

LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

UNIVERSITY OF LONDON

RUBBER ENTERPRISES IN THE BRAZILIAN AMAZON, 1870-1930

By

ROSINEIDE DA SILVA BENTES

THESIS SUBMITTED FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

UMI Number: U615818

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI U615818

Published by ProQuest LLC 2014. Copyright in the Dissertation held by the Author.
Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code.



ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

TITÉSES

F

7637



710547

ABSTRACT

This thesis examines *seringais* (rubber estates) on the Brazilian Amazon from the perspective of capitalist social relations of production in the period from the 1870 to 1930. It is divided into four parts. The first part introduces the subject. The second part considers the social relations of land property and the selective way of privatising land to argue that *seringal* is private property and that there was a free labour market. The third part discusses the engagement and the forms of controlling and disciplining labour. The fourth part focuses on profitability and capital accumulation by demonstrating that (a) the local investors had their own project of economic political changes, (b) this and a converging view on the use of natural resources constitute decisive elements in their decisions of re-investments. Rubber enterprises were usually run as partnerships and they invested mainly in the production of the Fina Hard Para kind, which was considered the best quality and commanded the highest price at that time, and in the diversification of economic activities.

As this thesis demonstrates, the social relations of production in *seringal* are capitalist due to the following features: (a) they are organised to produce commodities for profit in order to ensure capital accumulation; (b) they are characterised by the command of capitalists over subordinated forms of free labour; (c) this command is based on the private ownership of the main means of rubber production. The specific features of the relations of production in *seringais* are basically twofold: (a) the employment of different forms of subordinate free labour, including waged and salaried, in which *seringueiros* (rubber tappers paid by results instead of by work time) were predominant and (b) the geomercantile privatisation and use of natural resources, involving a converging interaction with nature.

Contents

List of Illustrations	06
List of Tables	07
Acknowledgements	08

PART ONE: Introduction

Chapter 1: The Problem and The Context	10
Issues in the Historiography	13
Issues Raised in, and the Contribution of the Literature to the Effort to Build	
Workable Definitions and Concepts	16
. Problems of the View of 'Colonies' as 'Free lands'	17
. Difficulties in the Definition of Capital Centred on Wage Labour	24
Workable Definitions and Concepts	37
(a) Capital as a Social Relation of Production Historically Built	37
(b) Geomercantile Privatisation of Land	37
(c) The Double Movement: English Rubber Dealers versus <i>Seringalistas</i>	41
The Historical Investigation and Sources Used	49
Outline of the Thesis	58

PART TWO: *Seringal* as Estates and Labour Availability: Social Relations of Land Property, Geomercantile Privatisation of Rubber Fields and the Emergence of an Internal Labour Market

Chapter 2: <i>Seringal</i> as Private Property	62
The Historical Circumstances for the Birth and Expansion of <i>Seringais</i>	63
<i>Seringal</i> as Private Property	69
The Geomercantile Feature of <i>Seringais</i> : Questions about the Definition of <i>Benfeitoria</i>	70
The Question of Sovereignty and Domain in Acre	79
<i>Seringal</i> as Private Property of Entrepreneurs Mostly	90
Conclusion	101

Chapter 3: The Availability of Labour for <i>Seringais</i>	102
The Formal Historical Process of Turning Natives into Labour	103
The Informal Historical Process of Turning Direct Producers into Labour	111
The Attraction of Labour to <i>Seringais</i>	120
The Recruitment of Immigrant Labour	122
The Internal Availability of Labour in Acre	137
Conclusion	140

PART THREE: Work Relations in *Seringais*: Engagement and Forms of Controlling and Disciplining Labour

Chapter 4: Forms of Controlling and Discipline Labour	143
<i>Seringueiros' Engagement as Labour Paid by Results</i>	145
The Indirect and Direct Ways of Controlling and Disciplining Labour in the Process of Making Rubber	149
Indirect Means of Controlling <i>Seringueiro</i> by Controlling Credit/Debt	156
<i>Seringueiros' Strategies of Dealing with Debt: Re-Thinking Debt and Abscondment</i>	164
Bonuses, Gratification or Discounts	170
Labour Rotation and Changes	174
Conclusion	178

PART FOUR: Profitability and Capital Accumulation: the *seringalistas'* project of economic-political changes, re-investments and changes in *seringais*

