to design, implement and monitor better compliance. The exclusion of the DoE and the RMG firms in this policy network is likely to lead to poorly designed outcomes.

In Chapter Two, the interacting and interdependent networks of EM was presented as follows:

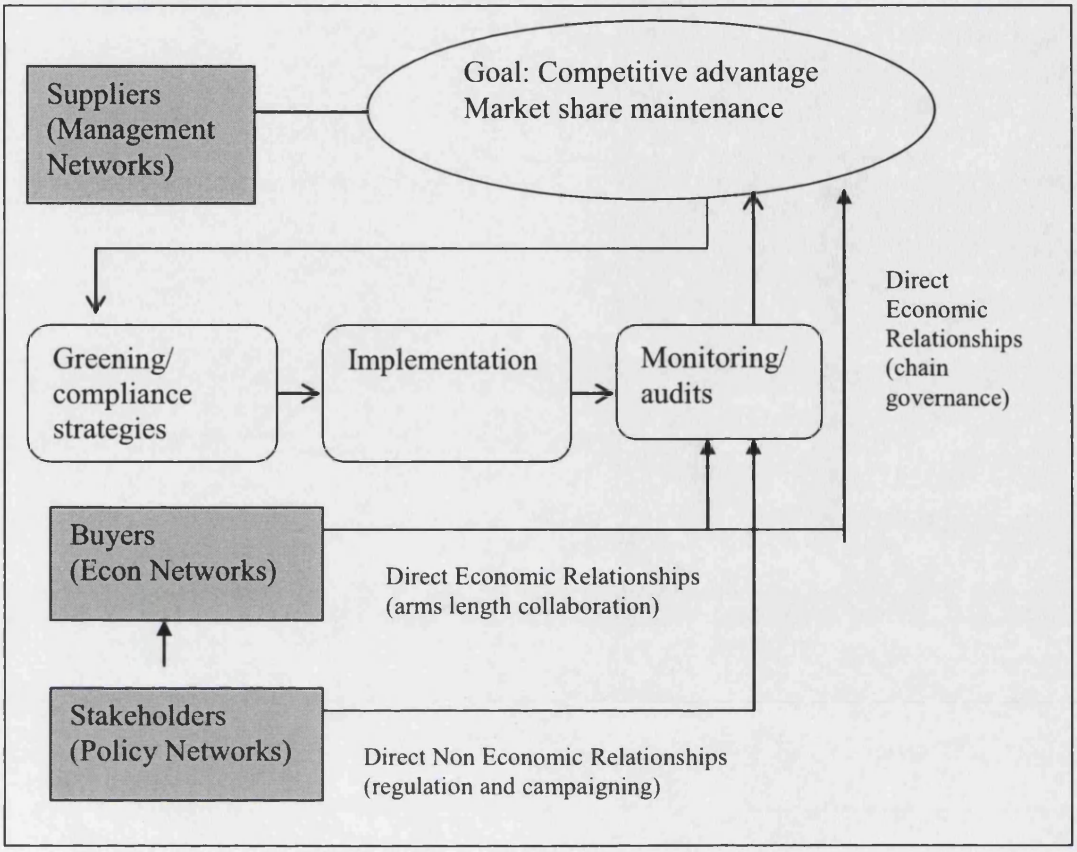
Figure 8.1: Actors in the Bangladeshi RMG EM network



Note: Only the most important relationships have been shown.

While the three networks had a great many features in common (such as the main explanatory variables that weave through the networks – social, political and economic relationships, mutually dependent actors etc.), their commonality and frequent overlapping in Chapters Five, Six and Seven can be used to argue that perhaps the analytical division between the three networks is rather forced, and that EM needs to be studied across the whole network to get a sense of how changes in one impacts others. In this chapter, I would like to present the results as one network, to get a better sense of the synergies and the cross network implications for greening of the RMG sector and for EMT.

Figure 8.2: Functional Interdependence in the Bangladeshi RMG EM Network



Certain things should be kept in mind when thinking about EM as one large network. Many different frameworks have been used to study the workings of EM principles, and taking a network approach to it shares with other approaches a belief that the existence of relationships, many of them stable and durable, provides a compelling reason for researching inter-organisational relationships (that help or hinder greening). Where it differs from previous studies is in its scope – it is concerned with understanding the totality of relationships among firms, buyers and policy makers, as they are engaged in manufacturing, exporting and ecologising in what might be described as a production system. The network approach that I take involves a new way of visualising complex interacting industrial and policy networks in modern economies, and it borrows heavily from management theories, industrial organisation theories, industrial network theories, global value

chain theories and policy network theories. It looks at the nature of the network as a result of the basic actor characteristics and tools, and at how the networks constrain but also offer opportunities, reduce uncertainty, provide coordination, and control. The EM network is not structured atomistically, like free markets, or like centrally controlled economies. Indeed, it would be difficult to imagine a network that is so free that it contains no inertia, or any constraints. Similarly the EM network in Bangladesh is not a fixed hierarchy: so fixed and immutable that some change is not possible, even though change resistance is a significant feature. The network covers a wide spectrum of actors, resources and relationships that need to be studied as relevant, and it may be criticised as being faulty because of that. While the broad scope of such analysis is a strength, it is also a weakness. Setting the boundaries of such large networks is problematic for analysis and in policy network studies, the boundaries have varied depending on the purposes for which the boundary is drawn. The focus of the research ultimately is the EM of the network and not the firm or the supply chain or the policy network, although they are important parts of it. There is also a trade off in terms of detail captured vs. inclusion of a large network of actors, and an EM network can seem too simplistic and accessible. However, I would argue that the simplicity is more apparent than real (as we shall see in the rest of this chapter) because the sets of relationships it describes are theoretically very complex, especially when inter-network dynamics are considered. The main relationships types and their tendencies are discussed below.

Interdependence of the three networks - In the empirical chapters we have seen that the actors (figure 8.1) are functionally related (figure 8.2) and also share a network of resources (financial, knowledge based, and legal), which they use for a network of activities, based on their individual goals. Goal oriented strategy making and actor actions influenced the actions of others, creating a change in the balance of resources (profit vs. loss), ultimately

influencing a pattern that set the network direction. The most distinguished forces identifiable in this case were:

Functional interdependence: Actors, activities and resources in all three networks together formed a system where a complex and interactive list of demands and agendas were met by using the heterogeneous resources that the actors brought to the network space for negotiation. Functional interdependence is based on the end goals of the actors (e.g. profit making, compliance, regulation) and result in governance forms best suited to end goal realisation (e.g. collaboration or arms length) involving the network of actors.

Power structure interdependence: Repeatedly we have seen how the resource-power dependencies within the networks predicted the outcome of compliance initiatives. Change was handled on the basis of which actor can control activities and resources, and determined how new actions were carried out (or not) and by whom. For example, the trade associations ultimately triumphed in bargaining to not only exclude actors that they did not welcome in the policy making phase, but they also protected their members' weaknesses by pushing through weaker policy targets. So what made actors powerful? For RMG firms and buyers, it was the access to DC markets, access to resources, considerable market share, good market reputation, etc. For government agencies and trade associations it was legal power, access to financial resources, access to foreign donors, etc. For trade unions and NGOs, bargaining power came from their affiliations with international NGOs and linkages (albeit clandestine) with the workers. Their bargaining power was lessened due to their lack of political allegiances, as perceived by the politically powerful.

Knowledge structure: The knowledge and shared experience of the actors, as well as their access routes to other actors (that helps them gain new

knowledge and re-strategise) influenced the way they decided to set goals and use their resources (for which there are always many competing uses) or the way they decided to bargain. For example, smaller RMG firms that had no contact with end consumers or larger buyers tended not to have greening strategies, whereas larger suppliers who were "in the know" were more proactive and better bargainers, resulting in (indirect) competitive advantage. The DoE could not use their knowledge or experience because of their marginalisation via the power structures in the network.

Inter-temporal dependence: The EM network was a product of its history in terms of institutional memories, investments in relationships, knowledge, routines, etc., that can collectively be called "network cultures" or "rules of the game". We have repeatedly seen the influence of institutionalised network cultures, norms and "rules of the game" that acted against the ecologising of the sector. For example, RMG managers held on to established hierarchies of operation by not involving workers or lower management in designing compliance initiatives; trade associations repeatedly denied any wrong doing or responsibility in non-compliance by its members; buyers repeatedly refused to negotiate with suppliers regarding compliance implementation and cost problems; the government agencies remained riddled with capacity and corruption problems. The history of such behaviour is difficult to erase and influenced the network outputs.

The last point about historically institutionalised "network rules and rationalities," suggests that *stability* and *development* within the network are closely related. Development in certain areas depended upon the existing stability in others so that some part can change, and vice versa, for example the case of the SCF, where development of a new policy initiative on compliance depended upon exiting relationships and capacities for carrying out policy directives. Development of activities, therefore, can be a means to secure stability in the power structure and enable collaboration over

resources. Stability and change in the network not only co-exist but also actually depend on each other.

The connections within the network - In industrial network studies, two exchange relations are considered connected to the extent that exchange in the first relation is contingent, positively or negatively, upon exchange in the other relationship. This idea is also apparent in the case of the Bangladeshi EM network. Connections exist within the networks because a desired activity/goal (e.g. the realisation of contracts between RMG firms and their buyers) will require resources from all linked actors, directly and indirectly. These resources include access to customers or suppliers, as well as flows of goods, services, information etc. Every activity/goal involved a transfer of resources, sometimes yielding a mixture of positive and negative outcomes for the actors. There are two major types of connections that I found in the network:

Activity based connections: These are the connections that realise the raison d'etre of the network, and tend to be the oldest. These connections arise from structural dependencies between different activities; the structural dependencies are of course, linked to the complimentary goals of the actors (e.g. profit making, compliance sign-off, DoE certification etc.). These connections cannot be easily discontinued (e.g. buyers cancel orders only when "zero tolerance" issues are flagged). These relationships stabilise and reinforce the network by the frequency of interactions; "rules of the game" are set up around these connections.

Actor based connections: These are the new connections that are established in the network due to an actor's subjective acting or "will", such as when the buyers put up codes that result in suppliers' new relationships with auditors, or when the BGMEA liases with a the fire department to hold compliance training among firms. These new connections provide for "new networking"

and enable change. These are not as old as the activity based connections, and often have to make space for themselves within activity-based connections; the latter creates stability while actor based connection causes network development.

The atmosphere of the network and power relations - Network atmosphere depended on many variables, such as the power and resource dependencies, conflict vs. cooperation, closeness or distance of the relationships, and the mutual expectations of actors about their own allegiances. The overall atmosphere of the network is too complex to be described in one sentence. There seemed to be a mutual expectation of non-cooperation when it came to greening (whereas product quality related matters enjoyed better coordination and cooperation); there was also much conflict and reluctant cooperation in activity based connections. However, what is interesting is, "access to resources" was the most important attribute in overcoming network atmosphere problems. Financial and legal resources, or access to actors whose resources can be accessed via collaboration helped sustain network conflicts and contested bargaining, but not always to the end of EM goals.

Different kinds of changes in the relationships - The EM network is interesting because it is a "living" network with a structure that continuously changes; it is never at a complete equilibrium, or at an optimal design. However, the changes are not always random. Two main change enabling *motivations* can be identified in the Bangladeshi EM network: the first was actors acting to combine and recombine activities to *maximise resources* (e.g. firms getting TPC for (indirect) competitive advantage, buyers enforcing codes to secure compliance risks, etc.). The second involved actors trying to *control resources* (e.g. SCF's compliance strategy making, factories undertaking fire safety training etc.). Most changes are driven by either of these two causes (if not a mix of both). Actors trying to maximise their resources are not hard to

identify in the network, especially if one views profits as a resource. In this process of maximising resources, there are two generally opposite *tendencies* that are significant for the study. One is the tendency to stick to the existing ways of doing things. This may be called "structuring" since it reinforces the existing structure. This would involve non-RBV skills, copying compliance strategies from peers, regulators refusing to update legislative requirements, etc. The second tendency is to find new ways of combining activities and resources. This tendency fits in well with actor-based connections and increases the heterogeneity of the network, and may be called "heterogenising".

In the same way it is possible to recognise two tendencies for controlling resources and power, which is something that has been pointed out in industrial networks literature by Hakansson (1992). One is the tendency for greater control by fewer and fewer actors, similar to the idea of "structuring", where actors do not want to change or allow new actors into the hierarchy; this may be called "hierarchisation". The most obvious example of this was in the formation of the core and periphery during phase one, two and three of compliance policymaking. The second and opposite tendency is when the control of the same resource or activity is diminished. This occurs comparatively less frequently, and may be called "extrication".[137] An example of this was in the third phase of compliance policymaking, which had a multi stakeholder design, allowing previously excluded actors access to opportunities.

The overall network atmosphere is distinguished by tendencies to *maximise* resources and control; more structuring behaviour than heterognising and more hierarchisation over extrication. It is obvious that these tendencies are not conducive for EM: for EM to succeed, the network needs more heterogenising and extrication behaviour, so that new ideas, new voices, new

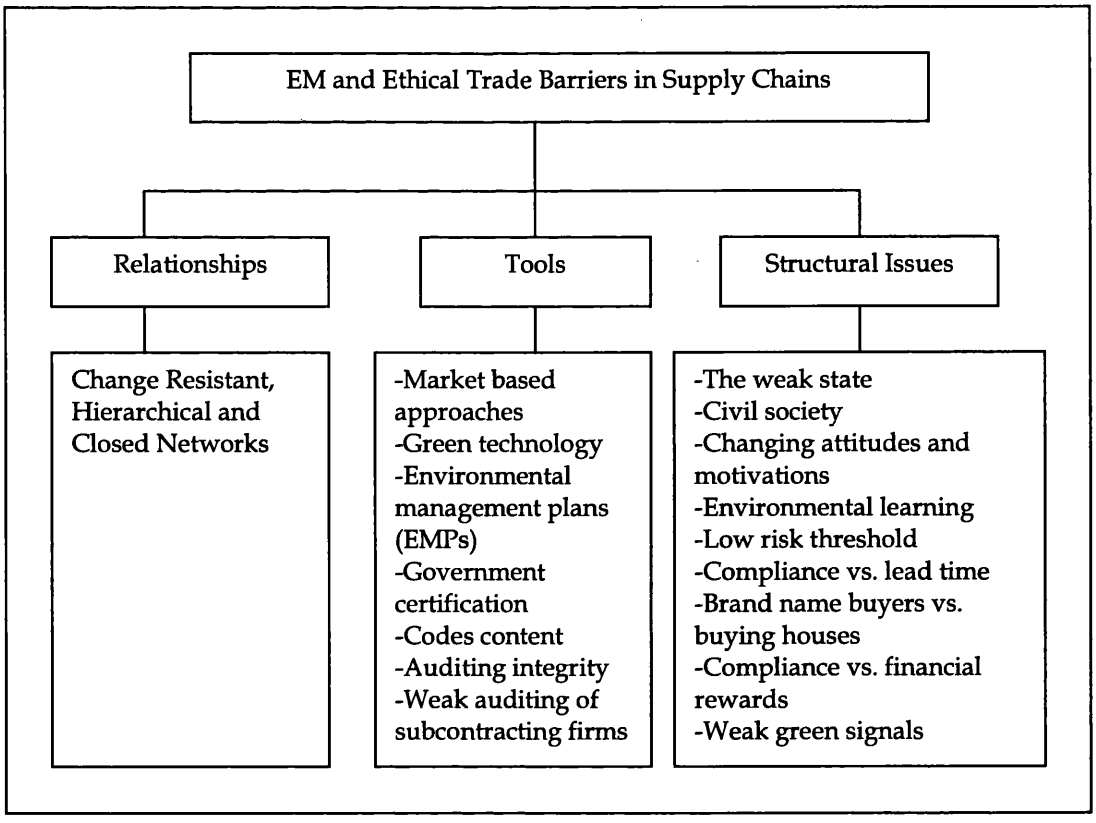
[137] The terms "hierarchisation" and "extrication" are adapted from Hakansson (1992).

rationalities and new tools can flourish within open networks. EM needs actor based connections to bargain a space for themselves within activity-based dominating connections. This can only happen over time, given the right set of economic relationships that reward behaviour that complements resource maximisation tendencies.

8.3 EM and Ethical Trade Outcomes in the Apparel Supply Chain:

Some of these tendencies and characteristics were hinted at in Chapter One (section 1.4), when we discussed the most commonly cited problems of ethical trade along supply chains of varying sectors, which included: greening motivation, operational conflicts with economic goals, environmental knowledge and expertise, prohibitive costs, power and governance methods, anonymous markets, poor green market signals, political and policy signals, inadequate codes and auditing tools.

Figure 8.3: EM Barriers in Supply Chain Ethical Trade



My empirical findings have demonstrated all these problems cited in the literature reviewed in section 1.4, but this study has gone deeper than operational level problems by analysing their interconnectedness/cross influences. In the next section, I present my findings in terms of EM outcome barriers (figure 8.3).

a. Relationship Barriers:

Change resistant, hierarchical and closed networks -EMT tells us that actors need to change at various levels; this includes state agencies moving away from closed hierarchical regulatory systems to a more open multi stakeholder system of consultative policymaking. EMT also assumes that relevant stakeholders who are aware of the problem of environmental regulation will be interested in participating with the state actors. CSR literature similarly calls for business firms to rethink their business strategy to integrate new CSR goals and take a multi-stakeholder approach to strategy making and implementation of greening. Ethical trade proponents have also called for a more inclusive policy space and private sector dialogue where perspectives of non-financial stakeholders (workers, NGOs, trade unionists, citizens etc.) are heard and taken into account.

However, my thesis findings show that while there certainly were movements towards changing the hierarchical network, the more the things changed, the more they stayed the same. Hierarchisation and structuration tendencies dominate in the network, and the dominating rationalities prioritise economic growth over ethical trade or CSR. The policy network has grown in size but the core remains "by invitation only" and is a closed network, where we can clearly see hierarchisation by action-based connections. Given its current state, the core of the network is halfway between the Policy Communities and Issue Networks as identified by Rhodes and Marsh (1998). The number of participants has grown, but the participants are chosen keeping in mind

participant strength and common political alliances, and consequently do not represent a wider spectrum of interests. At the core, interactions were frequent with easily identifiable policy outcomes. Contrary to the Policy Community model though, the consensus in the core is not shared. Ideologies, values, policy preferences and acceptance of viable policy options are contested, resulting in the network operating like an Issue Network.

Hierarchisation and structuration in the green strategy making and organisational behaviour was obvious in RMG firms. Motivation for greening was not organic, hence power and resources were not easily diverted for non-price issues especially since the raison d'etre of the firms were competing for the resources. The overwhelming majority of the firms began and ended their green strategy making with the top management. This is risky because then the top management's commitment/environmental responsibility holds greening as hostage. Compliance planning did not involve workers, and in most cases did not involve cognitive feedback loops. Top management has no mechanism for listening/registering worker issues, so change is likely to stop abruptly and win-win benefits are likely to dry out fast, effectively snapping the link between continued economic growth and ecological safeguarding.

The reasons behind the closed nature of the network is because of the interdependencies highlighted in the previous section - functional interdependence (which determined the governance structures that were fairly rigid), power/resource interdependence (which determined the agenda for inclusion/exclusion based on actor strategies for controlling resources and power), and inter-temporal dependence (which determined the influence of years of "rules of the game" or "network habits" had on the stability and change in the network). Even if there was movement towards greening the supply chain, years of institutionalised rules have triumphed over EM.

b. Tools as a Barrier:

Market based approaches – The empirical chapters did not mention any state action regarding the use of economic instruments, simply because economic instruments have rarely been used, if ever, in Bangladesh for environmental gains. There has never been any pressure from the civil society NGOs or research bodies on economic instruments. One possible reason is the lack of knowledge among the DoE on how to design and implement economic incentives for industrial greening. Economic actors (who might benefit from eco-taxes etc.) have always stayed away from environmental policy because their main preoccupation was economic activities and they saw no role for themselves in green matters. The still considerable involvement of the state in economic developments and decision-making hinders the incorporation of environmental dynamics and actors in the economic reform process (although the opposite does not happen).

Green technology – Green technology has remained totally unexploited in the case of Bangladeshi RMG; waste minimisation, use of less chemically damaging washing processes, chemical rinses, colour dyes, etc. are not used. In fact, end-of-pipe solutions have not caught on either. The sources of green pressure (codes and legislation) are a step behind in what Christoff (1996) would call weak EM. Although the Factories Act vaguely mentions proper waste and effluent disposal, the later legislation does not go beyond reactive prescriptions for liquid wastes. The DoE is remarkably silent in proposing greener technological alternatives to this sector. Even though ETPs were rare, only large and medium sized firms installed them. Since the DoE does not inspect the ETP water quality on a regular basis, the firms often save on costs by not running the ETPs on non-audit days. Overall, green technology, as one of EM's biggest tools has not impacted the Bangladeshi RMG.

Environmental management plans (EMPs) - Environmental management systems (EMSs) (or, EMPs) are an important tool in EM because it involves firms making voluntary decisions to improve their environmental performance based on the unique cost-benefits ratios in each factory. This involves actor-based connections and RBV skills. Most RMG firms in this survey had environmental certification from the DoE, which makes it mandatory for the firms to have EMPs. However, most firms admitted to not having an operational EMS. The firms that *did* have EMSs were not necessarily fairing any better: none had employed outside experts in designing the EMS, only their top management. The middle or lower management were not consulted, nor did they involve the DoE or use buyer manuals as guidelines. Therefore, the prevalence of DoE certification is not an indication that EMSs are being used, or that production is going on with day-to-day concern for the consequent environmental impact. Unsurprisingly, none of the firms could identify any cost savings from doing EMSs. Similar to green technology, this EM tool has also failed.

Government certification - Government certification is an important starting point in EM, and is especially significant in LDCs where the dominant mode of regulation is state led. Despite most Bangladeshi RMG firms being officially compliant, there is a large gap between the environmental compliance "on paper" and on the factory floor. Most have taken the shortest possible route to compliance and freely admit to having paid bribes at some stage of their government certification. The quality of the certification is further compromised by the fact that firms -of all sizes - said that they did not submit *any* environmental evaluation documents with their application. Firms who had EMSs and/or ETPs maintain that DoE certification was not necessarily connected to these efforts. The firms see the DoE certification process as more of an opportunity to maintain cordial relations with the government agency. Therefore, the lack of government capacity and

institutional corruption has led to a strategy of loophole finding among RMG firms, instead of a proactive greening strategy.

Codes content - The buyer codes are indubitably one of the most powerful EM tools for the Bangladeshi RMG supply chain. The codes, unfortunately, are a flawed tool at various levels: firstly, most of the codes are vague about environmental requirements and often pack environmental factors in with "environmental health and safety". Most codes ask for on-going measures and emphasise workplace accident prevention, so in that sense they are asking for proactive strategy making. However, only the big brand buyers mention solid waste or effluents, and ask only for reactive solutions (ETPs). Secondly, most codes require suppliers to meet national environmental standards and do not go beyond that. Given the state of government certification we saw in this thesis, that is an important flaw. This flaw is also curious, given that weak environmental regulation in LDCs is one major reason why these codes were constructed in the first place. Thirdly, the sheer number of codes and their typologies creates confusion among suppliers, and hinders compliance learning. It also creates productivity blockages (instead of the productivity gains seen in GVC studies). Codes have also resulted in more loophole hunting by the RMG firms. Many RMG factory managers thought that buyers' expectations were unrealistic and not fitting Bangladeshi culture or economic realities. Buyers, however refuse to see this as a problem, and suggest that since most of the code clauses are supported by the extensive (and rarely followed) national legislation, the codes did not add confusion. Consequently, suppliers are left to either work out a compromise with the audit official or schedule different audits on different days that allows the factory to show the auditor what they need to see.

Auditing integrity– The actual auditing process is another area where EM has fallen short: RMG management admitted to "showing the auditor what they needed to see" in the face of time pressure and conflicting multiple code

requirements. Interviewed trade unionists were very critical of how the compliance auditing mechanism is placed within the larger scheme of the buying process, which hinges on "making lead time". Since the RMG firms have to pay the third party auditors, it is to everyone's benefit to rush through compliance auditing and compliance remains "only on paper". The buyers do not double check auditor finings, and only in a handful of cases did buyers say that they insisted on factories being re-audited periodically. Lastly, the audit findings are not shared with the workers, lending an air of secrecy and mistrust over the whole compliance process. Overall, significant questions remain about the integrity of the audits in actually pushing forward ethical or green production in Bangladeshi RMG firms.

Weak auditing of subcontracting firms - Since subcontracting happens only under tough time constraints, compliance auditing can get overlooked in these cases. Interviewed brand name buyers explicitly said that they do not allow subcontracting, but many other buyers do, allowing many of the small factories to run purely on subcontracts. However, the assertion that buyers do a compliance check (which would take at least a few working days) before subcontracting factories get approval to go into production, is questionable.

c. Structural Barriers:

The weak state - Bangladeshi environmental institutions, laws, and environmental management practices are quite new and facing problems that new institutions and policy making practices have to overcome in any case. The DoE, as well as other government agencies that are in charge of regulating working environment standards (as part of ethical trade), lack trained personnel and face financial constraints. However, these are not difficult to overcome when there is the scope for donor driven environmental projects that have funding for capacity building and skills training; but what they cannot build up easily is political bargaining power for the ethical trade

agenda in front of other government agencies. The economic rationality for national economic development is a powerful one, and it is one that is shared by not only the powerful government ministries, but also by those bureaucrats in charge of agencies with lower political saliency and bargaining power. As a result, the strategy employed by the weak DoE has been to accept its marginalised mandate and remain passive, as seen in Chapter Seven. This fits into the broader culture of resignation and acceptance of regulatory failures: RMG firms have repeatedly said this was part of the cultural norm of doing business in Bangladesh.

Civil society—The role of civil society in EM powerful. Civil society can mobilise local support for ethical production, form alliances with international NGOs, and gather information for stakeholders, activists, as well as project designers. The state is meant to be open to such participation by the NGOs and environmental groups, and is meant to jointly promote environmental awareness campaigns etc. However, the role of civil society in EM in developing countries is problematic. For example, Frijns, Phuong and Mol (2000), found that the NGOs in Vietnam are hardly supported by environmental authorities. Compared to their western counterparts they are resource poor in terms of funding, manpower, knowledge and information. Environmental awareness is also less widespread among larger segments of the population and environmental protest is uncommon. There is also the problem of the absence of domestic environmental NGOs. However, Sonnenfeld (2000) found NGOs to be more proactive in neighbouring countries of Indonesia and Thailand. Even though in all three countries the ultimate EM outcomes were different, the in- country dynamics there were similar to that of Bangladesh - at the core of the EM network, there was a landmark environmental accident that alerted the media and NGO attention to the problem (similar to the 2006 riots regarding RMG compliance), which led to the establishment of new standards and regulations, regulatory pressure to adopt cleaner technologies and processes, and the implementation

of cleaner production. However, in the Bangladeshi case, there were no environmental accidents to jump start dialogue, and even on broader social compliance issues, civil society participation was constrained by political bargaining and powerful trade associations actively kept NGOs out. The palpable mistrust and exclusion of NGOs would most likely continue had they been protesting green issues.

Changing attitudes and motivations - EMT's material and technological objectives have to be realised in the background of the unique social and cultural histories, but not enough attention has been given to the "softer" objectives of greening behaviour in empirical EMT research in LDCs. This thesis tries to address that.

The hierarchical and change resistant attitudes in the EM network in Bangladesh is also due to how compliance issues have been perceived over time: during the Phase One and Two (child labour, wage riots, etc.) government agency and trade association staff have publicly denied compliance failure, denied responsibility as governing agency, and even made press statements about foreign conspiracies behind the wage riots. During Phase Three (the SCF), the BGMEA described the Jo-In Code as a "pain in the neck" (Financial Express 2006). This can act as an incentive for the average RMG factory to treat compliance as something to be avoided and resisted. As it is, compliance had initial problems of gaining acceptance among the RMG factory management.

Secondly, ethical trade was never a long term threat to the health of the RMG sector. Its criticality spiked on and off, never gathering sustained momentum. RMG factories are used to start-stop measures and have gotten complacent about inaction and non-participation. Thirdly, ethical trade is not an important criteria for the buyers in placing orders in Bangladesh. The non-criticality of the issue helped bury it in the agendas of the RMG

managements' list of high priority tasks. Also, policy making and action in the more critical areas (action-based connections, such as lead time maintenance, raw material procurement, transport strikes, port work stoppage, government tax regulations, finance problems, etc.) were moving much faster and yielding more frequent outputs and solutions. The RMG firms were more directly involved in those policy issues. Fourthly, there is little trust of other actors involved in social compliance. The garment factories have misgivings about not only government agencies (where allegations of corruption and bribe giving are fairly common and publicly admitted to), but they are also sceptical of NGO participation and are mistrustful of trade union agendas (and it would be naïve to assume all scepticism is unfounded). They are content with the BGMEA's leadership, despite allegations of non-commitment to compliance by the ILO. Fifthly, and perhaps because of these factors, the RMG firms have not been invited directly in the SCF talks, isolating them from compliance policy dialogue. The time constraints of the RMG factory management, and their past experiences of environmental upgrading failure are also factors in them not being interested in this issue (keeping in mind that in Bangladesh, perceptions of social equity and environmental quality are probably different than those in western industrial countries o begin with). This sets up a difficult situation for EM, since market pressure alone can only go so far, especially if the market pressure is coming from a society that is geographically and culturally very distant from the point of production.

Environmental learning - EMT places a lot of importance on the role of science and technology, and it is reasonable to assume that science and technology should not simply stop in the hands of experts, but environmental learning will pass on to practitioners in the boardrooms and factory floors. However, mainstream EM interpretations do not theorise substantially on how this is to happen, and this thesis tries to address that.

The problem of environmental learning among policymakers is hard to judge, given the paucity of eco-considerations in the compliance discussions. Greening continued to be absent from the ethical trade agenda in Bangladesh. At the level of firms, environmental learning problems were twofold: most top management sourced their information from buyers, in house skills and the trade association manuals. The nature of information is purely technical and does not explain environmental implications of inaction or the benefits of successful upgrading actions. Such contextual motivation would contribute positively to EM changes in attitudes and strategy making. Secondly, environmental learning among lower management and workers was problematic. The firms used a mixture of teaching methods including training of trainers (training is given by external experts to top management) and worker training seminars (training of workers by top/mid management who may or may not have been trained formally). Therefore larger and medium firms were faring better because of a more detectable presence of mid-management. Unfortunately, staff and worker training was not done on an ongoing basis, regardless of the size of the firm, which is dangerous because of the high rates of worker turn over in the RMG sector which means that trained staff might be replaced by untrained staff, posing a risk of non compliance. However, the majority of firms said that they did not receive any comments from their workers after the training, meaning that the training was possibly in name only.

Low risk threshold -Value chain studies distinguish between shallow (arms length) collaboration and deep collaboration. My findings show that buyers are satisfied with an arms length approach when governing ethical trade, as opposed to adopting a closer relationship of tighter production monitoring when it comes to specifying *other* parameters - such as design details, sourcing of raw materials, sample approval, shipping dates, etc. - that have a more direct impact on profit levels for buyers and retailers.

If risks from non-compliance with quality assurance measures is considerable for buyers (e.g. child labour banning case) then they initiate collaboration, resulting in more visible closeness in the supply chain. However, where the process already in-place for governing environmental standards and codes is accepted as being adequate to meet any legal claims, or prevent any loss of retailers' reputation due to non-compliant suppliers, then the pressures for closer governance is less. The system is not likely to include close collaboration (whether technical or financial) in the immediate future either: the RMG suppliers were unanimous in saying that it is not a possibility. The buyers broadly agreed. The buyers have never financially invested into their suppliers for any part of upgrading, and social compliance is no exception. Buyers said that they had enough suppliers to work with who already had the capacity they were looking for. They also mentioned that financial investment with suppliers would complicate their dealings with other suppliers, which is a transactions cost barrier. So unless the quasi hierarchical structure of the chain changes, we cannot expect to see EM oriented closer collaboration.

Compliance vs. lead time - Another significant feature of a quasi hierarchy supply chain is the close governance for on time and reliable shipment of clothing. As a rule, shortening "lead time" is one of the biggest challenges in managing the supply chain, and environmental upgrading is sometimes puts a break on shipment progress. Adjustments are commonplace where the buyers and the auditors give "sign off", because otherwise lead times will be compromised. If lead time allows, then buyers wait for upgrading initiatives to materialise before allowing the opening of credit letters in banks. Given these deadlines, ethical trade and EM have a lot to compete against.

Brand name buyers vs. buying houses - Earlier we have seen that there are different types of codes based on types of buyers. Brand name buyers are more concerned about the compliance behaviour of their suppliers in LDCs and tend to be more hands on and demanding with their chosen suppliers

(mostly these deal with expensive orders, although brand buyers also source "cheap bulk items" from Bangladesh). Buying houses (that operate a large share of the total RMG business), are fairly anonymous to the end consumer, and have no public scrutiny or shareholder pressures making them consider ethical trade issues. These buying houses also tend to work with the smaller segment of RMG firms, who tend to be struggling with financial and compliance problems and are large in numbers. Greening of the supply chain cannot happen without the comprehensive coverage of all types of buyers, brand name or not.

Compliance vs. financial rewards - Discernible financial benefits from environmental upgrading would go a long way in changing attitudes and green policy making, as espoused by EMT. However, most firms said that they could at best identify indirect competitive advantage from eco-compliance investment, and while this may be due to them using non-RBV skills and strategies, RMG firms are also not getting financial benefits because of the "rules of the game": during the buying process, the price of the order is set during the initial assessment made by the buyer (which is based on product quality, product price offered by the supplier, factory set up and managerial capability), the satisfaction of which is followed by any social compliance negotiations. This leaves the supplier with no room to bargain for financial benefits from agreed compliance measures, and they have to wait for future negotiations.

Buyers however, were unequivocal that higher prices will need to correspond to better quality of products and not anything else. However, if the nature of the order-at-hand is such that there is no chance of a sustained working relationship, then the supplier might not want to invest substantially into current requirements for environmental upgrading. Interviewed buyers said that greening has to happen not because of directly identifiable financial cost benefits, but due to the managements' own personal preference for

environmental responsibility (and the need to adhere to national laws), which will be accompanied by good management skills. Therefore, while the RMG firms would prefer to see direct results of the "win-win" proposition of greening their business, the RMG buyers are content to provide long-term indirect benefits.

Weak green signals - The problems with the buyer codes has already been discussed above, but the codes are acting as a barrier to EM in other important ways: buyer codes have not been able to influence RMG firm behaviour (unlike the child labour case) because of a disconnect between green consumerism and retailers' need to sustain profitability by shifting higher volumes of clothes. Firstly, consumer preference for ethically produced clothing remains a niche market compared to the total apparel retail market. However, green consumer signals are not translating to profits in the same way for all retailers. Brand name buyers were divided about green consumerism as being enough to change the way the supply chain selects suppliers or rewards eco-friendliness. Most importantly, buyers were more sceptical of green consumerism as a driving force behind compliance in Bangladesh, because so much of the total exports are made up of "basic bulk items" which are outside of the niche markets. This is an important break with the EM principle that greening is backed up by strong and consistent emphasis on green issues at the level of buyer policies. Secondly, the green signal is weak because there are many buyers who simply do not ask for social or environmental upgrading. The inconsistent and weak greening pressure needs to be addressed before EM can be adequately implemented in a supply chain.

8.4 Conclusion:

The problems that hampered ethical trade/CSR/EM initiatives might leave one reasonably sceptical of whether there can be a meaningful marriage

between ethically (i.e. environmentally and socially) compliant exports and market profits for LDC firms. The problems along the network (hierarchisation and structuring tendencies, the priority given to activity-based connections, the agenda seeking strategies to maximise control over power and resources tat leaves little space for CSR type initiatives) seem to have sealed the fate of EM.

Yet, now is perhaps the worst time to give up hope for EM in the apparel supply chain. International and national policy making on withdrawing Chinese export quotas in 2008 has been preparing Chinese apparel exporters to build up capacity for a era of apparel exports into the US and EU unlike any other time (Saha 2006). Chinese exporters are already well known for being vertically integrated producers of high value added apparels produced at highly competitive labour rates. Such a situation is not optimistic for Bangladesh, which has neither high RBV skills, high productivity rates, nor high bargaining power; on top of which they have crippling problems within the economic infrastructure and political instability. As it stands, production costs have increased by 15% in 2006-07, and per unit garment prices have fallen by 1.5% for the same period (MFB 2007), and competition has not lessened for Bangladeshi factories. Giving up on ethical trade/EM/CSR at this juncture would leave the road open for significant risks to worker rights and ecological well being.

EM is set to face tougher challenges as international trade regimes change. For ethical trade to work under these circumstances it needs to work with a changing quasi hierarchy: the apparel value chain is about to restructure as lead competitors change (with China perhaps being the overall winner, according to French 2007 and 2008) and the impacts will fall on price bargaining and supplier behaviour. Bangladeshi factory managers will be under harder time and price pressures; ethical sourcing managers will have to bargain more against activity-based connections. Western consumptive

patterns also have to be rethought in line with ethical trade, since it is the West's high demand for on-trend "bulk and basic" clothing that is keeping lead times short and compliance compromised.

As Chinese labour costs rise, Chinese investors are thinking of shifting production facilities to cheaper countries, like Bangladesh, as part of their China+1 strategy (French 2007). While Bangladesh no doubt welcomes this opportunity, this might mean that the sector is going to stay in the "low value added" segment of the value chain. Based on my findings, I would like to argue that as long as that happens, ethical trade imperatives are not going to translate to cost benefits that will cause attitudinal and motivational changes in factories, buyers or policy makers. Recent press reports (e.g. Saha 2007) have reported that the Bangladeshi RMG factories are going back to their old habit of employing children in factories, despite having made milestone progress in the mid 1990s with the ILO backed IPEC, that was internationally applauded (ILO 2005, ILO-IPEC-BGMEA 2004). Therefore, given the overwhelming imperative to continue with business as usual while reducing production costs even further, we can expect two things: the buyers will keep their arms length distance since many buyers might not source from Bangladesh anymore (preferring China) making it worthless to invest into close collaboration till they pull out after China's restrictions are withdrawn; and buyer pressure for greening/compliance will get even more diluted since Bangladesh will increasingly produce cheap bulk items, which is solidly outside of the ethical trade niche market.

Ethical trade might be an uphill task in these circumstances, but buyers boycotting Bangladeshi suppliers on ethical grounds (e.g. child labour) is not the answer since it jeopardises the livelihoods of the workers. The Bangladeshi factory owners and workers have the right to export earnings and a better life, and perhaps the onus has to be on the actors who are leading the supply chain in profit and power: the DC retailers and buyers. The

problem is obvious to ethical trade proponents, but less obvious to buyers. Buyers need to ask themselves: what are the goals of their codes? Is responsible sourcing an integrated part of their business strategy? How is compliance monitoring established within the purchasing operations? Are the current relationships enough? Should the compliant suppliers be rewarded in some way (e.g. a tier system of rewards for larger sized orders and or higher profits)? The buyers need to view their relationships with suppliers as something expendable and fast changing: buyers need to start collaborating on long term relationship building.

Instead of withdrawing from countries that have unethically operating factories, I would argue that it is perhaps more responsible to stay the course by working with what I would call a "coalition of the willing", as opposed to the whole EM network (which was reluctant, at best). Trade unions and NGOs (environmental, social, labour etc.) should become better organised within themselves and encourage the leading suppliers to work together on remediation strategies, that can be replicated on a larger scale by trade associations. Public-private partnerships might provide valuable learning spaces through EM compliance demonstration projects. Learning from peers might be the way forward for suppliers (especially SMEs), instead of being given buyer codes that do not provide contextual guides for implementation.

Local solutions and remedies (based on local cultural contexts) have a better chance of succeeding than codes that are seen as "non-Bangladeshi". This may be lower in stringency than DC buyer codes, but it is important to set ethical trade goals that are achievable, so that a platform is made for further growth, instead of setting up targets that either do not make sense culturally or are too complex to be met. Setting the stage for failure is not the best basis for ethical trade to function within a system where governance of reward and punishment is already weak. Buyers also tend to terminate contracts with

smaller factories for non-compliance, which does not set the stage for wider changes in the supplier networks.

Of course, this does not mean that suppliers can become complacent: RMG firms' current corporate cultures are not open to EM thinking, but the current modes of apathy and complacency will not withstand the challenges of ethical trade, if Bangladesh is to move out of the "cheap and basic" segment of apparel manufacturing. A reputation for non-compliance is damaging for everyone involved in the supply chain. It seems obvious that Bangladeshi suppliers, buyers and workers stand to gain if the factories start becoming more compliant through more long term collaboration with actors in the EM network.

Chapter Nine: Ecological Modernisation Theory Conclusions

9.1 Introduction:

EMT has broadened its geographical base considerably since the early days, and EM scholars have been studying Asian developing countries, especially China, India, Thailand, Myanmar, Laos, Cambodia, Vietnam, Indonesia, Singapore, Malaysia, Philippines and Papua New Guinea. Evidence from these Asian countries suggests that great economic vibrancy paired with considerable environmental threats has led to remarkable efforts in environmental reform, but tremendous challenges remain (Memon, Imura and Shirakawa (2006), D'Sa and Murthy (2006), Hirsch (2006), Mayer (2006), Burke (2006) and Sonnenfeld and Mol (2006)). Researchers have shown a number of common themes (e.g. a great diversity of states, economies, cultures, and environments in Asia; the importance of multi level approaches; complementarities and conflicts between local, national and international goals and reform processes; and the unique character of environmental problems, management strategies, and reforms) but the EM outcome has always been influenced by national characteristics, and local contexts. None of these studies have looked at EM in supply chains (although some of the sectors studied were export based), but most researchers concluded that whether or not EM succeeds or fails depends not only on the EM assumptions being met, but on the contextual factors unique to each country/environmental problem, which determined whether the EM prescriptions were fulfilled or not. This broad conclusion is also supported by my thesis.

The aim of this thesis was to test the applicability of EMT in the Bangladeshi RMG apparel supply chain. EMT was used as a prescriptive theory as well as a descriptive and analytical framework. EMT assumptions (e.g. "win win" gains from ecologising the economy; politically mature nation-state; green

signals in the market; supportive civil society) and EM's prescriptions (e.g. changing roles of the state, market actors and science/technology) were tested empirically in the Bangladeshi EM network (Chapters Five, Six and Seven). In the last chapter we saw how EM has had limited success in explaining environmental upgrading in the apparel value chain. Not only was there scant ecologising in reality (weak green signals and confusing code content, not to mention almost non existent actual regulatory oversight), the "win win" gains were indirect if not absent totally for most firms. The nation-state was weaker than EM assumed, the market relationships were fragmented and distant, and civil society was either pushed into the periphery or simply disinterested in participating in greening. So if the EM assumptions were not met, and the EM prescriptions were not fulfilled, is the lack of environmental upgrading success in Bangladeshi RMG a failure for EMT? Perhaps not. However, Bangladesh's failure to ecologise as per EM predictions certainly added to our knowledge about greening problems along buyer driven supply chains - the greening claims of ethical trade in apparels vs. Bangladeshi reality; supply chain gaps in communication and bargaining; buyer perceptions of non-compliance risks to their reputation and on time delivery, etc. We have also learnt much about Bangladeshi environmental policy making for industries - how easily the DoE accepts its institutional agenda being marginalised over national goes of industrial growth and economic empowerment; how easily "green issues" are marginalised even among other non-price "social issues"; not to mention the problems of institutionalised inefficiency, poor capacity and corruption. The policymaking surrounding social and environmental compliance was also uniquely revealing of how non-price factors are conceptualised and dealt with by actors who are adamant about maintaining economic competitiveness using non-RBV skills. Lastly, this thesis has added to our knowledge of how EM prescriptions fail on a LDC factory floor - how corporate cultures in sectors that do not see themselves as polluters, are closed to EM thinking; how environmental

learning is easily hampered and set aside; not to mention the problems of CSR, and the lack of financial incentives.

EM might work in non-Western countries, but Bangladesh is not one of those cases (table 9.1). The reasons are a mixture of national characteristics, supply chain structural factors, and a practice of weak EM. The general lessons from this thesis are important in taking forward EMT. If EMT is to be used as a useful theoretical framework to outline a feasible path of environmental change in the LDCs, it has to conceptualise greening imperatives and actions that are more complex and heterogeneous than is currently envisioned. EMT needs to be more precise about its prescriptions, eespecially involving structural and technological changes (in line with Christoff's (1996) criticisms of weak EM) and to better theorise how "change" and "learning" has to happen in geographies of different political and cultural locationalities. EMT also needs to address the role of the nation state within weak regulatory systems in LDCs; and to consider cases where "win win" gains do not happen. Based on my findings, EM is fundamentally at odds with traditional industry views of green gains, (which does not seriously pay attention to new types of green technologies or greening modes of production without immediate cost benefits) and is out of sync with supply chains where the pressure for greening is neither uniform or sustained beyond its focus on short-term efficiency. Therefore I would like to argue that EM without sustainable technological and structural change does not bring about meaningful environmental change; and that perhaps EMT should consider *proactive* economic actors taking the lead in chain greening in weak LDCs, while state actors build regulatory capacity. This chapter discusses these EMT implications in detail.

Table 9.1: EM in Bangladesh

Research Question: *Why are export based ready made garments (RMG) suppliers in Bangladesh failing to undertake environmental management?*	
First Hypothesis	
EM Prerequisites: Changing role of science, technology, information and knowledge in order to change firm behaviour and attitudes about environmental upgrading.	Relevant networks analysed: The firms' management networks: corporate culture, organisational change, and environmental learning.
Relevant hypothesis: Poor environmental upgrading in firms will be associated with factors internal to the firms, such as corporate culture, slow changing behaviour, problems with learning environmental information and will be linked to poor competitive advantage gains.	Thesis conclusions: RMG firms were not convinced of greening because they did not see the RMG sector as polluting, and did not see direct financial benefits from undertaking environmental upgrading. The biggest upgrading barriers are lack of financial resources, management commitment, and slow environmental learning. Their greening strategy making is a mix of reactive and proactive, and the reactive strategy yields certain indirect competitive advantage since it is a entry barrier to peers due to high cost.
Second Hypothesis	
EM Prerequisites: Changing role of markets, market actors and private sector initiatives in order to create market pressure and market opportunities for environmental upgrading.	Relevant networks analysed: The economic network: the buying process in the global supply chain, environmental compliance auditing.
Relevant hypothesis: The most powerful demand for environmental management on Bangladeshi RMG firms is originating from their buyers in global supply chains. However, opportunities for collaboration or assistance from buyers demanding these environmental upgrading initiatives may be low.	Thesis conclusions: Environmental management of the apparel supply chain happens within the larger buying process. Due to the nature of the buying process and supply chain governance characteristics, compliance on paper and compliance on the floor are two different things. Green consumerism does not apply to this segment of the supply chain, and buyers are not sending out a strong message for greening production.
Third Hypothesis	
EM Prerequisites: Changing role of the state (away from command-and-control style to a decentralised flexible consensual proactive style), as well as changing social and political attitudes at the level of policymakers and stakeholders	Relevant networks analysed: The policy network: weak regulatory power, and non-participation of state and non state actors
Relevant hypothesis: The regulators (state and non state) are not convinced of the benefits of compliance and do not have the capacity to design, implement and monitor better compliance. The exclusion of the DoE and the RMG firms in this policy network is likely to lead to poorly designed outcomes.	Thesis conclusions: The regulators are institutionally weak. State agencies are reluctant to change away from strict command and control strategies, to embrace greener technologies or use economic instruments. The non-state actors have the opportunity to participate in the policymaking core, but it is by invitation only and the policy network remains beyond the reach of the periphery. Many important non-state stakeholders do not wish to participate. Many non-state actors lead the policymaking agenda in the absence of state leadership. All of this impacts the current policy discussions and the future of outputs.

9.2 Criticisms and Implications for EMT:

In Chapter One, we have seen the neo-Marxist and radical criticisms of EM, and at several points in the empirical chapters the validity of those criticisms was easily recognisable. In particular, what was striking was that EM as a discourse and practice followed what could be termed as weaker than weak EM. According to Christoff (1996), weak EM discourse emphasise efficiency gains of industrial development and resource management gains: in the Bangladeshi case, the EM discourse was not even sophisticated enough to identify the linkages between resource/input minimisation (refinement of production) and cost savings. The same applies for the buyer codes content.

Christoff's other criticisms of weak EM, however, held true for Bangladesh: the system of compliance regulation by dated command and control regulatory tools and buyer codes had a narrow vision, was hegemonistic, technology fix driven, and can be identified as a co-optation of the ecological movement in Bangladesh. The neo-Marxist criticism of EM speaking the language of business lobby and silencing more radical criticisms also held true: before the SCF, the DoE led certification drives on TV were stopped by the request of the trade association, not to mention the "MNC friendly" language of greening in the buyer codes which mostly transfer eco-responsibility to national legislation. Dobson (1990) and Yearly (1994) have criticised EM for ignoring the broader cultural needs and non-anthropocentric values: this is broadly true in the Bangladeshi case and will be discussed in detail later. Postmodern criticisms of EM ignoring social and distributive justice were also visible in this case. Pepper's (1998) criticism that the EM discourse is contradictory because it does not suggest a reduction in consumption (only a refinement) also found an echo in this thesis' criticism of the DC consumers who are the end beneficiaries of the apparel value chain. Below I discuss these criticisms in context specific detail.

An alternate growth trajectory for LDCs - One of EM's key ideas is that modern institutions will change in terms of the network resources, network actions and network actor-configurations. However, empirical evidence from this thesis as well as Asian and Latin American countries has shown that these changes have not happened as deeply and simultaneously as the theorists would like (cf. Sonnenfeld and Mol 2006, Mol and van Buuren 2003, Mol and Sonnenfeld 2000). In the case of LDCs, EMT has to recognise that these changes will come about using a different growth trajectory that is perhaps slower for a few reasons: economic development priorities that triumph over environmental policy, low environmental awareness, a different culture of environmental protests or activism and a dependency on bureaucratic closed policymaking.

"Win-win" gains - Perhaps the biggest appeal of EM discourse and practice is that it is predicated on the notion that green business makes business sense, and perhaps that is why EM is silent about cases (or industrial sectors) where the green profits are not so pronounced: such as in the case of the apparel value chain segment that sources clothes from Bangladesh that are "cheap and basic" and do not face much green consumer demands. EMT needs to look critically at the claim that financial benefits are the main incentives in supply chains, and that scientific evidence and green technology (that deliver cost savings) are sufficient arguments. EM should not ignore cases in LDCs where there might not be sufficient green market pressure.

The lead of the state -In cases where there is demonstratable deficiencies in state capacity (poor funding, poor power in front of other ministries, poor knowledge, poor policymaking capacity, excessive dependencies on donors for policy making leads, old style closed policymaking preference, absence of capacity for implementation and monitoring, etc.) then EMT needs to go critically examine what it means for greening reform when such actors are put in the lead. Of course the role of the weak-state is not be discarded; the state

must concentrate on building capacity for better policy making, implementation and monitoring. However, this is not a short-term goal, so perhaps EMT can make room for proactive economic actors (e.g. brand name buyers) to lead greening, while the state becomes stronger and more able to lead. The proactive economic actors are ideally placed to at as eco-hegemons while governments provide legislative backing (which can act as legal sanctions for buyer actions). Local economic leaders in South Asia (e.g. Indian Tata, Birla, etc.) have taken the lead when it comes to CSR, and if more entrepreneurs and their foreign counterparts (e.g. brand buyers) agree to get involved, then they could lead green management programmes for weaker peers and SMEs. The private sector could also liaise with the government agencies, donors and NGOs on building capacity at different levels for eco-management training, implementing, monitoring and auditing. The proactive economic actors have much to contribute by leading supply chain greening in the short term, and until the state is strong in capacity, EMT could gain by making room for that possibility.

Reconceptualisation of relationships and reality– EM theories lack a realistic notion of change barriers within the relationships between the many actors in supply chains, which is an important institution of modernity. Supply chains contain several governance styles, each with its weaknesses and strengths. However, not all the strengths are harnessed for ecological gains and many weaknesses affect greening– a fact that EM ignores. The relationships between buyers, RMG factories and their environmental regulators were a complex combination of opposing tendencies. Each set of relationships wanted to maximise their own agendas or access to resources, but they each chose to do that by trying to increase their control of resources, and were not open to collaborating or strengthening relationships to achieve greening, perhaps because they did not perceive greening to be a mutually beneficial goal. EMT also ignores the war of the resources: tangible and non-tangible resources have competing uses, and environmental investments were not

pursued because of lower probability of returns, when compared to other areas of potential investment. Furthermore, this tendency of non-cooperation over ethical trade issues became reinforced because the actors have a marked preference for structuring network changes and hierarchisation over resource control. This reinforces the old "rules of the game" and preserves the old "pecking order", which is reinforced by the fact that the larger global supply chain structure has not changed in the apparel industry. Therefore, while it was not that the network did not change to facilitate greening of the supply chain, the actors did it in a way that did not require them to change the structure too much, or get in the way of the main raison d'etre - profit making by using the cheapest possible inputs. EMT underestimate the stabilising tendencies of the "rules of the game", greatly compromising its usefulness as a descriptive tool. EMT also naively assumes that given the appropriate tools, change will happen, and ignores factors such as inter-temporal conflict, mistrust, outright apathy or even an expressed reluctance among stakeholders to participate in EM policymaking and regulation.

Homogenous actors - EMT critics have variously pointed out that that EM propagates a Western notion of modern industrial nation-state, and ignores differences in state capacity, especially in LDCs. I would like to suggest that EMT does the same with economic market actors. EM homogenises all actors as having the same benign agenda and capability: EM does not adequately theorise the capacity differences between large brand name buyers and buying houses (which is perhaps a reflection of the fact that EMT is out of touch with contemporary global market structures) and that they pass on green competitive advantage in different ways. EMT also does not say anything about the arms length collaboration between buyers and suppliers, which is a significant barrier for ethical trade, and instead assumes that it is enough for buyers to provide greening incentives and nothing further. In my empirical findings we have seen how buyers were keeping an arms length approach to greening; this needs to change and EMT has to address closer

collaboration more directly. Perhaps EMT needs to cultivate more relationships with GVC theories to emerge stronger. EMT also needs to look at CSR and EMS evidence that distinguishes between economic actors who have to make the greening changes. EMT does not theorise on how SMEs are supposed to achieve EM, given that they are typically weak in funding and human resources. Often they have upgrading barriers that cost more than for larger firms: many Bangladeshi RMG SMEs are situated in rented supermarket spaces, which makes it impossible for them to carryout infrastructure alterations for greening. EMT does not make any suggestions for how SMEs are going to overcome structural barriers.

EM tools - In the last chapter I have discussed how EM tools were barriers for ecologisation. EMT in fact, does not qualify exactly what tools are appropriate in which conditions, which is an important shortcoming in the context of global supply chains. Buyer codes are often culturally insensitive (e.g. use of toilet paper among predominantly Muslim factory workers), voluntary management tools are easily rendered useless (e.g. homemade EMSs), and literature on misdesigned economic instruments is plentiful. EM critics judge the theory for assuming that the tools will automatically be enough, perhaps EMT also needs to theorise on tool appropriateness and applicability in different geographical contexts (i.e. political and cultural differences). EMT also needs to address the "soft" sides of human resource skills that are needed to gainfully learn scientific information and or properly use the technological tools (e.g. availability of information in accessible and understandable forms, given that LDCs have low literacy levels).

Skills and strategies - EMT does not say anything specifically about the kind of skills that are needed for the translation of the green promise into green profits. EM indirectly suggests that proactive skills and strategy making will be enough to realise competitive gains and costs savings, but that is a simplistic view. EM skills do not mention the ability to find loopholes in the

system that can be exploited to hamper EM. EM also simplifies all firm behaviour as proactive or reactive when in reality firms use a mixture: RMG firms continued to find ways to exploit the legislation loopholes; and only made proactive changes when three conditions were met - demand for changes driven by buyer codes (showing disregard for government regulations, which is a behavioural trait that cannot be easily changed); necessary costs were low; and changes were all inside the factory. Their proactiveness was in part thanks to their skills and competencies, but their skills and strategy making regarding compliance did not get them direct financial benefits, because the skills used were not unique to them (as also predicted by the RBV).

Consumption and consumer behaviour - Without green consumer pressure it would be short sighted to expect any greening to happen, no matter who took the lead. EMT conditionalities need to be extended that we need green consumer pressure to occur for all lines of products, so that cheap low value added product lines are not exempt from the need for greening. If this happens, then the pro-greening structural changes within supply chains will become easier. For buyers, environmental risks of non-shipment will increase, forcing them to abandon the current arms-length governance style when it comes to CSR, and the problems mentioned earlier in the empirical chapters about conflicting code requirements, integrity of auditing and compliance monitoring will be reduced. Last but not the least, a uniform increase in buyer pressure will also hasten the reform process within government and civil society for capacity building.

9.3 Conclusion:

We have come to the end of the discussion about what compliance failings in the supply chain can mean for EMT and the many points that EM theorists need to consider. At this point it is reasonable to ask whether it is useful to

design future environmental reforms according to EMT. Is there any hope for a more receptive institutional development in Bangladesh that could successfully green the economic growth that is a crucial part of Bangladesh's poverty reduction strategy? Can we hope for the EM requirements to be met in the near future, in the context of the little change that is occurring in the way environmental problems are regulated?

I conclude that although Bangladesh's environmental policy system is currently incapable of detailed monitoring for lack of financial and human resources, and has failed to develop and implement environmental technologies for the RMG sector, it may still do so if the incentive arises from the public and the global markets. In fact, some recent developments suggest the start of environmental reform in Bangladesh. First of all, although not acknowledged explicitly in these terms, the polluter pays principle is used all through the national environmental laws, especially in the EIA Guidelines for Industries. This creates the space for introduction of newer instruments based on market incentives. Secondly, as the Bangladesh economy opens up and the RMG sector becomes better integrated into the global apparel supply base (and hopefully escape the trap of being confined to making low value added clothes, as discussed in the last chapter), the transition may lead to a change in the lines of EM. Thirdly, the existing policy of allowing foreign owned RMG firms to operate n Bangladesh can help increase the number of factories that are more eco-friendly since the parent corporations already have much experience in running factories compliant with stringent international standards of environmental quality. This may lead to local firms learning from their peers. As the local firms have to compete with these foreign owned firms, they may become more willing to take up bigger environmental challenges. Fourthly, the growing media and international NGO attention that became focused on the Bangladeshi RMG sectors' social-environmental compliance performance as a result of the tragic accidents in 2006 may result in a stronger system of continued third party monitoring and pressure that

will keep the factories from becoming complacent. Fifthly, greater awareness among the ordinary citizens about the poor social-environmental conditions that the workers have been pressured into living with has tremendous potential to influence and redirect the social-environmental performance of the RMG industry, especially since media coverage of the policy level negotiations are getting more column inches in the newspapers after the tragic accidents. Finally, going by the trend of the SCF led policymaking; there is some preference from the policymaking core (and periphery) that national laws on factory conditions (although not the DoE's environmental regulation for industries, which is separate from the Factories Act) need to be updated with special regard for the RMG sector. Therefore there is some chance that environmental considerations that are in built in the Factories Act will be updated and likely lead to better environmental conditions within the factories, even though overall, the outdated requirements for ETPs look set to remain.

Bangladesh is a slowly developing economy, and environmental priorities of Bangladeshis are very different from what is valued in industrialised prosperous countries. As Bangladesh's industrialisation increases and poverty levels are reduced, and political stability returns to the country through a democratically elected government, EMT may gain relevance for Bangladesh, particularly as a prescriptive policy perspective. In order for that to happen, Bangladesh will need the governance of the supply chain and the governance of environmental problems to change. The first set of relationships will have to change from an arms length approach to a collaborative approach that facilitates higher value addition production and backward-linkage integration. The second set of relationships will be no less significant – policy making and policy implementation will have to become more inclusive and include a new set of instruments, based on a review of existing laws more in line with the needs of staying competitive in a international economy, that is governed by international standards that are often different from those in use

in Bangladesh. If these changes happen – and there is likelihood that it will – EMT then might become more applicable in designing mechanisms for environmental reform in Bangladesh. However, it would be a mistake to forget that Bangladesh, like other poor countries, will always mirror their own specific cultural conditions and institutional rules of the game. This calls for some caution in transferring EMT to societies that are very different from industrialised nations where EMT was first developed. The interlinked EM networks of relationships, actors and outputs that this thesis analysed, captured the institutional and behavioural transformations that show signs of greening the RMG supply chain according to Bangladesh's own identity. These were the prospects of EM in Bangladesh, in resemblance to the environmental developments made in industrialised countries, but having its own unique characteristics. The challenge now is for EM theorists to design a version of the theory that takes into account the geographical and cultural variations that are part of environmental policymaking, and the complex governance structures of international supply chains.

The London School of Economics and Political Science

Ecological Modernisation Theory and Bangladesh: Lessons from the Environmental Compliance Upgrading Experiences of Bangladeshi Garments Firms

Volume II: Annexes and Bibliography

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Annex 1.1

Ecological modernisation policymaking for international trade and the developed country responses:

EM ideas began to be expressed in international policy making at the supra national levels in the 1980's. According to Hajer (1995), they may be identified in the discussions surrounding ex post facto lawmaking for environmental accidents, international conferences on environmental quality, and the publication of major international strategy papers on ecological balance, such as the 1972 Stockholm Conference and the IUCN's World Conservation Strategy report in 1980. The 1972 Stockholm Conference was a significant milestone in incorporating environmental considerations into industrial and trade issues, not only by recognising the links between industrial activity and environmental degradation, but also by extending the actor network around this issue, which was achieved through the formation of the UN Environment Programme (UNEP), a supra national body with an internationally binding mandate for greening trade.[138]

Conferences, publications and birth of new institutions such as these were the early markers of efforts being made to look at the problem of industrial pollution in a holistic manner, and gradually brought in discourse about the responsibility of the economic actors in conservation, as well as implications on North South economic relations (Hajer 1995).[139] Together, there was a sense that the responsibility for future ecological health rested in the hands of policymakers, economic actors and individual citizens, and even though concerns were shared by the LDCs as well, early greening policy action was seen in western industrialised countries. A good example of EM ideas being reflected in developed country action can be seen in the formation of the OECD's Environment Committee (OECD EC), under which, member countries worked to enhance aspects of eco-friendly trade. In particular, the

[138] Source: http://www.earthsummit2002.org/Es2002.pdf, accessed July 17, 2008.

[139] In the EU, environmental policymaking impacting industries started before the 1972 Stockholm Conference, in the late 1960's with the first directive in 1967 on classification, packaging and labelling of dangerous substances. The 1970's saw the signing of the Helsinki Convention (1974) for regulating industrial run off pollution of the Baltic coastal area. The idea of regulation of transboundary pollution by economic activity through a unified charter gained ground due to the 1976 accidental release of dioxins in Seveso, Italy, which led to the Seveso Directive I (1982) and II (1996), designed to prevent major accidents involving dangerous substances.

OECD EC included in the environmental agenda the use of the Polluter Pays Principle (first adopted by the OECD in 1972), Environmental Performance Reviews, as well as work on the "precautionary approach".[140] The work of the Environment Committee led to the publication of the 1984 Brundtland Report, *Our Common Future,* which coined the phrase "sustainable development" as a goal for governments and citizens, and defined it as "a form of development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987:7), which gave concrete meaning to a new vision of development[141] that had much in common with EM principles- it emphasised continued economic growth, but in a more sustainable way. It strategically placed the linkage between environment and development at the top of the global agenda, and the following decades saw sustainable development becoming a standard for formulating development objectives in both developed countries and LDCs.

The 1990s saw a decade of trade related environmental policymaking unlike ever before. Sustainable development continued its prominence in development discourse, easily identifiable in the underlying global, supranational, national, regional and local environmental policy strategies,[142] private sector environmental management measures (albeit prominent in western MNCs) and also in the expansion of the policy area actors, which included many environmental groups from the North and South (Khan 2002). In 1992, the UN Conference on Environment and Development (UNCED/Rio Earth Summit) brought together the North and South over trade development agendas.[143] The significant aspect of the Rio action plan negotiations was that the distributive justice of greening production became a highly contested and politicised part of 1990s environmental discourse (Khan 2002).

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[140] Source: http://www.oecd.org/about/0,3347,en_2649_34305_1_1_1_1_1,00.html, accessed July 17, 2008.

[141] The politics and history behind sustainable development discourse, and its subsequent evolution as a development paradigm has been well documented, and will not be repeated here (see Meadowcroft 1997 for example). However, for the purposes of this thesis, it is pertinent enough to acknowledge that discourse about sustainable development dramatically changed thinking about the social, economic and environmental consequences of development paths that have dominated the world economy.

[142] For example Bangladesh's National Environmental Action Plan in 1995, which reflected the government's strategic recognition of the inseparable links between environmental degradation and poverty.

[143] The participants adopted the Agenda 21, a comprehensive action plan for sustainable development; the Framework Convention on Climate Change (UNFCCC); the Convention on Biological Diversity (CBD) and the Statement of Forest Principles; and the Rio principles: 20/25 guidelines to promote sustainability.

North and South agendas and conflicts were brought to the discussion table with the South demanding that the North should pay for the environmentally benign economic growth that the South is critically pursuing. At the 2002 Johannesburg summit, the shared responsibility of shouldering environmental costs of economic growth and poverty reduction were at the heart of discussions. The means of implementation of the Johannesburg Plan of Action included most of the prescriptive means of EM theory: increased trade, finance, technology transfer, role of the scientific community, education, capacity building, and information for decision making at the levels of government and citizens.[144] Environmental impacts of international trade were addressed by setting specific goals for heavily polluting industries.[145]

Elements of EM policy making and economic action were also noticeably present at the EU level. 1996 saw two EU Directives - the first on ambient air quality assessment and management, and the second on integrated pollution prevention and control (IPPC) to minimise pollution from industrial sources.[146] The holistic approach of the IPPC[147] is also reflected in EU policy initiatives such as the 2003 Integrated Product Policy (IPP), which addresses the whole life-cycle of a product, and expands the idea of environmental responsibility all along the supply chain - involving actors such as designers, industry, marketing, retailers and consumers.[148] The IPP also recognises the heterogeneous and complex nature of supply chain management, and instead of taking the "one policy fits all" approach, IPP uses a variety of tools - both voluntary and mandatory - that include economic instruments, substance bans, voluntary agreements, environmental labelling and product design guidelines. The way EM elements are woven into western country polices becomes increasingly important for international supply chains, as these policies not only influence environmental policy making in the member states, but since they are supranational policymaking bodies, their policy goals, directions and rhetoric also has important

[144]Source: http://www.environment.gov.au/commitments/uncsd/index.html, accessed July 17, 2008.
[145]Source: http://www.earthsummit2002.org/Es2002.pdf, accessed July 17, 2008.
[146] Source: http://ec.europa.eu/environment/ippc/index.htm, accessed July 17, 2008.
[147] The IPPC Directive was very important in driving ecological modernisation, since it not only made it mandatory for industrial units to get environmental permits from EU authorities, but it was also emphasised an integrated approach to industrial pollution (similar to the circular materials balance model), using Best Available Techniques (BAT), allowing certification authorities in member countries to be flexible in licensing requirements reflecting local needs and capacities, and the use of public participation in permit processing.
[148] Source: http://ec.europa.eu/environment/ipp/, accessed July 17, 2008.

significance for the global environmental agenda, not least for the economic actors that are supplying to their markets.

Developed country states as importers - EM theory relies heavily on political programmes for "economising the ecology" and asks for innovative policymaking and implementation arrangements to push these changes through. The responses that were made to EM trends in the developed countries as importers of goods manufactured in LDCs can explain the source of pressure on developing country exporters for supply chain greening.

The role of the state has been significant in this case, as we have seen above. Critics of EM theory have questioned the under theorised role of the state, since EM theory does not say sufficiently how state institutional structures ought to change despite the entrenched power relations and how the state should lead in the changes (Berger et al 2001). They have also argued that the broadening of the EM network to a more consensual and open governance style has allowed ecological ideologies to become "sell outs" to multinational corporations that it once challenged (Smith 2007). Other critics criticise EM governance for not changing enough, and point to the entrenched power resource hierarchies in modern industrial nations, and suggest that sustainable and meaningful EM has failed to occur without a radical shift in governance and institutions (Harvey 1996).

The way governments have responded can be criticised along these lines, since studies show that much of the policy and economic network interactions remain hierarchical and closed, resulting in the mixed success of EM in developed countries, (for example, see Jänicke et al. 2002) but at the same time one cannot deny the progress that has been made towards protecting the environment. Developed country governments have addressed EM's requirements as important policymakers at the national and international levels, and have also created special institutional sets ups for implementing and monitoring the EM goals by pursuing "governance lite" style of regulation that relies much more on economic instruments and the economic actors, rather than traditional purely standard setting and monitoring models. These dual changes are reflected in the states' consensual relationship with the regulated and the broadening of the EM network to include economic actors who

have more bargaining leverage than before. Another perceivable feature of the EM governance network is the shift towards using economic incentives and flexible regulatory arrangements (for example, the EU IPPC Directive). **Economic instruments** (such as emissions trading, taxes, subsidies and charges) have been added to the mix of traditional command and control tools (such as permits and emissions level standards) when those had the potential to lower costs of public spending and lessen monitoring burden (please see OECD 2007a and OECD 2007b for case studies of mixed instruments regulation of point and non point source pollution). Use of these economic incentives also resulted in environmental trade regulations that impacted the exports from certain developing countries, in the form of trade permits for eco-friendly goods. By the mid to late 1990s the value of flexible economic incentives for regulating industrial pollution became apparent to even the hard-line green political fronts (Andersen 2002), but that is not to say that the industry lobby did not have any influence on delaying the use of the more ambitious or stringent eco taxes or on negotiating exemptions to their benefit (Kronsell 2002). It can be argued that this shift towards EM has improved the relationship between the **regulatory bodies and the private corporations**, making their relationship less confrontational and more collaborative. The opening up of policy networks to a more inclusive and consultative structure was also recommend in strategy papers by supra national bodies (such as the UNCED), think tanks and was adopted by governments in Europe starting from the late 1980s (Hajer 1995). The pressure to become more inclusive has continued throughout the 1990s with the rise of green political parties, industrial lobby groups and trade unions (Rihoux 2002, Kronsell 2002). At the same time, the state held on to its leading role by creating new institutions (or rearranging established institutional arrangements) and forging new liaisons chiefly by invitation (Rawcliffe 2002). In addition they were actively working with corporate bodies and trade associations, who were now increasingly more interested in research into the technological barrier aspect of greening production (Young 2002).

Developed country environmental movements – EM along the supply chains also owes much to the growth and evolution of the developed country **environmental movements**. Many NGOs moved away from their earlier confrontational strategy towards more pragmatic ways of trying to influence policy. The green NGOs and organisations have been developing into more complex and increasingly corporate-

like structured organisations (characterised by ever more sophisticated administrative, marketing, legal, media, fundraising and government lobbying sections) with a dramatic increase in membership numbers (specially visible around the time when issues like the ozone layer depletion was high on the policy agenda) and increased professionalisation of green bargaining. Simultaneously, there has been a spread in the active cells of the radical direct-actions groups in both sides of the Atlantic. As the national groups have grown and matured, the nature of their campaigns and policy work has changed to a shifting balance between conflict and more consensual styles. As Rawcliffe (2002) suggests, this is in part because of the governments and industrial bodies becoming more receptive to environmental voices, but also to do with the coincidental resource increases and organisational developments within the green NGOs. As Hajer (1995) says, the environmental NGOs began to subscribe to the appealing discourse of EM and got invited into the broader rhetoric of green-policymaking. There are, of course, numerous cases of social movements emerging, taking on an organisational form, becoming institutionalised and changing or disappearing if they were unsuccessful in affecting political and social processes. Over the past 25 years, environmental NGOs in the west have gained power from increased memberships and ranges of activities and better representation at the level of supranational policymaking (such as the EU, where, according to Kronsell 2002, the most powerful lobbies continue to be from business and agricultural lobbies), however, despite direct participation in policy dialogue, environmental movement organisations were only able to inspire and influence EU policymaking in an indirect way through the network of policymaking participants (for example, please see the discussion of EU Fifth Environmental Action Programme in Kronsell 2002). So the overall there is a trend of opening up policy making, but not at the cost of politics. As Young (2002) puts it, one of EMs big attractions for western governments was that it allowed them to buy time - by addressing environmental issues without making the fundamental structural changes that were called for by the stronger strains of EM (for example, see Jänicke et al 2002 for the limited progress made by developed countries in integrating ecological sensitivity into the broader cross sectoral industrial policy). But this very utilitarian and pragmatic aspect of EM is what enabled it to not threaten late 20th century capitalism, because it made possible to arrive at consensus with the greens, avoid damaging political disputes, avoid the alienation of industrial funding, and

delay making the changes that EM theory does call for. This very feature of "buying time" has helped give the discourse its wide appeal across the EM network, and has drawn in actors from the state, industries, trade unions, NGOs and civil society (Hajer 1995, Young 2002).

Developed country businesses - EM first became attractive to the **private sector** in developed countries because of increasing regulatory pressure. While that is broadly true, their underlying reasons for participating in eco-modernisation networks were not so simple: they were attracted to the positive attitude of eco-modernisation theorists towards theorising ecological issues, especially when contrasted to the so far prevailing negative growth messages (e.g. "de-industrialisation" and "de-modernisation") sent out towards industries in particular. Plenty empirical cases clearly demonstrated that industries' were indeed profiting from EM since it was making business sense (Berger et al 2001), especially in terms of saved resources, reduced wastages, green subsidies, marketing opportunities, buttressing company stock prices, gain new customers, improve customer relations, etc. Some businesses were reaping market benefits from developing green technology and the mantra of green consumerism was now an important part of business strategy making geared towards catching the niche markets for premium priced eco-friendly products (Porter and van der Linde 1995). There is also plentiful literature existing on how companies gradually became interested in the environmental impact of their actions (through the rise of CSR practices) and took responsibility of the environmental well being of their staff, stakeholders, customers and communities (for example see Halila 2007,Welford 2007, CSR Asia 2007and Hahn and Scheermesser 2006 for summaries). There are also companies specialising in delivering EM technologies, say, through industrial waste recycling and management (for example, the European Tyre Recycling Association (ETRA) which operates in 25 EU member countries) that deliver on the promise of eco friendly cost savings. Industry leaders came to understand that it was in their economic interests to act on EM principles, and as Young (2002) points out, it would be wrong to assume that industrial leaders were doing this for altruistic reasons: their main concern continues to be economic self-interest (although it cannot be denied that many companies genuinely value their ecological footprint higher than others). Businesses responded to the greening challenge by collaborating more closely than before with government policymakers,

as we have discussed before, and established increased contact, both formal and informal, with the stronger trade unions (Rihoux 2002). The private sector also began to become better organised in terms of forming more professional lobby groups who would represent their ideas for setting environmental targets and pursue opportunities for funding of environmental institutions. For example, in Belgium, a large specialised agency called Fost Plus was established financed jointly by industry and the distribution sector, in order to develop a countrywide waste recycling and treatment scheme (Rihoux 2002). The business lobby groups have proved significantly powerful and environmental policy entrepreneurs, often over the green movement in Europe. Critics point to many long stories of moves made away from actual implementation of eco taxes on a significant scale in EU member countries, as powerful business lobbies representing producers of batteries, disposable razors and cameras managed to reduce eco-tax rates, or even negotiate a total exemption (Rihoux 2002, Rawcliffe 2002, Kronsell 2002).

Industrial groups also came up with a way of dealing with the costs of continuing environmental action (in line with the principles of voluntary initiatives such as EMAS or ISO14000 series certification) - they shared the cost and responsibility of minimising environmental risks across new coalitions within the economic network - such as trade associations (for example the plastics industry, European Chemical Industry Council (CEFIC) and Canada's Ontario Multi Material Recycling Inc.) Part of this strategy has been to spread the responsibility down the supply chain, to involve their suppliers as well (Welford 2007).

Developed country consumers - Consumers in the developed markets have been a crucial driver of EM initiatives in LDC countries that export to these consumers, and a study of greening supply chains would be incomplete without understanding the contextual background that was provided by the civil society in these countries. Civil society in developed countries has acted as consumers, shareholders, and voters who measurably acted to show their preference for eco friendly goods and environmental quality of life. The rise in eco-friendly preferences is, of course, in tune with the rise in membership numbers of the green NGOs, as we discussed before. This is based on evidence of the emergence of post materialist values in human society that makes people take a holistic approach to nature and human beings - they see human beings

in a complex relationship with ecological systems where environmental degradation directly compromises the quality of human life.[149] Issues like the Chernobyl disaster, Exxon Valdez, etc. received high profile media attention during the mid to late 1980s and early 1990s. In the same period, international summits on sustainable development were also in the news. Environmental consciousness has influenced western citizens to question their lifestyles and become more aware of their power as consumers of goods that have environmental impacts. In fact, an example of this is the spontaneous consumers' boycott of Shell petrol stations in Germany after the Brent Spar accident and the increased green votes in Belgium after food scares in 1999. If we look at the rise in the range of "ethically sourced" goods for sale in the supermarkets in the UK we can get a sense of consumer power and greening. Kronsell (2002) contends that there has been a shift in social values in the west whereby the economic decision-making and political support has to go beyond logical monetary values, and it has had such an impact on western societies, that it would be very difficult for policymakers to ignore it today. Apart from their purchasing habits as consumers of consumables, people in developed countries were also taking environmentally conscious decisions as property buyers, shareholders, parents and holidaymakers. In this age of hyper-connectivity and easy information availability, this concern for environmental quality has reached higher than before and now extends to include the developing country factory floors where these goods are produced (Welford and Frost 2006, Frost and Ho 2006).

149 Inglehart (1995) suggested that "post-materialist" values achieved after a reasonable degree of material security, can predict environmental concern as a significant priority in people. However, there is considerable controversy regarding the empirical support for this argument at either the individual or the national level (e.g. Stern et al. 1999, York et al. 2003).

Annex 2.1

Choosing Conceptual Frameworks for Studying Bangladeshi RMG Sector:

Conceptually framing the problem of Bangladeshi industrial greening is challenging for two reasons. Firstly, choosing conceptual variables that would yield insight into economically vulnerable firms' behaviour is still problematic, given the existing body of literature on firms that have been undertaken in either developed countries, or in newly industrialised countries (NICs such as Malaysia, Indonesia, China, the Philippines, etc.). No studies have been done on the internal firm capacities in LDCs like Bangladesh. The problems of poor internal firm capabilities and resource constraints may or may not differ significantly between firms in countries like Bangladesh and Malaysia, but the way in which the firms are able to overcome these barriers may be different, therefore for this thesis, it makes sense to learn from the theoretical frameworks and variables that existing researchers have used while studying developed countries and NICs, but with a special view on how those aspects respond in less mature industrial systems with weak product innovation, bureaucratic change resistant organisational set ups, low investment and weak human resource skills.

Secondly, existing literature does not provide any useful starting points in framing the study of Bangladeshi industrial eco-management. Academic literature or policy publications on the environmental management of Bangladeshi firms is almost non-existent. There are no public disclosure programmes for industrial environmental performance in Bangladesh and the government does not publish any related information. Let alone any studies done on their environmental management performance or management capacity barriers, there are no sector wise data from any source on how Bangladeshi industries fare on meeting minimum mandatory environmental regulations. Few sector wise studies have been done on the highly polluting sectors that contain data on their effluent characteristics etc., but there have been no studies on the environmental management of those sectors either, except as viability studies for common effluent treatment plants. Policy level publications are limited to EIA guidelines focusing on selected highly polluting sectors. Therefore, given the near vacuum of knowledge of environmental practices in industries in one

of the poorest, most crowded and most polluted cities in the world, Dhaka, an approach similar to that used by industrial greening capacity researchers mentioned above seemed like a sensible starting point. The chosen conceptual variables look at the kind of ecological imperatives these firms are facing, then go on to studying the kinds of capacities they have for environmental action and the kinds of actions they take and why. I wanted to go beyond "green idealism", and take into account the way firms are structured to get a sense of where the strengths and weaknesses of these firms lie -- whether the firms have strategic resources for environmental management, whether they are heavily bureaucratic or organic, whether they are culturally sensitive to environmental issues, whether they have the enabling structure to deal with environmental information, whether they are able to learn and implement changes, are all important factors in explaining the weak environmental strategies they make.

Annex 2.2

Firms' Internal Management Networks And Greening

The business firm is defined by Robbins and Coulter (2003) as a deliberate arrangement of people to accomplish some specific purpose, distinctly characterised by the possession of a deliberate structure to attain those goals. Therefore the actors in a firm are arranged in units with well-defined relationships. Organisational theory suggests that working relationships at each level of actors (or employee units) are distinguished by managerial authority over different areas of control. Analysis of how a firm functions strategically, then, has to begin with mapping where these employee units are located and how they are regulated formally and informally through existing networks of power structures.

Robbins and Coulter (2003) highlight the three areas of control in management networks - first line managers (lowest line managers, overseeing non managerial staff); middle managers (managing first line managers); and top managers (undertaking organisation wide decisions, establishing plans and goals effecting entire firm). Higher-level managers focus more on external relationships and are most likely the first point of contact for feeling market pressure for environmental upgrading. They are responsible for decisions regarding resource allocation and business strategies, both of which are crucial drivers for environmental management to succeed. At lower managerial levels, the focus is on internal responsibilities mainly concerned with supervising staff from the operating core and overseeing daily operating work flows and maintenance work (Mintzberg (1980), Pavett and Lau (1983)). Undertaking environmental management involves the whole firm and responsibility for managing aspects of it depends on the "span of control" at each level. The way a firm is "controlled" determines the degree of centralisation and decentralisation in firms. In centralised bureaucracies, top managers make all the decisions and lower-level employees are not consulted. Change is slow and path dependent (Mintzberg 1983, Robbins and Coulter 2004). In organic firms, decision-making is more decentralised and the firm is quicker to change. Centralised decisions are common in conditions where decisions to be taken are significant for the firm or the firm is facing a crisis, while low risk decisions can be made in more organic styles

(Robbins and Coulter 2004). Therefore, the organisational theorists argue that each firm has different degrees of centralisation and decentralisation operating within different pockets of the power structures within the firm. These power hierarchies will explain different decision-making styles effecting the use of *resources* and management of *actor-capabilities* depending on the decision type itself. While, the mixture of centralisation and organic decision-making styles is a crucial factor behind a firm's unique ability for successful (i.e. rent seeking) business strategy formulation, (that may include innovations such as environmental upgrading), I argue further that only organisational structure is insufficient in understanding why environmental upgrading may be too much of a challenge, given other factors such as strategic resource shortages, weak management capability and cultural factors. These additional complexities of resources and capabilities, which can determine whether a firm succeeds or fails at innovative responses to market pressure, are examined in the chapter, according to the resource based view (RBV).

Annex 2.3

Background to Economic Networks and Greening

Traditionally, market systems have been studied as consisting of interacting agents who continuously pursue advantageous opportunities to maximise profits (Wilkinson, Wiley and Lin 2001, Kosfeld 2003), based on assumptions of rational actors who are utility or profit-maximising, who operate within economies of scale and diminishing returns (Robertson and Langlois 1994, Porter 1990). However, recent years have seen the evolution of a more dynamic conceptual framework to describe how an economy might get from one state to another.[150] Economic networks or value chains (versus markets or hierarchies) have emerged as valuable conceptual frameworks for describing business relationships between firms, especially in the context of growing global supply chains where cooperation and coordination networks are becoming analytically complex due to dispersed actors and cultural variables (Wilkinson, Wiley and Lin 2001, Cottica and Ponti 2004).