Chapter 5: The Double Movement: English Rubber Dealers versus Local Capitalists and the <i>Seringalistas'</i> Project of Economic and Political Changes	182
The Brazilian Counter Movement to Colonial Inequalities and the English Rubber Dealers and British State's Movements Towards Rubber Economy	183
The Foreign Rubber Dealers Influence on Rubber Prices in Belém	196
The <i>Seringalistas'</i> Counter Movement to Rubber Dealers	209
The Demand for Interventionism and the Counter-Reaction by Foreign Rubber Dealers	212
The <i>Seringalistas'</i> Project of Economic-Political Changes and the Central Governments' Pattern of Response	216
Conclusion	226

Chapter 6: Nature, technology, Re-Investments and Changes in Rubber Estates	228
The Geomercantile View on Nature and Technological Changes in <i>Seringais</i>	229
The Way <i>Seringalistas</i> Re-invested the Profit they Gained from Rubber Production	238
Conclusion	244

Conclusion	246
Appendix 1	259
Appendix 2	260
Appendix 3	261
Appendix 4	263
Appendix 5	264
Appendix 6	265
Bibliography	266
Primary Sources	266
Manuscripts	266
Official Publications	268
Reports and Journals Published by Private Institutions	271
Newspapers	273
Memoirs and Novels	273
Secondary Sources	274
Contemporary Literature	274
Academic Literature	276

List of Illustrations

List of Charts

1. Rubber Paths' Owners	97
2. Immigration in Amazonas: 1870-1900	136
3. <i>Seringueiro</i> Rotation, 1910, 1913	177
4. <i>Seringueiros</i> Leaving the Estate, 1910, 1913, 1930	178
5. Maximum and Minimum Average Rubber Prices (in Brazilian currency), in Belém, 1890-1930	199
6. Rubber Prices (in Brazilian currency) in Belém, 1890-1930	200
7. Rubber Production in Amazonia, 1830-1945	240

List of Maps

1. The Most Important Areas Producers of Rubber in Pará and in Acre States, and Seringal ITU in Acre River District	50
2. Seringal ITU-Palmares and Neighbour Estates	54
3. Population Distribution in the Brazilian Amazon According to IBGE Census of 1950	73
4. Schematic Map of a <i>Colocação</i>	151

List of Tables

1. Origin of Old Seringais' Deeds in Acre River District	84
2. Register of Seringais: Pará, 1891-1942	94
3. Categories of Owner, Pará, 1891-1942	96
4. Land Property in Acre – Census 1920 and 1940	99
5. Seringal ITU Recruitment Expenditure, 1910	123
6. Population Growth: Pará, Amazonas, 1872-1920	129
7. Population Growth: Belém, Manaus, 1872-1920	137
8. Villages and Population Centres: Acre, November 1912	140
9. Other Sources of Income: Seringal ITU, 1910, 1913	154
10. Seringueiro Shopping – Seringal ITU, 1910, 1913	157
11. Goods Transport Expenses, 1913	158
12. Newcomers' Initial Debt, 1910	159
13. Seringueiros's Tools – Prices in 1913	161
14. Bonuses, Gratification and Discounts: Seringal ITU, 1910, 1913	172
15. Gratification Receivers – Production Value and Shopping, 1910-1913	173
16. Non-receivers Production and Shopping 1910, 1913	174
17. Other Sources of Annual Income, 1930	175
18. Seringueiros Shopping: 1930	176
19. Brazilian Rubber Production, 1822-1930	198
20. Economic Activities in Rubber Estates, Acre River District 1890s-1910s	242
21. Managers of Seringal ITU's Rubber Enterprise, 1870s-1961	244

Acknowledgments

This thesis represents the effort to develop a deep understanding about issues brought about in my previous historical investigations (master's dissertation at the Universidade Federal do Pará in 1986-91 and researches at the *Instituto do Desenvolvimento Econômico e Social do Pará* in 1987-93). The research work was carried out under a grant from the *Conselho National de Desenvolvimento Científico e Technológico* (CNPq), the fees partially paid by the Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom (CVCP). However it would not have been possible without little helps from institutions in Belém and from friends. Supplementary financial-economic assistance for the fieldwork came from the *Junta Comercial do Pará* (JUCEPA), and photocopy quotes from both the *Instituto de Terras do Pará* (ITERPA) and the *Secretaria de Estado de Ciência, Tecnologia e Meio Ambiente* (SECTAM). The London School of Economics and Political Sciences (LSE) assisted with funds for four months in the last stages of the thesis. I am indebted to these institutions as well as to my friends (the Steves family, particularly Nilda Esteves, Rosa Helena and her family, Abnor Gondin, Leila Matos, Alice, Sandra and Iyiola), Troo, who offered me free accommodation for short periods during my fieldwork in Brazil, carried out in Belém, Manaus, Rio Branco, Brasília and Rio de Janeiro or during difficult times in London.