The economic networks approach is based on complex adaptive systems theory, which stresses the mutually adaptive relationships that form between actors when they enter trade relationships as buyers and sellers. According to Vriend (1995: 205), "A 'complex system' is a system consisting of many agents that interact with each other in various ways. Such a system is 'adaptive' if these agents change their actions as a result of the events in the process of interaction." Therefore, this view looks at market interactions in terms of adaptability of actors - as in, interacting firms who self organise in response to market pressure, into pursuing actions that are the most advantageous (Vriend 1995). As with all complex adaptive systems, order emerges in a bottom up fashion through the interaction of many dispersed actors acting simultaneously (Wilkinson, Wiley and Lin 2001). Over time, these interactions set the

[150] This reflects the debates that began in the 1980's surrounding industrial policy studies on the growth of large vertically integrated firms which had economies of scale (typical in the USA, UK and Japan) vis a vis the cluster formation of networked smaller more flexible firms (typical in Italy's industrial districts). For more on this debate, see Robertson and Langlois (1994). Analysis of new factors promoting international market competitiveness brought attention to the need for stable domestic/regional production networks (Porter 1990), while on the other hand, some proponents argued in favour of stable, large, vertically integrated production systems (Lazonick 1991).

rules of the game and operating norms within the supply chain (Johanson and Mattson 1992, Hakansson and Snehota 1995, Welch and Wilkinson 2000).

Annex 2.4

Triadic Buyer Seller Relationships and Environmental Upgrading in Global Value Chains

Hakansson and Johanson (1992) explain industrial relations in trade networks by looking at three basic variables: actors, activities and resources. Actors are defined as those who control activities or resources through networked relationships.[151] Actors may be identified at different organisational levels (e.g. a firm, a trade body, a financial institution, etc.). They can be operational at the local, national and global levels (e.g. multinationals with local offices, or local firms involved in international supply chains, etc.). For the purposes of this thesis, the primary actors in the supply chain are the buyers/retailers (buyers and buying houses) and the RMG suppliers (large, medium, small sized firms); the secondary actors are auditors, trade unions, trade associations and raw materials suppliers. They create network pressures by deciding on the selection of activities, their coupling and resource usage. Their main objective is to maximise resources through strategic and rational management of these relationships, which is done through accumulated power and bargaining. There is constant bargaining and struggle between actors to increase own control over resources at the expense of others' decrease in control, resulting in a zero sum game. Distribution of resources determines the power that the actors have over future activities (Hakansson and Johanson 1992). Therefore, these three variables exist within knowledge gaps and uncertainty and are influenced by their history, in terms of its institutionalised learning, memory, routines, embeddedness and inertia, which happens in a fashion similar to the "bottom up ordering" concept of Wilkinson, Wiley and Lin 2001 (See also, Uzzi 2000 for discussion on network embeddedness). As bottom up ordering occurs, certain actors become more

[151] The end goal of networking is attaining maximum control over resources. Control determines the activities in a network and can be of 2 types; direct control, which is established by ownership of the resources and indirect control, which is based on relationships with other actors and the associated dependence relations with those actors. Due to the multi-level existence of the actors, it is always unclear which actors control which resources and to which extent. The aim is to increase own direct control and reduce indirect control of other actors over their resources. Complementary goals can be shared between actors, making them work together towards decreasing the control of a third actor to attain their mutual goal. Therefore network action is a mixture of competing and complementary goals. (Hakansson and Johanson 1992).

powerful than others, which is an interesting phenomenon for this thesis, since I aim to analyse the exercise of power between buyers-sellers and its expression by way of supplier RMG firms trying to adopt environmental management practices, under pressure from buyers.

Source of Buyer Power - Smith and Laage-Hellman (1992) talk about two kinds of triadic relationships that explain where buyers and suppliers in a network source their power and their span of influence. The first is the **Customer-Supplier-Supplier (C-S-S) triad**, which involves one buyer and two suppliers,[152] a situation that immediately lays bargaining power with the customer/buyers because the financial benefit of the multiple suppliers rests upon the non-relationship between the buyers and competing suppliers. Corominas-Bosch (1999) refers to buyers' bargaining power as a numbers game. Bargaining power depends on whether the network type is "**uneven**" (when buyers or sellers outnumber each other), or "**even**" (when the number of buyers and sellers are the approximately same). Kranton and Mineheart (2001) suggest that if the network is uneven (where suppliers outnumber the buyers such as in the C-S-S triad), then the market is becoming competitive and the buyers hold the most power because they are the price setters in a buyers market. Buyers purchase from sellers in an ascending bid auction, which determines the price.[153] Empirical work by Charness et al (2003) shows that actor behaviour follows the theoretical prediction that in competitive network structures, the stronger party takes advantage during bargaining. As a result, the nature of the links (even vs. uneven) between actors is influential in determining the power structures and bargaining outcomes over time. This also holds true in supply chains made up of smaller subnetworks. If even structured subnetworks are linked to competitive subnetworks so that the large network becomes competitive, then bargaining power shifts (Kranton and Mineheart 2001). This aspect of buyer power, as expressed in setting prices in an ascending bid auction, has important implications for firms trying for

[152] If the suppliers are offering the same resource to the customer, then they are competing and are in a **negative** relationship because either's relationship with the customer is contingent upon the customer's non-relationship with the other supplier. If suppliers are providing complementary goods or services then they are in a **positive** relationship, for one supplier's relationship with the customer is dependent on the relationship with the first supplier. (Smith and Laage-Hellman 1992)

[153] Buyers drop out of the bidding if the price exceeds their valuation and eventually the bidding process stops when demand equals supply. Important elements in their model are the reasons for emergence and competition among the actors. (Kranton and Mineheart 2001)

competitive advantage gains as a result of environmental upgrading, since if the market is too competitive, the chances of firms gaining financial advantages due to greening investments is going to be less.

Source of Supplier Power - International supply chains are as much defined by the relationships suppliers have with their competitors as they do with their buyers. Easton and Araujo (1992) expand on this idea, and emphasise the latter part of the C-S-S triad by identifying suppliers' relationships with their competing firms using 5 dimensions -- competition, conflict, co existence, cooperation and collusion.[154] These responses are determined by the suppliers' goal conflicts with competitors, their individual competitive strategies and degree of suppliers' "bargaining power" for optimum prices, since powerful suppliers can create bargaining space for themselves and become a barrier for competitors' upgrading efforts (Easton and Araujo 1992). This aspect of supplier behaviour has important implications for firms looking to get higher prices through EM by making greening-strategies that change the relationships between suppliers in many ways – such as increasing competition (e.g. buying expensive rare green technology), increasing cooperation (e.g. entering into waste recycling schemes) or collusion (e.g. sharing the expense of green technology imports to create a barrier for other firms). The motivation for creating barriers and alliances to achieve competitive advantage is an important strategic resource, as suggested by the resource based view discussed earlier. Bargaining space and competitive fields are also important weapons in suppliers strategy for gaining market share, and is something that can be reasonably transferred to the case of greening firms, that might bargain with their buyers to get higher prices for greener products even though the rest of the suppliers are not enjoying the same prices. Bargaining spaces are not geographically bound in international networks, according to Easton and Araujo (1992). For example, in the Bangladeshi RMG sector, a

[154] Competition occurs when there are two suppliers competing ("parallel striving") for the same buyer and the suppliers' goals are in conflict. Conflict arises when the goals of two actors are mutually exclusive and the aim is to destroy the competitor. Coexistence occurs when goals are mutually independent. This can occur due to inadequate information or their contentment with maintaining current market niche. The fourth form of co-relationships is cooperation, which is when actors' goals are mutually dependent. Cooperation may be formal or informal. Formal cooperation may be dyadic, joint or third party. Formal cooperation may be related to people (social capital), information flows and social norms. The fifth kind of co relationship is collusion, when two or more actors join forces to injure the third competitor to gain greater market share (Easton and Araujo 1992).

supplier's power may be high at the national level (e.g. competition between firms of a similar size within Bangladesh) but low at the international level (e.g. firms specialising in certain product lines competing for specific orders with firms from other countries) and therefore bargaining power can differ as per venue.

Smith and Laage-Hellman's second triad, the **Supplier-Customer-Customer (S-C-C)** triad looks at actor adaptability in terms of how a supplier reacts to its relationships with multiple buyers. In a market such as apparel, one supplying factory may be expected to work for several buyers at the same time, hence any strategy making decision they make has to be mindful of its impacts on the firm's terms of trade with multiple buyers. It is reasonable to assume that during environmental upgrading, similar considerations will have to be made. In this case, source of supplier power depends on the nature of dependency between the supplier and its multiple buyers. Smith and Laage-Hellman distinguish between exchange concentration (frequency of transactions between suppliers and core buyers) and competence as factors determining supplier power. Another way suppliers increase their bargaining power is through making strategies in accordance with buyers' wishes. This phenomenon of "upgrading" own production skills, process or product has been widely recorded as a means of not only competitive advantage gaining, but also of gaining network power (cf. Porter, Easton and Araujo 1992, Russo and Fouts 1997, Hart 1995, etc.). Upgrading is a positive relationship, since this increases the capacity of the supplier and adds value to its products.

Annex 2.5

Policy Making Theories and Cycles

There is a general consensus that there is no one definition of what public policy is or ought to be (Birkland 2001). However, it is important to remember that policy making **by governments** entails a set of laws, plans and actions, arrived at through an ambiguous and politically charged process. According to Dye (1978: 3), public policy is "anything a government chooses to do or not to do." This emphasises that although there may be highly influential policy stakeholders in the policy process, the government is the ultimate legal authority and agent for making public policy, and therefore, their policy decisions and non-decisions (which is also a deliberate policy choice) are worth examining to understand policy outcomes (Brooks and Miljan 2003). Jenkins (1978) define public policy as "set of interrelated decisions taken by a political actor or group of actors concerning the selection of goals and the means of achieving them within a specified situation where those decisions should, in principle, be within the power of those actors to achieve." This is a broader definition than Dye's, since it emphasises the fact that a policy is a set of inter related decisions, some made inadvertently and that policy making is done by **a group of actors** inside and outside government, who are networked to attain certain policy goals (i.e. policy development). Also, the ability/capacity of policy actors to implement the decisions is a crucial element in producing policy decisions and points to the role of institutions in providing support to the regulated. Perception of policy problems and associated uncertainty are highlighted by James Anderson's definition of policymaking as "a purposive course of action followed by an actor or set of actors in dealing with a problem or matter of concern." (Anderson 1984: 3). Policy analysis has traditionally been done keeping these factors in mind.

Policy analysis must begin with identifying the stages of the "policy process". The idea of a cyclical policy process has been very influential in policy analysis (cf. Lipsky 1980) because it identifies the particular stages of policymaking,[155] and helps isolate whole process into discrete phases and enables analysis of inter linkages and

[155] Originating with H. Lasswell's "Stages Heuristics Approach" (Howlett and Ramesh 1995)

succession. Howlett and Ramesh (1995) present a simplified model of the policy cycle. This is shown briefly in the table below.

Table: The Ideal Type Policy Cycle

Stages In Policy Cycle	Phases Of Applied Problem Solving
1. Agenda setting	Problem recognition
2. Policy formulation	Proposal of solutions
3. Decision making	Choice of solutions
4. Policy implementation	Putting solution into effect
5. Policy evaluation	Monitoring results

Based on Howlett and Ramesh 1995: 12

The model explains how policymaking is done in overlapping steps, by a changing cast of actors (public and private actors; individuals and organised groups; networks of mutual benefit), using policy instruments (compulsory, voluntary, mixed tools, etc.), and within given institutional contexts (formal and informal nature of institutions).

The policy process begins with **agenda setting**, which may be fraught with opposing public and private agendas, and both parties have the power to bring an issue to the table. Depending on the amount of public support for the issue/problem at hand, the agenda may be set by non-state actors by means of political bargaining. In the next phase, **policy formulation** is done, where ideally, policy goals are defined and policy alternatives are discussed. This may proceed without clear definition of the problem, often in a disorderly, nebulous and contested manner[156]. Policy **decision-making** phase involves narrowing down policy options to the ones that are ultimately chosen. This is the most political stage of policymaking (Brewer and DeLeon 1983) as political bargaining powers of various actors determine selection of appropriate instruments such as market instruments, direct regulation, voluntary instruments or mixed instruments, depending on complexity of the regulated and the regulator, state capacity, and institutional considerations (such as resources availability,

[156] This phase is never neutral, since power and resource imbalances will create winners and losers. At this stage those policy options are eliminated that are deemed impossible or unacceptable to those with greater bargaining power.

precision of targeting the area to be regulated, political risk, and constraints on state activity).

Policy implementation has received much attention in policy analysis. In particular, **implementation theory** examines the link between institutional obstacles and the regulation outcomes. Authors such as Pressman and Wildavsky, (1984), Bardach (1977) call it "mutual adjustment". Long and Franklin (2004) present 3 theoretical perspectives on implementation styles -- centralised, decentralised and mixed approaches. In centralised systems (the "top down" approach), agency leaders have maximum control (Sabatier 1986, Wildavsky 1979). However, the top-down model does not fully explain policy distortion at the hands of the practitioners. In decentralised systems there is more input by lower level public servants, whom Lipsky (1980) calls the "street level bureaucrats", whose decision making powers limits the circumscription by the policy makers at the top.[157] Long and Franklin (2004) also talk about a mixed approach where constraints on implementation are imposed at the top and implementing actors interpret policy so that implementation is congruent with their preferences (Goggin 1990). Bardach presents policy implementation through a framework of "games" with "players, what they read as the stakes, their strategies and tactics, their resources for playing, the rules of play, the rules of "fair play", the nature of the communications among the players and the degrees of uncertainty surrounding the possible outcomes." (Bardach 1977: 56).[158] The list of factors that can result in weak policy implementation and low regulatory pressure is a long one, but Pressman and Wildavsky (1984) and Bardach (1977) highlight faulty policy design and institutional characteristics of agents involved.[159]

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[157] Lipsky argues that the decisions, routines, and devices they invent to cope with uncertainties and work pressures, effectively become the public policies they carry out. From this we can infer that street level bureaucrats will pursue or distort policies to suit their commitments or preferences and that this would leave room for agency capture, if the opportunity arises (Smith 1997).

[158] The relevance and applicability of their work in studying current policy implementation is immense because the gap between policy conception and implementation raises questions about how challenges and obstacles are to be dealt with during policy games to ensure that policy meets its goals. Past literature has shown how initial policy intentions are unclear, policy assumptions about probable outcomes are incorrect, compromises cause goal diffusion and disillusion. (Pressman and Wildavsky 1984, Sabatier and Mazmanian 1978, Long and Franklin 2004).

[159] Bardach (1977: 10) lists as influencing factors: intergovernmental relations, interagency relations, relations between government and private contractors, professional participation as providers and overseers, inter-professional rivalries, regulatory as well as service-delivery

Lipsky (1980) also analyses the nature of bureaucracy as an institutional factor.[160] Goggin (1990) highlights ambiguity and conflict. Ripley and Franklin (1982) identify the number and the nature of the actors involved, nature of conflicts in the particular policy and the expectations concerning the policy goals. Mazmanian and Sabatier (1983) point to the tractability of the problem and the ability of the state to structure adequate implementation solutions.

Policy evaluation occurs after policy implementation has ended or is ongoing. It may be done by stakeholders inside and outside government and is conducted at different levels, such as administrative evaluation (to see if state efficiency, managerial performance and process design was adequate), judicial evaluation (to evaluate possible conflicts between administrative conduct and individual rights), political evaluation (undertaken by general voting/protesting public/ private sector policy actors/ the regulated), (Howlett and Ramesh 1995). While policy evaluation is done to measure whether it has met its goal or not, in actuality it does not proceed in a rationalistic manner and is a highly politicised affair. Often polices do not have clear goals that can be measured easily and developing objective and rational standards for such measurement is difficult (Ingram and Mann 1980).

The role of **stakeholders**[161] during the policy process is interesting for this thesis, not only because actors internal and external to the government can have powerful input towards initiating new policy or strengthening existing policy, but also because they may be relegated to the periphery due to power struggles and other participation boundaries (Long and Franklin 2004).[162] Current literature raises questions on how to better understand and predict the behaviour of stakeholders including business

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activities, intra-bureaucratic politicking, important interface programmes with other policy areas, and continuing legislative oversight and intervention.

[160] According to Lipsky (1980), each bureaucratic agency undertakes implementation in a specialised way, reflecting particular intellectual and institutional traditions, holding certain values, which help shape a particular institutional perspective, thought which each policy negotiation is understood and judged. These preconceptions over time become embedded and create precedents and generates "lessons learnt". In a cyclical way, implementation becomes a way of modifying the original policy.

[161] The term 'stakeholder' is often associated with the 'stakeholder approach' from the corporate management literature. See Freeman (1984) for details.

[162] Much empirical evidence points to a disconnect between stakeholder dialogue and policymaking and policy implementation. Power struggles over issue definition, participation boundaries and the identification of the relevant stakeholders contribute to this (Long and Franklin, 2004)

firms, civic society, lobby groups, etc., in environmental policy making; how to understand what motivates them to join, affiliate with or form a new group.[163] What is important for policy analysis is to acknowledge that all stakeholders in a policy process do not necessarily share the same values and have conflicts with the dominant actors, often who are from within the government (Cordano, Frieze and Ellis 2004).[164]

[163] A network perspective has been suggested to understand how and why stakeholders respond to institutions and other stakeholders (Grimble, et al., 1995).

[164] However, defining stakeholders has been problematic in this kind of analysis (Driscoll and Starik 2004, Jones and Wicks 1999, Mitchell et al 1997) and definitions vary depending on the field of inquiry (e.g. corporate management vs. natural resource conflicts) and scope of variables. The normative view (by Mitchell et al 1997) defines stakeholders based on their legitimacy, risk, property rights and moral claims. However, Driscoll and Starik (2004) argue for a broader criteria based on stakeholder ability to influence, legitimacy of relationship and urgency of claims.

Annex 3.1

The Multi Fibre Arrangement (MFA) and the Apparel GVC

The supply chain of the apparel trade has shifted a few times since the early 1950's when the sector was almost exclusively located in the developed industrialised countries. It first shifted from North America and Western Europe towards Japan in the late 1950's. Japanese apparel exports rose sharply until another shift towards Hong Kong, Taiwan and the Republic of Korea. This new exporting block dominated till the early 1980's. Around mid to late eighties, the third migration occurred from the "Asian Big Three" - Hong Kong, Taiwan and Korea - to other developing Asian economies, such as mainland China, India, Indonesia, Malaysia and Sri Lanka. In the 1990's Bangladesh and some Latin American Countries also joined as suppliers (Gereffi and Memedovic 2003).

Europe and America have long been the largest importers of textiles and clothing and continue to produce apparel for their domestic market, which is in some competition from overseas labour and raw materials, which are cheaper. Consequently, apparel import policy of the US and Europeans countries have been designed with two over arching goals - to reap the benefits of lowest cost labour through internationally competitive apparel sourcing, and to provide protection to their domestic apparel manufacturers. This was clearly reflected in their adoption of quota based apparel import policies that allowed developed country buyers to source clothing based on least cost principles, but each exporting country would be under restriction to stay within imposed quota amounts. In 1959 India, Pakistan and Hong Kong entered a voluntary restriction with the UK. The USA was trying to negotiate with Hong Kong into entering a voluntary restriction but failed, leading to pressures on the GATT, pleading for a "global solution" to the problem of "economic disruption" that imports from lower cost countries was wrecking on the US domestic apparel industry (Cai 1997). GATT adopted a definition of market disruption as safeguards to developed country domestic industry, exempting these new restrictive rules from normal GATT principles. This resulted in the Short Term Arrangement on Cotton Textiles (STA) in 1961. The Long Term Arrangement Regarding International

Trade in Cotton Textiles (LTA) then replaced this in 1962.[165] In 1973, in order to win support of the apparel lobby for the 1974 Trade Act, USA proposed the MFA under GATT (Trela and Whalley 1990).

The MFA was intended to provide temporary protection to the domestic T&C producers in developed countries as well as to give time to LDC firms to make suitable arrangements to enter the developed country markets. However, the MFA was renewed 4 times - MFA I (1974-77), MFA II (1977-81), MFA III (1982-86) and MFA IV (1986-94). The coverage of developing countries also grew. At the end of 1994, there were 40 countries involved in MFA, including some non-GATT countries such as China (Cai 1997). At its inception, the MFA's objective was stated as achieving the expansion of trade through the reduction of barriers and the progressive liberalisation of trade terms in textile products (Trela and Whalley 1990). It allowed for 6% annual growth for quotas and various provisions to make quotas more flexible[166]. While the debate around the net benefits of the MFA and its welfare distribution has been contentious, policy outcomes indicate that the long term benefits accrued to the more powerful bargainers, who were the importing country governments. Critics were concerned with the discrepancy between the policy objectives and policy instruments chosen under the MFA through successive renegotiations. Policy instruments were designed to extend protection of developed country apparel manufacturers instead of liberalising the trade terms. Annual growth rates under quota have been below 6%, and fibre coverage has increased to include silk blends and vegetable fibres. Additionally, anti surge mechanisms were introduced to protect against full utilisation of previously unused quotas by suppliers (Trela and Whalley 1990).[167]

However, total apparel export during the MFA doubled between 1993 and 2003, rising from about $90 billion to $180 billion. Low and middle income countries

[165] The LTA allowed for a 5% growth limits on imports. The LTA was extended twice and lasted for 10 years. (Trela and Whalley 1990).

[166] Such as the provision to allow a developing exporting country to transfer a quota between product categories in the same year; or the allowance for countries to carry over up to 10% of their unused quotas; or carry forward up to 5% of their quotas and use them up in advance. (Trela and Whalley 1990).

[167] This had been happening within the wider context of other product specific trade restrictions used by developed countries against developed countries in the 1970's to 1990's (Erzan, Goto and Holmes 1990).

showed most growth, their apparel exports rising from $53 billion to $123 billion, ending with a 70% share of global exports. While countries like China and India were restrained, some countries (such as Bangladesh) benefited from the quota system as well as preferential access granted to many LDCs by various regional and preferential trade agreements (e.g. by EU under GSP and Everything but Arms, and, recently, by USA under AGOA) (World Bank 2005).

Hierarchies of Membership, Integration, Resource and Power:

The MFA quota restrictions were key in the establishment of power hierarchies at various levels of policy networks. As we have seen earlier in this chapter, MFA negotiations were led and dominated by developed country governments and lobby groups - a power base that continues to this day and is very influential for understanding the policy networks relevant for this thesis. Another set of developed country actors maintained their position of power and influence in the policy network through their dominance of the supply chain. These are the retailers and buyers, who continue to lead the apparel GVC, since during the MFA, the quota restrictions meant that more suppliers were chasing fewer orders. Additionally, global retailing became dominated by large multinationals focusing on greater specialisation of products, creating constant pressure along the value chain with high volume orders. Retailers eventually developed strong ties with individual suppliers who have remained favoured trade partners as the GVC changed over time (Gereffi and Memedovic 2003).

The MFA has also created a lasting power hierarchy within LDC actors at national and international levels. At the national level, the number of RMG firms grew quickly (since RMG is a labour intensive sector and entrepreneurs learnt quickly from each other). Over time, older leading firms moved up the hierarchy by adopting modern technologies (technical upgrading) and getting accredited for quality management (process upgrading),[168] resulting in increased bargaining power in front

[168] This includes steps like computerised colour matching, dyeing and printing optimisation, recycling of print paste remnants, adoption of energy saving dyeing technologies, etc. Adoption of computer-aided design/computer-aided manufacturing (CAD/CAM) technologies by proactive suppliers has allowed them to maintain production flexibility, reduce delivery times and enhance the designing capabilities leading to production upgrading. These technologies reduce waste from cutting, improve

of buyers (Gereffi and Memedovic 2003). At the international level, such successful quality upgrading and value addition by the leading firms resulted in increased sales volumes for the supplying country within the confines of quantitative quotas, therefore elevating the status of country within international policy making [169]. As countries neared quota exhaustion, exporters rapidly diversified into new products and fibres to exploit unrestricted categories,[170] leading to new growth avenues, which led to the rapid growth of the apparel sectors in countries such as India, Bangladesh and Sri Lanka. This phenomenon, of course, has strengthened the bargaining position of the leading suppliers, to the detriment of smaller, less competitive firms (Gereffi and Memedovic 2003).

The MFA also created a power hierarchy among the supplying countries. While the quotas provided certainty of market access up to agreed limits, newer entrants had limited access compared to the more established exporters, which in turn was reflected in the different bargaining powers within the supplier-supplier-customer (S-S-C) triads. New entrants had low capacity for product upgrading, leaving the opportunity for product upgrading and value addition to the older, more established supplying countries. While the MFA enabled countries into diversifying, the ability of apparel suppliers for such diversification depended on the role of apparel as a country's first steps in a sequence of stages towards industrialisation (Trela and Whalley 1990). Differences in suppliers' abilities underlined the importance of enabling policy networks, including the administrative capacity for effective utilisation of quotas and an enabling infrastructure base. Increasing labour costs and consequent shift in comparative advantages also impacted LDC apparel suppliers'

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the fit of apparel, allow the suppliers to make accurate pre-costing of ordered products and reduce delivery times.

[169] A good example of such quota manipulation comes from Hong Kong, which initially manufactured garments using raw materials supplied by their customers. Customers provided the design and the fabrics and strongly supervised the firms (quasi hierarchy). Over time, Hong Kong manufacturers started to add local services value added by providing fabric development services and also product sourcing and designing. (Cai 1997) A similar example can be cited of Bangladesh, which saw a tremendous growth in investment, even within quota controlled categories, designed to improve physical productivity, design and quality. Local backward linkage has also flourished supplying fabric, buttons, cardboard stiffeners, fasteners, etc. India is another example of quality improvement, although it is always not clear whether this was solely due to quota restrictions than natural evolution (CPD 2003).

[170] For example, when India reached full quota for cotton garments they diversified into synthetic fibre items (US ITC 2004)

responses to competition from older apparel suppliers (Erzan, Goto and Holmes 1990).

Different abilities among supplying countries led to the rapid increase in the numbers and geographical locations of suppliers through "quota hopping" (Cai 1997, US ITC 2004, CPD 2003). Older exporters who were nearing quota exhaustion in their own countries began to invest in production capacity building in countries that were not under MFA quota. Taiwan and Korea became prominent in investing in China, Indonesia, Pakistan and Hong Kong. The Bangladesh RMG industry got started up due to a Korean firm subcontracting outside.[171] (GTO & PPMA 2002).

The MFA Phase Out and the New Apparel GVC:

Given that the MFA was a departure from the basic GATT rules, and particularly the principle of non-discrimination in trade,[172] the calls for MFA withdrawals began in 1994. In the Uruguay Round of discussions, MFA IV was subsumed under the Agreement on Textiles and Clothing (ATC) on January 1, 1995, when the ATC came into force, under the control of the WTO.[173] The MFA finally expired 10 years later, on January 1, 2005.

Consensus among policy actors regarding the benefits of the phase out and the mechanisms of implementation with least disruption to the suppliers (specially the millions of apparel workers) was difficult to achieve (see for example, Cai 1997, Trela and Whalley 1990, Oxfam 2004). Some exporters wanted the MFA to be abolished,

[171] Two interesting things occurred in this instance. Some quota-hopping countries invested in developed countries themselves, as a "back route" access, which was the cost effective option. Secondly, some established exporters actually invested in the importing countries themselves by moving offshore and centrally controlling the production, design and marketing, assuming the role that was hitherto fulfilled by the developed country customers (Cai 1997).

[172] See WTO press briefing at http://www.wto.org/English/thewto_e/minist_e/min96_e/textiles.htm, accessed on June 30, 2006.

[173] The ATC was a transitional arrangement, with a finite lifespan of 10 years, to expire on 1 January 2005. The ATC phase provided for the progressive phasing out of the MFA and other non-MFA restrictions through a four-stage integration of the T&C sector into the normal rules of GATT, starting from January 1, 1995. It was a liberalising process to aid gradual enlargement of existing quotas by increasing annual growth rates every year. It applied to all WTO members, regardless of their previous quota agreements under the MFA. Under the ATC, the WTO members were required to provide improved market access for T&C through tariff reductions or through the removal of non tariff barriers (such as environmental and quality standards). The rules regarding anti-dumping practices, subsidies and countervailing measures, and the protection of intellectual property rights had to be strengthened (Gereffi and Memedovic 2003).

while older apparel supplying countries, such as Hong Kong, Korea and Taiwan, who had the largest share of export quotas, were against it. Suppliers such as Bangladesh who entered the supply chain because of MFA quotas were also reluctant (CPD 2003, GTO&PPMA 2003). MFA quotas gave guaranteed market access and competitive advantage to many supplying countries, especially countries like Bangladesh. Post MFA market share can now only be gained or maintained through international competitiveness, of which price-factors is a critical element. Supplying firms and governments have to understand their comparative strengths along the supply chain, redesign the way the firms operate, remove policy level bottlenecks, and anticipate new buyer requirements. Therefore, while most LDCs could, in theory, gain from MFA elimination the degree to which MFA quotas are binding, effects of inter-developing country trade flows and quality upgrading complicates the overall picture of winners and losers. After the phase out, importers are likely go back to the oldest exporters such as Hong Kong and Taiwan, further weakening the bargaining power of countries like Bangladesh (Trela and Whalley 1990).

The need for changing supplier strategies, however, is not only due to the MFA phase out. Changes in consumer demands, entirely outside the influences of the MFA, have resulted in retailers rationalising their sourcing practices, in order to better position themselves in a fast changing market. This major restructuring will have an additional impact on the way apparel is sourced, eventually effecting the supplying firms and the policy makers responsible for providing them an enabling economic infrastructure (Gereffi and Memedovic 2003, World Bank 2005).

Post MFA apparel GVC will retain its domination by large companies in the USA and EU, which will continue developing greater product and price specialisation[174]. Retailers (such as Wal Mart, Nike and Adidas) welcome the MFA phase out since they will benefit enormously from sourcing freely from more profitable locations. Governments and firms in exporting countries will invest more to attract buyers, but

[174] Gereffi and Memedovic (2003) predict this trend based on the rise of specialised stores selling only one item, such as clothes, shoes or office supplies and the growth of high-volume, low-cost discount chains.

the rents from this will go to these overseas companies (Gressner 2004)[175]. Recent studies on sourcing practices of international buyers finds that major apparel buyers are increasingly adopting sourcing strategies that seek to minimise their total costs throughout the supply chain rather than minimising the cost of procurement from the RMG factories who are the lowest down in the supply chain (World Bank 2005). Countries that are most dependent on apparel exports (like Bangladesh) are therefore going to be the most vulnerable to shocks to the supply chain structure (Gereffi and Memedovic 2003) and therefore, need to be most proactive in setting priorities in order to survive.

According to a study by the World Bank on the impacts of the MFA phase out for Asian suppliers (World Bank 2005), this relentless drive for total cost minimisation by overseas buyers poses tough challenges: (i) price competitiveness, (ii) quality, (iii) social and environmental compliance, and (iv) lead time. Below I discuss some of the predicted changes that directly impact the way demands for social and environmental upgrading will translate along a post MFA supply chain.

Changing Prices:

US clothing import prices under MFA have fallen continuously since 1996, similar to Europe and Japan. In an oversupplied, liberalised post MFA market, this trend is likely to continue, potentially bringing about deterioration in developing countries' terms of trade. This will be felt the most in the low value added basic products, where the profit margins were low to begin with (Baden 2002). This will mean that suppliers will have to rethink their operating costs while prioritising social and environmental investments in the context of declining profits.

[175] At the level of the developed country consumers, studies by the US International Trade Commission (ITC) project sharp falls in clothing prices due to the abolishment of the MFA quotas. The Gressner (2004) paper, published on behalf of a coalition of US importing and retailing associations[175], examines the impact of the MFA on the US consumers and is enthusiastic about the MFA phase out from a consumer benefit perspective. The ATC is termed as the most pro-poor and pro-middle class trade reforms in T&C in modern US trade history. US families will save billions of dollars a year[175] and enjoy permanent net gains in both GDP and employment.

Changing Value Chains:

As buyers rationalise and consolidate the post MFA supply chain, they are favouring suppliers who can provide a "full package" delivery. Previously East Asian suppliers have fulfilled these criteria, starting from product development, fabric sourcing, cutting, sewing, packaging, quality control, trade financing, logistical arrangements, reputation for reliability and good working relationships with individual buyers. Post MFA, this trend will increase sharply, leading suppliers to invest in vertical integration (US ITC 2004).

Some retailers are increasing the frequency of mid season orders and the "non replenishment" approach has resulted in smaller batches requiring flexibility among suppliers. This has meant that price, quality and short lead times will remain top priority areas for upgrading for the RMG suppliers (Baden 2002).

Gaining bargaining power as a first tier GVC member has never been more important for suppliers. Major EU retailers have reduced the number of their suppliers worldwide based on supplier performance rating through various Preferred Supplier Programmes. This trend is likely to continue post-MFA, where first tier or large-scale suppliers will be retained, who will be then subcontracting from a wider base of smaller RMG suppliers (Baden 2002). This implies that social-environmental compliance will potentially become more important for suppliers to maintain their position in the GVC, despite declining profits or prices.

Buyers are focusing on factors such as good human rights records, minimum wages, no child labour and good working conditions while making sourcing considerations. Presence of basic infrastructure (roads, railways, ports, airports etc.) supporting the buying process is also important. These include presence of international quality controllers and standardisation testing centres for establishing social-environmental compliance. (US ITC 2004).

Changing Non Tariff Barriers (NTBs):

While significant progress has been made in reducing tariff barriers, overall this has been counterbalanced by non-tariff barriers (NTBs) that persist and may even be on the increase in new and possibly more discrete forms (Fliess and Lejarraga 2005). A review of the notification process established under WTO's Negotiating Group on Market Access for Non Agricultural Products (NAMA) suggests that technical regulations (TBTs) such as social and environmental quality certification, price control measures and certain other measures are particularly frequently subject to concerns voiced about access to developed-country markets.[176] While recognizing that technical measures may serve legitimate purposes, LDC governments point out that they can be important obstacles to exports to developed countries whose technical regulations, standards and conformity assessment procedures may effectively serve as border-protection instruments (Fliess and Lejarraga 2005).

There is concern among analysts that, for LDC firms struggling after the MFA phase out, access to developed markets will be further significantly reduced due to use of social-environmental conditionalites as a NTB, as consumer preference for eco labelled garments as well as lobbying by protectionist domestic industries rise in importing countries. Overall, the LDC producers are shoring up to face eco-labels and social compliance certifications as a new market access barrier (GTO&PPMA 2002). Codes of Conduct (CoC) for suppliers have been gaining ground. The highest uptake has been for branded manufacturers (Gap, Nike, Adidas etc.); while merchandisers, high street multiples, specialist chains and supermarket chains are slowly catching on. The US brand name retailers have taken the lead while discount retailers are far behind (Baden 2002). There is no denying the fact that social and environmental compliance will be another priority area in the post-MFA survival strategies developed by LDC suppliers. The complex agenda of environmental and social compliance is further unpacked in chapter 3, where I examined the specific ethical trade issues confronting the Bangladeshi RMG industry.

[176] Reported NTBs most affecting apparel exports are essentially of three types, namely technical barriers to trade, customs and administrative procedures, and quantitative restrictions. Among TBTs, technical regulations and standards as well as testing and certification arrangements are the main problems, while customs valuation is another predominant problem (Fliess and Lejarraga 2005).

Annex 3.2

Social- Environmental Compliance and Bangladesh in the Apparel GVC

Social compliance in the apparel sector refers to safeguard measures undertaken as a part of corporate social responsibility towards the factory workers, as per standards set by the national legislation for working conditions as well as buyers' Codes of Conduct (CoCs). Social compliance is designed to look after the workers by ensuring them a workplace free from forced labour, child labour, all forms of discrimination, and guaranteeing them the right to fare wages, regular pay, wage benefits, the right to bargain collectively and a healthy and safe working environment (SEDF 2001, Saifullah 2005a, Siddiqi 2003). Social compliance also includes the adherence to national laws pertaining to environmental pollution control.

Hierarchies of Membership, Integration, Resource and Power:

Initially, the policy agenda around socially conscious apparel trade was set by importing country governments, and international institutions like the International Labour Organisation (ILO) and the WTO, who had formal claims to authority and secure access to political, institutional and fiscal resources (Osakwe 2003). The policy debate arena was always in formal settings, where interactions were regular, prescheduled and by invitation only (e.g. under the various WTO trade talks). The first non-tariff social issue to be attached to apparel trade negotiations was labour rights and standards, as embodied in the International Fair Labour Standards (IFLS), from the Tokyo round of GATT (**1973-79**). Significant progress in ethical trade occurred in **1984**, when the Generalised System of Preferences (GSP)[177] was amended to require LDC apparel exports to meet internationally recognised worker rights,[178] to be considered eligible under GSP. The industrialised countries were asking for a phased approach, which would begin with a declaration of intent on protecting workers rights, rather than a strict enforcement of legislative provisions. While the

[177] Please see Bhattachariya 1996 for a discussion of the GSP evolution and Bangladesh RMG's high dependence on EU GSP.

[178] These workers rights included freedom of association, right to organise and bargain collectively, prohibition of forced labour, minimum age for child labour, acceptable work conditions with regards to working hours, minimum wages, safety and health (Bhattachariya 1996).

policy goals were agreed upon, consensus around policy alternatives was hard to find. At the Preparatory Committee of GATT Uruguay Round (**1986**), the US raised the question of workers rights, but the issue was not included in the agenda for negotiation (Erzan et al 1990). Over time, the range of NTBs and policy instruments increased, and labour conditionalities were firmly a part of RMG trade by the time the protracted Uruguay Round (**1986-94**) trade negotiations concluded (Cai 1997, Cable 1990, Bhattachariya 1996). Eventually the policy network opened up to include more non state actors -- such as NGOs and trade unions - and although these societal groups became important in policymaking, the implementation was within the state agenda of maximising export share - overall giving the policy network a pluralistic character (Howlett and Ramesh 1995). Below I examine the actors most important to the Bangladeshi social-environmental compliance networks.

International Labour Organisation:

A significant actor in social compliance is the **International Labour Organisation (ILO)**. The ILO fulfils the crucial role of standardising labour requirements in an international context. Their bargaining power and institutional reach is unparalleled in the area of labour rights. Given their range of expertise in social issues in international supply chains, and their tripartite institutional set up, they were agenda leaders from early on in state directed negotiations (ILO 2004). The early conventions established the principles of the minimum age and the link to schooling. The Minimum Age Convention, No. 138 (and Recommendation 146) adopted in 1973 consolidated the provisions of the earlier conventions, including the education link, through, *inter alia*, its definition that "the minimum age of entry into employment should not be less than the age of completion of compulsory schooling". Elimination of child labour was adopted as a core labour standard with Convention No. 138 as one of the seven core conventions in 1996, and subsequently incorporated into the Declaration on Fundamental Principles and Rights at Work adopted in 1998. Recognizing that the elimination of child labour is a long-term process, but certain forms of child labour require urgent and immediate action, the ILO adopted Convention No. 182 (and Recommendation No. 190) in 1999 on the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour.

Convention No. 182 became the eighth core labour convention associated with the Declaration (ILO-IPEC 2004, US DoL ILAB 1996).

The ILO Definition of Child Labour:

Broadly, the ILO define "child labour" as any economic activity performed by a person under the age of 15, employment that prevents effective school attendance, and which is often performed under conditions hazardous to the physical and mental health of the child. ILO Convention 138 emphasises the Minimum Age for Employment, a terminology adopted in **1973**, which is defined as that age which is not less than the age of compulsory schooling and shall not be less than 15 years. The ILO allows for exceptions based on the conditions of work in poorer countries whose educational facilities are under developed. In these cases, minimum age is specified as 14 years and the minimum age for light work is reduced from 13 years to 12 years. Generally, child labour does not refer to performing "light work", which is work undertaken after school. It also does not include young people being involved in family businesses or farms. However, the ILO Convention 138 is particular in defining "light work" as work that is not likely to harm the child's health or development, or disrupt school attendance. It disallows any young person less than 18 years of age from undertaking dangerous work that is likely to endanger their health and safety or affect their moral development (US DoL ILAB 1996).

The adoption and implementation of international labour standards remains the ILO's main programme focus against child labour. In 1992, ILO started unifying its approach under one technical assistance programme, called the InFocus Programme on the Elimination of Child Labour (IPEC) in 1999, and focused on supporting advocacy and providing technical assistance for strengthening the capacity of countries in application of the child labour convention(s).[179] The design of IPEC recognised the need for policy network building: IPEC partnerships sought to address and create national, regional, and eventually global networks of technically competent and committed institutions. It also highlighted the weaknesses of the existing networks by funding research and acting as an information clearinghouse. It

[179] Source: "About IPEC" website at http://www.ilo.org/public/english/standards/ipec/about/implementation/ipec.htm, accessed on July 12, 2006

also targeted the problem of fragmented conceptualisations and low issue ownership across different stakeholders, by focusing on capacity building and empowerment through joint project planning and implementation among network actors. IPEC also created an important policy space for tripartite policy consultations and action, which opened up the social compliance network wider than ever before.[180]

National and International NGOs:

The global debate on apparel trade labour rights grew to encompass voices of new network actors - the millions of factory workers, whose livelihood depended on outcomes of negotiations where they previously had no real access (Hewett and Amin 2000). They were represented through the **international NGOs** such as the Clean Clothes Campaign (CCC), Fair Wear, Ethical Trade Initiative UK, Oxfam International, Sweatshopwatch, etc. Broadly, they are powerful advocacy actors in intersecting networks, involved in drawing up policy guidelines on important NTB issues for labourers in the apparel sector and coordinating the activities of networked affiliates, disseminating information of relevance to the daily work of NGOs in the sector, undertaking solidarity action in support of workers whose rights are being denied, and lobbying intergovernmental organisations and institutions to further the interests of workers through in decisions made at international levels. However, the reach of these non-state actors in LDCs is only as strong as their relationships with powerful local NGOs. This is especially true in the case of labour rights in the Bangladeshi RMG sector (Paul-Majumder and Begum 2006, Buckland 2003).

Trade Unions:

Trade unions are another powerful driver of social issues with their unique set up of bringing together the workers and the formal policymakers (Roberts 2002b). The US based International Textile, Garment and Leather Workers' Federation (ITGLWF) has been active in building a policy network of CSR across apparel retailers and their suppliers as well as LDC governments and smaller trade unions. For example, ITGLWF is affiliated with a number retailers who source in Bangladesh, who they

[180] Source: "IPEC Networking" website at http://www.ilo.org/public/english/standards/ipec/networking/index.htm, accessed on July 12, 2006.

have networked with a number of Bangladeshi trade unions, such as Bangladesh Homeworkers' Women Association (BHWA), Bangladesh Independent Garment Workers Union Federation (BIGUF), Bangladesh Jute Textile Workers Federation and Bangladesh Textile and Garments Workers League (BTGWL).[181] The ITGLWF also works with the developed country retailers in translating labour concerns into practicable action through private sector initiatives. For example, as a result of ITGLWF's involvement, the Clothing Manufacturers' Association of the United States of America (representing RMG MNCs as employers) and the Amalgamated Clothing Textiles Workers' Union (representing American workers) signed a national branch collective agreement in 1996, which included a code of conduct applicable to enterprises within the US and their subcontractors in LDCs, which established minimum standards regarding the initial list of issues, which included wages, hours of work, forced labour, child labour, freedom of association, non-discrimination, occupational safety and health. (US DoL ILAB 1996).

Apparel Suppliers and State Actors:

In the initial stages of social compliance policymaking, governments were active only while formulating, negotiating and enacting international level legislation and trade remedies with LDC governments and NGOs, but the social compliance policy network was changing with new policy alternatives initiated by these governments emphasising accountability along the supply chain for labour rights. The US Department of Labor (US DoL) was a pioneer in opening the policy network to include LDC suppliers. The DoL, with the help of various American apparel producers' coalitions took numerous steps to "clean up" the sector at home and abroad. It stepped up its inspections along the international supply chain, which opened up the network to enable the western media to monitor progress and influence decisions at the policy level (US DoL ILAB 1996).

LDC governments remained important policy actors, and by and large they reacted unfavourably to developed country concern for labour rights, when repeated unsuccessful attempts were being made by LDCs at negotiating quota benefits and

[181] Source: ITGLWF website at http://www.itglwf.org/pdf/05-11-08%20-%20ITGLWF%20Affiliates%202.pdf, accessed July 7, 2006

duty free access; failures that contributed much to the financial hardship of workers - the very group the labour lobby were trying to protect. The LDC governments saw social compliance as "an unequal contest of strength with the developing countries" (Bhattacharya 1996: 28). The motivations behind the proposed social compliance remedies were examined with suspicion among Bangladeshi policymakers, who shared the views expressed at the conference of Labour Ministers of the Non Aligned Movement (NAM) in 1995.[182] **Development agencies** also cautioned against the uniform and mandatory nature of labour demands. The **1995** World Development Report suggested that linking trade with labour issues raises two very important points - the distinction between "basic standards" vs. "historical standards", and the cost implications of these linkages for the supplying countries and the labourers.[183] While the LDCs could understand sanctions on violations of basic labour standards, they argued that interpreting evidence of such infractions opens up the possibility of miscarriage of justice due to cultural differences and the lack of clear evidence (Bhattachariya 1996).

[182] Deep concern was expressed at the gap in issue perception among the powerful importers and the affected supplier countries. They felt that labour policies should be practiced by each country as considered appropriate to its own socio economic conditions, and that such coercive bargaining went contrary to the voluntary nature of the ILO Conventions. They expressed fears that such pressure will negate the benefits which trade liberalisation is designed to bring about. (NAM 1995). While the poorer countries recognised that disparate labour standards affect terms of trade and inhibit fair competition, they argued that different labour endowments (availability of unskilled labour forces) form the very basis of international comparative advantage in RMG. Furthermore, developing countries argued that NTBs to alleviate labour conditions may result in unwarranted consequences on the precarious employment conditions in LDCs. As a result, insistence by importers on suppliers meeting minimum labour standards to ensure continued participation in global value chains was met with scepticism among LDC policymakers and trade analysts as a new form of trade protectionism and value chain domination.(Bhattachariya 1996).

[183] The first category of labour standards is associated with globally acknowledged human rights, such as elimination of forced labour, gender discrimination, etc., while the latter set is more problematic, it has to do with wage and non-wage benefits that are propelled by national development levels

Annex 3.3

Factory Fires And Stampede Related Deaths And Injuries In Bangladeshi RMG

The problem caught the attention of international media and activist groups in the late 1990's. The Clean Clothes Campaign (CCC) started an action petition in **2000,**[184] which focused on the Chowdhury Knitwear factory fire in Narsingdi, where the death toll eventually rose to 53.[185] The CCC petition stated,

> "This was obviously not the first time in Bangladesh. As was communicated to us, in the last 10 years there were more than hundred fires in factories in Bangladesh. More than 5000 workers were injured in these fires and 246 workers were killed."

In August **2001,** 24 garment workers died in a factory fire, which brought the total to 82 deaths in 2001.[186] According to the ITGLWF press release following the incident,

> *"The latest tragedy comes nine months after the Chowdhury factory fire which claimed 48 lives, and less than a year after the fire at Globe Knitting which left 12 dead."*

In May **2004,** an electronic transformer exploded in an alley behind the Misco Supermarket Complex in Dhaka, which illegally housed garment factories in the upper stories of a supermarket. A fire broke out outside the supermarket and a false fire alarm was raised, leading the workers to panic and throng the narrow emergency exits and the main exit of the supermarket. The main supermarket exit was locked, which resulted in 9 women dying and over 50 injured in the stampede.[187] The reason for the main exits being closed highlighted three new issues - that factories had inadequate fire exits (often these were metal staircases added externally to the main building since original buildings did not have provisions for fire exits.

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[184] Source: Clean Clothes Campaign at http://www.cleanclothes.org/news/00-12-00.htm, accessed on March 16, 2006.
[185] There is a discrepancy in the numbers reported for the workers who died.
[186] Source: ITGLWF press release at http://www.cleanclothes.org/news/01-08-17.htm, accessed on March 16, 2006.
[187] Source: Clean Clothes Campaign at http://www.cleanclothes.org/urgent/04-06-30.php, accessed on March 16, 2006.

The metal structures were not steady enough to withstand the weight of workers and tend to shake. During a fire evacuation, workers prefer to use the main exits, which are the original staircases of the building); factories do not adequately train their employees on safe fire evacuation (the stampedes could have been avoided if workers had been trained); and that main exits were kept locked even when the factories were running because of security issues.

In **April 2005**, an accident in the **Spectrum** garment factory in Savar, Dhaka, led to factory compliance being addressed in a comprehensive manner for the first time in Bangladesh by policy makers. The nine-storied garment factory collapsed killing 62 workers and injuring hundreds. The collapse was significant not only because of the number of casualties, but also since Spectrum was a well reputed medium sized factory, who were making clothes for the European hypermarket giant Carrefour at the time of the accident. Spectrum was operating in their purpose built premises, and was apparently in full compliance with buyer codes. Investigations following the accident revealed that the 3 year old building was structurally unsound, and was constructed using materials not suited for a nine-storey building. RAJUK (Rajhdhani Unyan Kartripokkho, the statutory body responsible for ensuring all buildings meet legal safety requirements)[188] officials further said to Reuter's news service that the building was erected on marshland without RAJUK permission. The Spectrum accident changed the conceptualisation of "compliance defaulters" at the national and international levels. First of all, it revealed to the public and the policymakers that the non-compliance problem ran much deeper than the small sized and financially weak segment of the RMG industry that was usually thought to be non compliant with buyer standards - and that non compliance with national laws and buyer codes can occur regardless of factory size or reputation.[189] Secondly, since Carrefour was involved, the Spectrum accident caught the attention of European and American buyers unlike after previous accidents, and energised buyers operating in Bangladesh into becoming interested in dialogue with each other as well as with

[188] Source: Banglapedia at http://banglapedia.search.com.bd/HT/R_0087.htm, accessed on March 17, 2006

[189] Source: Daily Star at http://www.thedailystar.net/magazine/2006/03/03/cover.htm, accessed on March 15, 2006

state actors on finding a solution. [190] As we will see later in the chapter, the Spectrum accident was an important catalyst that gave birth to the new phase of the social-environmental compliance policy network in 2006.

2006 was particularly tragic for garment workers. Two large-scale disasters struck in February 2006. The first was on February 23, when a fire at **KTS Textile Industries, Chittagong,** left 61 dead, and approximately 100 injured. The deaths occurred due to a stampede following an electrical short circuit inside the building, and similar to the Misco Supermarket incident, the main exit was locked at the time, preventing the workers from evacuating.[191] Similar to Spectrum, KTS is a reputable company, producing for large US companies and were in full compliance with buyer codes, as claimed by their representatives. Interestingly, media investigations into the KTS fire was more in depth than in previous accidents, reflecting a more maturing press rhetoric surrounding non-compliance, and this broadened the kinds of issues that were associated with non-compliance in the public sphere. According to the newspapers, KTS was not only providing inadequate fire exits, but they were in violation of numerous additional labour laws such as forced overtime, seven-day work weeks, payment of below subsistence level wages, denial of legal maternity rights, etc.[192]

The second tragedy in early 2006 struck a few days later; on February 25 the five-storied **Phoenix Building** collapsed in Dhaka, killing 22 garment workers and injuring more than 50. The building housed Phoenix Garments and was similar to Spectrum, in that it was a well-reputed firm, who had illegally constructed floor extensions, in violation of the factory laws.[193]

The loss of so many lives within one week and resultant buyers' concern about inappropriate conduct meant that the factory owners and the trade associations were faced with fresh prospects of losing market shares in a post MFA supply chain, as

[190] See, for example, the coverage by the Clean Clothes Campaign at http://www.cleanclothes.org/news/05-04-12.htm, accessed on March 17, 2006
[191] Source: the Daily Star at http://www.thedailystar.net/2006/02/25/d60225060163.htm, accessed March 18, 2006
[192] Source: the Daily Star at http://www.thedailystar.net/2006/02/25/d60225060163.htm, accessed March 18, 2006
[193] Source: Daily Star at http://www.thedailystar.net/magazine/2006/03/03/cover.htm, accessed March 15, 2006

well as facing compliance pressure from new sources. Trade Unions, national and international NGOs, local and international news media and industry members renewed the much-repeated calls for fully complying with Bangladeshi laws on factory safety, which were a part of buyer CoCs. Observers noted that the need for being socially compliant were reiterated only after accidents claimed lives, and accused the government of lacking serious commitment to the issue, which allowed this situation to prevail.[194]

In **March 2006**, the Bangladeshi representatives of the Make Trade Fair Alliance (MTFA) and their member trade unions held a mass hearing under the banner "Women Labour in the Context of Occupational Hazard and Safety and Security", for the garments workers.[195] The representative legal activists made the statement that while penal codes, criminal acts and factory laws were in place to ensure a safe working environment, the main accountability for these deaths lies with the regulatory bodies, specially the Chief Inspector of Factories (Ministry of Labour) for not auditing factory sites as per laws; and RAJUK for allowing the construction and extension of illegal buildings that house garment factories. The BGMEA and BKMEA were deemed responsible for not penalising economically powerful factory owners who were in open breach of local laws regarding building planning permission. The trade associations were also reprimanded for failing to ensure the workers and factory management were up to date on the laws and the rights of the workers.

[194] Source: NewAge at: http://www.newagebd.com/2006/mar/04/busi.html#2, accessed July 21, 2006
[195] Source: Bangladesh Observer at http://www.bangladeshobserveronline.com/new/2006/03/08/economic.htm, accessed on March 19, 2006.

Annex 3.4

Wage Disputes in the Bangladeshi RMG sector in 2006:

On May 20th 2006, a garment worker died in the wage protests, police fired on agitating workers, and 200 workers were reported as injured.[196] On May 22nd another worker died, two factories were set ablaze by rioters, over 100 factories were looted, 12 buses that were parked near some factories being looted were burnt, many demonstrators were injured and arrested.[197] The next day, another factory worker was killed in police fire, workers looted 250 new factories, activists damaged over 200 vehicles on the roads, and many people were arrested. Dhaka city came to a standstill and the situation got worse. May 23rd was especially tragic and was later termed as "Black Tuesday" by the press. According to the media reports, large contingents of police, including paramilitary units from the Rapid Action Battalion (RAB), used rubber bullets, baton charges and tear gas in an effort to break up determined protests by thousands of workers, who threw up barricades and blocked roads. The BGMEA as well as affected factory owners expressed their dissatisfaction at how quickly worker dissatisfaction with wages had turned into mass factory lynching, instead of peaceful dialogue or non-violent protests.[198] On May 23rd, factory owners took to the streets to protest against their employees being beaten and raw materials worth millions being looted, resulting in heavy losses that would lead to bankruptcy for some RMG firms.[199]

To divert the anger of workers, the trade union leaders issued an ultimatum to employers for a minimum monthly wage of 3,000 taka ($US 43). Protests erupted again on June 1-2 as workers demanded a 3,000-taka minimum wage as well as mandatory holidays on Fridays, transport allowances, overtime facilities and an end to night work for women workers. As many as 70,000 workers from the Dhaka

[196] Source: the Daily Star at http://www.thedailystar.net/2006/05/21/d6052101044.htm, accessed May 30, 2006.
[197] Source: the Daily Star at http://www.thedailystar.net/2006/05/23/d6052301011.htm, accessed May 30, 2006.
[198] Source: the Daily Star at http://www.thedailystar.net/2006/05/23/d6052301033.htm, accessed May 29, 2006.
[199] Source: the Daily Star at http://www.thedailystar.net/2006/05/24/d6052401033.htm, accessed May 29, 2006.

Export Processing Zone (DEPZ) took to the streets on June 2nd, and clashed with police armed with batons and tear gas. Street protests, property damage, factory closures and police action continued all of June 2006.

The understanding of social compliance problems by stakeholders had grown from the days of news coverage about garment factory fires that was typically followed by BGMEA and BKMEA reinstating their programme of conducting fire drills for all factories. However, at the official levels, the narrative now turned towards denial of responsibility and blaming outsiders. The government, RMG employers and the media denounced the unrest as the product of a foreign conspiracy. Mr. Mannan Bhuiyan, the then Minister for Rural Development and Cooperatives and the Secretary General of the ruling Bangladesh Nationalist Party (BNP), said those involved in arson were "enemies of the country" and accused "outsiders" of staging the violence. BGMEA and other employer groups blamed a "conspiracy by a neighbouring country". Many government ministers said that there were only few workers involved in the agitations, inferring the involvement by the then opposition party, the Awami League, as a part of planned opposition agitation before the next general elections to be held in early 2007.[200] There was further speculation about the origin of such unrest, with some policy makers directly blaming India and the US for wanting to cripple the Bangladeshi RMG sector.[201]

The riots were an expression of long running dissatisfaction with the working conditions faced by 1.8 million garment workers. The minimum monthly wage of Tk. 930, which was fixed in 1994, was yet to be implemented in many factories.[202] According to an ITGLWF press briefing in May 2006[203] the Bangladeshi factories are characterised by

[200] Source New Age website at http://www.newagebd.com/2006/may/25/index.html, accessed July 24, 2006
[201] Source Holiday website at http://www.weeklyholiday.net/2006/260506/front.html, accessed July 27, 2006
[202] Source New Age website at http://www.newagebd.com/2006/may/25/index.html, accessed July 24, 2006
[203] Source ITGLWF website at http://www.itglwf.org/list.asp?OrgType=Docs&Language=&Type=Press&Order=Date&start=0&finish=19, accessed July 17, 2006

"...excessive long working hours, low rates of basic earnings, abuses in piece rate payments, late payment of wages, child labour, issues of structural and fire safety, corrupt police practices of charging workers on the flimsiest of evidence, the practice of supervisors acting as labour contractors who illegally rake off a percentage of workers' wages, the practice of using hired goons to terrorise and intimidate workers."

The policy arena was divided into two neat halves - the workers on one hand demanded better and regular pay, and the RMG employers who said that RMG wages were not inadequate, but agreed that non payment of wages has to end. This difference in views arises from different rationalities behind framing arguments. Low wages in RMG can be explained with the argument that, in the presence of an excess supply of labour, wages will be low irrespective of the productivity level. Therefore, even if some factories achieve very high labour productivity and make high profits, wages would still not be high in those factories, which explains why regardless of factory size, RMG employers across the board had a common wage scale. Additionally, the wage rate has been low because the legal minimum wage for this sector has not increased during the past 10 years or so. It is often argued by BGMEA in press statements that despite the unchanged legal wage rate, the actual minimum wage in the sector has increased in response to the adjustment with the increased standard of living and inflation. However, full inflation adjustment is never undertaken, as maintained by the trade unionists. From a certain point of view trade association members legitimately argued that employers were already providing wage rates higher than the market-clearing ones, and as such the industry is characterised by efficiency wages. However, the trade union activists approached the problem from a different angle; they asked if efficiency wage is a fair wage. The answer to this depends on the concept of decent work, which encompasses the quality of work and social values along with the wages provided.

From this discussion it is clear that once again, the stakeholders were divided over the severity of social compliance violations and their own accountability, as happened in the child labour banning case. The BGMEA and the RMG employers

agree that certain factories have deprived workers for years,[204] and have been acting on solving it on an ad hoc basis, but overall they disagree with the trade unions regarding the severity of the problem. Following the May-July protests, ITGLWF general secretary Mr. Neil Kearney expressed his dissatisfaction with the current cognition of issues by the BGMEA. He said in a press release:[205]

> "We have repeatedly warned of the growing frustration at the payment of starvation wages, the excessive hours of work, the cheating on piece work and the falsifying of overtime rates, the abusive treatment and the appalling health and safety conditions. But the BGMEA has brushed aside the notion that the violence is the result of low wages and poor conditions, claiming that workers were 'well paid and enjoyed good conditions' Unfortunately, this sort of head-in-the-sand attitude is undermining the huge efforts that have been made to try to stabilise and grow the industry in the post-MFA climate."

Given this atmosphere of mistrust and conspiracy theories, the policymaking network for social compliance was, perhaps, at its most volatile in Bangladesh.

While factory fire safety was mainly handled by state level actors and trade associations, the new social compliance hot topics such as irregular wage payment, illegal overtime and maternity benefits, were taken up as projects by stakeholders from a wider range, such as trade unions, international NGOs, BGMEA, BKMEA, buyers and suppliers - albeit without an integrated institutionalised framework. Interactions were project based, and as a result, effective policy momentum had not built up and many opportunities remained unaddressed in this loose policy network, which resembles an issue network according to the Rhodes and Marsh typolgy. However, specific interventions were being designed to overcome the communication gaps within the overall policymaking network. Development partners such as UK government's **Department for International Development (DfID)** and **the German Federal Government's GTZ** were initiating changes to an

[204] Source: New Age at: http://www.newagebd.com/2006/may/25/front.html#e2, accessed July 23, 2006.
[205] Source: Daily Star at http://www.thedailystar.net/2006/05/28/d6052801106.htm, accessed July 23, 2006

existing scattered network, by newly focusing on supporting a wider range of non-government institutions that can variously act as intermediaries, advocates, and technical advisers in their field of RMG compliance. Recently they are getting involved in supporting progressive institutions that share CSR values such as the **Bangladesh Enterprise Institute (BEI)**, which is focusing on collaboration, replication of good practice and providing peer pressure to enable RMG sector wide pro-CSR changes through their CSR Roundtable Discussions. DfID is also supporting the NGO, **Phulki**, for providing ongoing crèche facilities in RMG factories for children between 6 weeks and 2 years, giving lactating mothers access to their infants during working hours as a part of maternity benefits requirements in buyer codes. The NGO works together with factory owners, workers, buyers, trade associations and the GoB. The initiative has been hugely successful and led to the widespread establishment of day care centres in garment factories in Dhaka.[206] DfID has also jointly sponsored Phulki with WaterAid, which works explicitly with the children of garment workers, using child-to-child approaches for hygiene promotion.[207]

The multi donor organisation, **SouthAsia Enterprise Development Facility (SEDF)** is working as the secretariat of the **Bangladesh Garments Buyer's Forum** (SEDF 2001). Part of its responsibility as coordinator is research on social compliance issues with the objective of facilitating a common understanding of issues. Consequently, the SEDF has signed a MoU with the BGMEA on a social compliance crash programme in July 2006.[208] BGMEA will organise four workshops and seminars under this agreement focusing on child labour monitoring, safety training and fire-drill and updating of the workplace improvement plans (WIP).[209]

Buyers have also become more active in promoting social compliance ever since the Spectrum accident outside of their CoC requirements. Certain European buyers such

[206] Source: Local Consultative Group of Donors Meeting website at: http://www.lcgbangladesh.org/HealthandPopulation/reports/Final%20report.doc, accessed July 23, 2006
[207] Source: UK House of Commons Website at: http://www.publications.parliament.uk/pa/cm200304/cmhansrd/vo040510/text/40510w16.htm, accessed July 20, 2006
[208] Source: BangladesherDak at: http://www.bangladesherdak.net/modules.php?op=modload&name=News&file=article&sid=6848, accessed July 19, 2006
[209] Source: Financial Express at: http://www.financialexpress-bd.com/index3.asp?cnd=7/9/2006&section_id=7&newsid=30456&spcl=no, accessed July 20, 2006

as Carrefour and Karstadt Quelle have begun liasing with the Clean Clothes Campaign in starting an enquiry into the causes of the accident. Most of the large buyers have indirectly increased the span of the compliance network by encouraging their RMG suppliers to getting third party certified (such as SA8000 and WRAP, along with ISO9000), thereby creating a relationship between several **international certifying agencies** and RMG firms. Karstadt Quelle has also partnered with the **Bangladesh Centre for Advanced Studies** (BCAS) in promoting social compliance in 22 firms supplying to them.[210] While new relationships are being made, old ones are changing. Various Bangladeshi **trade unions** have also started awareness campaigns along with projects providing legal advice to workers. Their work programme is often affiliated with **NGOs** and **international trade unions.**[211] Other than BGMEA's involvement with NGOs in providing health care for workers, BKMEA and Nari Uddog Kendro (NUK) have started a project promoting social compliance for 100 selected factories in 2005. This is in addition to the awareness raising seminar series for BKMEA members regarding the costs and benefits of CSR.[212]

After the riots in May-June 2006, the minimum wage aspect of RMG compliance came to the forefront of national level policymaking. A multi stakeholder "**Minimum Wage Board**" was formed in early June immediately after the first round of street riots, headed by the Ministry of Labour and Employment, to deal exclusively with wage issues in the RMG industry by reviewing current legislation and updating minimum wage scales.[213] A 10-point MoU was signed soon after, at a tripartite meeting on June 12th, where the BGMEA, BKMEA, and the government affiliated trade union Sromik Karmachari Oikko Parishad (SKOP) were present.[214] On June 22nd, a more extensive 16-point MoU was signed by BGMEA, BKMEA, and 16 trade unions. The new MoU was signed with the workers organisations that are directly related to the garment industry. According to the MoU, garment workers will receive appointment letters and identity cards, they will be allowed to form trade unions at garment factories, workers will enjoy one-day weekly holiday and other public

[210] Source: BCAS at: http://bcas.net/ProjectBrief/Ongoing.htm, accessed July 28, 2006.
[211] Source: Bangladesh Garment Workers Federation website: http://www.bgw-info.net/tu_dir/trade_union.php?page=list, accessed July 22, 2006.
[212] Source: BKMEA at: http://www.bkmea.com/social_compliance.php, accessed July 20, 2006
[213] Source: New Age at: http://www.newagebd.com/2006/may/25/front.html#e2, accessed July 27, 2006.
[214] Source: New Nation at: http://nation.ittefaq.com/artman/exec/view.cgi/51/28465, accessed July 28, 2006

holidays, regular workers will get overtime allowance if they work after eight hours, female workers will get maternity leave with their monthly salary, and a wage board will be formed to fix the wages for garment workers within three months.[215]

At this point, a divide between the trade unions operating in the RMG factories became evident. At the national level, trade unions were unhappy with their representation in the wage commission and threatened fresh street agitation. This threat led to the Labour Minister calling an emergency meeting with the labour leaders on July 6th, where it was explained that the wage board had already met 11 times and was on the verge of finalising the new wage structure, therefore a change of membership would delay a much needed resolution. The 16 member trade unions then agreed to submit a proposal of wage categories.[216] However, agitations continued outside of formal dialogue, over extended wage issues between individual factory management and their workers. For example, on July 10th, several thousand workers inside and outside Dhaka Export Processing Zone (DEPZ) were on strike for realisation of demands including higher overtime bill, timely payment of salary and the cancellation of termination of 35 workers. According to the DEPZ officials, such termination is lawful since workers can be dismissed without notice with full termination benefits. On the same day, workers of Universe Sweaters Ltd., a factory outside the DEPZ, refrained from work demanding rise in their overtime rates. Terming the existing rate of overtime payment that ranges from Tk 11 to 12 an hour as inadequate, workers warned of not resuming duties until the overtime benefit is raised. Workers of Intraco Sweaters Ltd., a factory adjacent to the DEPZ, also observed strike protesting management decision to change salary payment date. Earlier on July 8th, workers of the factory had physically injured 5 middle managers, protesting the decision.[217] Given these agitations at individual factories, the labour leaders who were drafting a wage category draft, did not wait for the realisation of the MoUs that they were signatories to and supported the street level agitation instead, and this type of agitation became the norm in July 2006, regardless of the formal policy process of revaluating the wage structure laws. This suggests the

[215] Source: Daily Star at: http://www.thedailystar.net/2006/06/23/d60623012013.htm, accessed July 28, 2006.
[216] Source: Bangladesh Garments Workers website: http://www.bgw-info.net/news/news.php?page=details&news=148, accessed July 28, 2006.
[217] Source: Daily Star at: http://www.thedailystar.net/2006/07/11/d60711012817.htm, accessed July 28, 2006.

participants at the fringes of the policy network lack faith in formal dialogue and have a preference for piecemeal justice. This adds to the system-noise and makes policymaking in a time bound scenario particularly hard to achieve.

Annex 4.1

Questionnaire for Donors - DfID

As a donor participant in the recent MFA Forum, what kind of demands were articulated requiring donor assistance?

What gaps do you thinks donors can target in achieving social compliance for the RMG sector?

What do you think should be done to help the small RMG firms?

Annex 4.2

Questionnaire for Social Compliance Auditor:

What kind of RMG firms in Bangladesh are eager to become compliant?

What is your opinion of the **corporate culture in Bangladeshi garment factories** in general? Are they **open** to Social-Environmental issues? Do they think its a **barrier** to trade? Both?

What kind of skills do you think a company needs to succeed in compliance? Is this related to firm's size/age/upper management vision? Upper management commitment?

Why do you think **small sick RMG firms in Bangladesh are struggling with non compliance?**

How big a barrier do you think "**cost of compliance**" is for the small/medium/large RMG firms?

What are **some other the barriers** firms face while becoming compliant? Understanding/Learning/Changing?

What do you think is the **driving force** behind RMG firms becoming compliant?

What do you think the **BGMEA/Ministry of Labour/Ministry of Commerce/Ministry of Environment** can do to help firms become compliant?

Annex 4.3

Questionnaire for RMG Firms that have undertaken environmental actions

A. BASIC QUESTIONS ON ENVIRONMENTAL UPGRADING EFFORTS:

1. What actions have you taken?

1-DOE CLEARANCE

2-buyers CODE OF CONDUCT GUIDELINES)

3- ENVIRONMENTAL POLICY

4-ENVIRONMENTAL MANAGEMENT PLAN

5-ISO 14000 CERTIFICATION

6-ETP

2. Do you think it will have any positive **environmental effects?**

1-Yes/

2-no

3. **benefited financially** from environmental upgrading?

1-Yes, through increased order quantities

2-Yes, through better prices

3-Yes, we have used it to attract new buyers

4-Yes, we have saved money

5-No but we have better working relationships with buyers

6-No, but might do in future

7-No, did not think of it in terms of financial gain

8-No, we do not see any clear and direct financial benefits from these efforts

B.BUYER GUIDEBOOK/ Code of Conduct:

1. What are the typical measures that buyer guidebooks suggest for environmental upgrading?

1-implement an EMS

2-have your own environmental policy about factory air/water quality

3-get ISO 14000 certification

4-get DoE certification

5-other :_____

C.ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS):

1. Who helped to do this?

1- Outside consultant/

2- somebody from buyer's office/

3-own top management/

4- own middle management/

5- other ____

2. Are you facing problems maintaining your EMS? Yes/no

If yes---

1-cannot cope with the task of implementing due to **complicated processes**

2-too **costly**

3-too **difficult to monitor**

4-too difficult to make **time** for staff

5-**other issues** are more important

6-staff have problems **understanding components**

3. If you have **stopped your EMS**, then was it because of the following:

1-we started working for **buyers who did not want EMSs**

2-we realised that **getting a DoE clearance was enough**

3-it was **not worth it financially**

4-the **buyers do not ask for it after the first time**

4. If you have an EMS, **but have not gotten ISO 14000/ other Standard Social Responsibility Certification**:

1-Would you consider getting it?

2-If yes, why? _____

3-If not, why not? Too expensive/ not enough information,/benefits unclear

4-have your buyers suggested getting certified?

5-have you received any information regarding the benefits to your business?

5. Do you **advertise your EMS**?

1-Yes/

2-No

6. To your knowledge, are **your competitors** thinking of doing EMSs?

1-Yes/

2- no/

3- some

7. Do you know of any other firms who have done EMSs? Are they

1-small/

2-medium/

3-large sized firms

D. DoE CERTIFCATION:

1. If you have DoE certification, what was your **main motivation**:

1-**buyers** request

2-needed it to get **gas connection**

3-threat of **DoE audit**

2. What **kind of problems** did you face while getting certified?

1-No problems, the DoE were helpful

2-DoE was not helpful

3-they wanted **bribes**

4-they created bottlenecks/**bureaucracy and paperwork** was too much

5-they **did not provide any guidance** on how to do IEEs or do EMPs or technicalities of ETPs

3. In order to get a DoE clearance did you have to furnish them with the following–

1–IEE?

2–EMP?

3--ETP?

4. What was the **amount of fees** that you had to give for the DoE certificate? 1-Tk._____

5. Did they ever **inspect your premises** before granting the Certificate?

1-Yes/

2-no

6. Have you applied for a **renewal?**

1--Yes

2--No, it wasn't needed

3--No, but we will do so

7. Do you **advertise** your DoE Certification?

1-Yes/

2-no

8. To your knowledge, are your **competitors** thinking of getting DoE certified? 1-Yes/

2-no

3-some

9. Do you know of any other firms who have gotten DoE certification? Are they

1-small/

2-medium/

3-large sized firms

E ISO 14000/ OTHER STANDARD SOCIAL RESPONSIBILITY CERTIFICATION:

1 If you have an ISO 14000/other Standard Social Responsibility Certification (outside of a DoE certification), **did you think it would be financially worthwhile to get certified?**

1-Yes/

2-no

2. **How much did it cost** to get ISO 14000/ other Standard Social Responsibility Certification?

1-ISO 14000 cost Tk. _____

2-Standard Social responsibility Certification cost Tk. _____

3. Now that you have ISO 14000/ other Standard Social Responsibility Certification, do you **advertise it**?

1-Yes/

2-no

4. To your knowledge, are your **competitors** thinking of getting ISO 14000/ other Standard Social Responsibility Certification?

1-Yes/

2-no

3-some

5. Do you know of any other firms who have gotten ISO 14000/ other Standard Social Responsibility Certification? Who? Are they

1-small/

2-medium/

3-large sized firms

6. What benefits has your firm gotten from doing this? _____

7. ISO 14001 does not offer guidance on ensuring compliance with regulatory and legal compliance requirements. **Did your firm face problems with getting certified due to interpretations made by the certification bodies, which were more restrictive than expected by your firm**?

1-Yes/

2-no

F EFFLUENT TREATMENT PLANTS (ETPs):

1. If your firm has an ETP:

How **long was your firm in operation before** the ETP was installed?

-------years

2. What were your **main motivation?**

1-buyer pressure

2-DoE pressure

3-market competitiveness

4-other _____

3. Where did you **find the information** on chemical wash waste water treatment?

1-DoE

2-engineering consultant

3-buyers' guidebook

4-other _____

4. To your knowledge, are your **competitors** thinking of installing ETPs?

1-Yes/

2-no

3-some

5. Do you know of any other firms who have installed ETPs? Are they

1-small/

2-medium/

3-large sized firms

6. What benefits has your firm gotten from doing this? _____

7. How **expensive** was it? Tk _____

8. Did your **buyers guarantee** you orders if you installed the ETP?

1-Yes/

2-no

Testing Hypothesis 1: Environmental Upgrading in Firms

Theoretical Base: Resource Based View and Organisational Theory

G CORPORATE CULTURE QUESTIONS:

1. **How critical** do you think environmental pollution from industries is in the Bangladeshi context?

1-very critical

2-moderate importance

3-not important at all

2. As you may know, buyers are pressuring some RMG firms to get environmental clearances. Do you think these pressures are **fair or unfair?**_____

If you think **it's fair**, please tick the statement(s) that represents your opinion the most closely:

1-I think it's fair; Bangladesh is not being unfairly persecuted

2-I think it's fair; because we need to remain competitive in a global arena of RMG suppliers

3-I think it's fair, because these social-environmental problems cited here are important in Bangladesh, and we can make a real difference

4-I think it's fair, because the buyers do/will give us more profits if we meet these demands

3. If you think **it's unfair**, please tick the statement(s) that represents your opinion the most closely:

1-I think it's unfair; Bangladesh is being unfairly persecuted

2-I think it's unfair; it is part of international trade conspiracy to hurt Bangladeshi trade

3-I think it's unfair, because these social-environmental problems cited here are not so important in Bangladesh

4-I think it's unfair, because our firms are already under so much stress
5-I think it's unfair, because the buyers are setting these standards without any real knowledge of Bangladeshi conditions
6-I think it's unfair, because the buyers are not giving us more profits if we meet these demands

4. **As an individual, how much do you think your actions can make a difference to improve the environmental pollution generated by your firm?**
1-a lot
2-some amount
3-not so much, even if I personally want to do something, the rest of my colleagues may not share my views

5. **As an individual, how much do you think your attitude about this is influenced by society at large?**
1-a lot
2-some amount
3-not so much

H ORGANISATIONAL CHANGE QUESTIONS:

1.**Who made the decisions** about changes to be made?
1-Top management/
2-lower management/
3-workers

2. Was top management in your firm **convinced of the costs/benefits** of making these changes?
1-Yes/
2-no

3. **What kind of changes** did you face?
1--changes made to the **way the firm functions in each of the sections** (process changes)

2--changes made to the **way wastes are disposed of** (end of pipe changes)

4. Did the **employees complain** to the top management about some initial problems with implementing environmental measures?

1-yes

2-no

5. What were some of your **initial problems**:

1-lack of **financial** resources

2-lack of **sufficient understanding** of the importance of environmental upgrading by employees

3-lack of **management capabilities** in this new area

4-other _____

6. How did the **employees react** to the proposed changes?

_____

_____

_____

7. **Was there one person** in the firm who adopted the challenge of making these changes happen as a matter of personal responsibility? (eco leadership)

1-yes

2-no

I LEARNING QUESTIONS:

1. **How did you get hold of the information** that you needed to make these changes?

1-buyers' provided the information

2-other sources, such as BGMEA, chambers of commerce, other firms, hired consultants

3-in house knowledge

2. After you got the information about what changes have to be made, **was it easy to calculate the costs, procedural changes needed and the time frame** of implementation?

1--yes, the instructions were clear

2--no, instructions were unclear /incorrect/out of date/insufficient

3. Was **"uncertainty" a hindering factor** in making a strategy for environmental upgrading? How so? What did you do to overcome it?

_____

_____

_____

_____

_____

_____

4. **How were the employees informed** of the changes that needed to be done?

1-organised seminars/meetings for employees

2-hung notices on notice board explaining what we were trying to do

3- Educated selected employees so they can act as trainers for other employees

5. **What problems did you face** while explaining changes to employees?

_____

_____

_____

_____

_____

_____

6. Do you think that the **low literacy levels** among workers was a hindrance? 1-yes 2-no

7. **Were the employees made aware of how important** it is for the company to get a certificate, regarding the customer focus, the money saved and the money earned?

1-yes

2-no

8. The process of implementation and maintaining the EMS/ISO 14000 has to be looked at as an **on-going process** of prevention and improvement. **Did all the employees understand and accept this?**

1-yes

2-no

_____

_____

_____

_____

_____

_____

I Testing Hypothesis 2: Environmental Upgrading in Economic Networks

Theoretical Base: Industrial Relations and Global Value Chain Theory

1. **What kind of buyers make non tariff demands?**

1-Large/

2-medium/

3-small

4-Well established/

5-New entrants

6-Bulk orders/

7-small order

8-Higher profit giving buyers/

9-Lower profit giving buyers

10-Buyers from the US/

11- EU

2. In your experience, **are buyers eager to invest** in RMG firms to build capacity?

1-yes

2-no

3. Do you believe that **buyers are getting more demanding** generally about socio-environmental causes?

1-yes

2-no

4. Do you believe that these social-environmental pressures/demands **will increase in the future?**

1-yes

2-no

5. Do your buyers **have their own company specific environmental standards?**

1-yes

2-no

3-If yes, what is it called? _____

4-If yes, what are some of its features?_____

6. Did the buyers make environmental conditions separate from other conditionalities?

1-yes

2-no

7. **Were you able to negotiate the clauses of environmental demands** made by your pressures? Under what circumstances was that? What was the outcome?

_____

_____

_____

_____

_____

_____

8. **What kinds of factors strengthened or weakened your bargaining position?**

_____

_____

_____

_____

_____

_____

K Testing Hypothesis 3: Environmental Upgrading in Policy Networks

Theoretical Base: Policy Networks Theory

1. **How efficient was the DoE** while getting DoE certification/ ISO 14000/ other Standard Social Responsibility Certification?

1-very helpful

2-helpful

3-not helpful

4-they wanted bribes

6-they created bottlenecks

2. **Do you think that the DoE should be more cooperative with RMG firms** in meeting environmental upgrading pressures, specially the recent reinforcements of the ETP installation requirement?

1-If yes, how? _____

_____

_____

_____

_____

_____

2-If no, why not? _____

_____

_____

_____

_____

_____

3. Do you feel that the **RMG sector should have a dialogue with the environmental policy makers** regarding getting more help from the DoE?

1-yes

2-no

3-If yes, then what issues would you like to be addressed?

_____

_____

_____

_____

_____

_____

4-If no, why? _____

_____

_____

_____

_____

_____

4. **What do you think of the following statements**: (strongly agree/ agree/ don't know/ disagree/ strongly disagree.)

1-the **government should give us tax breaks** for meeting these standards

2-the **government should give us easy term loans** for making investments to meet these standards

3-the **buyers should grant us "preferred business partner" status** for meeting these standards

4-the **buyers should invest in our firms directly** that so that we can afford to make these arrangements

5-the **buyers should back up these orders with higher profit orders**

5. **What kind of policy level changes would you like to see?**

1-I would like to **see the GoB become more active**

2-I would like to **see the GoB agencies become more competent** about what these demands entail

3-I would like to **receive free information** about how to meet these requirements

4-I would like to **receive guidance** (about hiring consultants, guideline specifications, etc.)

5-I would like **the BGMEA give us certificates of "ethical trading partnerships"**

6-I would like **to be promoted as a factory that meets all these requirements**

Annex 4.4

Questionnaire Cover Sheet for all RMG firms

Please fill out the following:

Name of Factory: _____ Code: _____

Person Interviewed: _____

Date of Interview: _____

Wish to remain anonymous? _____

Kind of product made: knitwear/woven

Years of being in production: _____years

Ownership: Bangladeshi/ Joint venture with foreigners/ 100% foreign investment

Size of factory: small/medium/large

What kind of orders do you take:
subcontracts from other firms
large orders to retailers' own buyers
smaller orders to buying houses

Majority of your goods are sold in: EU/USA/Other

What kind of production process do you have? Please tick
-dry process - **we do not do our own washing** (type A firm)
-wet process - we do our own washing but **only detergent wash** (type B firm)
-wet process - we do our own washing, **detergent and chemical wash** (type C firm)

What kind of non tariff pressures have you complied with: please tick

Child labour/ worker health and safety/ social/ environmental/labour unions

Annex 4.5

Questionnaire for Certifier in Bangladesh:

What kind of RMG firms become compliant?

What is your opinion of the **corporate culture in Bangladeshi garment factories** in general? Are they **open** to Social-Environmental issues? Do they think its a **barrier** to trade? Both?

What kind of skills do you think a company needs to succeed in compliance? Is this related to firm's size/age/upper management vision? Upper management commitment?

Why do you think **small sick RMG firms are struggling with non compliance**?

How big a barrier do you think "**cost of compliance**" is for the small/medium/large RMG firms?

What are **some other the barriers** firms face while becoming compliant? Understanding/Learning/Changing?

What do you think is the **driving force** behind RMG firms becoming compliant?

What do you think the **BGMEA/Ministry of Labour/Ministry of Commerce/Ministry of Environment** can do to help firms become compliant?

Annex 4.6

Questionnaire for Director, Department of Environment (DoE)

PART ONE: National Committee formed on Eco-Compliance of RMG firms

Establishing ETPs in each factory and arranging for low interest financing for RMG factories towards buying and installing the ETPs.

How were these policy goals arrived at? Who is leading this initiative?

What is the **institutional arrangement** for this project? The role of the DoE/BKMEA/BGMEA etc.? Implementation schedule?

PART Two: Understanding DoE certification for the RMG sector:

What are the main environmental aspects checked during RMG visits? Workplace environment? Waste disposal? Health and safety?

Does the DoE provide any guidance/assistance to factories wishing to do ETPs?

What do you think is hampering more garment factories from becoming socially-environmentally compliant? What's the solution?