I am grateful to Dr. Galisia Tundisi (President of CNPq) for his personal effort to offer me proper conditions to finish my thesis and Dr. Ademar Cruz for working as a mediator in the contact with CNPq.

I am thankful Prof. Colin Lewis, who gave suggestions about bibliography and returned with comments three of the seven chapters of my first draft. I also thank Antonio Trimani, who helped with the editing of footnotes and list of bibliography. Dr. Lea Lobato and Rosa Helena Campos helped sending me complementary information on rare books or particular documents.

I also thank Prof. Max Steuer for organising my final examination.

I also wish to express my warmest acknowledgements to my parents (Sebastião Monteiro Bentes and R. Rosa Bentes) and all members of my family as well as to my fiancé Scott Hubanks who has been waiting for me in a long distance relationship. My gratitude goes also to all my friends and colleagues in Brazil and in England who in one way or another helped in this endeavour, particularly to those who offered me their friendship during difficult times in London. I would particularly like to thank Ahmet Akharli, Lee Pegler, Troo Crew and Anne Bakilana. Without my family and friends' help and encouragement this work would never have been completed.

PART ONE: *Introduction*

Chapter 1:

The Problem and The Context

There is a hiatus in the literature on the definition of entrepreneurial production of rubber in Brazilian Amazonia due to looking at it from the perspective of 'free land' and/or non- or pre-capitalist relations of production.

The perspective of 'free land' or 'empty territory' emerged in the 1950s and 1960s when accounts of Brazilian Amazonia generally stressing its large geographic size and its proportionally small number of inhabitants as well as supposing a regional economy characterised exclusively by temporary and unsystematic extractive activities, concluded that rubber production rested upon temporary encampment.¹ According to Prado Junior² Amazonia would be an area of extraction of natural resources, with irregular human occupation, so that it would not represent a subject of economic history.

The emphasis on nature or non-occupied or non-privatised nature, ignoring the local society, persisted throughout the 1970s-1980s by means of official and academic interpretations. On the one hand, the mathematical equation (that is, physical extension divided by the number of inhabitants) supported the military governments' view of the region as an empty territory. On the other hand, Marxist and non-Marxist approaches focusing exclusively on recent migratory flux to the region built varying interpretations centred on the notion of 'frontier' of human occupation or of mercantile/capitalist economy in which the common element is the sweeping aside of Amazonian History.³

¹ Prado Junior 1956, pp. 246-47; Furtado 1959, pp. 61-62; see also 1968; Werneck Sodre 1979.

² Prado Junior op.cit.

³ The so called 'frontier peasantry' scheme is based not only on the notion that there was non-privatised land or 'free land' in Amazonia. More than that, it is based on a particular notion

In this context, historical investigations into the rubber economy by Pacheco de Oliveira⁴ and Weinstein⁵ seem quite innovative, although these interpretations too were guided by notions of Amazonia as a 'free land'. The former argued that the existence of free land would have led to difficulty for capitalists establish their command over rubber production such that they instead established commercial relationships as the only form of controlling the workforce. This was accepted and interpreted by the latter as pre-capitalist relations of production.

Weinstein⁶ refers to *seringais* as large estates and mentions the privatisation of rubber fields in the oldest municipalities in Pará. Yet, she considers large estates as a phenomenon of the 'later boom years' in upstream rivers areas, while familial smallholders (with small tracts of land) would have occupied rubber fields in Pará. Most importantly, the view of familial smallholders from the perspective of pre-capitalism and the notion of free land (in the sense of the existence of non-privatised land) moulding work relations constitute the central explanatory elements.