Is the DoE involved in the recent BGMEA drive for compliance (fire safety)?

PART THREE: Understanding Cognition Problems/Strategic Uncertainty:

As a comparatively new government agency, the DoE has been putting in considerable efforts in strengthening its institutional capacity. How would you rate **budgetary constraints, small size and young age** as a problem in fulfilling the DoE mandate of regulation?

Do you think that **a more shared perception about environmental pollution among the public and the parliament** is needed in pushing forwards the DoE agenda?

For an organisation like the DoE, the staff members would require considerable training in environmental issues as well as environmental management. Do you think your **staff receives training that is adequate**?

Understanding at the level of the RMG firms: Do you find that the **average RMG company understands/easily accepts what is involved** in maintaining an EC?

PART THREE: Determinants of state and non-state actor participation in policy areas:

Is there any **cross-ministerial working group** for environmental policymaking?
How helpful are the **donors** in environmental policymaking?
How would you rate **private sector participation** in environmental policymaking? Do they only contribute in implementation? Does the DoE give them training/awareness building?

What is the role of civil society (NGOs/BCAS/etc.) in policy making and implementation for garments sector?

Annex 4.7

Questionnaire for Ministry of Commerce

RMG firms have been increasingly coming under pressures to become socially responsible producers of apparel. In January 2006 the Social Compliance Forum was formed.

--Under phase one of the project, the **Jo-In code** was supposed to have been finalised.

Have the Jo-In compliance issues been changed through discussion?

--Which organisations are members of the two **Task Forces**?

How was the Task Force's Worker Safety and Labour Standards written and finalised?

How far have the Task Forces gone towards implementing their Work Plans? Would you say that the work progress has been fast or slow?

--What are the main lessons learnt so far from the Labour Standards Task Force?

---What are the main lessons learnt so far from the Health and Safety Task Force?

--What problems did the **SCF** face, so far? Were there institutional barriers? Were there budget and time shortages that hampered smooth implementation? Lack of staff who are trained in social compliance?

-- In the past, BGMEA, ILO, Ministry of Labour etc., have done a lot in areas of social compliance, but never before have we seen a united effort as this time. What are the strong points of the SCF that will help it succeed?

--The policy agenda for social compliance seems to have been born with **foreign donors** (UNDP and the MFA Forum). How does your office negotiate and bargain

with them regarding setting policy goals and implementation mechanisms better suited to the Bangladeshi local situation?

--Do you feel that at present, your office has sufficient support from other ministries to carry out its work on compliance? If not, why not?

--In the post MFA market, Bangladeshi garment factories are struggling to keep afloat. How important do you think social compliance is, in this context?

--Do you feel that "social compliance" is seen as a barrier to economic growth by garment factories/trade associations?

--Do you find that the average small garment factory understands what costs and benefits is involved in becoming compliant?

--How important do you think "lack of understanding" has been as a barrier to social compliance? Do you think that the complexity of social compliance challenges facing garment factories is stopping them from becoming proactive in policy dialogue?

Annex 4.8

Questionnaire for RMG Buyers

PART ONE: Identifying the basics:

Name of Company: _____

Name of Interviewee: _____

Date of Interview: _____

Anonymous? _____

Does your company represent :

- branded clothes (which brand? _____)
- retailer
- supermarket
- department store
- discount chain
- mail order catalogue
- importer for a retailer or retailers

- large retailer
- medium retailer
- small retailer

- non specialist
- specialist

Where do your sourced clothes go? (EU or USA or both)

How many Bangladeshi RMG firms supply to you? (approx)

Are most of your regular suppliers -

--vertically integrated with backward linkage

--stand alone factories

Do you have fixed Bangladeshi RMG firms that you work with constantly?
Yes/no

If yes, then how many years have you been working with them? _____

PART TWO: Identifying Environmental Upgrading Demands:

Do you have any ethical buying policies? Yes/ no
If not, why not? _____

Are you aware of the Bangladesh Government's Environment Regulations applicable to garment factories?
Yes/no
If yes, then does your company ask RMG firms to be Environmental Clearance/Certified? Yes/No
If not, why not?_____

If your company has ethical buying policies, then what areas do they cover?
-child labour
-discrimination
-forced labour
-wages and hours
-working conditions (-worker health and safety)
-freedom of association
-gender issues
-environmental legislation

Out of these, which ones are zero tolerance issues?
-child labour
-discrimination
-forced labour

-wages and hours
-working conditions (-worker health and safety)
-freedom of association
-gender issues
-environmental legislation

How do you think sourcing from compliant suppliers impact your company's image and profit levels?

PART FOUR: Identifying the Compliance and Audit Mechanism:

What factors do you check before you work with a new supplier? (Price and Non Price.)

What is the auditing process? Do you have foreign audit teams or local?

How is re-auditing done? Is it unannounced?

How often do RMG firms pass these inspections?
Often/very often/not often/rarely

How long do you give suppliers to make changes for compliance?

Do you discontinue working with a supplier because of compliance failure? Over what kinds of clauses do you terminate orders?
Do you check to see if they are compliant with other buyer codes? Yes/ no

Do you ask them to become third-party certified? (e.g. SA8000/ISO14000/WRAP)

Does it help a supplier if they are already compliant with other buyer codes? Yes/no

Do you have rules about your suppliers subcontracting your orders?

If a firm achieves standards above those required by your company, are they rewarded? More orders? Better priced orders? Continued working relationship?

PART FIVE: Management Network Skills within Firms:

Do you think good compliance performance is related to firm size? Firm age? Firm structure?

What sort of **skills** do you think helps a Bangladeshi firm in succeeding in becoming compliant? What about **corporate culture**? Ability to be **flexible and learn new tasks**?

How important do you think barriers such as **COST, UNCERTINTY of outcomes, and CONFUSION** are while complying?

What sort of problems do you see within **Bangladeshi firms in general** that is holding them back in becoming compliant?

Are RMG suppliers in neighbouring India/Sri Lanka more compliant?

PART SIX: ECONOMIC NETWORKS AND COMPLIANCE DEMANDS

Do you feel your firm might be getting more stringent in the future about environmental issues? Yes/ no

If yes, why?

- Important to differentiate our product from that of our competitors/ to satisfy customers/ to capture niche markets
- Other reasons _____

If not, why not?

- Current requirements are enough for the foreseeable future/ it is not cost effective to get more stringent
- Other reasons _____

Do you see your retail customers becoming more ethically conscious? Yes/ no

In the post MFA scenario, how important do you think compliance is for Bangladeshi garment suppliers?

How do you feel about the discrepancy between different buyer codes of conduct creating confusion among suppliers?

Would you support a uniform code of conduct?

Many buyers are less demanding than others in compliance issues, why do you think that is?

PART SIX: buyer opportunities/barriers for collaboration

See also: buyer's response to cooperation with suppliers during becoming compliant.

What kinds of efforts do you make to help suppliers become compliant more easily?

Do your suppliers ever ask for help in becoming compliant? Monetary, technical information?

If you have invested in collaboration, then what qualities did you look for in the RMG supplier before selecting them for such investment?

Have you ever invested in a supplier - financially or technically - for any reason?

PART SEVEN: POLICY NETWORKS ISSUES IN COMPLIANCE

What do you think of the role played by BGMEA/BKMEA in helping RMG firms in adjusting to ethical trade demands?

What do you think the role of the Government should be in this case?

What role for NGOs?

How do you think the compliance problems of smaller RMG suppliers should be addressed by buyers/ the government/BGMEA/BKMEA/ILO etc.?

Annex 4.9

Questions for Anonymised Interviewee, Sromik Nirapotta Forum (trade union)

RMG firms have been increasingly coming under pressures to become socially responsible producers of apparel. Various trade associations and government ministries have previously attempted to address issues under labour rights and health and safety, as laid out in local laws and ILO Conventions. Why does policy making on these issues always happen as a reaction to a disaster? Why are we not proactive about rigorous enforcement?

The government has recently established the Social Compliance Forum, headed by the Ministry of Commerce. The forum was a result of a multi stakeholder policy discussion between state and non-state actors, convened by foreign donors. One major policy recommendation has been the unification of codes of conducts, which are demands that are made by foreign donors. Why is CSR such a foreign driven agenda?

How do you think workers rights and occupational health and safety are perceived by the garments firms, trade associations and government agencies?

How much of a barrier are institutional weaknesses vis-à-vis intuitional corruption in the case of our CSR failures?

How difficult do you think it is for non state actors, such as NGOs and trade unions, to gain access to policy level decisions, such as adoption of safety standards, standards implementation arrangements, etc.?

What changes would you recommend in the way CSR policymaking is done today?

What do you think should be done to make government agencies and trade associations more transparent in their dealings with regards to CSR?

What role would you recommend for the small garments factories regarding their compliance with labour rights and labour safety issues?

Annex 4.10

Questionnaire for BGMEA (trade association)

Part One: Introductory Questions:

The BGMEA started working on social issues when the child labour case was brought against Bangladeshi garment factories. It has been along journey since then. What kind of lessons do you think BGMEA has learnt about making policies for social causes?

Part Two: Eco Compliance Initiatives for garment firms (ETPs):

In August 2005, newspapers reported that BGMEA is a member of a national committee on ensuring eco-compliance among RMG factories, headed by the DG of DOE. What were the main motivations behind making RMG factories compliant with ecological standards?

The working committee's initial policy suggestions were: **establish effluent treatment plants (ETPs) in each factory and arrange for low interest financing** for RMG factories towards buying and installing the ETPs. How were these policy goals arrived at? Have these goals been discussed with RMG firms, financial institutions and MoEF any further? Have these goals been changed?

What is the institutional arrangement/set up for carrying out the tasks of the committee? Which organisation is taking the lead? Which organisations are involved? Who is doing the implementation and monitoring?

What kind of policy dialogue has BGMEA had with the factory owners regarding ETP problems?

Part Three: Social Compliance Forum (SCF) for garment firms:

RMG firms have been increasingly coming under pressures to become socially responsible producers of apparel. In January 2006 the Social Compliance Forum (SCF) was formed. Under phase one of the project, the **Jo-In code** was supposed to have been finalised. What is the progress on this?

There are 2 task forces set up under the SCF. How were the Task Force's Worker Safety and Labour Standards written and finalised?

What are the main lessons learnt so far from the Labour Standards Task Force?

What are the main lessons learnt so far from the Health and Safety Task Force?

Part Four: Policy Networks/Institutional arrangement questions:

What institutional problems did the SCF face, so far? Were there budget and time shortages that hampered smooth implementation? Lack of technically qualified staff?

The policy agenda for social compliance seems to have been born with foreign donors (UNDP and the MFA Forum). How does your office negotiate and bargain with them regarding setting policy goals and implementation mechanisms better suited to the Bangladeshi local situation?

Do you feel that at present, your office has sufficient support from other ministries to carry out its work on compliance? If not, why?

In the past, BGMEA, ILO, Ministry of Labour etc., have done a lot in areas of social compliance, but never before have we seen a united effort as this time. What are the strong points of the SCF that will help it succeed?

What difficulties did you face while getting trade unions to participate?

Is there any particular organisation/authority that is pushing ahead for making factories socially compliant?

Part Five: Problems/issues at the level of firms:

In the post MFA market, Bangladeshi garment factories are struggling to keep afloat. How important do you think social compliance is, in this context?

What helps and hinders factories from becoming compliant? How important is firm age/size/structure/top management education levels/corporate culture/learning problems/ability to change, etc.?

What kind of firms are most proactive, in your experience?

How do you think the small firms can become more compliant?

The smaller buyers do not make many social compliance demands. How is this gap being addressed by the Social Compliance Forum?

What kind of support do you think garment firms need from the bigger buyers on this issue?

Annex 4.11

Questions for Anonymised Interviewee, Bangladesh Center for Workers Solidarity (trade union)

POLICY MAKING: Govt, Donors, BGMEA and ILO:

RMG firms have been increasingly coming under pressures to become socially responsible producers of apparel. Why does policy making on these issues always happen as a **reaction to a disaster**? Why are we not proactive about rigorous enforcement?

The government has recently established the Social Compliance Forum, headed by the Ministry of Commerce. The forum was a result of a multi stakeholder policy discussion between state and non-state actors, convened by foreign donors. One major policy recommendation has been the unification of codes of conducts, which are demands that are made by foreign donors. Why is CSR such a foreign driven agenda?

How much of a barrier are institutional weaknesses vis-à-vis intuitional corruption in the case of our CSR failures?

How difficult do you think it is for non state actors, such as NGOs and trade unions, to gain access to policy level decisions, such as adoption of safety standards, standards implementation arrangements, etc.?

What changes would you recommend in the way CSR policymaking is done today?

What do you think should be done to make government agencies and trade associations more transparent in their dealings with regards to CSR?

FACTORIES and BUYERS:

How do you think the garments firms perceive "social compliance"?

What do you think are the weaknesses of the firms that are holding them back from becoming compliant? Skills? Age? Structure? Lack of money?

What do you think of the current arrangements for buyers' audits?

Do trade unions ever have any dialogue with the buyers about what needs to be corrected?

What role would you recommend for the small garments factories regarding their compliance with labour rights and labour safety issues?

Annex 5.1

Selected Descriptive Data for all 53 Factories

Serial number	Knit/Woven	Years of production	Small/ Med/Large	Subcontract /direct?	EU /USA	Type A,B,C
1.	K	26	M	D	USA	A
2.	W	16	M	D	EU	C
3.	W	10	L	BOTH	USA	A
4.	K	1	M	BOTH	USA	B
5.	W	7	M	D	USA	A
6.	W	9	M	D	USA	A
7.	W	6	M	D	USA	A
8.	W	6	M	D	USA	A
9.	W	4	M	D	USA	A
10.	W	9	M	D	USA	A
11.	K	13	M	D	USA	A
12.	W	11	M	D	EU	C
13.	W	5	M	D	EU	C
14.	W	8	L	BOTH	USA	A
15.	K	6	M	BOTH	USA	B
16.	K	4	M	BOTH	USA	B
17.	K	2	M	BOTH	USA	B
18.	K	3	M	D	EU	C
19.	W	23	M	D	USA	A
20.	W	14	M	D	USA	A
21.	W	17	M	D	USA	A
22.	W	10	M	D	USA	A
23.	W	8	M	D	USA	A
24.	W	6	L	D	USA	A
25.	W	9	L	D	USA	A
26.	W	10	L	D	USA	A
27.	W	14	L	D	USA	A
28.	W	21	L	D	USA	A
29.	W	18	L	D	USA	A

30.	K	4	L	D	both	B
31.	K	4	L	D	both	B
32.	K	4	L	D	both	B
33.	K	16	S	S	EU	A
34.	K	10	S	S	EU	A
35.	K	7	M	D	both	A
36.	K	5	M	D	both	A
37.	K	7	L	D	both	A
38.	W	5	L	D	both	A
39.	W	18	M	D	both	A
40.	W	18	M	D	both	A
41.	W	7	L	D	both	A
42.	W	14	M	D	both	C
43.	W	14	M	D	both	A
44.	W	14	M	D	both	A
45.	W	14	M	D	both	A
46.	W	14	M	D	both	A
47.	W	14	M	D	both	A
48.	W	20	S	BOTH	USA	A
49.	W	10	S	S	USA	A
50.	W	10	S	S	EU	A
51.	W	21	S	S	USA	A
52.	W	22	S	S	both	A
53.	W	14	S	S	both	A

Annex 5.2

General Environmental Policy within the Codes

Generally, codes are not entirely insensitive to environmental problems; it is more a problem of issue definition. The majority codes reviewed have environmental considerations packed in with "health and safety" requirements. This typically focuses on occupational health and safety and aims to ensure fire safety, provision of health benefits and reduce health impacts rising from poor environmental quality within the factory confines. For example, the Liz Claiborne Workplace Code of Conduct states,

> *"Health and Safety: Employers shall provide a safe and healthy working environment to prevent accidents and injury to health arising out of, linked with, or occurring in the course of work or as a result of the operation of employer facilities."*

The Liz Claiborne example is typical of the CoCs reviewed. However, companies such as NIKE go further in ensuring occupational health by asking suppliers to comply with the US Department of Labour's (DoL) Occupational Health and Safety Administration (OSHA) standards. Generally, complying with "health and safety" requirements means going beyond fire safety and medical benefits provisions. According to OSHA standards, the most common indoor occupational standards that apparel suppliers are audited for include hazard communication, the control of hazardous energy (the "lockout/tagout" provisions that safeguard employees from the unexpected energisation or startup of machinery and equipment, or the release of hazardous energy during service or maintenance activities), wiring methods, maintenance of components and equipment for non-production use, maintenance of abrasive wheel machinery and mechanical power-transmission apparatus, and maintenance, safeguards, and operational features for exit routes (OSHA 2006b). Some buyers such as Van Heusen also insist upon the use of personal protective equipment (PPEs) such as dust masks as a means of protecting workers from indoor air pollution (arising from the use of "thinners" or airborne fibres in the cutting section), and maintaining a materials safety data sheet (MSDS) for the storage and handling of toxic chemicals. While this addresses the "indoor" pollution caused

during the manufacturing process, it is only an implicit acknowledgement, so suppliers can seem compliant on this depending on the strength of compliance auditing.

Outside of packaging environmental issues along with health and safety, many buyers had "environmental statements" in their codes. Generally speaking, there is a wide spectrum in terms of emphasis given to environmental statements. Most of the CoCs reviewed made general statements, for example, Reebok simply states,

> "Reebok will seek business partners that strive to assure employees a safe and healthy workplace and that do not expose workers to hazardous conditions"

US retailer Gear For Sports states a more holistic approach,

> "Environment: We recognise the sacredness of all lands and waterways and are committed to preserving the environment. We commit to compliance with all national and local regulations regarding the protection of the environment."

However, certain manufacturers were more specific and had detailed requirements. Clear leaders in this respect are the UK based Marks & Spencer, and the US based NIKE, Adidas and Levis. Marks & Spencer has a very detailed environmental policy regarding suppliers, operations, and customers. Their Global Sourcing Principles include environmentally friendly clothing and they have adopted the ETI Base Code for social compliance. Levi Strauss has drafted and put in place a policy on "Environmental Philosophy and Guiding Principles" while Adidas- Salomon has a Guide to Environmental Practice. NIKE has worked with its Asian footwear contractors to implement management systems to allow them to achieve specific environmental, health and safety goals, beginning with its MESH (Management, Environment, Safety and Health) programme. Liz Claiborne and VF Corporation (who own Wrangler Jeans, among other brands) subscribe to standards made by

trade associations (the US Apparel Industry Partnership (AIP)[218] and the American Apparel Manufacturers Association (AAMA).[219] The AAMA signatory retailers are bound to the AAMA Statement of Responsibility, which includes preventing environmental damage in supplier countries. The brand name buyers who are signatory to trade association codes are responsible for ensuring that their suppliers in Bangladesh are audited by their internal teams. Suppliers working with these big name proactive brands are therefore subject to more stringent auditing and are more likely to be compliant with better-articulated environmental demands in the CoCs.

Emphasis on National Regulatory Standards:

The majority CoCs reviewed that mention environmental issues (whether bundled together with health and safety or by itself) tended to simply call for adherence to all national and local laws pertaining to a host of issues, including environment.[220] For example, the Jones Apparel Group's Business Partners Standards document states,

> "Our business partners must share our commitment to providing a safe and healthy workplace and to treating employees fairly and in compliance with local laws. While we recognize that cultural differences exist and standards may vary by country, we expect our partners to adhere to certain practices. Health, safety and other workplace standards must meet all local laws and safety regulations."

While compliance with national laws is a useful starting point, it is a minimum standard that the companies require for environmental issues. In contrast they have more detailed requirements (often better articulated in terms of detailed standards and implementation strategies) for child labour and worker benefits. This indicates a passive attitude to environmental issues by most retailers, but importantly, it creates an opportunity among suppliers to find loopholes in interpreting national legislation

[218] For Liz Claiborne's involvement with the AIP and the FLA, please see the Liz Claiborne webpage at http://www.lizclaiborneinc.com/rights/history.htm, accessed on February 17, 2007.
[219] For the VF Corporation's involvement with the AAMA, please see the ITGLWF website: http://www.itglwf.org/doc/VFcorporation.doc, accessed on February 17, 2007
[220] Studies by the World Bank Group (2003a, 2003b, 2004a, 2004b) also draw a similar conclusion.

on getting environmental clearances, sacrificing the proactive elements and keeping the reactive "quick fix" solutions. In a country like Bangladesh where institutional corruption and bribery is well documented, this can be the "permission slip" for false environmental compliance. In the next two sections I will examine the loopholes in more detail.

Timeframe for Becoming Compliant:

Providing a clear and phased timeframe to suppliers for adopting CoC demands is important in two ways - an agreed timeframe that allows for a phased implementation will encourage the RMG firms' environmental strategy makers to take steps that involve pollution preventative measures that involve each stage of production, whereas the absence of a phased timeframe will suggest to the firms that immediate actions are more appropriate, leading to reactive strategy making. Secondly, a phased timeframe will also encourage continued auditing and improvement, which is a key requirement in proactive strategy implementation.

None of the CoCs that were reviewed talk about remediation measures or taking a phased approach to becoming compliant, instead they frame the CoC in terms of "absolute acceptance by partner firms" before any orders can be placed. In a cutthroat competitive industry, this leads to a "race" to become compliant overnight, often missing the intent behind having social-environmental safeguards. However, there are exceptions. Marks & Spencer has published a self-help guide specifically tailored for its Bangladeshi apparel suppliers, which takes a phased approach. None of the other retail companies surveyed had done anything similar, although Karstadt Quelle has conducted seminars with their Bangladeshi suppliers on social compliance, which has taken a phased approach. Some SA8000 and WRAP auditing is done in phased methods as well.

Focus on Raw Materials Used:

Although the CoCs reviewed do not set standards for sustainably farmed cotton, wool, etc., but there is a general philosophy to conduct business in a manner that utilises natural resources efficiently and seeks to reduce the use of such resources. H&M's code states that business should be conducted in a manner that utilises natural resources as efficiently as possible. Marks & Spencer's code states that where there is the potential to improve significant environmental impacts, it will use raw materials only from known sources. This set of considerations impacts only a small percentage of highly vertically integrated RMG firms in Bangladesh, since the majority of yarns and wool are imported.

Focus on Hazardous Emissions:

How codes deal with the issue of suppliers' emissions is an important aspect where the buyer preference for preventative measures could have been clearly demonstrated. The review of codes shows that buyers mainly rely on reactive pollution control for emissions, which fits in with prevalent practice in Bangladesh.[221] They generally operate on the philosophy that pollution should be ideally prevented, but they said very little about prevention of emissions. None of the CoCs referred to particular emissions standards, and it would be reasonable to assume then that national law would take the lead in this case. However, brand name buyers like NIKE and Adidas-Salomon have adopted comprehensive policies for their Bangladeshi suppliers. This is perhaps not surprising, since footwear manufacturers use hazardous chemicals more systematically than apparel manufacturers. NIKE prohibits the use of CFCs, and calculates an annual baseline emission of greenhouse gases and establishes goals for the reduction of such gases. Adidas-Salomon also seeks to reduce VOCs in its footwear factories. Although NIKE and Adidas do not source footwear from Bangladesh, they do source clothing, and insist on their suppliers treating wastewater through Effluent Treatment Plants (ETPs), which is an important limiting factor behind choosing their RMG suppliers. Marks & Spencer says that where potentially hazardous substances are used, it will set performance standards to carefully control their use, and it amenable to phase out the use of particularly hazardous substances. Therefore, while most of the codes reviewed said

[221] Ahmed et al (2002) draw a similar conclusion in their study of water pollution abatement in Bangladesh.

nothing about preventing emissions or even controlling emissions post-facto, some of the larger buyers preferred a reactive environmental solution. So perhaps the greening pressure is not as proactive as it could have been.

Focus on Waste Management:

With respect to waste management, there is some support for the general practice of "reduce, reuse and recycle" programs to limit waste, although none of the CoCs have established specific goals to implement or monitor such programs. An example from the small sample that mentioned recycling etc., would be, Gap Inc. who,

> "...encourages [its] employees and business partners to reduce waste, recycle and close the recycling loop by purchasing products that contain high percentages of post-consumer recycled material."

Waste management is another area where a proactive environmental strategy is needed in implementing reduce-recycle-reuse schemes, and similar to the case of the emissions control, could have made significant differences in apparel manufacturing pollution impacts, but only few of the largest buyers are asking for any action on these issues, and even then they are leaning towards reactive strategies.

Annex 5.3

Legal Environmental Requirements for RMG Firms

The Factories Act and Factories Rules:

The Bangladesh Factories Act 1965 is responsible for regulating the appointment of workers, their wages and the working conditions in factories, including health and hygiene, safety, welfare, working hours, and penalties for non-compliance of the FA requirements. The Act is important also because it sets definitions of various terms from a legal perspective, such as: adolescent, adult, child, working day, explosive substance, factory, machinery, manufacturing process, occupier, working hour, wages, etc. It incorporates the provisions for obtaining factory plan and construction approvals, and specifies licensing fees and factory registration. The Act is most often cited among RMG firms because of the fire safety requirements that the sector has been struggling to comply with for the past decade. The Act requires that each factory must have adequate fire safety measures, which includes fire escapes and personal protection against dangerous and accident-prone parts of machinery, electric and mechanical devices, etc. Workers are to be given fire and work hazard training before they are working near these machines.[222] The Factories Act 1965 (specifically Section 12 to 21) contains provisions for the protection of worker health while they are in the factories. According to the FA, management is responsible for keeping the factory premises clean and free from effluvia arising from any drain or toilet facilities. The Act requires RMG managers to make sure there are provisions for wastes and effluents disposal, dust and fume prevention, and proper ventilation and maintenance of room temperature. The specific Factories Act 1965 provisions that are most often cited in ensuring good environmental health are as follows (i) Cleanliness (section 12), (ii) Disposal of wastes and effluents (section 13), (iii) Ventilation due to high temperature (section 14), (iv) Dust and fume (section 15), (v) Artificial humidification (section 16), (vi) Overcrowding (section 17), (vii) Lighting (section 18), (viii) Drinking water (section 19), (ix) Latrines and urinals (section 20), (x) Spittoon

[222] For details on the Act contents pertinent to worker health and safety, please see: http://www.ilo.org/dyn/natlex/docs/WEBTEXT/47346/65073/E65BGD01.htm#a012, accessed October 1, 2007.

(section 21). While these Sections include provisions for waste disposal, it must be pointed out that more up-to-date requirements are set about in the DoE's ECR (1997).

The Environmental Conservation Act and the Environmental Conservation Rules:

The Bangladesh Environmental Conservation Act (ECA) passed in 1995, and the accompanying 1997 Rules (ECR 1997), and the DoE's EIA Guidelines for Industries (1997) are arguably the most important legislative documents for environmental compliance of all industrial operations in Bangladesh, RMG included (Clemett 2003a and 2003b). The Act is dedicated to the "conservation, improvement of quality standards, and control through mitigation of pollution of the environment" (Environmental Conservation Act, 1995:3). The 1997 Environment Conservation Rules made in accordance with the 1995 Act provide additional guidance for specific components of the Act.[223]

Since the gazetting of the 1995 Act, all industrial units must obtain two documents -- **Location Clearance Certificate (LCC)** and follow it up with an **Environmental Clearance Certificate (ECC)** -- from the DoE before production can start. The DoE has classified all industrial units and projects into four categories depending on its environmental impact and location. The LCC-ECC granting process differs depending on which category the applicant falls into:

(a) Green;
(b) Orange - A;
(c) Orange - B; and
(d) Red.

The costs of getting and renewing the ECC are associated with the amount of capital invested into the factory, and not on the production type or amount of pollution generated. Once ECC has been granted it is valid for a period of 3 years for Green Category industries (the category for factories with least environmental impact and sited in a least sensitive area) and 1 year for all other Categories.

[223] The Environmental Conservation Act, 1995 and the Environmental Court Act 2000, which supports the Environmental Conservation Act (1995) and the Environmental Conservation Rules (1997), were amended in 2002.

According to ECA sub-rule (1) and ECR Schedule 1, all RMG firms are categorised as Orange B. In order to get an LCC, a *new* RMG firm needs to submit the following documents along with an application form to the Divisional office of the DoE:

(i) Report on the **feasibility** of the industrial unit or project (applicable only for proposed industrial unit or project);
(ii) Report on the **Initial Environmental Examination (IEE)** of the industrial unit or project, and also the process flow diagram, Layout Plan (showing location of the proposed ETP), design of the **ETP** of the unit or project (these are applicable only for a proposed industrial unit or project);
(iii) **No objection certificate** from the local authority;
(iv)**Emergency plans** relating adverse environmental impact and plan for mitigation of the effect of pollution;
(v) Outline of the relocation, rehabilitation plan (where applicable);

For an *existing* RMG factory, instead of (ii), the factory applicant needs to submit a report on the **Environmental Management Plan** (EMP) for the industrial unit or project, and also the **Process Flow Diagram, Layout Plan** (showing location of ETP), design of the ETP and information about the effectiveness of the ETP of the unit or project.

It may be noted here that the ECR does not mention any provisions for mandatory site visits by DoE staff to check on the veracity of the IEE etc. before granting of an LCC. After getting the LCC, the RMG entrepreneur is free to undertake activities for land development and infrastructure development. Only after the machinery (including the mandatory ETP) has been installed, can the RMG entrepreneur apply for an ECC, without which it is legally impossible to get a gas connection or even start trial production. After installation of the machinery and the ETP, RMG units must apply to the DoE for an ECC, which they will be granted within 30 working days, or the application shall be rejected mentioning appropriate reasons (DoE 1997).

Annex 7.1

Policy Making and Negotiations at the Social Compliance Forum:

The SCF is looking at compliance from a supply chain perspective as well. During the FFFI, the trade association representatives brought the issue of conflicting code confusion to the discussion agenda and in response it was agreed by the SCF that buyers need to work collaboratively to agree a common approach both to code content and implementation criteria, the SCF agreed that buying practices need to be reviewed ensure that a fair price is paid for sourced products from socially responsible firms, specifically due to unrealistic delivery schedules. Consequently, a "**Buyers Group**" has been set up to aid the formulation of a commonly agreed code of standards and to set up a process for monitoring and improving understanding about the link between compliance and purchasing practices (MFAF 2006h). This network included buyer representatives from Asda, Carrefour, The Co-op, Cotton Group, Gap Inc., H&M, Inditex, Karstadt Quelle, Levi's, Marks & Spencer, Nike, Tesco, and Wal-Mart. The ITGLWF, Oxfam International, Ethical Trading Initiative (ETI), Social Accountability International, and the Fair Labour Association are also part of this Working Group.

Possibly the most significant output of the SCF has been the formulation of the Joint Initiative on Corporate Accountability and Workers' Rights, in November 2005 (called the **Jo-In code**) which is a common code to be adopted by the buyers placing their orders in Bangladesh. Under phase one of the proposed Jo-In implementation project, the minimum labour standards to be met by all RMG firms as well as timeframes for implementation are to be determined. The second phase is concentrating on establishing a method of implementation of these codes. In order to do that, it was decided that buyers would document the cases of non-compliance that arise during audits of four factories over the next two seasons to note the barriers to implementation and possible remediation approach to each non-compliance issue. This evaluation never came to be.

Despite the multi stakeholder inclusive design of the SCF, in practice the leading actors found it difficult to include all stakeholders. They could not shed

institutionalised norms and rules of making policy only involving government representatives, affecting the acceptability of the code by stakeholders, such as trade unions (who became politically important after the riots in 2006) and NGOs (who are active in producing independent audits of compliance performance in liaison with international trade unions and NGOs, and command significant attention from non-Bangladeshi players in the supply chain). During the project negotiations in **January 2006**, for example, it was revealed that the MoC led task forces had drafted worker safety and labour standards without any participation from the trade unions or civil society, even though the basis of the initiative was to achieve CSR goals through a cross dialogue involving non state actors who were previously not invited informal policy making networks. From the government side it was explained that civil society representation had not been resolved due to an absence of a unified self-nominated trade union actors who would participate. Similar weaknesses were also alleged behind NGO participation being non-existent (MFAF January Meeting Minutes, 2006).[224] Upon questioning, the task forces questioned the unbiased agendas of the trade unionists and NGOs. It may be mentioned here that after the 2006 riots, some trade unions and NGOs became affiliated with certain political parties, and hence the tendency to exclude some over the others (or even to leave a group out completely) had to do with local politics. Meanwhile, conflict regarding actor agendas and participation was gradually becoming deeper between the government agencies and the non-Bangladeshis as well. By the end of **July 2006**, the MoC called the first meeting of the SCF, where the MFAF was not invited but was able to participate only through lobbying by the BGMEA and UNDP. No trade unions or NGOs were invited (as noted in the MFAF August Meeting Minutes, 2006).

The problem of a restricted policy network was still being worked out when the MFAF met with BKMEA, NGOs, trade unions, BGMEA and the MoC in **August 2006**. According to the MFAF August Meeting Minutes (2006):

> "BKMEA also confirmed that they had jointly proposed along with BGMEA that BIGUF be invited to the National Forum meeting to represent the Trade Unions, although no consideration had been given to inviting an NGO."

[224] Source: MFAF website at http://www.accountability.org.uk/mfa_forum/bangladesh/docs/mfaf_dhaka_visit_summary_january2006.pdf, accessed on March 25, 2006

Representatives from BIGUF, the trade union discussed in the meeting, contradicted BKMEA's statement that they had been invited to join the SCF meetings (as stated in the MFAF August Meeting Minutes, 2006).The NGOs, for their part, were willing to organise themselves to participate in the SCF. At the MFAF meeting in August, they intimated that they would elect their own representatives without any influence from the GoB. The trade unions also felt similarly excluded and wanted to elect their own representatives. Self selection of NGO and trade union representation was the only acceptable basis for the non Bangladeshi SCF members, although the BGMEA reluctantly accepted the suggestion.

By the August meetings of the SCF, much of the old behavioural norms were being displayed once again, such as BGMEA's reluctance to take responsibility for compliance and to blame foreign actors for agenda pushing. At the August 2006 SCF meeting, the BGMEA called for a level playing field when it came to non Bangladeshi demands for social compliance investment across the supply chain. An example of anti Bangladeshi bias was cited through the uneven attention given to the Spectrum accident versus the sacking of 500 Bangladeshi workers overnight by Taiwanese employers at DEPZ. In response, the MFAF stressed that buyers have to demonstrate their commitment more clearly by contributing their support and allowing for sufficient time for complying with such high standards. The main barriers in the short run were identified as the conflicted cooperation across the SCF network and the obsolete and vague national laws that relate to social compliance. It was concluded that both these factors were creating confusion in moving forwards (MFAF August Meeting Minutes, 2006).

The next MFAF meeting was held in **September 2006**, in London, as a part of the MFAF's biannual strategy meetings. The participants in the Bangladesh panel discussions included the joint secretary of the Ministry of Commerce, high-level representatives from the BGMEA, BKMEA, BEPZA, and labour leaders representing trade unions (INCIDIN, Awaj Foundation, the Bangladesh National Council of Textile Garments and Leather Workers, Kormojibi Nari, and Workers Safety Forum), as well as Mr. Neil Kearney, General Secretary of ITGLWF. The Bangladesh meetings were sponsored by DFID Bangladesh and GTZ. The UNDP was not present at this

stage. The key agenda item was to present the plan for the implementation of the **Jo-In code**. The complete content and implementation proposal was due to be presented to potential donors in early 2007. By the end of the round of closed door meetings in London, the Jo-In code concept paper was agreed in principle by all stakeholders, with the implementation to be negotiated in Dhaka. The concept note on planning focused on three key areas for policy making (please see box for the key areas) which represented a broadening focus of issues. Previously the SCF had only dealt with compliance monitoring (e.g. fire and safety issues through the CMC), however, in this round of discussions, social compliance was being thought of a part of greater quality improvement demands. The Jo-In code for Bangladeshi RMG was to be packaged within a broader focus than simple social compliance support, instead, the new focus was on actions required to sustain the Bangladesh RMG industry by making it not only compliant according to international compliance standards, but also improving production quality standards.

The concept paper led to a multi stakeholder **Steering Committee** being set up, comprising representatives from the buyers group, the government (represented by the Ministry of Commerce), local industry (BGMEA and BKMEA), donors (as represented by the donor Local Consultative Group on social compliance) and civil society (at this point, details of civil society participation was to be coordinated by the MFAF, since the NGOs proved unable to find a representative that they were satisfied with).

Box : 3 year project model key areas of activity and outputs[225]

1. Compliance to International Codes of Conduct
-Re-affirming the commitment to the use of the Jo-In code among buyers at the international and local level.

-Identification of process and timeline for implementation of the Jo-In code throughout the RMG sector including sub-contractors.
-Collaborative work by all brands and retailers to instigate improvement programs across common suppliers.
-Identification of how monitoring of compliance and improvement programs will be taken forward, including auditing and alternative methods.
-Identification and acquisition of capital expenditure support (donor funding) needed to help meet compliance and improvement programs.
-Facilitate the development of a mature system of independent verification, including the development of a robust data base of suppliers and the degree of compliance to international standards.

Outputs: With these activities, a greater compliance to a common code and standards throughout the RMG sector including sub-contractors with a more robust system of ongoing monitoring and transparency.

2. Training and awareness raising
-Needs assessment for the development of training programs.
-Training programs developed and funding secured to support workers, supervisors and junior management covering;
- HR management.
- Technical support areas i.e. engineering, electrical etc.
- International human rights in the workplace.
- Industrial engineering and work study.
- Supply chain and inventory management.
- Quality management.

-Identify and contract supplier partners to deliver these programs.

Outputs: With these activities, workers and managers will be aware of their rights and will be able and willing to contribute to programs that will lead to compliance to international standards and improved productivity in the RMG sector.

3. Productivity improvements
Develop work based projects to incorporate the training delivered from activity 2.
Output: With this development, a sustainable RMG sector in Bangladesh that is competitive and progressively able to meet International standards of compliance will deliver improvements to workers rights, conditions of work and wages.

The steering committee was in charge of actual policy making for social and environmental compliance in the RMG sector. They were in charge of reviewing broader quality standards that would be applicable and acceptable for the RMG in Bangladesh keeping in mind local realities and foreign expectations; including performance, social and environmental standards. They were in charge of analysing the costs and benefits of different policy options, and for analysing the risks of failure. Even though the operations of the CMC (that is in charge of compliance monitoring and audits) ended up being limited in its suitability for even shallow EM,

[225] Source MFAF website at:
http://www.accountability21.net/mfa_forum/bangladesh/docs/concept_note_developing_3yr_plan.pdf, accessed January 30, 2007.

one could have reasonably hoped that the steering committee in charge of the Jo-In code for Bangladesh RMG would provide a second chance for socially conscious green production of apparel. However, that was not to be. What is remarkable about the policy network at this stage, is the solidification of the policy making core, along old familiar lines. In the SCF, the core was once again made up of participants who were state actors (the ministries), task implementers (the trade associations), and project funders (donors).[226] The actors in the periphery were also familiar. The London meeting had comparatively fewer trade union representatives than in the Dhaka meetings. The representation of trade unions in the Steering Committee also remains vague. Non state actors are not the only ones being left out - the number of state actors has also decreased, for example, anybody from the CMC or the task forces was not involved in the Steering Committee, even though there are some overlaps between the CMC's long term goals and the Jo-In code, and by that time the task faces had gained experience in auditing that could have been valuable in formulating the Jo-In code appropriate for Bangladesh.

Following the London meeting in September, the Steering Committee met for the first time in Dhaka on the 26th of September with the aim of formulating a plan for mobilising resources and institutionalising mandates behind the three key areas for social compliance. At this point, the agreed date for finalising the project plan for presentation to the donors was January 2007. The problems of unequal resource and power dependencies and wavering commitment to the issue begun to become apparent within the core-players that constituted the Steering Committee, very much like it had done when the same actors had interacted over the issue of compliance in a fragmented manner. The structure of the network and its communication paths were identified as causing barriers to network functioning at the core level by the SCF. Government agencies were not according a high enough priority to their SCF work after the initial agreement of the early days. They were not following up on their tasks, agreeing to release matching funds, or even showing up for meetings - collectively it may be taken to mean that social or environmental issues to do with RMG trade were not of high priority for the government agencies. In order to

[226] Another noticeable change in the policy network was the change in the lead donors. The three month planning by the Steering Committee and the MFAF was funded by DfID Dhaka and GTZ PROGRESS.

overcome policy bottlenecks and facilitate efficient decision making within the committee, it was stated by the Committee Chair that the member institutions should nominate representatives for the Committee who are high level enough to have the authority to take instant decisions on behalf of their constituents. Representation in the committee was proposed to include the Ministry of Labour, who were also in the SCF task forces. As belated as it was, the addition of the government agency was indubitably helpful in designing the fair wage component of the Jo-In code.

At this stage, the donors and the MFAF staff were unofficially leading the Steering Committee. They were scheduling the meetings and preparing the meeting agendas (e.g. compliance with international CoCs, training and awareness raising mechanisms, productivity improvements, etc.). Only the MFAF staff met with the buyers group; the Steering Committee members did not regularly meet or exchange input with the buyers. Among the Bangladeshi participants, this seemed like hidden steering by foreign actors, and it was seen as an extension of the hegemonic rule of foreign values and demands over Bangladeshi economic networks.

Once again, the issue of regularising buyer codes and reviewing the buying process was brought up in the Steering Committee meetings. As we saw in chapter 6, the buying process itself is extremely time pressured, which leads to the exploitation of several loopholes in compliance implementation and auditing. Interestingly enough, this aspect of policy making kept on being forgotten in the policy dialogue. Eventually, trade associations expressed the view to the Steering Committee that the **concerns of the RMG factory owners regarding the changes they expect from the buyers** were not being reflected in the plan. Mr. Fazlul Hoque from the BKMEA stated that these are problems related to the buying practices of the brands and the responsibilities of the workers and trade unions. Both the representatives from the BGMEA and the BKMEA stated that the suppliers' demands are not given adequate importance when defining the problems of the overall sector. Discussions reached a critical point when Mr. Hoque stated that if the suppliers' demands were not taken into consideration then the BGMEA and BKMEA would not be interested to participate in this initiative. Mr. Ghulam Hussain, from the Ministry of Commerce, emphasised that the forward and backward linkages related to the RMG industry

should be focused on while designing compliance and there should be a special care package for the "sick" RMG firms.

The problems with the new policy network did not end with tension between the core and the periphery; the Bangladeshis and the non-Bangladeshis; and the state vs. non-state actors. Another important challenge for the policy core at this point was agreeing on *how* to implement the Jo-In code in Bangladesh. Core members, the BGMEA and the BKMEA, disagreed with most discussants regarding the applicability and acceptability of the Jo-In code for the Bangladeshi RMG sector. The input of trade unions was not taken until this point about the Jo-In issue. At that meeting, as an acknowledgement of the unacceptability of the Jo-In code by the trade associations, it was decided that the BGMEA would carry out a gap analysis between the new **Bangladesh Labour Code 2006** and the Jo-In Code. Meanwhile, the Steering Committee decided to continue working on the identification of process and timeline for implementation of the Jo-In code throughout the RMG sector including sub-contractors with specific reference to the issue of working hours and low wages.

The task of getting all the **buyers** - large and small - to agree to become active in the policy core was continuing to be a challenge, even though collaborative work by all brands and retailers to instigate improvement programmes across common suppliers is an important part of the Steering Committee's mandate. To address this, the international Buyers Group under the MFAF had already sent letters to their local offices and suppliers stating that the implementation of the Jo-In Code should start, to be completed within 2 years.

Another crucial programme bottleneck was identified as the **lack of information**, as a baseline of compliance. Consequently, it was decided that in order to facilitate the development of a mature system of independent verification, including the development of a robust data base of suppliers and the degree of compliance to international standards. At this point, both the BGMEA and BKMEA expressed concern about stating the names of the non-compliant suppliers.

As a part of packaging social compliance with overall improvements in product quality, the Steering Committee suggested that a benchmarking exercise be

conducted to confirm that overall productivity is indeed low and identify steps to improve the production processes. The benchmarking exercise was assigned to the buyers since they are in a suitable position to carry out the task.

The second steering committee meeting was in **October 2006**, and was attended by representatives of BKMEA, BGMEA, Ministry of Commerce and some international buyers. By this stage, the number of non core group participants had reduced even further. Trade unions were invited to this round of meetings, but did not participate, marking out the polarisation even further.

The second meeting heralded a major change in policy direction, brought about by the trade association concerns in the last meeting about the unacceptability of the Jo-In code by the RMG factories. Consequently, the trade associations persuaded the Steering Committee members that the Jo-In code is, in fact regarded as the highest common denominator for social compliance standards by RMG factories. Therefore it was decided that the "**Bangladeshi Labour Law**", which is a legal binding code and has more acceptance, it will serve as the basis for the immediate programme, and will build towards the future attainment of the Jo-In code.

After the meeting in October 2006, not much has been done by way of formulating the plan of implementing the three year compliance programme for the RMG sector. The main reason for this is the political disruption that has made Bangladesh come to a standstill building up to the general elections. Bangladesh went under a Caretaker Government and a State of Emergency was declared in December 2006. As a result, all government ministries are headed by non-regular acting chiefs, and action regarding social compliance in the SCF has become slower. In fact, according to the GTZ PROGRESS team, the project proposal that was due to be submitted to the donors in early 2007 will now only be ready by May or June 2007, depending on the elections. It may be noted that as of April 28th 2008, the Caretaker Government of Bangladesh has not set any dates for the next general elections.

Bibliography

Abbot, J., Roberts, S., and Robins, N. (1999) *Who Benefits? A social assessment of environmentally-driven trade*, International Institute for Environment and Development, London.

Absar, S.S. (2001) 'Problems Surrounding Wages: the Ready made Garments Sector in Bangladesh' *Labour and Management in Development Journal*, Vol. 2, Number 7, pp. 2-19, Asia Pacific Press.

Achda, B.T. (2006) 'The Sociological Context of Corporate Social Responsibility Development and Implementation in Indonesia', *Corporate Social Responsibility and Environmental Management*, Wiley InterScience, Vol.13, pp. 300-305

Adidas Group (2006) 'Codes of Conduct', available at: http://www.adidas-group.com/en/sustainability/suppliers_and_workers/code_of_conduct/default.asp, accessed on 14 September, 2006

Adidas Group (2006) 'Standards of Engagement', available at: http://www.adidas-group.com/en/overview/corporate_governance/sea/default.asp, accessed on 14 September, 2006

Ahmed, K.H. (2002) *Backward Linkage to Ready Made Garments: Bangladesh Perspective*, Academic Press and Publishers, Dhaka.

Ahmed, S., Clemett, A., Clark, M., and Tapley, K. (2002) 'Choosing an Effluent Treatment Plant', Managing Water Pollution from Industries in Bangladesh, Stockholm Environment Institute (SEI) Bangladesh center for Advanced Studies (BCAS) DFID, University of Leeds.

Ajzen, I. (1985) 'From intentions to actions: A theory of planned behavior' in Kuhl, J. and Beckman, J. (eds.) *Action-control: From cognition to behaviour*, Springer, Heidelberg, pp. 11-39

Ajzen, I. (1991) 'The theory of planned behaviour', *Organizational Behavior and Human Decision Processes*, Vol. 50, pp 179-211.

Alvesson, M. and Skoldberg, K. (2000) *Reflexive Methodology: New Vistas for Qualitative Research*. Sage Publications, London.

Amin, A., (2004) 'Regulating economic globalization', *Transactions of the Institute of British Geographers*, Vol. 29, pp. 217–233.

Anderson, J. (1984) *Public Policy-Making: An Introduction*, Houghton Mifflin, Boston.

Anderson, K., (1990) 'China and the Multi Fibre Arrangement' ' in Hamilton, C.B. (ed.) *The Uruguay Round: Textiles Trade and the Developing Countries – Eliminating the Multi Fibre Arrangement in the 1990s*, The World Bank, Washington, USA.

Andersson, L.M., and Bateman, T.S. (2000) 'Individual Environmental Initiative: Championing Natural Environmental Issues in US Business Organization's, *Academy of Management Journal*, Vol. 43: 548-570

Andrews, R. N. L. et al. (2001) 'Environmental Management Systems: History, Theory, and Implementation Research' in Coglianese, C. and Nash, J. (eds.) *Regulating from the Inside: Can Environmental Management Systems Achieve Policy Goals?*, Resources for the Future Press Washington, DC, pp. 31-60.

Angel D. and Rock M. (2005) 'Global standards and the environmental performance of industry', *Environment and Planning A*, Vol. 37, pp 1903-1918.

Antoshak, R.P. (2001) 'The World Trade Organization: Globalization and the Legacy of the MFA', *Journal of Textile and Apparel Technology and Management*, Vol. 2, No. 1, pp. 1-3

Apparel Industry Partnership (1997) *The Apparel Industry Partnership Agreement Workplace Code of Conduct*, available at: http://www-old.itcilo.org/actrav/actrav-english/telearn/global/ilo/guide/apparell.htm, accessed on July 5, 2008.

Appelbaum, R.P. (2004) 'Assessing the Impact of the Phasing-out of the Agreement on Textiles and Clothing on Apparel Exports on the Least Developed and Developing Countries' Institute for Social, Behavioral, and Economic Research, Paper no 5, Center for Global Studies, University of California, Santa Barbara.

Aragón-Correa, J.A. (1998) 'Strategic Proactivity and Firm Approach to the Natural Environment', *The Academy of Management Journal*, Vol. 41, No. 5. (Oct., 1998) pp. 556-567.

Armour, S, (2003)`WalMart takes hits on workers treatment', USA Today, 9 February, pp. 2

Asaduzzaman, M. (2004) 'Politics, Development and Civil Society in Bangladesh', paper presented at the ISTR Sixth International Conference on 'Contesting Citizenship and Civil Society in a Divided World', Toronto, Canada, July, 2004.

Ashford, N. A. (1993) 'Understanding technological responses of industrial firms to environmental problems: Implications for government policy' in Fischer K. and Schot J. (eds.) *Environmental strategies for industry*, Island Press, Washington, DC, pp. 277-307

Axelsson, B. and Johanson, J. (1992) 'Foreign Market Entry – the Textbook vs. the Network View' in Axelsson, B. and Easton, G. (eds.) *Industrial Networks a New View of Reality*, Routlage, London.

Baden, S. (2002) 'Trade Policy, Retail Markets And Value Chain Restructuring In The EU Clothing Sector', PRUS Working Paper NO. 9, Poverty Research Unit at Sussex (PRUS) University of Sussex, UK.

Bair, J. and Gereffi, G. (2003) 'Upgrading, Uneven Development and Jobs in the North American Apparel Industry', *Global Networks*, Vol. 3, No. 2, pp. 143-169.

Bair, J., and Gereffi, G. (2001) 'Local clusters in global chains: The causes and consequences of export dynamism in Torreons blue jeans industry', *World Development*, Vol. 29, No. 11, pp. 1885–1903.

Bangladesh Today (2006) Bangladesh Today at: http://www.thebangladeshtoday.com/archive/Febraury'06/26-02-2006.htm, accessed on July 19, 2006.

Bansal, P. and Roth, K. (2000) 'Why Companies Go Green: A Model of Ecological Responsiveness', *The Academy of Management Journal*, Vol. 43, No. 4. (Aug., 2000) pp. 717-736.

Bardach, E. (1977) *The implementation game: what happens after a bill becomes a law*, MIT studies in American politics and public policy; Cambridge, Mass., London

Barney, J. (1991) 'Firm resources and sustained competitive advantage', *Journal of Management*,

Vol.17, pp. 99-120.

Barney, J. (2001) 'Is the resource-based 'view' a useful perspective for strategic management research? Yes', *The Academy of Management Review*, Vol. 26, No. 1. (Jan., 2001) pp. 41- 56.

Barry, J. and Paterson, M. (2004) 'Globalisation, Ecological Modernisation and New Labour', *Political Studies*, Vol. 52, pp. 767–784

Bauer, M. W. and Gaskell, G. (eds.) (2000) *Qualitative Researching with Text, Image and Sound*, Sage Publications, London.

Baylis, R., Connell, L. and Flynn, A. (1998a) 'Company size, environmental regulation and ecological modernization: further analysis at the level of the firm', *Business Strategy and the Environment*, Vol. 7, No. 5, pp. 285-296

Baylis, R., Connell, L., and Flynn, A. (1998b). 'Small and medium enterprises: The implications of greener purchasing.' in Russel, T. (ed.) *Greener Purchasing: Opportunities and Innovations*, Greenleaf Publishing, Sheffield, England, pp. 135-150.

Bazan, L., and Navas-Aleman, L. (2004) 'The Underground Revolution in the Sinos Valley: A comparison of Upgrading in global and national value chain', in Schmitz, H (ed.), *Local Enterprises in the Global Economy*, Edward Elgar, Cheltenham.

BBC (2008), Panorama Programme on Primark, available at: http://www.bbc.co.uk/programmes/b00cf06z, accessed on June 26th, 2008.

Beck, U. (1994) 'The Reinvention of Politics: Towards a Theory of Reflexive Modernization' in Beck,U., Giddens, A. and Lash, S. (eds.) *Reflexive Modernization. Politics, Tradition and Aesthetics in the Modern Social Order*, Polity Press, Cambridge, pp. 1-55

Beck, U. (1995) *Ecological Politics in an Age of Risk*, Polity Press, London.

Bell, J. (1993) '*Doing Your Own Research Project: A Guide for First-Time Researchers in Education & Social Science*', Open University Press, Buckinghamshire

Bell, M. and Albu, M. (1999) 'Knowledge Systems and Technological Dynamism in Industrial Clusters in Developing Countries', *Special Issue of World Development*, Vol. 27. No 9, pp. 1715-1734

Berger, G. (1999) 'Environmental agreements: a comparative study of the experiences in The Netherlands and Austria with co-operative environmental management', Unpublished MSc thesis, Cardiff University.

Berger, G., Flynn, A., Hines, F. and Johns, R. (2001) 'Ecological Modernization as a Basis for Environmental Policy: Current Environmental Discourse and Policy and the Implications on Environmental Supply Chain Management', Innovation', *The European Journal of Social Science Research*, Vol. 14, No.1, pp. 55 - 72

Beske, P., Koplin, J., and Seuring, S. (2006) 'The use of environmental and social standards by German first-tier suppliers of the Volkswagen AG', *Corporate Social Responsibility and Environmental Management*, in press.

BGMEA (2004) BATEXPO Social Welfare online page: http://www.bangladeshgarments.info/batexpo/batexpo2004/socialwelfare.cfm, accessed on July 18, 2006.

BGMEA (2005a) 'Post MFA and Bangladesh: Ground Rules for Being Competitive', presented at seminar on Exchange of Views Between BGMEA and Financing Institutions, BGMEA, Dhaka.

BGMEA (2005b) *BGMEA Members' Directory 2004-2005*, BGMEA, Dhaka.

BGMEA (2006) BGMEA 2006 Data Bank, online at: http://www.bgmea.com/data.htm, accessed on July 9, 2006.

Bhattachariya, D. (1996) 'International trade, Social Labelling and Developing Countries: Bangladesh's Garments Export and Use of Child Labour' in Forster, J (ed.) *Annuaire Suisse Tiers Monde*, University Institute of Developing Studies (IUED) Geneva.

Bierly, P. and Hamalainen, T. (1995) 'Organizational learning and strategy', Scandinavian Journal of Management, Vol. 11, No. 3, pp. 209-224.

Birkland, T. (2001) *An Introduction To The Policy Process: Theories, Concepts, And Models Of Public Policy Making*, M.E. Sharpe, New York.

Blowers, A. (1997) 'Environmental policy: ecological modernisation or the risk society', *Urban Studies*, Vol. 43 No.5-6, pp.845-71

Bowen, F. E. et al. (1999) 'Greening supply: potential, practices and performance', Paper intended for submission to the *European Management Journal*, School of Management, University of Bath.

Brewer, G., and DeLeon, P. (1983) *The Foundations of Policy Analysis*, Homewood Dorsey Press, Illinois.

Bridgman, P. and Davis, G. (2000) *The Australian Policy Handbook*, Allen and Unwin, Australia

Brooks, S. and Miljan, L. (2003) *Public Policy in Canada: An Introduction*, Oxford University Press, Toronto.

Buckland, J. (2003) 'Non Governmental Organisations and Civil Society in Bangladesh: Risks and Opportunities for Globalisation', in Rahman, M. (ed.) *Globalisation, Environmental Crisis and Social Change in Bangladesh*, UPL, Dhaka

Burke, G. (2006) 'Opportunities for Environmental Management in the Mining Sector in Asia' *The Journal of Environment & Development* Vol. 15, No. 2, pp. 224-235

Burritt, R.L. (2004) 'Environmental management accounting: roadblocks on the way to the green and pleasant land', *Business Strategy and the Environment*, Vol. 13, No. 1, pp. 13-32

Buttel, F. (2000a) 'Classical theory and environmental sociology', in Spaargaren G., Mol, A., Buttel, F. (eds.) *Environment and Global Modernity*, pp. 17–40, Sage Publications, London.

Buttel, F. (2000b) 'Ecological modernization as social theory', *GeoForum*, Vol. 31, pp. 57–65.

Buttel, F. (2000c) 'Classical theory and contemporary environmental sociology' in *Environment and global modernity*, eds. G. Spaargaren, A. P. J. Mol, and F. H. Buttel, pp.17–40, Sage Studies in International Sociology, London

Buysse, K. and Verbeke, A. (2003) 'Proactive Environmental Strategies: A Stakeholder Management Perspective', *Strategic Management Journal*, Vol. 24, pp. 453–470

Cable, V. (1990) 'Adjusting to Textile and Clothing Quotas: A Summary of Some Commonwealth Countries' Experiences as a Pointer to the Future' in Hamilton, C.B. (ed.) *The Uruguay Round: Textiles Trade and the Developing Countries – Eliminating the Multi Fibre Arrangement in the 1990s*, The World Bank, Washington, USA.

Cai, W. (1997) 'International Trade in Textiles and Clothing After the Uruguay Round: Opportunities and Challenges for ESCWA Countries', no. 46, Occasional Papers in International Trade Law and Policy, Centre for Trade Policy and Law, the Norman Paterson School of International Affairs, Carleton University, University of Ottawa, Canada.

Canning, L, and Hanmer-Lloyd, S. (2001) 'Managing the environmental adaptation process in supplier-customer relationships', *Business Strategy and the Environment*, Vol. 10, No. 4, pp. 225-237

Carter, N., and Lowe, P. (2000) 'Sustainable development in the UK' in S. C. Young (ed.) *The emergence of ecological modernisation: Integrating the environment and the economy*, Routledge, London

CCC (1998) 'Code Of Labour Practices For The Apparel Industry Including Sportswear' [online], Clean Clothes Campaign, available at: http://www.cleanclothes.org/codes/ccccode.htm, accessed on September 17, 2006.

CCC (2005) 'Looking for a Quick Fix: How weak social auditing is keeping workers in sweatshops'[online], Clean Clothes Campaign, Amsterdam. available at: http://www.cleanclothes.org/publications/quick_fix.htm, accessed on September 16, 2006.

Chapple, W. and Moon, J. (2005) 'Corporate Social Responsibility in Asia: A Seven-Country Study of CSR Web Site Reporting', *Business & Society*, Vol. 44, No.4, pp. 415-441.

Charness,G., Corominas-Bosch, M., and Frechette, G.R. (2003) 'Bargaining and Network Structure: An Experiment' , Dept. of Economics, UCSB, Santa Barbara, CA, JEL Classification: B49, C70, C78, C91, C92, D40

Chaudhuri, S. and Paul-Mazumder, P. (1991) The Conditions of Garments Workers in Bangladesh - An Appraisal, BIDS, Dhaka.

Child, J. (1984) *Organisations: a Guide to Problems and Practice*, Harper Row, London.

Choudhury, S.R. and Hussain M.G. (2005) 'Post MFA Issues and Challenges: Social Dimension: Enhancing Employment And Global Competitiveness Through Decent Work: Post-MFA Challenges And Opportunities', ILO Decent Work Pilot Programme - DWPP, Dhaka.

Christoff, P. (1996) 'Ecological Modernisation, Ecological Modernities', *Environmental Politics*, Vol. 5, No. 3, pp 476-500.

Christoff, P. (1997) 'Environmental challenges for public policy: the search for ecological Governance', in T. Bonyhady (ed.) *Ecological Discourses*. (forthcoming).

Christopherson, S. and Lillie, N. (2005) 'Neither global nor standard: corporate strategies in the new era of labor standards', *Environment and Planning A*, Vol. 37, pp. 1919 - 1938

Clemett, A. (2003a) 'A Review of Environmental Policy and Legislation in Bangladesh', BEEL Working Project Working Paper 2, Managing Water Pollution from Industries in Bangladesh,

Stockholm Environment Institute, Stockholm.

Clemett, A. (2003b) 'Managing Pollution from Small Scale Industries in Bangladesh', BEEL Working Project Working Paper 1, Managing Water Pollution from Industries in Bangladesh, Stockholm Environment Institute, Stockholm.

Coe, N. M. and Hess, M. (2007) 'Global production networks: Challenges and debates', Paper prepared for the GPERG workshop, University of Manchester, 25-6 January 2007.

Coglianese, C. and Nash, J. (2001) 'Environmental Management Systems: the New Policy Agenda' in Coglianese, C. and Nash, J. (eds.) *Regulating from the Inside: Can Environmental Management Systems Achieve Policy Goals?*, Resources for the Future Press Washington, DC, pp. 1-27.

Cordano, M., and Frieze, I.H. (2000) 'Pollution Reduction Preferences of U.S. Environmental Managers: Applying Ajzen's Theory of Planned Behavior', *The Academy of Management Journal*, Vol. 43, No. 4. (Aug., 2000) pp. 627-641.

Cordano, M., Frieze, I. H., and Ellis, K. M. (2004) 'Entangled affiliations and attitudes: An analysis of the influences on environmental policy stakeholders' behavioral intentions', *Journal of Business Ethics*, Vol. 49, pp. 27-40.

Corominas-Bosch, M. (1999) 'On Two-sided Network Markets', Ph.D. Thesis, Universitat Pompeu Fabra.

CPD (2002) 'Corporate Responsibility Practices in Bangladesh: Results from a Benchmark Study', Paper 18, CPD Occasional Paper Series, Centre for Policy Dialogue, Dhaka.

CPD (2003a) 'Coping With Post MFA Challenges: Strategic Response for Bangladesh RMG Sector', Report number 55, CPD Dialogue Reports, Centre for Policy Dialogue, Dhaka.

CPD (2003b) 'Corporate Responsibility in Bangladesh: Where do we stand?', Report number 54, Centre for Policy Dialogue, Dhaka.

CPD (2003c) *Phasing Out of the Apparel Quota: Addressing Livelihood Concerns in Bangladesh, A Strategy Paper*, Centre for Policy Dialogue, UPL, Dhaka.

D'Sa, A. and Murthy, K.V.N. (2006) 'Environmental Reform in the Electricity Sector China and India', *The Journal of Environment & Development* Vol. 15, No. 2, pp. 158-183

Dahlsrud, A. (2008) 'How corporate social responsibility is defined: an analysis of 37 definitions', *Corporate Social Responsibility and Environmental Management*, Vol. 15, No. 1, pp. 1-13

Daily Star (2006a) available at: http://www.thedailystar.net/2006/03/17/d6031701022.htm accessed on March 17, 2006

Daily Star (2006b) available at: http://www.thedailystar.net/magazine/2006/03/03/cover.htm accessed on March 17, 2006.

Daily Star (2006c) available at: http://www.thedailystar.net/magazine/2006/03/03/cover.htm, accessed on March 15, 2006

Daily Star (2006d) available at: http://www.thedailystar.net/2006/05/23/d6052301033.htm, accessed on May 29, 2006.

Daily Star (2007) available at: http://www.thedailystar.net/2007/05/09/d70509050158.htm, accessed on July 20, 2008.

Daily Star (2008) available at: http://www.thedailystar.net/2007/05/09/d70509050158.htm, accessed on July 20, 2008.

Darnall, N., Jolley, G.J., and Handfield, R. (2008) 'Environmental management systems and green supply chain management: complements for sustainability?', *Business Strategy and the Environment*, Vol. 17, pp. 30-45

Dasgupta, N. (1997) 'Greening small recycling Firms: the case of lead smelting units in Calcutta', *Environment and Urbanisation*, Vol. 9, No. 2, pp. 289-305.

Dasgupta, N. (1998) 'Tall blunders: present strategies do more harm than good', *Down to Earth*, Vol. 30 (September), pp. 22-25. Centre for Science and Environment.

Dasgupta, N. (2000) 'Environmental enforcement and small industries in India: Reworking the problem in the poverty context', *World Development* , Vol. 28, No. 5, pp. 945-968.

Dasgupta, S. and Wheeler D. (1996) 'Citizen Complaints As Environmental Indicators: Evidence From China', World Bank Policy Research Department Working Paper, No. 1704, November.

Dasgupta, S., Hettige, H. and Wheeler, D. (2000) 'What Improves Environmental Compliance?: Evidence from Mexican Industry', *Journal of Environmental Economics &Management*, Vol.39, No.1, pp. 39-67.

Dasgupta, S., Mody, A., Roy, S., and Wheeler, D. (1995) 'Environmental Regulation And Development: A Cross-Country Empirical Analysis', World Bank Policy Research Department Working Paper, No. 1448, March.

Dasgupta, S., Wang, H. and Wheeler, D. (1997) 'Surviving Success: Policy Reform and the Future of Industrial Pollution in China', World Bank Policy Research Department Working Paper, No. 1856, October.

Deloitte (2003) 'The Challenge of Complexity: critical trends in supply chain management across global manufacturing', Deloitte Touche Tohmatsu.

DfID (2003) 'Citizen Participation And Voice In The Health Sector In Bangladesh' Reference number: DCP/DFID-B-251, Final Report, Department for International Development, Dhaka.

Dierickx, I., and Cool, K. (1989) 'Asset stock accumulation and sustainability of competitive advantage', *Management Science*, Vol. 35, pp1504-1511.

Dillard Department Stores (1996) 'Dillard Department Stores Business Policy', available at: http://www.itcilo.it/english/actrav/telearn/global/ilo/code/dillard.htm, and also: http://www.itglwf.org/doc/Dillardcode.doc, accessed on 14 September, 2006.

Dobson, A. (1990) *Green Political Thought*, Unwin Hyman, London

Dodge, J. (1997) 'Reassessing Culture and Strategy: Environmental Improvement, Structure, Leadership and Control', in Welford, R. (ed.) *Corporate Environmental Management 2: Culture and Organisations*, Earthscan, London.

DoE (1977) Environment Pollution Control Ordinance, Department of Environment, Ministry of Environment and Forests, Govt. Peoples Republic of Bangladesh.

DoE (1990) National Environment Management Action Plan (NEMAP), Department of Environment, Ministry of Environment and Forests, Govt. Peoples Republic of Bangladesh.

DoE (1992) National Environmental Policy, Department of Environment, Ministry of Environment and Forests, Govt. Peoples Republic of Bangladesh.

DoE (1995) Environmental Conservation Act (1995) the Bangladesh Gazette, extra-ordinary issue of 16-2-1995 and amended by Act Nos. 12 of 2000 and 9 of 2002, Department of Environment, Ministry of Environment and Forests, Govt. Peoples Republic of Bangladesh.

DoE (1997) Bangladesh Environment Conservation Rules, the Bangladesh Gazette, Extra-ordinary Issue of 28-8-1997 and amended by Notifications S.R.O 29-Law/2002, S.R.O 234-Law/2002 and S.R.O 88-Law/2003, Department of Environment, Ministry of Environment and Forest, Government of Bangladesh, Dhaka.

DoE (1997) EIA Guidelines for Industries, Department of Environment, Ministry of Environment and Forest, Government of Bangladesh, Dhaka.

DoE (1997) The Environmental Impact Assessment Guidelines of Industries (1997). Department of Environment, Ministry of Environment and Forests, Govt. Peoples Republic of Bangladesh.

DoE (1999) The Environmental Court Act, Bangladesh Gazette. Govt. Peoples Republic of Bangladesh.

DoE (2006) Please see Bangladesh DoE website for details of ongoing projects and donor contribution, at http://www.doe-bd.org/projects.html, accessed on February 18, 2007.

DoE, BCAS, UNEP (2001) 'Bangladesh State of the Environment (SOE) Report 2001', The Department of Environment (DoE) Ministry of Environment and Forest, Government of Bangladesh, in collaboration with Bangladesh Centre For Advanced Studies (BCAS) Published by: The United Nations Environment Programme (UNEP) Bangkok.

Doel, C. (1996) 'market Development and Organisational Change: the case of the food industry' in Wrigley, N. and Lowe, M. (eds.), *Retailing, Consumption and Capital: Towards the New Retail Geography*, Harlow, Longman.

Dolan, C. and Humphrey, J. (2000) 'Governance and trade in fresh vegetables: the impact of UK supermarkets on the African horticulture industry', *Journal of Development Studies*, Vol. 37, No. 2, pp 147-176

Dolan, C. and Humphrey, J. (2004) 'Changing Governance Patterns in the Trade in Fresh Vegetables between Africa and the United Kingdom', *Environment and Planning A*, Vol. 36, No.3, pp. 491–509

Dowding, K. (1995) 'Model or Metaphor? A critical review of the Policy network approach', *Political Studies*, Vol. 18, pp.136-158.

Drake, F., Purvis, M., and Hunt, J. (2004) 'Meeting the environmental challenge: a case of win-win or lose-win? A study of the UK baking and refrigeration industries', *Business Strategy and the Environment*, Vol. 13, No. 3, pp. 172-186

Dryzek, J. (1997) *The Politics of the Earth. Environmental Discourses*, Oxford University Press,

Oxford.

Dudley, G. (1994) 'The Next Steps Agencies, Political Salience and the Arm's Length Principle: Barbara Castle at the Ministry of Transport 1965-68', *Public Administration,* Vol. 72, Summer 1994, pp. 219-240.

Durieu, X. (2003) 'How Europe's retail sector helps promote sustainable production and consumption', Industry and Environment, Quarterly Review of the United Nations Environment Programme (UNEP) Division of Technology, Industry and Economics (UNEP DTIE) France, Vol. 26, Number 1 (January-March 2003).

Dutton J. and J. Dukerich (1991) 'Keeping an Eye on the Mirror: Image and Identity in Organizational Adaptation', *Academy of Management Journal,* Vol. 34, pp. 517-554

Dvir, D., Segev, E. and Shenhar, A. (1993) 'Technology's varying impact on the success of strategic business units within the Miles and Snow typology', *Strategic Management Journal,* Vol. 14, No. 2, pp. 155-161.

Dye, T.R. (1978) *Understanding Public Policy,* Prentiss Hall, Englewood Cliffs, NJ.

Easton, G. (1992) 'Industrial Networks: a review' in Axelsson, B. and Easton, G. (eds.) *Industrial Networks a New View of Reality,* Routlage, London

Easton, G. and Araujo, L. (1992) 'Non-economic exchange in industrial network' in Axelsson, B. and Easton, G. (eds.) *Industrial networks a new view of reality,* Routledge, London.

EC (2003a) 'The European eco-label for textile products', Commission Decision 2002/371/EC of 15 May 2002, O.J. n° L 133 of 18.5.2002, European Commission, Brussels.

EC (2003b) 'Handbook for Implementation of EU Environmental Legislation' [online] European Commission, Brussels. Available at: http://ec.europa.eu/environment/enlarg/handbook/handbook.htm, Accessed on 17 September, 2006

EC (2007) '50 Years Of Protecting Europe's Environment', KH-77-07-098-EN-P, European Commission, Brussels.

EC(2002) 'Ten Years EU Eco Label', European Commission, Brussels.

Eckersley, R. (2000) 'Disciplining the market, calling in the state: the politics of economy - environment integration' in S. C. Young (ed.) *The emergence of ecological modernisation: Integrating the environment and the economy,* Routledge, London

Egels-Zandén, N. (2007) 'Suppliers' compliance with MNCs' codes of conduct: Behind the scenes at Chinese toy suppliers.', *Journal of Business Ethics,* Vol. 75, No. 1, pp. 45-62.

EPB (2006a) Export Promotion Bureau Data Bank, online at http://epb.gov.bd/Statistics2005-06.html, accessed on July 7, 2006.

EPB (2006b) Export Promotion Bureau CMC CMC at: http://www.epb.gov.bd/cmc.html, accessed on July 22, 2006.

EPB (2007a) Export performance for the period of July-March, 2006-2007, online at http://www.epb.gov.bd/, accessed on March 22, 2008

EPB (2007b) Export performance for the period of July-December, 2007-08, online at http://www.epb.gov.bd/, accessed on March 22, 2008

Erzan, R., Goto, J. and Holmes, P. (1990) 'Effects of the Multi Fibre Arrangement on Developing Countries' Trade: An Empirical Investigation' in Hamilton, C.B. (ed.) *The Uruguay Round: Textiles Trade and the Developing Countries – Eliminating the Multi Fibre Arrangement in the 1990s*, The World Bank, Washington, USA.

Eshel, I., Samuelson, L and Shaked, A. (1998) 'Altruists, Egoists, and Hooligans in a Local Interaction Model', *American Economic Review*, Vol. 88, pp. 157 - 179.

ETI (2007) *ETI Base Code*, Ethical Trade Initiative, online at: http://www.ethicaltrade.org/Z/lib/base/code_en.shtml, accessed on July 5, 2008.

European Commission (2003) 'Mapping Instruments for Corporate Social Responsibility', Industrial relations and industrial change, European Commission, Directorate-General for Employment and Social Affairs, Unit D.1.

European Commission (2006) 'Country Strategy Paper: Bangladesh', European Commission Directorate Asia, Brussels.

Fahy, J. and Smithee, A. (1999) 'Strategic Marketing and the Resource Based View of the Firm', *Academy of Marketing Science Review*, Vol. 1999 no.10, available at: http://www.amsreview.org/articles/fahy10-1999.pdf, accessed on January 12, 2008.

Fair Wear Foundation (2006) *Background Study BANGLADESH [online]*, Fair Wear Foundation, Amsterdam, available at: http://en.fairwear.nl/tmp/Background%20study%20Final%202006.pdf, accessed on 15 September, 2006.

Fernández, E., Junquera, B. and Ordiz, M. (2006) 'Managers' Profile in Environmental Strategy: A Review of the Literature', *Corporate Social Responsibility and Environmental Management*, Wiley InterScience, Vol.13, pp. 261-274

Financial Express (2006) 'Jo-In Code' a strong pain in RMG neck', available at: http://www.mfa-forum.net/bangladesh/docs/Jo-In_Code_Strong_Pain_in_RMG_Neck_Feb06.pdf, accessed July 20, 2008

Fischer, C., Parry, I., Aguilar, F. and Jawahar, P. (2005) 'Corporate Codes of Conduct: Is Common Environmental Content Feasible?' Discussion Paper 05-09, Resources for the Future, Washington.

Fisher D. R. and Freudenburg W. R. (2001) 'Ecological Modernization and Its Critics: Assessing the Past and Looking Toward the Future', *Society and Natural Resources*, Vol.14, No.1, pp 701-709

FLA (2004) 'Tracking Charts', available at: http://www.fairlabor.org/all/transparency/charts2004.html, accessed on August 23, 2006.

Flannery, B.L. and May, D.R. (2000) 'Environmental Ethical Decision Making in the US Metal Finishing Industry', *Academy of Management Journal*, Vol. 43, pp. 642-662

Fleishman-Hillard (2005) 'Rethinking Corporate Social Responsibility: A Fleishman-Hillard/National Consumers League Study', Flieshman-Hillard, USA.

Fliess, B. and Lejarraga, I. (2005) 'Analysis Of Non-Tariff Barriers Of Concern To Developing

Countries', OECD Trade Policy Working Paper No. 16, TD/TC/WP(2004)47/FINAL, Organisation for Economic Co-operation and Development.

Font, X., Tapper, R., Schwartz, K., Kornilaki, M. (2008) 'Sustainable supply chain management in tourism', *Business Strategy and the Environment*, Vol 17, pp. 260-271.

Fox, T. and Prescott, D. (2004)'Exploring the role of development cooperation Agencies in corporate responsibility', based on discussions at an international conference: 'Development cooperation and corporate social responsibility: exploring the role of development cooperation agencies', Stockholm, 22-23 March, 2004, organized by Swedish foreign ministry, IIED,IBLF, Sida and the World Bank.

Freeman, R. E. (1984) *Strategic Management: A Stakeholder Approach*, Pitman, Boston

French, P. (2007) 'Asia column: Bangladesh - Rejuvenating an age-old problem', Ethical Corporation, 15 December 2007, available at: http://www.ethicalcorp.com/content.asp?ContentID=5588, accessed on 12 April, 2008.

French, P. (2008) 'Asia column: Cheap in China - Low-cost sourcing's high price', Ethical Corporation, 10 April, 2008, available at: http://www.ethicalcorp.com/content.asp?ContentID=5825, accessed on 27 April, 2008.

Frier, I. (2003) 'Environmental management from an ecological modernisation and innovation perspective' Presentation for the DRUID winter conference 2003, Chemnitz University of Technology, Germany

Frijns, J., Kirai, P., Malombe, J. & van Vliet, B. (1997) *Pollution control of small-scale metal industries in Nairobi*, Department of Sociology, WAU, Wageningen.

Frijns, J., Kirai, P., Malombe, J., and van Vliet B. (1997) 'Pollution Control of Small Scale Metal Industries in Nairobi', Department of Environmental Sociology, Wageningen University, Wageningen, Netherlands.

Frijns, J., Phuong, P.T. and Mol, A.P.J. (2000) 'Ecological modernisation theory and industrialising economies: the case of Viet Nam' in Mol, A.P.J and Sonnenfeld, D.A., (eds.) *Ecological Modernisation Around the World: Perspectives and Critical Debates.* Frank Cass, London and Portland.

Frost, S. and Ho, M. (2006) 'The End of the MFA and Apparel Exports: Has Good CSR Allowed Cambodia to Hold Steady Against China in a Quota Free Environment?' *Corporate Social Responsibility and Environmental Management*, Wiley InterScience, Vol.13, pp 37-46

Fruit of the Loom (1999) 'Fruit of the Loom Contractor Code of Conduct', available at: http://www.ilo.org/public/english/employment/gems/eeo/code_98/fruitof.htm http://www.itcilo.it/english/actrav/telearn/global/ilo/code/fruitof.htm, accessed on September 14, 2006.

Gains, F. (2003) 'Executive agencies in government: the impact of bureaucratic networks on policy outcomes', *Journal of Public Policy*, Jan-Apr 2003, Vol.23, No.1, pp.55-79

Gap Inc. (2005) 'Gap Inc. Code Of Vendor Conduct', available at: http://www.gapinc.com/public/documents/code_vendor_conduct.pdf, accessed on September 14, 2006.

Gaskell, G. (2002) 'Individual and Group Interviewing' in Bauer, W.M. and Gaskell, G (eds.) *Qualitative Research with Text, Image and Sound: A Practical Handbook*, Sage Publications, London.

Gear for Sport Inc. (2004) 'Code of Conduct', available at: http://www.gearnosweat.com/, accessed on 14 September 2006.

Geng, Y., Haight, M. and Zhu, Q. (2007) 'Empirical analysis of eco-industrial development in China', *Sustainable Development*, Vol. 15, No. 2, pp. 121-133

Gereffi, G. (1994) 'The organization of buyer-driven global commodity chains: How US retailers shape overseas production networks' in Gereffi, G., Korzeniewicz, M. (eds.) *Commodity Chains and Global Capitalism*, Praeger, Westport, CT, pp. 95-122.

Gereffi, G. (1995) 'Global production systems and Third World development', in Stallings, B. (ed.) *Global Change, Regional Response: The New International Context of Development*, Cambridge University Press, New York.

Gereffi, G. (1996) 'Commodity chains and regional divisions of labor in East Asia', *Journal of Asian Business*, Vol.12, No.1, pp 75–112.

Gereffi, G. (1997) 'Global shifts, regional response: Can North America meet the full-package challenge?', *Bobbin*, Vol. 39, No. 3, pp 16–31.

Gereffi, G. (1999) International trade and industrial upgrading in the apparel commodity chain, *Journal of International Economics*, 1999, vol. 48, issue 1, pp. 37-70

Gereffi, G. (2001) 'Global Sourcing in the US Apparel Industry', *Journal of Textile and Apparel Technology and Management*, Vol. 2, Issue 1.

Gereffi, G. and Memedovic, O. (2003) 'The Global Apparel Value Chain: What Prospects for Upgrading by Developing Countries', Sectoral Studies Series, UNIDO, Vienna.

Gereffi, G. and Sturgeon, T. (2004) 'Globalization, Employment, and Economic Development: A Briefing Paper', Sloan Workshop Series in Industry Studies, MIT, Massachusetts.

Gereffi, G., and Bair, J. (1998) 'US companies eye NAFTA's prize', *Bobbin*, Vol. 39, No. 7, pp 26–35.

Gereffi, G., and Pan, M. L. (1994) 'The globalization of Taiwan's garment industry' in Bonacich, E., et al. (eds.) *Global Production: The Apparel Industry in the Pacific Rim*, Temple University Press, Philadelphia, PA.

Gereffi, G., Garcia-Johnson, R., and Sasser, E. (2001) 'The NGO Industry Complex', *Foreign Policy*, Number 125, (July August 2001) pp. 56-65.

Gereffi, G., Humphrey, J. and Sturgeon, T. (2005) 'The Governance of Global Value Chains', *Review of International Political Economy*, Vol. 12, No.1, pp. 78–104.

Gibbon, P. (2001) 'Upgrading Primary Products: A Global Value Chain Approach', *World Development*, Vol. 29, No. 2, pp. 345–63.

Gibbs, D. (1998) 'Ecological Modernisation: A Basis for Regional Development?', Paper

presented to the Seventh International Conference of the Greening of Industry Network 'Partnership and Leadership: Building Alliances for a Sustainable Future', Rome 15-18 November 1998.

Gibbs, D. (2003) 'Reconciling economic development and the environment', *Local Environment*, Vol. 8, No. 1, pp 3-8.

Giddens, A. (1990) *The Consequences of Modernity*, Polity Press, Cambridge.

Giuliani, E., Pietrobelli, C. and Rabellotti, R. (2005) 'Upgrading in Global Value Chains: lessons from Latin American Clusters', *World Development*, Vol. 33. No. 4. pp. 549-573

Godfrey, J.M. and Langfield-Smith, I.A. (2004) 'Regulatory capture in the globalization of accounting standards', *Environment and Planning A*, Vol. 37, pp. 1975-1993

Goggin, M. (1990) *Implementation theory and practice: Toward a third generation*, Scott, Foresman, Glenview, IL

Gomes, R. (2003) 'Upgrading without exclusion: Lessons from SMEs in fresh fruit clusters in Brazil', in Pietrobelli, C. and Rabellotti, R. (eds.), *Upgrading in Clusters and Value Chains in LA. The Role of Policies*, Report for Agorà 2000 and the Micro and SME Division, Department of Sustainable Development (SD/MSM) of the Inter-American Development Bank, Washington D.C.

Gouldson, A. (2006) `Do firms adopt lower standards in poorer areas? Corporate social responsibility and environmental justice in the EU and the US?', *Area*, Vol. 38, Issue 4, pp. 402-412.

Gouldson, A., and Murphy, J. (1998) *Regulatory Realities: The Implementation and Impact of Industrial Environmental Regulation*, Earthscan, London.

Gouldson, A., and Murphy, J. (1996) 'Ecological modernization and the European Union', *Geoforum*, Vol. 27, No.1, pp11-27.

Gouldson, A., and Murphy, J. (1997) 'Ecological Modernisation: economic restructuring and the environment', *The Political Quarterly*, Vol. 68, No.5, pp 74-86.
Gouldson, A., and Murphy, J. (2000) 'Environmental policy and industrial innovation: integrating environment and economy through ecological modernisation', *Geoforum*, Vol. 31, pp. 33-44.