Santos⁷ historical research surpasses the idea of nature or non-privatised nature defining economy or society. He searches for the causes of economic features in social relations by focusing on the native society's economic-political interconnections nationally and internationally. Furthermore, he mentions the emergence of rubber estates after the 1850s, surpassing the notion of rubber fields as 'free land' occupied

about Amazonian history or, more precisely, it is marked by the presumption of an absence of history before the 1950s. In this sense, 'free land' became a particular way of looking at the region so long as the central idea is that before the 1950s Amazonia was characterised by both non- effective and permanent occupation of land and the absence of mercantile relationships. This view is combined with a dualistic approach in which south east Brazil is the 'centre' and Amazonia the 'periphery'. Consequently, the focus is concentrated exclusively on recent immigration from other regions of Brazil, which is assumed to have happened in stages; first peasants, then, capitalist investments after the 1960s. Consequently, recent Brazilian immigrant peasants are supposed to be pioneers of the permanent occupation of land (and/or of mercantile relationships and 'integration' of Amazonia in the 'national economy') so that the main issue in the region is supposed to be the relationship between peasantry and capitalism. This scheme was analysed critically in my previous historical research (1987-1991) the results of which were presented in Bentes February 1992 and 1996.

⁴ Pacheco de Oliveira 1979.

⁵ Weinstein 1983, chapter one, and 1984.

⁶ Weinstein 1983, p. 45.

⁷ Santos, R. 1980.

only temporarily.⁸ However, the idea of cycles of exporting commodities suggests discontinuity of the rubber economy after the period 1870-1913, which he classifies as a rubber boom.

Martinelo⁹ criticises the notion of discontinuity. Yet, he reproduces Santos' neo-classical approach, giving secondary importance to relations of production and stressing external investments. Continuity in rubber production is visualised by focusing on the so-called 'battle of rubber', resulting from USA investments, during the Second World War.

A few masters dissertations¹⁰ represent interesting attempts to focus on entrepreneurial rubber production as a permanent enterprise. But old dogmas remain such as *seringal* being a simple mercantile undertaking and of non- or pre-capitalist relations of production leading to the secondary importance given to the sphere of production.

In my previous historical investigation, undertaken during the period 1987-1991,¹¹ I came across the gap in existing literature on the definition of entrepreneurial rubber production which was not deeply tackled because the focus was on the emergence of peasantry in Amazonia in order to question the 'frontier peasantry' scheme. *Seringal* was focused on finding out if *seringueiro* could or could not be defined as autonomous familial producers.

Thus, the views of rubber production, as defined by 'free land' or as non- or pre-capitalist, remain essentially unquestioned.

The discussion which follows I intend to be my contribution to this debate. *Seringal* is defined as opposed to both (a) the supposition of temporary encampment or temporary commercial enterprise and (b) the view of non- or pre-capitalist relations of production. From the 1848 (particularly from the 1870s) onwards, the entrepreneurial

⁸ Actually, the privatisation of rubber fields was mentioned previously by Reis 1953 and Bonfim 1954.

⁹ Martinelo 1988.

¹⁰ Paula, J.1980 ; Duarte, H.1987; Silva, A. 1982; Pinto de Oliveira, 1985.

production of rubber emerged and expanded under the form of *seringal*, which has three interconnected meanings. First, it is synonymous with a large estate, being private property in the modern sense. Second, it characterises capitalist social relations of production. Third, it means rubber fields or Hevea forest.

The social relations of production in *seringal* are capitalist because of features such as: (a) they are organised to produce commodities for profit in order to ensure capital accumulation; (b) they are characterised by the command of capitalists over subordinated forms of free labour; (c) this command is based on the private ownership of *seringal* as an estate and as a business. The specificity of these social relations of production are basically two fold: (a) the employment of different forms of subordinate free labour, including wage and salaried, in which *seringueiros* (rubber tapers engaged as labourers paid by results instead of by work time as for instance salaried labourers) were predominant and (b) the geomercantile privatisation and use of natural resources, involving a converging interaction with nature.

The problem was focused by doing a historical investigation on *seringal* in the Brazilian Amazonia in the period from the 1870s to 1930 (see the discussion on sources).

Interpretation of the results necessarily involves the discussion and definition of terms to apprehend the generic and specific meaning of *seringal* and to express the argument clearly, which is our concern in what follows. The rest of the chapter deals with historical sources and the outline of the thesis.

Issues in the Historiography

The debate on the rubber economy has revolved more around theoretical principles than historical research on social relations of production.