Grankvist, G. and Biel, A. (2007) 'The impact of environmental information on professional purchasers' choice of products', *Business Strategy and the Environment*, Vol. 16, No. 6, pp. 421-429

Grant, R.M. (1991) 'The Resource Based Theory of Competitive Advantage: Implications for Strategy Formulation', *California Management Review*, Vol. 33, No. 3, pp. 114-135.

Gray, P., Golob, E., and Markusen, A. (1996). 'Big Firms, Long Arms: A Portrait of a 'Hub and Spoke' Industrial District in the Seattle Region', *Regional Studies*, Vol. 30, No. 7, pp. 651-66.

Green, K. et al. (1996) 'Purchasing and environmental management: interactions, policies and opportunities', *Business Strategy and the Environment*, Vol. 5, pp. 188–197.

Green, K. et al. (1998) 'Green purchasing and supply policies: do they improve companies' environmental performance?' *Supply Chain Management*, Vol. 3, No. 2, pp. 89–95.

Green, K., Harvey, M. and McMeekin, A. (2003) 'Transformations in food consumption and production systems', *Journal of Environmental Policy and Planning*, Vol. 5, No. 2, pp. 145-163.

Green, K., McMeekin, A. and Irwin, A. (1994) 'Technological trajectories and R&D for environmental innovation in UK firms', *Futures*, Vol.26, No. 10, pp. 1047-1059

Green, K., Morton, B., and New, S. (1996) 'Purchasing And Environmental Management: Interactions, Policies And Opportunities', *Business Strategy and the Environment*, Vol. 5, No. 3, pp. 188-197

Greening, D.W., and Gray, B. (1994) 'Testing a model of organizational response to social and political issues', *Academy of Management Journal*, Vol. 37, pp. 467–498.

Gressner, E. (2004) 'The Big Bang: Ending Quota and Tariff Policies' report on behalf of the American Import Shippers Association (AISA) the U.S. Association of Importers of Textiles and Apparel (USA-ITA) the National Retail Federation (NRF)the International Mass Retail Association (IMRA) and the American Apparel and Footwear Association (AAFA) USA.

GTO and PPMA (Gherzi Textile Organisation and Project Promotion and Management Associates) (2002) 'Initial Report on Post-MFA Development Strategy and Technical Assistance for the RMG Sector' submitted to the Ministry of Commerce, Government of the People's Republic of Bangladesh, Dhaka by Gherzi Textile Organisation, Zurich and Project Promotion and Management Associates, Dhaka.

GTO and PPMA (Gherzi Textile Organisation and Project Promotion and Management Associates) (2003) *Final Report on Post MFA Development Strategy and Technical Assistance for the RMG Sector*, Vol. 1 and 2, submitted to the Ministry of Commerce, Government of the People's Republic of Bangladesh, Bangladesh Secretariat, Dhaka, Bangladesh.

GTZ (2005) 'Promotion of social and environmental standards' German Development Cooperation, GTZ, Dhaka.

GTZ PROGRESS (2007a), WP 2 - Salient Features of the Bangladesh Labour Law 2006 Related to the RMG Sector, prepared by SEBA Limited in cooperation with the Ministry of Labour and Employment, Bangladesh. Document released: May 2008.

GTZ PROGRESS (2007b), WP 4 - Review of Donor Support in the RMG Sector, GTZ PROGRESS, Dhaka. Document released: May 2008.

GTZ PROGRESS (2007c), WP 5 - Identification of Eco-Efficiency Measures for the Ready-Made Garment Factories in Bangladesh, a concept paper prepared by Prokausali Sansad Limited, Dhaka. Document released: May 2008.

GTZ PROGRESS (2007d), WP 6 - A Comparative Analysis between the Bangladesh Labor Law 2006 and 7 General Codes of Conduct, GTZ PROGRESS, Dhaka. Document released: May 2008.

Guillén, M.F. (2000) 'Business Groups in Emerging Economies: A Resource-Based View', *The Academy of Management Journal*, Vol. 43, No. 3. (Jun., 2000) pp. 362-380.

H & M Hennes & Mauritz AB (2006) 'Code of Conduct', available at: http://www.hm.com/filearea/corporate/fileobjects/pdf/common/COMMON_CODE-OFCONDUCT_ENGLISH_PDF_1124202692491_1150269822085.pdf, accessed on 14 September 2006.

Haas, P. M. (1992) 'Epistemic communities and international policy coordination', *International*

Organization, Vol. 46, No. 1, pp 1–35.

Haddock-Fraser, J., and Fraser, I. (2007) 'Assessing corporate environmental reporting motivations: differences between close-to-market and business-to-business companies', *Corporate Social Responsibility and Environmental Management*, in press.

Hahn, T. and Scheermesser, M. (2006) 'Approaches to Corporate Sustainability among German Companies' *Corporate Social Responsibility and Environmental Management*, Wiley InterScience, Vol.13, pp 150-165

Hajer, M. (1995) *The Politics of Environmental Discourse: Ecological Modernisation and the Policy Process*, Oxford University Press, Oxford.

Hajer, M. (1996) 'Ecological Modernisation as cultural politics' in Lash, S., Lzerszynski, B., and Wynne, B. (eds.) *Risk, Environment and Modernity: Towards a New Ecology*, Sage, London.

Hajer, M. (2004) 'Three Dimensions of Deliberative Policy Analysis: Analysing Governance Networks in Rebuilding Ground Zero' Hajer Roskilde paper 2004, Amsterdam.

Hakansson, H. and Snehota, I. (1995) *Developing Relationships in Business Networks*, Routledge, London.

Hakansson, H., and Johanson, J. (1992) 'A model of industrial networks', in Axelsson, B., and Easton, G. (eds.) *Industrial Networks: A New View of Reality*, Routledge, London, pp. 28-34.

Halawi. L., Aronson, J. and McCarthy, R. (2005) 'Resource-Based View of Knowledge Management for Competitive Advantage', *The Electronic Journal of Knowledge Management*, Vol. 3, No. 2, pp. 75-86

Halila, F. (2007) 'Networks as a means of supporting the adoption of organizational innovations in SMEs: the case of environmental management systems (EMSs) based on ISO 14001', *Corporate Social Responsibility and Environmental Management*, Vol. 14, No. 3, pp 165-179.

Halme, M. (1997) 'Developing an Environmental Culture Through Organisational Change and Learning' in Welford, R. (ed.) *Corporate Environmental Management 2: Culture and Organisations*, Earthscan, London.

Hannigan, J. (1995) *Environmental Sociology: A Social Constructionist Perspective*, Routlage, London.

Hardy, C., Phillips, N. and Clegg, S. (2001) 'Reflexivity in organization and management theory: A study of the production of the research 'subject'', Human *Relations*, Vol. 54, pp. 531-560.

Hart, S.L. (1995) 'A Natural-Resource-Based View of the Firm', *The Academy of Management Review*, Vol. 20, No. 4. (Oct., 1995) pp. 986-1014.

Harvey, D. (1996) *Justice, Nature & the Geography of Difference*, Blackwell Publishers, London.

Hassler, M. (2003) 'The Global Clothing Production System: Commodity Chains and Production Networks', *Global Networks*, Vol. 3, No. 4, pp. 513-531.

Haworth, N., Hughes, S. and Wilkinson, R. (2004) 'The international labour standards regime: a case study in global regulation', *Environment and Planning A*, Vol. 37, pp. 1939 - 1953

Hay, C. (1998) 'The Tangled Webs We Weave: the Discourse Strategy and Practice of Networking' in Marsh, D. (ed.) *Comparing Policy Networks*, Buckingham Open University Press, Buckingham.

Hebb, T., and Wójcik, D. (2005) 'Global standards and emerging markets: The institutional-investment value chain and the CalPERS investment strategy', *Environment and Planning A*, Vol. 37, No. 11, pp.1955-1974.

Hertz, S. (1992). 'Towards more integrated industrial systems' in Axelsson, B. and Easton, G. (eds.) *Industrial Networks a New View of Reality*, Routlage, London

Hettige, H., Huq, M., Pargal, S., and Wheeler D. (1996) 'Determinants of Pollution Abatement in Developing Countries: Evidence from South and Southeast Asia', *World Development*, Vol. 24, No. 12, pp1891-1904.

Hettige, H., Mani, M., and Wheeler, D. (1998) 'Industrial Pollution in Economic Development: Kuznets Revisited', World Bank Development Research Group Working Paper, No. 1876

Hewett, P. and Amin, S. (2000) 'Assessing the Impact of Garment Work on Quality of Life Measures', Population Council, New York, available at: http://www.bids-bd.org/sajeda.htm, accessed on 17 September 2006.

Hitt, M.A., Ireland, R.D., and Hoskisson, R.E., (2002) *Strategic Management - Competitiveness and Globalization*, South Western College Publishing, USA

Ho, M. and Welford, R. (2006) 'Case Study: Power, Protests and the Police: The Shootings at Shanwei', *Corporate Social Responsibility and Environmental Management*, Wiley InterScience, Vol.13, pp. 233-237

Holiday (2006) Source Holiday website at http://www.weeklyholiday.net/2006/260506/front.html, accessed on July 27, 2006

Holt, D. (2004) 'Managing the interface between suppliers and organizations for environmental responsibility - an exploration of current practices in the UK', *Corporate Social Responsibility and Environmental Management*, Vol. 11, No. 2, pp. 71-84

Howlett, M. (2002) 'Do networks matter? Linking policy network structure to policy outcomes: evidence from four Canadian policy sectors 1990-2000', *Canadian journal of political science*, Vol.35, No.2 pp.235-268

Howlett, M. and Ramesh, M. (2003) *Studying Public Policy: Policy Cycles and Policy Subsystems*, Oxford University Press, Ontario.

Hughes, A. (2005) 'Corporate strategy and the management of ethical trade: the case of the UK food and clothing retailers', *Environment and Planning A*, Vol. 37, pp. 1145 - 1163

Hughes, A. (2006) 'Learning to trade ethically: Knowledgeable capitalism, retailers and contested commodity chains', *Geoforum*, Vol. 37, pp. 1008–1020

Hughes, A., Buttle, M. and Wrigley, N. (2007) 'Organisational geographies of corporate responsibility: a UK–US comparison of retailers' ethical trading initiatives', *Journal of Economic Geography*, Vol. 7, pp. 491–513

Humphrey, J. (2003) 'Globalisation and Supply Chain Networks: The Auto Industry in Brazil

and India', *Global Networks,* Vol. 3, No. 2, pp. 121–141.

Humphrey, J. and Schmitz, H. (2000) 'Governance and Upgrading: Linking Industrial Cluster and Global Value Chain Research', *IDS Working Paper,* 120, Institute of Development Studies, University of Sussex.

Humphrey, J. and Schmitz, H. (2001) 'Governance in global value chains', *IDS Working Paper* No 120, Brighton: Institute of Development Studies, University of Sussex.

Humphrey, J. and Schmitz, H. (2002) 'How does Insertion in Global Value Chains Affect Upgrading in Industrial Clusters', *Regional Studies,* Vol. 36, No. 9, pp. 1017-1027.

Huq, M. and Wheeler, D. (1992) 'Pollution Reduction Without Formal Regulation: Evidence from Bangladesh', World Bank Environment Department Working Paper, No. 1993-39, Washington.

Huq, S. (2002) 'Case Study: Bangladesh' in Robins, N. and Roberts, S. (eds.) *The Reality of Sustainable Trade,* International Institute for Environment and Development, London.

Hussain, M.G. (2006a) 'Forum for the Future II: Social Compliance Initiatives in Bangladesh RMG Industry', Ministry of Commerce, Government of Bangladesh, Dhaka.

Hussain, M.G. (2006b) 'MFA Forum Strategy Meeting: Social Compliance Initiatives in Bangladesh RMG Industry', Ministry of Commerce, Government of Bangladesh, Dhaka.

Hyvarinen, A (2004) 'Eco-labelling and Environmentally Friendly Products and Production Methods Affecting the International Trade in Textiles and Clothing', Textiles and Clothing Technical Papers, International Trade Centre UNCTAD/WTO (ITC) Geneva, available at: http://www.intracen.org/textilesandclothing/atc_eco_labelling.htm, accessed on 17 September 2006.

IATP (2000) 'Incomplete Bibliography of Eco Labels' [online] Institute for Agriculture and Trade Policy, available at: http://www.iatp.org/labels/envcommodities/eco-labels.html, accessed on 17 September 2006.

IBM (2008) 'Attaining sustainable growth through corporate social responsibility', IBM Global Business Services, USA.

IISD (1996) 'Global Green Standards: ISO 14000 and Sustainable Development', The International Institute for Sustainable Development, Canada.

Iles, A. (2006) 'Shifting to green chemistry: the need for innovations in sustainability marketing', *Business Strategy and the Environment,* in press.

ILO (2004a) 'Child Labour and Responses: Bangladesh Overview', ILO-IPEC, available at: http://www.ilo.org/public/english/region/asro/newdelhi/ipec/download/bangladesh.pdf, accessed on 17, September 2006

ILO (2004b) 'Globalization and Decent Work: A report for the Decent Work Pilot Programme in Bangladesh', ILO Decent Work Pilot Programme - DWPP, Dhaka, available at: http://www.ilo.org/public/english/bureau/dwpp/countries/bangladesh/index.htm, accessed on 17, September 2006

ILO (2004c) 'Independent Evaluation of the InFocus Programme on the Elimination of Child Labour-IPEC', ILO Evaluation Unit, Geneva.

ILO (2005a) 'Enhancing employment and Global Competitiveness Through Decent Work: post MFA Challenges and Opportunities', Project 'Decent Work Pilot Programme' (DWPP) briefing note, ILO Dhaka.

ILO (2005b) 'Bangladesh Employers RMG Final Report: Enhancing Employment And Global Competitiveness Through Decent Work: Post-MFA Challenges And Opportunities', ILO Decent Work Pilot Programme - DWPP, Dhaka.

ILO (2005c) 'Briefing Note: Enhancing Employment And Global Competitiveness Through Decent Work: Post-MFA Challenges And Opportunities', ILO Decent Work Pilot Programme - DWPP, Dhaka.

ILO (2006a) 'Concept Note', ILO Decent Work Pilot Programme - DWPP, Dhaka, available at: http://www.ilo.org/public/english/bureau/dwpp/countries/bangladesh/index.htm, accessed on September 15, 2006.

ILO (2006b) 'Country Brief: Bangladesh', ILO Decent Work Pilot Programme - DWPP, Dhaka, available at: http://www.ilo.org/public/english/bureau/dwpp/countries/bangladesh/index.htm, accessed on September 15, 2006.

ILO BGMEA (2002) 'Baseline Survey', A Partnership Approach to Improving Labour Relations and Working Conditions in the Bangladesh Garment Industry, BGMEA and ILO, Dhaka.

ILO BGMEA (2003a) 'A Handbook on Relevant National Laws and Regulations Of Bangladesh', A Partnership Approach to Improving Labour Relations and Working Conditions in the Bangladesh Garment Industry, BGMEA and ILO, Dhaka.

ILO BGMEA (2003b) 'Workplace Improvement Plans Guidance', A Partnership Approach to Improving Labour Relations and Working Conditions in the Bangladesh Garment Industry, BGMEA and ILO, Dhaka.

ILO BGMEA (2004) 'Independent Final Evaluation', A Partnership Approach to Improving Labour Relations and Working Conditions in the Bangladesh Garment Industry, BGMEA and ILO, Dhaka.

ILO IPEC BGMEA (2004) 'Combined Evaluation of ILO/IPEC garment sector projects as part of the 'Memorandum of Understanding' framework with the Bangladesh Garment Manufacturers and Exporters Association', IPEC Independent Evaluation Team, ILO, Geneva.

ILO UNICEF (2004) 'Addressing Child Labour In The Bangladesh Garment Industry 1995-2001: A synthesis of UNICEF and ILO evaluation studies of the Bangladesh garment sector projects', ILO and UNICEF, New York and Geneva.

Inglehart, R. (1995) 'Public support for environmental protection: Objective problems and subjective values in 43 societies', *Political Science & Politics*, Vol. 28, pp.57-72.

Ingram, H.M., and Mann, D.E. (1980) 'Policy Failure: An Issue Deserving Analysis' in Ingram, H.M., and Mann D.E. (eds.) *Why Policies Succeed or Fail*, Sage, USA.

Intertek Labtest (2004a) 'SA8000 Program', Intertek Testing Services Hong Kong Ltd.

Intertek Labtest (2004b) 'WRAP Certification' [online], Intertek Testing Services Hong Kong Ltd., available at: http://www.intertek-labtest.com/en/Services/?cat=31&scat=77&art_id=613, accessed on September 15, 2006.

Intertek Labtest (2004c) 'WRAP Certification', Intertek Testing Services Hong Kong Ltd.

ISO (1998) 'ISO 14000-Meet the Whole Family!', International Organization for Standardization.

ITC (2003) 'An Introduction to Eco Labelling', Bulletin 73:2003, International Trade Centre, UNCTAD WTO, Geneva.

IWM (2007) 'Industrial Environmental Compliance and Pollution Control in Greater Dhaka Watershed', Institute of Water Modelling, Bangladesh.

Jabbar, J.S. (2006) 'Forum for the Future II: BGMEA Activities to ensure a viable, Profitable and Competitive Garment Industry in Bangladesh', BGMEA, Dhaka.

Jacques, P. (2006) 'How Should Corporations Deal with Environmental Skepticism?' *Corporate Social Responsibility and Environmental Management,* Wiley InterScience, Vol.13, pp 25-36

Jamison, A., and Baark, E. (1999) 'National Shades of Green: Comparing the Swedish and Danish Styles in Ecological Modernisation', *Environmental Values* Vol. 8, pp. 199–218

Jänicke, M. (1985) 'Preventive environmental policy as ecological modernisation and structural policy', Discussion Paper IIUG dp 85-2, Internationales Institut Fur Umwelt und Gesellschaft, Wissenschaftszentrum Berlin Fur Sozialforschung (WZB).

Jänicke, M. (1992) 'Conditions for environmental policy success: an international comparison' in Jachtenfuchs, M., Strubel, M. (eds.) *Environmental Policy in Europe: Assessment, Challenges and Perspectives,* Nomos Verlagsgesellschaft, Baden Baden, pp. 71-97.

Jänicke, M. (1997) 'The political systems capacity for environmental Policy' in Jänicke, M., and Weidner, H. (eds.) *National Environmental Policies: A comparative Study of Capacity-Building,* Springer, Berlin, pp. 1-24.

Jänicke, M. and Weidner, H. (1995) 'Successful Environmental Policy: An Introduction.' In Jänicke, M. and Weidner, H (eds.) *Successful Environmental Policy. A Critical Evaluation of 24 Cases,* Sigma Press, Berlin, pp. 10-26.

Jänicke, M., Mönch, H. et al. (2000) 'Structural change and environmental policy' in Young, S.C. (ed.) *The Emergence of Ecological Modernisation? Integrating the environment and the economy?* Routledge, London, pp. 133-152.

JCPenny (2006) 'JCPenney Foreign Sourcing Requirements', available at: http://www.jcpenney.net/company/supplier/legal/Supplier%20Compliance.pdf, accessed on 14 September 2006.

Jenkins, R., Pearson R., and Seyfang G. (2002) *Corporate Responsibility and Labour Rights: Codes of Conduct in the Global Economy* (eds.), Earthscan Publications, London.

Jenkins, W. (1978) *Policy Analysis: A Political and Organizational Perspective,* Martin Robinson, London.

Jeppesen, S., and Hansen, M.W. (2004) 'Environmental Upgrading of Third World Enterprises Through Linkages to Trans national Corporations: Theoretical Perspectives and Preliminary Evidence', *Business Strategy and the Environment,* Vol. 13, pp 261 - 274.

Johanson, J., and Mattsson L.G. (1992) 'Network Positions and Strategic Action - an Analytical Framework' in Axelsson, B. and Easton, G. (eds.) *Industrial Networks a New View of Reality*, Routlage, London.

Jones Apparel Group, Inc. (1996) 'Business Partner Standards', available at: http://www.itcilo.it/english/actrav/telearn/global/ilo/code/jones.htm http://www.jny.com/investors_sub.jsp?event=investors_sub&doc=irol-StandardsContSup&subsec=company_sub, accessed on 14 September 2006

Jones, T. M. and Wicks, A.C. (1999) 'Convergent Stakeholder Theory,' *Academy of Management Review*, Vol. 24, No. 2, pp. 206-221.

Kaplinsky, R., and Readman, J. (2001) 'Integrating SMEs in Global Value Chains: Towards Partnership for Development', Vienna, UNIDO.

Keesing, D., and Lall, S. (1992) 'Marketing Manufactured Exports from Developing Countries: Learning Sequences and Public Support', in G. Helleiner (ed.) *Trade Policy, Industrialisation and Development*, Oxford, Oxford University Press, pp. 176-193.

Keil, R. and Desfor, G. (2003) 'Ecological Modernisation in Los Angeles and Toronto', *Local Environment*, Vol.8, No. 1, pp. 27 - 44

Kenis, P. and Schneider, V. (1991) 'Policy networks and policy analysis: scrutinizing a new analytical toolbox', in Marin, B. and Mayntz, R. (eds.) *Policy Networks: Empirical Evidence and Theoretical Considerations*, Campus/Westview Press, Frankfurt/Boulder, CL.

Ketola, T. (2006) 'From CSR-Psychopaths to Responsible Corporations: Waking up the Inner Sleeping Beauty of Companies', *Corporate Social Responsibility and Environmental Management*, Wiley InterScience, Vol.13, pp. 98-107.

Khaled, A.J.S.M. (2004) '*Quality Management in the Apparel Industry*', Mahbuba Khaled Publishers, Chittagong.

Khan et al. (1992) 'A bacteriological profile of bottled water sold in Bangladesh', *World Journal of Microbiology and Biotechnology*, Vol. 8, No. 5, pp. 544-545.

Khan, M. (1998a) 'Patron-Client Networks and the Economic Effects of Corruption.' *The European Journal of Development Research*, Vol.10, No 1, pp. 15-39.

Khan, M. (1998b) 'The Role of Civil Society and Patron-Client Networks in the Analysis of Corruption' in Corruption and Integrity Improvement Initiatives in Developing Countries, UNDP - OECD Development Centre, New York.

Khan, S. R. (2002) (ed.) *Trade and Environment: Difficult Policy Choices at the Interface*, Zed Books, London.

Khondker, B.H., Razzaque, A. and Ahmed, N. (2005) 'Exports, Employment and Working Conditions: Emerging Issues in the Post MFA RMG Industry', ILO Dhaka.

Klassen, R.D. and Whybark, D.C. (1999) 'The Impact of Environmental Technologies on Manufacturing Performance', *Academy of Management Journal*, Vol. 42, No. 6, pp. 599-615.

Klein, N. (2000) *No Logo*, Picador, USA.

Klijn, E.H. (2000) 'Interactive decision making and the link to institutionalized Decision Making Arenas; An analysis of the arenas and the rules of the VERM discusión' Paper for

NOB conference on Interactive Governance, Workshop 'To a postparliamentory local democracy', Nov 2000.

Klijn, E.H. and Koppenjan, J.F.M. (2000a) 'Politicians and interactive decision-making: institutional spoilsports or playmakers', *Public Administration*, Vol. 78, No. 2, pp. 365-387

Klijn, E.H. and Koppenjan, J.F.M. (2000b) 'Public management and policy networks. Foundations of a network approach to governance', *Public Management*, Vol. 2, No. 2, pp. 135-138

Klijn, E.H., Koppenjan, J. F.M. and Termeer, K. (1995) 'Managing Networks in the Public Sector: a Theoretical Study of Management Strategies in Policy Networks', *Public Administration*, Vol. 73 Autumn 1995 (pp. 437 to 454).

Klooster, D. (2006) 'Environmental certification of forests in Mexico: The political ecology of a nongovernmental market intervention', *Annals of the Association of American Geographers*, Vol. 96, No. 3, pp. 541-565.

Knappe, M. (2003) 'The Agreement on Textiles and Clothing: The ATC Implementation so far', International Trade Centre UNCTAD/WTO, Geneva.

Knorringa, P. (1999) 'Agra: An Old Cluster Facing the New Competition', *Special Issue of World Development*, Vol. 27. No 9, pp. 1587-1604

Kosfeld, M. (2003) 'Working Paper No. 152: Network Experiments' in *Working Paper Series*, Institute for Empirical Research In Economics, University of Zurich.

KPMG (2005) 'KPMG International Survey of Corporate Responsibility Reporting 2005',Amsterdam.

Kranton R. and Minehart D. (1998) 'A theory of Buyer-Seller Networks', *American Economic Review*, Vol. 91, pp 485-508.

Kranton R. and Minehart D. (2000) 'Networks versus vertical integration', *RAND Journal of Economics*, Vol. 31, pp. 570-601.

Kronsell, A. (2000) 'A ' sustainable' impact on the EU? An analysis of the making of the Fifth Environmental Action Programme' in S. C. Young (ed.) *The emergence of ecological modernisation: Integrating the environment and the economy*, Routledge, London

Kumar, R., Balsari, V. and Murphy, D.F. (2006) 'Corporate responsibility in India: A changing agenda', Tata Energy Research Institute (TERI-Europe), EC Newsdesk, 26 Jun 02, online at: http://www.ethicalcorp.com/content.asp?ContentID=123, accessed on April 14th, 2008.

Kvale, S. (1996) *Interviews: An Introduction to Qualitative Research Interviewing*, Sage Publications, London.

Lee, E., Lee, K., and Moore, M. (2004) 'Global Sourcing and Textile and Apparel Import Values: a Four Country Study as an Application of Global Commodity Chain Theory', *Journal of Textile and Apparel Technology and Management*, Vol. 3, No. 4, pp. 1-10

Lees, C. (2000) 'Paradise postponed: an assessment of ten years of governmental participation by the German Green Party' in S. C. Young (ed.) *The emergence of ecological modernisation: Integrating the environment and the economy*, Routledge, London

Leroy, P. and van Tatenhove, J. (1999) 'New policy arrangements in environmental politics:

the relevance of political and ecological modernization', in Spaargaren, G. et al. (eds.) *Environmental Sociology and Global Modernity*, Sage, London.

Leroy, P., and Tatenhove, J. (2000) 'Political modernization theory and environmental politics' in Spaargaren, G., Mol, A. P. J., and Buttel F. H., (eds.) *Environment and global modernity*, pp. 187–208, Sage Studies in International Sociology, London.

Levi Strauss & Co. (1991) 'Levi Strauss & Co. Global Sourcing and Operating Guidelines', available at: http://www.levistrauss.com/Downloads/GSOG.pdf, accessed on 14 September 2006.

Lewis, D. and Kanji, N. (2009) *Non-Governmental Organisations ad Development* (Routlage Perspectives on Development), Routlage.

Lipsky, M. (1980) *Street-level bureaucracy: dilemmas of the individual in public services*, Russell Sage Foundation, New York

Liz Claiborne Inc. (2006) 'Workplace Code of Conduct', available at: http://www.lizclaiborneinc.com/rights/conduct.htm, accessed on September 14, 2006.

Locke, R. M. and Romis, M. (2007) 'Improving work conditions in global supply chain', *MIT Sloan Management Review*, Vol. 48, No. 2, pp. 54–62.

Locke, R. M., Qin, F. and Brause, A. (2006) 'Does Monitoring Improve Labor Standards?: Lessons from Nike', *MIT Sloan Research Paper* No. 4612-06

Long, E. and Franklin, A. L. (2004) 'The paradox of implementing the Government Performance and Results Act: Top-down direction for bottom-up implementation', Public Administration Review, Vol. 64, No. 3, pp. 309- 319

López, J.G., Sterner, T., and Afsah, S. (2004) 'Public Disclosure of Industrial Pollution: The PROPER Approach for Indonesia?', Resources for the Future Discussion Paper, World Bank, pp. 04–34

Luken, R. and Stares, R. (2005) 'Small Business Responsibility in Developing Countries: A Threat or an Opportunity?', *Business Strategy and the Environment*, Vol.14, pp. 38-53.

Lyrette, J. (2002) 'Innovation Through Linkages and Networks at the National Research Council: Measuring the Output', in de la Mothe, J., and Link, A.J., (eds.) *Economics of Science, Technology and Innovation: Networks, Alliances and Partnerships in the Innovation Process*, Kluwer Academic Publishers, London.

Mahoney, J.T. and Pandian, J.R. (1992) 'The Resource-Based View Within the Conversation of Strategic Management', *Strategic Management Journal*, Vol. 13, No. 5. (Jun., 1992) pp. 363-380.

Majone, G., and Wildavsky, A. (1984) 'Implementation as Evolution' in Pressman, J. L. and Wildawsky, A. (eds.) *Implementation*, University of California Press, Berkeley.

Make Trade Fair Alliance (2003) 'Market Access and Livelihood Security: A Strategy to Ensure Sustainability of the RMG Sector', INCIDIN Bangladesh and MTFA.

Mani, M., and Wheeler, D. (1997) 'In Search Of Pollution Havens? Dirty Industry In The World Economy, 1960-1995', PRDEI Workshop 3: Pollution havens and pollution halos, PRDEI, Washington.

Mani, M., and Wheeler, D. (1998) 'In search of pollution havens? Dirty industry in the world economy, 1960-1995', Journal of Environment and Development, Vol. 7, No. 3, pp. 215- 247.

Maquila Solidarity Network (MSN) (2005) 'Codes Memo: MFA Forum Promotes Joint Action in Bangladesh', Codes Memo, Number 19, September 2005, available at: http://www.maquilasolidarity.org/, accessed on July 15, 2006

Maquila Solidarity Network (MSN) (2006) 'Is Fair Trade a good fit for the garment industry?' MSN Discussion Paper No. 1, Maquila Solidarity Network.

Marks and Spencer (2003) *Self Help Guide towards Ethical Compliance:(A tool for Production Sites)* Marks and Spencer, UK.

Marks and Spencer (2005) 'Environmental, Chemical and Factory Minimum Standards for Dying, Printing and Finishing Clothing and Textiles', Marks and Spencer UK.

Marsden, T. and Smith, E. (2005), 'Ecological entrepreneurship: sustainable development in local communities through quality food production and local branding', *Geoforum*, Vol. 36, pp. 440-451

Marsh, D. (1998) 'The Development of the Policy Network Approach', in Marsh, D. (ed.) *Comparing Policy Networks*, Buckingham Open University Press, Buckingham.

Marsh, D. and Rhodes, R. A. W. (1992) `Policy Communities and Issue Networks: Beyond Typology', in Marsh, D. and Rhodes, R. A. W. (eds.) *Policy Networks in British Government*, Clarendon Press, Oxford.

Marsh, D. and Smith, M. (2000) 'Understanding Policy Networks: Towards a Dialectical Approach', Political Studies, Vol. 48, No. 1, pp. 4-21.

Martell, L. (1994) *Ecology and Society*, University of Massachusetts Press, Amherst.

Massa, I. and Skou Andersen, M. (2000a) 'Special Issue Introduction: Ecological Modernization,' *Journal of Environmental Policy & Planning*, Vol. 2, pp. 265-267

Massa, I. and Skou Andersen, M. (2000b) 'Ecological Modernization – Origins, Dilemmas and Future Directions,' *Journal of Environmental Policy & Planning*, Vol. 2, pp. 337-345

Matouq, M. (2000)'A case-study of ISO 14001-based environmental management system implementation in the People's Republic of China', *Local Environment*, Vol. 5, pp. 415-33.

Mayer, J. (2006) 'Transboundary Perspectives on Managing Indonesia's Fires', *The Journal of Environment & Development* Vol. 15, No. 2, pp. 202-223

Mazmanian, D. and Sabatier, P. (1983) Implementation and Public Policy. Scott Foresman, Glencoe, ILL

McWilliams, A. and Siegel, D. (2000) 'Corporate Social Responsibility and Financial Performance: Correlation or Misspecification?' *Strategic Management Journal*, Vol. 21, No. 5., pp. 603-609.

McWilliams, A. and Siegel, D. (2001) 'Corporate Social Responsibility: A Theory of the Firm Perspective', *The Academy of Management Review*, Vol. 26, No. 1. (Jan., 2001) pp. 117-127.

Meadowcroft, J. (1997) 'Planning for sustainable development: insights from the literatures of political science', *European Journal of Political Research*, Vol. 31, pp.427 -454.

Meima, R. and Welford, R. (1997) 'Introduction: the ecological challenge in organisation theory and organisational behaviour', in Welford, R. (ed.) *Corporate Environmental Management 2: Culture and Organisations*, Earthscan, London.

Memon, M.A., Imura, H. and Shirakawa, H. (2006) 'Reforms for Managing Urban Environmental Infrastructure and Services in Asia', *The Journal of Environment & Development* Vol. 15, No. 2, pp 138-157

Messner, D. (2004) *Regions in the 'world economic triangle'. In Schmitz (ed.) Local Enterprises in the Global Economy*, Cheltenham: Edward Elgar.

MFAF (2005a) 'A Collaborative Framework For Guiding Post-MFA Actions', MFAF, Accountability, UK.

MFAF (2005b) 'Harmonising Implementation of Codes of Conduct and Addressing Buying Practices in the Bangladesh Textile and Garment Industry', MFAF, UK.

MFAF (2005c) 'Joint Initiative on Corporate Accountability and Workers' Rights: Draft Code of Labour Practice', MFAF, UK.

MFAF (2005d) 'Summary of the visit by Alan Roberts and Maggie Burns to Dhaka on behalf of the MFA Forum from July 28th to August 1st inc.', MFAF, UK.

MFAF (2006a) Source: MFA Forum at: http://www.accountability.org.uk/mfa_forum/bangladesh/docs/mfaf_bangladesh_action_report.pdf, accessed on March 24, 2006

MFAF (2006b) Source: MFAF website: http://www.accountability.org.uk/mfa_forum/bangladesh/docs/tech_comm_minutes.pdf, accessed on March 24, 2006

MFAF (2006c) Source: MFAF website at: http://www.accountability.org.uk/mfa_forum/bangladesh/national_forum.html, accessed on March 24, 2006

MFAF (2006d) Source: MFA Forum at: http://www.accountability.org.uk/mfa_forum/bangladesh/buyers_group.html and http://www.accountability.org.uk/mfa_forum/bangladesh/conference.html, accessed on March 23, 2006.

MFAF (2006e) Source: MFAF website at http://www.accountability.org.uk/mfa_forum/bangladesh/docs/mfaf_dhaka_visit_summary_january2006.pdf, accessed on March 25, 2006

MFAF (2006f) Source MFAF website at: http://www.accountability21.net/mfa_forum/bangladesh/docs/concept_note_developing_3yr_plan.pdf, accessed on January 30, 2007.

MFAF (2007) Bangladesh Multi Stakeholder Meeting minutes, London 18 September 2007, available at: http://www.mfa-forum.net/docs/Bangladesh%20Stakeholders%20Group.pdf, accessed on July 20, 2008.

MFAF GTZ (2007) Assessing the impact of purchasing practices on code compliance: A case study of the Bangladesh garment industry, MFAF GTZ, Dhaka. Available at:

http://www.mfa-forum.net/docs/FINAL%20REPORT%20-%20Assessing%20the%20Impact%20of%20Purchasing%20Practices%20on%20Code%20Compliance.pdf, accessed on July 19 2008.

MFAF UNDP (2005) 'Forum on the Future Conference on an Internationally Competitive Textile and Garment Industry in Bangladesh', UNDP, Dhaka.

MFB (2007) 'Building sustainable "Social Compliance" and "Productivity" capacity for the Bangladesh Readymade Garment (RMG) Industry', Multistakeholder Forum for Bangladesh, Dhaka.

Miles, R.E., and Snow, C.C. (1978) *Organizational Strategy, Structure, and Process*, McGraw-Hill, New York.

Miller, D., and Shamsie, J. (1996) 'The resource-based view of the firm in two environments: The Hollywood film studios from 1936-1965',*Academy of Management Journal*, Vol. 39, No. 3, 519-543.

Min, H. and Galle, W. P. (1997) 'Green purchasing strategies: trends and implications', *International Journal of Purchasing and Materials Management*, Summer, pp. 10-17.

Mintzberg, H. (1983) *Structure in fives: Designing effective organizations*, Prentice-Hall, Englewood Cliffs, N.J.

Mitnick, B. M. (1980) *The political economy of regulation: creating, designing, and removing regulatory forms*, Columbia University Press, New York

MoC (2006) 'Minutes of the meeting of technical committee on 'Social Compliance Forum' for RMG', Ministry of Commerce, Government of Bangladesh, Dhaka.

MoF (2006) Government of Bangladesh Budget 2006/2007, Ministry of Finance, available at: http://www.mof.gov.bd/budget/afs/afs_st2_e.pdf, accessed on February 14, 2007.

Mol, A. P. J. (1995) *The Refinement of Production: Ecological Modernization Theory and the Chemical Industry*, Utrecht, Van Arkel.

Mol, A. P. J. (1999) 'Ecological modernisation and the environmental transition of Europe: between national variations and common denominators', *Journal of Environmental Policy and Planning*, Vol. 1, No. 2, pp. 167-181.

Mol, A.P.J and Spaargaren, G. (2000) 'Ecological modernisation in debate: a review' in Mol, A.P.J and Sonnenfeld, D.A., (eds.) *Ecological Modernisation Around the World: Perspectives and Critical Debates.* Frank Cass, London and Portland.

Mol, A.P.J. (1992) 'Sociology, environment, and modernity: Ecological modernization as a theory of social change', *Society and Natural Resources* Vol. 5, No.4, pp 323-344.

Mol, A.P.J. (1992) 'Sociology, environment, and modernity: Ecological modernization as a theory of social change', *Society and Natural Resources* Vol. 5, No.4, pp 323-344.

Mol, A.P.J. (1994) 'Ecological modernization and institutional reflexivity: sociology and environmental reform in the late modern age', Paper presented at the XIIIth International Sociological Association Congress at Bielefeld, Germany, July 1994.

Mol, A.P.J. (1996) 'Ecological modernisation and institutional reflexivity: environmental

reform in the late modern age', *Environmental Politics*, Vol. 5, No. 2, pp. 302–323.

Mol, A.P.J. (1997) 'Ecological modernization: industrial transformations and environmental reform' in Redclift, M., Woodgate, G. (eds.) *The International Handbook of Environmental Sociology*, Edward Elgar, London, pp. 138–149.

Mol, A.P.J. and Spaargaren, G. (1993) 'Environment, modernity and the risk society: the apocalyptic horizon of environmental reform', *International Sociology* 8, pp. 431–459.

Mol,A.P. J. and Sonnenfeld, D.A (eds.) (2000) *Ecological Modernization around the World: Perspectives and Critical Debates*, Frank Cass, Portland, OR.

Mont, O. and Bleischwitz, R. (2007) 'Sustainable consumption and resource management in the light of life cycle thinking', *European Environment*, Vol. 17, No. 1, pp. 59-76

Mujeri, M. K. (2004) 'Bangladesh Decent Work Statistical Indicators: A Fact-Finding Study', ILO Decent Work Pilot Programme - DWPP, Dhaka, available at: http://www.ilo.org/public/english/bureau/dwpp/countries/bangladesh/index.htm, accessed on September 15, 2006.

Muller, A. (2006) 'Global versus Local CSR Strategies', *European Management Journal*, Vol. 24, No.2-3, pp.189-198.

Muller, A. and Kolk, A. (2008) 'CSR Performance in Emerging Markets: Evidence from Mexico'. *Journal of Business Ethics*, (forthcoming)

Müller, E. (2002) 'Environmental Labeling, Innovation and the Toolbox of Environmental Policy: Lessons Learned from the German Blue Angel Program', Federation of German Consumer Organisations, Berlin.

Mullings, B. (1999) 'Insider or outsider, both or neither: some dilemmas of interviewing in a cross-cultural setting', *Geoforum*, Vol. 30, pp. 337-350.

Murphy, J. (2000) 'Ecological Modernisation?', *Geoforum*, Vol. 31, No 3. pp. 1-8.

Murphy, J. (ed.) (2007) *Governing Technology for Sustainability*, Earthscan, London.

Murphy, J. and Gouldson, A.P. (2000) 'Environmental Policy and Industrial Innovation: Integrating environment and economy through ecological modernisation', *Geoforum*, 31, pp. 33-44.

Nadvi K., and Waltring F., 2004, "Making sense of global standards", in H. Schmitz (ed.) *Local Enterprises in the Global Economy*, Edward Elgar, Cheltenham.

Nadvi, K. (1999) 'Collective Efficiency and Collective Failure: The Response of the Sialkot Surgical Instrument Cluster to Global Quality Pressures', *Special Issue of World Development*, Vol. 27. No 9, pp. 1605-1626

Nadvi, K. (2008) 'Global standards, global governance and the organization of global value chains', *Journal of Economic Geography*, No. 8 , Vol. 3, pp. 323-343.

Nadvi, K. and Halder, G. (2002) 'Local Clusters in Global Value Chains. Exploring Dynamic Linkages between Germany and Pakistan', *IDS Working Paper*, No. 152, Institute of Development Studies, Brighton.

Nadvi, K. and Kazmi, S. (2002) 'Global Standards and Local Responses. Case Study from Pakistan', *IDS Working Paper* (forthcoming) Institute of Development Studies, Brighton.

Nadvi, K. and Schmitz, H. (eds.) (1999) 'Industrial Clusters in Developing Countries', *Special Issue of World Development*, Vol. 27. No 9, pp 1503-1784.

Nadvi, K. and Thoburn, J. (2003) 'Challenges to Vietnamese firms in the world garment and textile value chain, and the implications for alleviating poverty', Paper presented at the EADI Workshop on Clusters and Global Value Chains in the North and the Third World, Novara, Italy.

Nadvi, K., Thoburn, J., Thang, B.T., Ha, T.T., Hoa, N.T., and Le D.H. (2003) 'Challenges to Vietnamese Firms in the World Garment and Textile Value Chain, and the Implications for Alleviating Poverty', EADI Workshop paper, Italy, October 2003.

Nagar, R. (2002) 'Footloose researchers, 'traveling' theories, and the politics of transnational feminist praxis.' *Gender, Place and Culture*, Vol. 9, No. 2, pp. 179-186.

Nash, J., and Stoughton, M.D. (1994) 'Learning to Live With Life Cycle Assessment', *Environmental Science and Technology* Vol. 28, No. 5, pp 236A-237A.

Nathan Associates (2002) 'Changes in Global Trade Rules for Textiles and Apparel: Implications for Developing Countries', USAID, Washington.

Nawrocka, D. (2007) 'Inter-organizational use of EMSs in supply chain management: some experiences from Poland and Sweden', *Corporate Social Responsibility and Environmental Management*, in press.

Neumayer, E. and Perkins, R. (2004) 'What explains the uneven take-up of ISO 14001 at the global level? A panel data analysis', *Environment and Planning A*, Vol. 36, pp. 823–39.

New Age (2006a) available at: http://www.newagebd.com/2006/may/25/front.html#e2, accessed on July 27, 2006.

New Age (2006b) available at: http://www.newagebd.com/2006/apr/23/busi.html , accessed on February 17, 2007.

New Nation (2005) available at http://nation.ittefaq.com/artman/exec/view.cgi/34/21735/printer, accessed on March 30, 2006.

NIKE Inc. (1991) 'Nike Code of Conduct', available at: http://www.nike.com/nikebiz/nikebiz.jhtml?pp.=25&cat=code#code, accessed on 14 September 2006.

Oakes, S.R. (2005) 'How Fashion got its soul back: the rise of eco-fashion', Yogi Times, Issue 35: September 2005, Los Angles Edition.

OECD (1997) *Eco-labelling: Actual Effects of Selected Programmes*, Organisation for Economic Co-operation and Development , Paris, France.

Oliver, C. (1991) 'Strategic response to institutional processes', *Academic of Management Review*, Vol. 16, No.1, pp 145- 179.

Oliver, C. (1997) 'Sustainable Competitive Advantage: Combining Institutional And Resource Based Views', *Strategic Management Journal*, Vol. 18, No. 9, pp. 697–713

Osakwe, C, (2003) 'WTO Issues: What Lies Ahead At The WTO?', WTO 15th Annual Textile & Apparel Trade & Transportation Conference, New York

OSHA (2006a) 'About Us', available at: http://www.osha.gov/, accessed on February 17, 2007.

OSHA (2006b) 'Assistance to the Apparel and Footwear Industry', available at: http://www.osha.gov/SLTC/aafa/standards.html , accessed on February 17, 2007.

OSHE foundation (2006) RMG Worker Mortality , available at: http://www.oshebd.org/networklinks.html accessed on March 17, 2006

Osman, F. A. (2004) *Policy Making in Bangladesh: a Study of Health Policy Process*, A H Development Publication House, Dhaka.

Oxfam (2004a) 'Stitched Up: How Rich Country Protectionism In Textiles and Clothing Trade Prevents Poverty Alleviation', Oxfam briefing Paper, Oxfam International, Oxford, available at: http://www.oxfam.org.uk/what_we_do/issues/trade/downloads/bp60_textiles.pdf#search=%22oxfam%20Stitched%20Up%22, accessed on 17 September, 2006.

Oxfam (2004b) 'Trading Away Our Rights -Women working in global supply chains', Oxfam International, Oxford.

Panayotou, T. (2001) 'Environmental Management Systems and the Global Economy' in Coglianese, C. and Nash, J. (eds.) *Regulating from the Inside: Can Environmental Management Systems Achieve Policy Goals?*, Resources for the Future Press Washington, DC, pp. 105-122.

Pargal, S., Mani, M. and Huq, M. (1997a) 'Regulatory inspections, informal pressure and water pollution: A survey of industrial plants in India', World Bank Poverty Environment and Growth Working Group Papers, July, 1997.

Pargal, S., Mani, M. and Huq, M. (1997b) 'Inspections and Emissions in India: Puzzling Survey Evidence about Industrial Pollution', World Bank - Development Research Group (DECRG) *World Bank Policy Research Working Paper No. 1810*, August 20, 1997.

Patel, V. G. (1987) 'Developing indigenous entrepreneurship: The Gujarat model', in Neck, P. A. & Nelson, R. E., (eds) *Small enterprise development: policies and programmes*, ILO, Geneva.

Paul-Majumder, P. and Begum, A. (2006) *Engendering Garment Industry: The Bangladesh Context*, University Press Limited, Dhaka.

Pavett, C.M., and Lau, A.W. (1983) 'Managerial work: the influence of hierarchical level and functional specialty', *Academy of Management Journal*, Vol. 26, No. 1, pp 170-177.

Pedersen, E.R. and Andersen, M. (2006) 'Safeguarding corporate social responsibility (CSR) in global supply chains: how codes of conduct are managed in buyer-supplier relationships', *Journal of Public Affairs*, Vol. 6, No. 3-4, pp. 228-240.

Penrose, E. (1959) *The Theory of the Growth of the Firm*, Oxford University Press: Oxford.

Pepper D. (1998) 'Sustainable Development And Ecological Modernization: A Radical

Homocentric Perspective', *Sustainable Development*, Vol. 6, pp. 1-7.

Pepper, D. (1993) *Eco-socialism: From Deep Ecology to Social Justice*, Routlage, London

Pepper, D. (1996) *Modern Environmentalism: An Introduction*, Routlage, London.

Pepper, D. (1999) 'Ecological modernisation or the "ideal model" of sustainable development? Questions prompted at Europe's periphery', *Environmental Politics*, Vol. 8, No. 4, pp. 1-34.

Perez-Sanchez, D., Barton, J.R. and Bower, D. (2003) 'Implementing environmental management in SMEs', *Corporate Social Responsibility and Environmental Management*, Vol. 10, No. 2, pp. 67-77

Perkins, R. (2007) 'Globalizing corporate environmentalism? Convergence and heterogeneity in Indian industry.', *Comparative Studies in International Development*, Vol.42, No. 3, forthcoming.

Perkins, R. and Neumayer, E. (2005) 'The international diffusion of new technologies: a multitechnology analysis of latecomer advantage and global economic integration', *Annals of the American association of geographers* 95, no. 4, pp 789-808.

Peteraf, M.A. (1993) 'The Cornerstones of Competitive Advantage: A Resource-Based View', *Strategic Management Journal*, Vol. 14, No. 3. (Mar., 1993) pp. 179-191.

Peters, G.B. (1998) 'Policy Networks: Myth, Metaphor and Reality', in Marsh, D. (ed.) *Comparing Policy Networks*, Open University Press, Buckingham

Phillips-Van Heusen Corporation (2005) 'Code of Business Conduct and Ethics' available at: http://www.pvh.com/CorpResp_WorldAction.html http://www.corporate-ir.net/ireye/ir_site.zhtml?ticker=PVH&script=2250#, accessed on 14 September 2006.

Pietrobelli C., and Rabellotti R. (2006), *Upgrading to Compete. Global Value Chains, Clusters and SMEs in Latina America*, Harvard University Press, Cambridge Ma.

Pietrobelli C., and Saliola F. (2006), 'Power Relationships along the Value Chain: Multinational Firms, Global Buyers, and Local Suppliers' Performance', CREI Working Paper No.2, University of Rome.

Piotrowski, R., and Kratz, S. (1999) 'Eco-labelling in the globalised economy', *Internationale Politik und Gesellschaft*, Vol. 1999/4, pp. 430-443

Ponte, S. and Gibbon, P. (2005) 'Quality standards conventions, and the governance of global value chains', *Economy and Society*, Vol. 34, No. 1, pp. 1-31.

Porter, M. (1980) *Competitive Strategy*, Free Press, New York.

Porter, M. and van der Linde, C. (1996) 'Green and competitive: Ending the stalemate', *Harvard Business Review*, Vol. 73, No. 5, pp. 120-134.

Porter, M. E. (1990) *The Competitive Advantage of Nations*, The Free Press, New York.

Porter, M., and van der Linde, C. (1995) 'Toward a New Conception of the Environment-Competitiveness Relationship', *Journal of Economic Perspectives*, Vol. 9, pp. 97-118.

Pressman J. L. and Wildavsky, A. (1984) *Implementation: how great expectations in Washington are dashed in Oakland, or, why it's amazing that federal programs work at all, this being a saga of the Economic Development Administration*, University of California Press, Berkeley, London.

Preuss, L. (2005) 'Rhetoric and reality of corporate greening: a view from the supply chain management function', *Business Strategy and the Environment*, Vol. 14, No. 2, pp.123-139.

Priem, R.L. and Butler, J.E. (2001) 'Is the Resource-Based 'View' a Useful Perspective for Strategic Management Research?', *The Academy of Management Review*, Vol. 26, No. 1. (Jan., 2001) pp. 22-40.

Quadros, R. (2002) 'Global Quality Standards, Chain Governance and the Technological Upgrading of Brazilian Auto-Components Producers', *IDS Working Paper*, No 156, Institute of Development Studies, Brighton.

Quadros, R. (2004) 'Global quality standards and technological upgrading in the Brazilian auto-components industry', in Schmitz, H. (eds.) *Local Enterprises in the Global Economy - Issues of Governance and Upgrading*, Edward Elgar, Cheltenham, UK.

Quasem, A.S.M. (2002) 'Adding Value: Building Value-Addition Alliances - Backward Linkages In The Textile And Clothing Sector of Bangladesh' Executive Forum on National Export Strategies, ITC SECO, Geneva.

Quddus, M. and Rashid, S. (2000) *Entrepreneurs and Economic Development – The Remarkable Story of Garment Exports from Bangladesh*, UPL, Dhaka, Bangladesh.

Rabellotti, R. (2004) 'The effect of globalisation on industrial districts in Italy: The case of Brenta', in Schmitz, H. (ed.), *Local Enterprises in the Global Economy*, Edward Elgar, Cheltenham.

Rahman, A.A. (2002) 'Policy Livelihood Relationship in South Asia: Role of NGOs in Advocacy: Lessons Learnt from Bangladesh and South Asian Countries', Bangladesh Centre for Advanced Studies- BCAS, Dhaka.

Rahman, S. (2006) 'Development, Democracy and the NGO Sector: Theory and Evidence from Bangladesh', *Journal of Developing Societies*, Vol. 22, pp. 451-473

Rahman, M. (2007) 'Market - State - Civil Society Relations and Development in Post-Independent Bangladesh: Some Theoretical Reflections', *Bangladesh e-Journal of Sociology*, Vol. 4, No. 2.

Rahman, M. and Weist, R. (2003) 'Context and Trends of Globalisation in Bangladesh: Towards a Critical Research Agenda', in Rahman, M. (ed.) *Globalisation, Environmental Crisis and Social Change in Bangladesh*, UPL, Dhaka

Rawcliffe, P. (2000) 'The role of the green movement in ecological modernisation: a British perspective' in S. C. Young (ed.) *The emergence of ecological modernisation: Integrating the environment and the economy*, Routledge, London

Reebok International Ltd. (2006) 'Controlling and Monitoring Hazardous Substances', available at:
http://www.reebok.com/useng/environment/controlling.htm, accessed on September 14, 2006

Reebok International Ltd. (2006) 'Our Commitment to Helping Suppliers' available at: http://www.reebok.com/useng/environment/helping.htm, accessed on September 14, 2006

Reed, L. (2003) 'Greening the supply chain: A study of Saturn Corporation manufacturing facilities', *Environmental Quality Management*, Vol. 13, No. 1, pp. 3-17.

Reitan, M. (1998) 'Ecological modernisation and "Realpolitik": ideas, interests and Institutions', *Environmental Politics*, Vol. 7, No. 2, pp. 1-16.

Repetto, R. (1994) Trade and Sustainable Development, Environment and Trade Series, vol. 1., United Nations Environment Programme, Geneva.

Repetto, R. (1995) 'Jobs, Competitiveness, and Environmental Regulation: What are the real issues?', World Resource Institute, Washington, USA.

Revell, A. (2003), 'The Ecological Modernisation of Small Firms in the UK', Presented to the Business Strategy and Environment Conference, Leicester, September 16,2003

Revell, A. (2005), 'Ecological Modernisation in the UK: Rhetoric or Reality?', *European Environment*, Vol.15, pp.344-361

Revell, A. (2007), 'The ecological modernisation of SMEs in the UK's construction industry', *Geoforum*, Vol. 38, pp. 114-126

Rhodes, R. A. W. and Marsh, D. (1992) `Policy Networks in British Politics: A Critique of Existing Approaches', in Marsh, D. and Rhodes, R. A. W. (eds.) *Policy Networks in British Government*, Clarendon Press, Oxford

Rhodes, R. A. W. and Marsh, D. (1994) 'Policy Networks: `Defensive' Comments, Modest Claims and Plausible Research Strategies', Political Studies Association conference, Belfast.

Richard, O.C. (2000) 'Racial Diversity, Business Strategy, and Firm Performance: A Resource-Based View', *The Academy of Management Journal*, Vol. 43, No. 2. (Apr., 2000) pp. 164-177.

Rihoux, B. (2000) 'Ecotaxes on the Belgian agenda, 1992-95 and beyond: environment and economy at the heart of the power struggle' in S. C. Young (ed.) *The emergence of ecological modernisation: Integrating the environment and the economy*, Routledge, London

Robbins, S.P. and Coulter, M. (2003) *Management*, Prentice Hall, New Jersey

Roberts, S. (2002a) 'International Negotiations and National Realities' in Robins, N and Roberts, S (eds.) *The Reality of Sustainable Trade*, International Institute for Environment and Development, London.

Roberts, S. (2002b) 'Sustainability in the Supply Chain' in Robins, N and Roberts, S (eds.) *The Reality of Sustainable Trade*, International Institute for Environment and Development, London.

Robertson, P.L. and Langlois, R.N. (1994) 'Innovation, Networks, and Vertical Integration', *Research Policy*, Vol. 24, Issue 4, Pp.s 543-562

Robins, N. and Humphrey, L. (2000) 'Sustaining the Rag Trade--Social and environmental trends in the UK clothing retail sector', International Institute for Environment and Development, London.

Rugman, A.M. and Verbeke, A. (1998) 'Corporate Strategies And Environmental Regulations: An Organizing Framework', *Strategic Management Journal*, Vol. 19, pp. 363–375

Rugman, A.M. and Verbeke, A. (2002) 'Edith Penrose's Contribution To The Resource-Based View Of Strategic Management', *Strategic Management Journal* Vol. 23, pp. 769–780

Russo, M.V. and Fouts, P.A. (1997) 'A Resource-Based Perspective on Corporate Environmental Performance and Profitability', *Academy of Management Journal*, Vol. 40, pp 534-559.

Rydin, Y. (1999) 'Can we talk ourselves into sustainability? The role of discourse in the environmental policy process', *Environmental Values*, Vol. 8, pp. 467–484.

Sabatier, P. (1986) 'Top-Down and Bottom-Up Approaches to Implementation Research', *Journal of Public Policy*, Vol. 6 (Jan) pp.21-48.

Sabatier, P. A. and Jenkins-Smith, H. C. (1993) (eds.) *Policy Change and Learning: an Advocacy Coalition Approach*, Westview, Boulder and Oxford

Sachs, W. (1993) *Global Ecology: a New Arena of Political Conflict*, Zed Books, London

Saha, P. M. (2007) 'Asia-Pacific: Supply chain management - Weak links in Bangladesh', Ethical Corporation, 5 February 2007, available at: http://www.ethicalcorp.com/content.asp?ContentID=4865, accessed on April 12, 2008.

Saha, P.M. (2006) 'Corporate responsibility in India: Flying the flag the Tata way', Ethical Corporation, available at: http://www.ethicalcorp.com/content.asp?ContentID=4299, accessed on April 14, 2008.

SAI (2001) 'Social Accountability SA 8000', Social Accountability International, New York.

Saifullah, K. (2005a) *Most Important Bangladesh Labor Laws*, Human Rights Compliance Department, Phillips-Van Heusen, Region D & E, Bangladesh.

Saifullah, K. (2005b) *Bangladesh Labor Laws: Health, Safety Hygiene & Welfare Requirements*, Human Rights Compliance Department, Phillips-Van Heusen, Region D & E, Bangladesh.

Saifullah, K. (2005c) *Handbook on Compliance Based on Bangladesh Labor Laws*, Human Rights Compliance Department, Phillips-Van Heusen, Region D & E, Bangladesh.

Sajhau, J.P. (2000) 'Business ethics in the textile, clothing and footwear (TCF) industries: Codes of conduct', Sectoral Activities Programme, Working Paper SAP 2.60/WP.110, International Labour Organization, Geneva.

Sandesara, J. C. (1991) 'Small scale industrialization: the Indian experience', in Thomas, H., Echevarria, F. and Romijin,H. (eds), *Small scale production*, Intermediate Technology Publications, UK.

Sara Lee Corporation (2006) 'Supplier Selection Guidelines', available at: http://www.itglwf.org/doc/SaraLeeCode.doc, accessed on September 14, 2006

Sarkis, J. (1995a) 'Manufacturing strategy and environmental consciousness', *Technovation*, Vol.15, No. 2, pp 79 -97.

Sarkis, J. (1995b) 'Supply chain management and environmentally conscious design and

manufacturing.' *International Journal of Environmentally Conscious Design and Manufacturing.* Vol.4 No. 2, pp 43-52.

Sarkis, J. (1995c). 'Reverse logistics, recycling, and product life cycles.' *GEMI '95 Proceedings,* Arlington, VA., USA: pp 257-264.

Sarkis, J. (1999) 'How green is the supply chain?: Practice and research', Working paper, Graduate School of Management, Clark University, Worcester.

Sattar, Z. and Ahmed, S. (2004) 'Trade Liberalization, Growth And Poverty Reduction: The Case Of Bangladesh', Economic Management Unit of the South Asia Region, World Bank, Dhaka.

Saurin, J. (2001) 'Global environmental crisis as the 'disaster triumphant': the private capture of public goods', *Environmental Politics,* Vol. 10, No.4, pp.63-84

Schmidheiny, S. (1992) *Changing Course: A Global Business Perspective on Development and the Environment,* MIT Press, Cambridge, MA.

Schmitz, H. (1995) 'Collective efficiency: Growth path for small-scale industry, *Journal of Development Studies,* Vol. 31, No. 4, pp. 529–566.

Schmitz, H. (1999a) 'Increasing returns and collective efficiency', *Cambridge Journal of Economics,* Vol. 23, No. 4, pp. 465–483.

Schmitz, H. (1999b) 'Global competition and local cooperation: Success and failure in the Sinos Valley, Brazil', World Development, Vol. 27, No. 9, pp. 1627–1650.

Schmitz, H. (2004) (ed.) *Local enterprises in the global economy: Issues of governance and upgrading,* Edward Elgar, London.

Schmitz, H. and Knorringa, P. (2000) 'Learning from Global Buyers', *Journal of Development Studies,* Vol. 37, No. 2, pp. 177–205.

Schmitz, H. and Nadvi, K. (1999) 'Clustering and Industrialization: Introduction', *Special Issue of World Development,* Vol. 27. No. 9, pp. 1503 - 1514

Schot, J. and Fischer, K. (1993) (eds.) *Environmental Strategies for Industry,* Island Press.

Sears, Roebuck and Co. (1993) 'Import Buying Policy and Procedures', available at: http://www.apparelsearch.com/Education/Research/Child_Labor_Clothing/Child_Labor_Fashion
_Industry_2005/V_Apparel_Appendices/Surveys_from_companies/Sears_Roebuck_Company.htm, accessed on September 14, 2006

SEDF (2001) *Module 3: Laws Governing the Bangladesh Garment Industry,* Series: Managing in the Bangladesh Garment Industry, South Asia Enterprise Development Facility (SEDF) Dhaka.

Seippel, O. (2000) 'Ecological Modernization as a Theoretical Device: Strengths and Weaknesses' *Journal of Environmental Policy & Planning,* Vol. 2, pp/ 287–302

Sethuraman, S. V. (1992) 'Introduction' in Bhalla, A. S. (ed) *Environment development and employment. A WEP study,* Geneva: ILO.

Seuring, S. (2004) 'Industrial ecology, life cycles, supply chains: differences and

interrelations', *Business Strategy and the Environment*, Vol. 13, No. 5, pp. 306-319

Seuring, S. and Müller, M. (2007) 'Core issues in sustainable supply chain management - a Delphi study', *Business Strategy and the Environment*, in press.

Sharma, S. (2000) 'Managerial Interpretations and Organizational Context as Predictors of Corporate Choice of Environmental Strategy', *The Academy of Management Journal*, Vol. 43, No. 4. (Aug., 2000) pp. 681-697.

Shrivastava, P. (1995a) 'Ecocentric management for a risk society.' *Academy of Management Review*, Vol. 20, No.1, pp.118-137.

Shrivastava, P. (1995b) 'Environmental technologies and competitive advantage', *Strategic Management Journal*, Vol. 16(Summer), pp.183-100.

Shrivastava, P. and Hart, S.L. (1995) 'Creating sustainable corporation', *Business Strategy and the Environment*, Vol. 4, No. 3, pp.154-165.

Siddiqi, D.M. (2003) 'Bangladeshi Workers in the Post-MFA', Daily Star Magazine June 2003, available at: http://thedailystar.net/magazine/2003/06/01/perspective.htm, accessed on 17 September 2006.

Simmonis, U. (1989a) Industrial restructuring for sustainable development: three points of departure. Working Paper FS II 89-401, Internationales Institut Fur Umwelt und Gesellschaft, Wissenschaftszentrum Berlin Fur Sozialforschung (WZB).

Simmonis, U. (1989b) 'Ecological modernization of industrial society: three strategic elements', *International Social Science Journal*, Vol. 121, pp. 347-361.

Skou Andersen, M. (2000) 'Ecological modernisation capacity: finding patterns in the mosaic of case studies' in S. C. Young (ed.) *The emergence of ecological modernisation: Integrating the environment and the economy*, Routledge, London.

Smith, A. (1997) *Integrated pollution control: change and continuity in the UK industrial pollution policy network*, Avebury Press, Aldershot.

Smith, N. (2007) 'Nature as accumulation strategy' in Panitch, L. and Leys, C., (eds.) *Coming to Terms with Nature: Socialist Register 2007*, Merlin Press, London, pp. 16-36.

Smith, P. and Laage-Hellman, J. (1992) 'Patterns of Small Group Analysis', in Axelsson, B. and Easton, G. (eds.) *Industrial Networks. The New Reality*, Routledge, London.

Sonnenfeld, D. A. (1998) 'From Brown to Green? Late Industrialization, Social Conflict, and Adoption of Environmental Technologies in Thailand's Pulp Industry', *Organization and Environment*, Vol 11, pp.59-87.

Sonnenfeld, D. and Mol, A.P.J. (2002) 'Globalization and the Transformation of Environmental Governance: An Introduction', *American Behavioral Scientist*, Vol. 45, No. 9, pp. 1318-1339

Sonnenfeld, D.A. (2000) 'Contradictions of ecological modernisation: pulp and paper manufacturing in South-East Asia' in Mol, A.P.J and Sonnenfeld, D.A., (eds.) *Ecological Modernisation Around the World: Perspectives and Critical Debates*. Frank Cass, London and Portland.

Sonnenfeld, D.A. and Mol, A.P.J. (2006a) 'Environmental Reform in Asia Comparisons,

Challenges, Next Steps', *The Journal of Environment & Development* Vol. 15, No. 2, pp. 112-137

Sonnenfeld, D.A., and Mol, A.P.J. (2006b) 'Guest Editorial', *The Journal of Environment & Development* Vol. 15, No. 2, pp. 107-111

Spaargaren, G. (1997) 'The Ecological Modernisation of Production and Consumption. Essays in Environmental Sociology', Department of Environmental Sociology, Wageningen University, Wageningen (dissertation)

Spaargaren, G. (2000) 'Ecological Modernization Theory and Domestic Consumption', *Journal of Environmental Policy & Planning*, Vol. 2, pp 323–335

Spaargaren, G. and Mol, A.P.J (1992) 'Sociology, environment and modernity: ecological modernization as a theory of social change', *Society and Natural Resources*, Vol. 5, No.4, pp 323-344.

Spaargaren, G. and van Vliet, B.J.M (2000) 'Lifestyles, consumption and the environment. The ecological modernisation of domestic consumption' in Mol, A.P.J and Sonnenfeld, D.A., (eds.) *Ecological Modernisation Around the World: Perspectives and Critical Debates.* Frank Cass, London and Portland.

Spaargaren, G., Mol, A.P.J and Buttel, F.H. (eds.) (1999) *Environment and Global Modernity*, Sage Publications, London.

Spinanger, D (1998) 'Textiles Beyond the MFA Phase-Out', CSGR Working Paper No. 13/98, Centre for the Study of Globalisation and Regionalisation (CSGR) University of Warwick, UK.

Spinanger, D (2000) 'The WTO, ATC and Textiles and Clothing in a Global Perspective: What's in it for Bangladesh?', CPD Occasional Paper Series 8 (Centre for Policy Dialogue, Dhaka Bangladesh).

Starik, M. and Rands, G.P (1995) 'Weaving An Integrated Web: Multilevel And Multisystem Perspectives Of Ecologically Sustainable Organizations', *Academy of Management* Review, Vol. 20. No. 4, pp. 908-935.

Stern, P., et al (1999) 'A Value-Belief-Norm Theory of Support for Social Movements: The Case of Environmentalism', *Human Ecology Review*, Vol. 6, pp 81-97.

Stringer, C. (2006) 'Forest certification and changing global commodity chains', *Journal of Economic Geography*, Vol. 6, No. 5, pp. 701-722.

Stuart-Smith, K. and Shefali, M.K. (2003) 'Study Report On Post MFA Strategy For The RMG Workers In Bangladesh (With ROAD MAP for Implementation)', Nari Uddug Kendra - NUK, Dhaka.

Studer, S., Welford, R., and Hills, P. (2006) 'Engaging Hong Kong Businesses in Environmental Change: Drivers and Barriers', *Business Strategy and the Environment*, Vol. 15, pp 416–431

Sturgeon, T. and Florida, R. (2004) 'Globalization, Deverticalization and Employment in the Motor Vehicle Industry', in Kenney, M. and Kogut, B. (eds), *Creating Global Advantage*, Stanford University Press, Stanford, CA.

Sturgeon, T. and Lee, J.R. (2001) 'Industry Co-Evolution and the Rise of a Shared Supply-Base for Electronics Manufacturing', Paper Presented at Nelson and Winter Conference, Aalborg, June.

Sturgeon, T. and Lester, R. (2004) 'The New Global Supply-base: Challenges for Local Suppliers in East Asia', in Yusuf, S., Altaf, A. and Nabeshima, K. (eds), *Global Production Networking and Technological Change in East Asia*, Oxford University Press, New York

Sultana, F. (2007), 'Reflexivity, Positionality and Participatory Ethics: Negotiating Fieldwork Dilemmas in International Research', Special issue on 'Participatory Ethics' in *ACME: An International E-Journal for Critical Geographies*, Vol. 6, Issue 3, pp. 374 - 385.

Sutton, R. (1999) 'The policy process: an overview', ODI Working Paper 118.

Sweatshopwatch (1999) 'The Power of Retailers & Their Private Labels' [online], Sweatshop Watch, California, available at: http://www.sweatshopwatch.org/swatch/industry/cal/retailers.html, accessed on 17 September, 2006.

Teece, D. (1987) 'Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy' in Teece, D. (ed.) *The Competitive Challenge*, Ballinger, Cambridge, MA.

Tellis, W. (1997) 'Introduction to Case Study', *The Qualitative Report*, Vol. 3, No.2, July, 1997, available at: http://www.nova.edu/ssss/QR/QR3-2/tellis1.html, accessed on January 14, 2008

Tesfatsion, L. (1997) 'How Economists Can Get A life' in Arthur, W.B., S. Durlauf and D.A.Lane (eds.) *The Economy as an Evolving Complex System II*, Addison Wesley, Redwood City: Ca, pp. 534-564.

Thompson, G.F. (2005) 'Is the future 'regional' for global standards?', *Environment and Planning A*, Vol. 37, pp. 2053-2071

Tilley, F. (1999) 'Small-Firm Environmental Strategy: The UK Experience' Foresight Research Centre, GMI 25, Spring 1999, Durham University Business School, Durham, UK.

Toke, D. (2001) 'Ecological Modernisation: A Reformist Review', *New Political Economy*, Vol. 6, No. 2, pp 279-291.

Toke, D. (2002) 'Ecological Modernisation and GM Food', Environmental Politics, Vol. 11, No.3, pp.145 - 163

Toke, D. and Strachan, P.A. (2006) 'Wind power and ecological modernisation', *European Environment* ,Vol,16, No.3, pp.155-166.

Trela, I. and Whalley, J. (1990) 'Unravelling the Threads of the MFA, in The Uruguay Round: Textiles Trade and the Developing Countries' in Hamilton, C.B. (ed.) *Eliminating the Multi Fibre Arrangement in the 1990s*, The World Bank, Washington, USA.

UNCED (1992) *Rio Declaration On Environment And Development*, Report of the United Nations Conference on Environment and Development, A/CONF.151/26 (Vol. I) United Nations, Geneva.

UNDP (2004) 'Down the Drain - Bangladesh', UNDP Equator Initiative Newsletter Series 5, 2004, available at:
http://www.tve.org/ho/doc.cfm?aid=1634&lang=English, accessed on March 31, 2006

UNEP (2003) 'Shopping for a better world - facts and figures', Industry and Environment, Quarterly Review of the United Nations Environment Programme (UNEP) Division of Technology, Industry and Economics (UNEP DTIE) France, Vol. 26, No. 1 (January-March 2003).

UNEP (2006) 'Resource Kit on Sustainable Consumption and Production' available at: http://www.uneptie.org/PC/sustain/10year/SCP_Resource_Kit.htm, accessed on 17 September, 2006.

UNIDO (2002) 'Corporate Social Responsibility: Implications for Small and Medium Enterprises in Developing Countries', Small and Medium Enterprises Branch, Vienna.

UNIDO (2003a) 'Trade Capacity Building: Case Studies: India', Small and Medium Enterprises Branch, Vienna.

UNIDO (2003b) 'Triple Bottom Line Demonstration Project in Four Asian Countries Final Report', Cleaner Production and Environmental Management Branch and the Small and Medium Enterprises Branch, Vienna.

US DoC (2002) 'Congressional Textile Caucus on the Administration's Efforts on Textile Issues', U.S. Department of Commerce, Washington DC.

US DoC (2003) 'Second Report to the Congressional Textile Caucus on the Administration's Efforts on Textile Issues', United States Department of Commerce, Washington DC.

US DoL ILAB (1996) 'The Apparel Industry and Codes of Conduct -A Solution to the International Child Labor Problem?', United States Department of Labor, Washington DC. available at: http://www.dol.gov/ILAB/media/reports/iclp/apparel/apparel.pdf, accessed on 17 September 2006.

US DoL ILAB (2006) 'Child Labour Bangladesh Negotiations',US ILAB International Child Labor Program (ICLP), available at:
http://www.dol.gov/ilab/media/reports/iclp/sweat/bangladesh.htm, accessed on 17 September, 2006.

US EPA (1996) *Manual, Best Management Practices for Pollution Prevention in the Textile Industry*, US EPA, Ohio.

US EPA (1998) 'Environmental Labeling Issues, Policies, and Practices Worldwide', Office of Prevention, Pesticides and Toxic Substances, US Environmental Protection Agency, December 1998 (7409). Available at: http://www.epa.gov/epp/pubs/envlab/toc.htm, accessed on 16 September, 2006.

US ITC (2004) 'Textiles and Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market Vol. 1', Investigation No. 332—448, Publication 3671, Office of Industries and the Office of Economics, United States International Trade Commission, Washington DC.

Uzzi, B. (2000) 'The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect', *American Sociological Review*, Ms. #94-289, available at:

http://www.analytictech.com/mb119/embeddedness%20and%20survival%20ASR%201996%20uzzi.pdf, accessed on January 14, 2008

van Bueren, E.M., Klijn, E.H. and Koppenjan, J.F.M. (2003) 'Dealing with wicked problems in networks: analyzing an environmental debate from a network perspective', *Journal Of Public Administration Research And Theory*, Apr 2003, Vol.13, No.2, pp.193-212

Vermeulen, W.J.V. and Ras, P.J. (2006) 'The challenge of greening global product chains: meeting both ends', *Sustainable Development*, Vol. 14, No. 4, pp. 245-256

VF Corporation (2006) 'Global Compliance Principles' available at: http://www.vfc.com/PDF/global_compliance_principles.pdf#search=%22VF%20Corporation%20Global%20Compliance%20Principles%22, accessed on September 14, 2006

Viswanath, P. and Dadrawala, N. (2004) 'Philanthropy and Equity: The Case of India', Global Equity Initiative, Kennedy School of Government, Harvard University, Massachusetts, USA.

Vives, A. (2006) 'Social and Environmental Responsibility in Small and Medium Enterprises in Latin America', *Journal of Corporate Citizenship*, Vol. 21(Spring), pp. 39-50.

Von Moltke, K. et al (1998) 'Global Product Chains: Northern Consumers, Southern Producers and Sustainability', *UNEP Environment and Trade*, No 15.

Vriend, N. (1995) 'Self Organization of Markets: An Example of a Computational Approach', *Journal of Computational Economics*, Vol. 8, No. 3, pp. 205-231

Wal-Mart Stores Inc. (2005) 'Ethical Standards Supplier Manual', available at: http://www.walmartstores.com/Files/SupplierStandards.pdf#search=%22walmart%20Ethical%20Standards%20Supplier%20Manual%22, accessed on September 14, 2006

Warnaco Group (2002) 'WARNACO Business Partner Terms of Engagement and Guidelines for Country Selection', available at: http://www.ilo.org/public/english/employment/gems/eeo/code_98/warnaco.htm, accessed on September 14, 2006

WCED (1987) *Our Common Future: The Bruntland Report*, Oxford University Press from the World Commission on Environment and Development, New York.

Weale, A. (1992) *The New Politics of Pollution*, Manchester Univ. Press, Manchester.

Weist, R., Khatun, A. and Mohiuddin, H. (2003) 'Workplace, Residence and Relationships among Garment Workers in the Globalising Export Economy of Bangladesh', in Rahman, M. (ed.) *Globalisation, Environmental Crisis and Social Change in Bangladesh*, UPL, Dhaka

Welford, R. (1995) *Environmental Strategy and Sustainable Development. The Corporate Challenge for the 21st Century*, Routledge, London.

Welford, R. (1997) *Hijacking Environmentalism. Corporate Responses to Sustainable Development*, Earthscan, London.

Welford, R. (2007) 'Corporate Governance and Corporate Social Responsibility: Issues for Asia' *Corporate Social Responsibility and Environmental Management*, Wiley InterScience, Vol.14, pp. 42-51

Welford, R. and Frost, S. (2006) 'Corporate Social Responsibility in Asian Supply Chains'

Corporate Social Responsibility and Environmental Management, Wiley InterScience, Vol.13, pp. 166-176

Welford, R. and Gouldson, A. (1993) *Environmental Management and Business Strategy,* Pitman Publishing, London.

Welford, R., Chan, C. and Man, M. (2007) 'Priorities for Corporate Social Responsibility: A Survey of Businesses and their Stakeholders', Summary Report, CSR Asia and Centre for Urban Planning and Environmental Management, University of Hong Kong.

Wells, P. and Orsato, R.J. (2003) 'The Ecological Modernisation of the Automotive Industry', in Jacob,K., Binder, M., and Wieczorek, A. (eds.). *Governance for Industrial Transformation.* Proceedings of the 2003 Berlin Conference on the Human Dimensions of Global Environmental Change, Environmental Policy Research Centre, Berlin, pp. 373 - 385.

Werndle, L., Brown, N. and Packer, M. (2006) 'Barriers to certified timber and paper uptake in the construction and paper industries in the United Kingdom', *Corporate Social Responsibility and Environmental Management,* Vol. 13, No. 3, pp. 121-134

Wernerfelt, B. (1984) 'A Resource-Based View of the Firm', *Strategic Management Journal,* Vol. 5, No. 2. (Apr. - Jun., 1984) pp. 171-180.

Wernerfelt, B. (1995) 'The Resource-Based View of the Firm: Ten Years After', *Strategic Management Journal,* Vol. 16, No. 3. (Mar., 1995) pp. 171-174.

Wheeler, D., Huq, M., and Martin P. (1993) 'Process Change, Economic Policy and Industrial Pollution: Cross Country Evidence from the Wood Pulp and Steel Industries', presented at the Annual Meetings, American Economic Association, Anaheim, California, January.

White, M. (1983) 'Basic Concepts in Policy Studies', in Nagel, S.A., (ed.) *Encyclopaedia of Policy Studies,* Marcel Dekker, Inc. New York.

Wick, I. (2005) 'Workers' tool or PR ploy? A guide to codes of international labour practice', Friedrich-Ebert-Stiftung / Bonn, Germany and SÜDWIND Institut für Ökonomie und Ökumene / Siegburg, Germany,
available at: http://www.cleanclothes.org/ftp/workers-tool-2005.pdf, accessed on 15 September 2006.

Wildavsky, A. (1979) *The art and craft of policy analysis,* Macmillan, London

Wildavsky, A. (1987) *Speaking truth to power: the art and craft of policy analysis,* Transaction Books, New Brunswick, N.J., U.S.A.

Wilkinson, I.F., Wiley, J.B., and Lin, A. (2001) 'Modelling the Structural Dynamics of Industrial Networks', *InterJournal Complex Systems,* Manuscript Number 409

William Carter Company (2006) 'Carter's Social Compliance Guidelines', Carter's Inc., Atlanta, Georgia, USA.

Williams, M.E. (2004) 'Introduction.' in Williams, M.E. (ed.) *At Issue: Child Labor and Sweatshops,* San Diego: Greenhaven Press.

Williams, M.E., (1998) 'Introduction' in Williams, M.E., (ed.) *At Issue: Child Labor and Sweatshops.* Greenhaven Press, San Diego

World Bank (2000) *Greening Industry: New Roles for Communities, Markets, and Governments,*

Published for the World Bank, Oxford University Press

World Bank (2002) 'On Corporate Social Responsibility: Bank starts dialogue with business', World Bank Institute, Governance and Anti Corruption, Today E-Zine, Washington, USA.

World Bank (2003) 'Company Codes of Conduct and International Standards: An Analytical Comparison', Corporate Social Responsibility Practice, World Bank, Washington.

World Bank (2005) 'End of MFA Quotas: Key Issues and Strategic Options for Bangladesh Readymade Garment Industry', Bangladesh Development Series - paper no 2, The World Bank Office, Dhaka.

World Bank (2007) Bangladesh Country Environmental Analysis, Bangladesh Development Series, Paper no. 12, The World Bank Office, Dhaka.

World Bank Group (2002) 'Public Sector Roles In Strengthening Corporate Social Responsibility: A Baseline Study', Corporate Social Responsibility Practice, World Bank Group, Washington.

World Bank Group (2003a) 'Company Codes Of Conduct And International Standards: An Analytical Comparison- Part I of II', Corporate Social Responsibility Practice, World Bank Group, Washington.

World Bank Group (2003b) 'Strengthening Implementation Of Corporate Social Responsibility In Global Supply Chains ', Corporate Social Responsibility Practice, World Bank Group, Washington.

World Bank Group (2004a) 'Company Codes Of Conduct And International Standards: An Analytical Comparison- Part II of II', Corporate Social Responsibility Practice, World Bank Group, Washington.

World Bank Group (2004b) 'Public Sector Roles In Strengthening Corporate Social Responsibility: Taking Stock', Corporate Social Responsibility Practice, World Bank Group, Washington.

WRAP (2003) 'Production Facility Self-Assessment and Monitoring Handbook' Worldwide Responsible Apparel Production - WRAP, Virginia.

WRAP (2004) 'Apparel Certification Program Principles', available at: http://www.wrapapparel.org/modules.php?name=Content&pa=showpp.&pid=3, accessed on September 15, 2006.

Wright, D. (1997) 'Child Labour in Bangladesh' in Falkus,M., Kaur,A., Brasted, H., Blackburn, S. and Wright, D. (eds.) *Child Labour in Asia* (Canberra, Australian Govt Printing Service, 1997) pp. 43-60.

Wright, D. (2003) 'Child Labour in Bangladesh: Recent Trends and Labour Standards,' *South Asia Special Issue: Globalisation and Development in Bangladesh: Labour and Environmental Issues*, vol. XXV1, no. 3, pp. 409-422.

Wright, M. (1988) '*Policy community, policy network and comparative industrial policies*', Political Studies, Vol. 36, No. 2, pp. 593-612.

Wurzel, R. K. W. (2002) *Environmental Policy-making in Britain, Germany and the European Union*, Manchester University Press, Manchester.

Wycherley, I. (1999) 'Greening supply chains: the case of The Body Shop International', *Business Strategy and the Environment*, Vol. 8, No. 2, pp.120-127

Yearley, S. (1994) 'Social movements and environmental change', in Redclift, M. and Benton, T. (eds.) *Social Theory and the Global Environment*, pp. 150-168, Routlage, London.

Yin, R. (1989) *Case study research: Design and methods*, Sage Publishing, Beverly Hills, CA.

Young, S.C. (2000) 'Introduction: The origins and evolving nature of ecological modernisation' in S. C. Young (ed.) *The emergence of ecological modernisation: Integrating the environment and the economy*, Routledge, London, pp 1-39

Zadek, S. (2004) 'The path to corporate responsibility', *Harvard Business Review*, Vol. 82, No. 12, pp. 125–132.

Zhu, Q. and Sarkis, J. (2004) 'The link between quality management and environmental management in firms of differing size: An analysis of organizations in China', *Environmental Quality Management*, Vol. 13, No. 3, pp. 53-64

Zwetsloot, G.I.J.M. (2003) 'From Management Systems to Corporate Social Responsibility', *Journal of Business Ethics*, Vol. 44, pp 201-207, Kluwer Academic Publishers.