¹¹ Bentes, February 1992 and 1996.

The free land approach ignores social relations of production and the entire historical process of capitalism in rubber production due to the priority given to the assumption that the existence of 'free land' would favour the flourish of peasantry. Accounts of the privatisation of rubber fields by the traditional historiography¹² are neglected or not questioned. And when Velho¹³ refers to *seringal* as a simple temporary mercantile undertaking, he ignores even Santos's¹⁴ recent reference to it.

Moreover, results from the few attempts to analyse the privatisation of land are given secondary importance. For instance, investigation of the privatisation of rubber fields in a few municipalities in Pará revealed familial smallholders and small and large-scale *seringalistas*¹⁵ (landowners in rubber yields). However, this was not used to define the difference between peasant and entrepreneurial property and, most importantly, to find out who had effective control over rubber fields and the importance of this in the process of emergence and consolidation of an internal free labour market.

The traditional historiography¹⁶ is more narrative-descriptive than social science based. This literature gives important information on rubber production. Its weakness is the notion of *seringal* as a mercantile undertaking, resulting from the view that *seringalistas* would personalise commercial-usury capital not very keen on investing in production. In chapter four, I contest this view by demonstrating that the rule of *seringalistas/merchant-seringalistas* (merchants or commercial houses owning and running *seringais* indirectly by means of managers or in partnerships) as commanders of relations of production was deeper than their supposed absenteeism suggests. Actually, the descriptive account of the administrative organisation and

¹² Reis, 1953; Quintiliano 1963; Bonfim 1954

¹³ Velho 1983, p. 33.

¹⁴ Santos, R. op.cit.

¹⁵ Weinstein 1983, p.46-49.

¹⁶ Reis 1953; Quintiliano op.cit.; Bonfim op.cit.; Santos, R. op.cit.

division of labour in *seringal* by Reis¹⁷ seems to contradict the idea of a simple mercantile undertaking.

The historiography attempting to focus on *seringais* as productive enterprises in the 1980s and beginning of the 1990s is more social science based and reveals interesting features about the rubber economy in Acre. However, this literature has revolved around theoretical dogmas such as the automatic association of *seringal* with non- or pre-capitalist relations of production¹⁸ originated from two approaches. On the one hand was the emphasis on commercial relations from the perspective of *aviamento* (the regional denomination for buying on account) and debt, which is interpreted according to the Marxian definition of capitalist relations of production,¹⁹ and so is considered as evidence of compulsory labour.²⁰ On the other hand, was the focus on *seringal* from the perspective of enterprise in which the Weberian view on capitalist enterprise as synonymous with rational authority in opposition to supposed pre-capitalist 'irrational' authority or administration, which is based on the notion of economic processes as non-social phenomena, resulted in two biased interpretations. First, items of the internal regulations referring to aspects of social relations, not strictly linked to the process of rubber production, are considered 'extra-economic' so that *seringal* is defined as a particular case in which non-capitalist work relations would be combined within an economic organisation.²¹ Second, the interference of *seringalistas'* individual character, materialised in a few cases of abuse of power over labour or even violent reaction to labour abscondment and non-payment of debt, is viewed as evidence of an 'insane' or 'evil' system of work.²²

¹⁷ Reis op.cit.

¹⁸ Paula 1980 and 1981; Silva, A.op.cit.; Duarte, H. op.cit.

¹⁹ Paula op.cit.

²⁰ Paula, J.1980 and 1981; Silva, A. 1982; Duarte, H.1987.

²¹ Teixeira, C. 1980 pp. 72-79, who absorbed well the Weberian sense of economic processes as non-social phenomena. See also Littler 1982, chapter 4, who analyses Weber's view on bureaucracy and bureaucratisation in order to focus on the labour process.

The neo-classical technical-economic approach focuses on the rubber economy from the perspective of the Western notion of civilisation and progress, arguing that local investors failed to adapt their enterprises to the standard of modernity and progress represented by the modern technology of large-scale monocultural rubber, but divergent views exist about the reasons for that.²³ This approach ignores the *seringalistas*' own project of economic and political changes and gives no evidence about how local capitalists invested and re-invested their profit, how they consequently changed or did not change rubber production, and why.

Our previous focus on work relations in *seringais*²⁴ constituted a subsidiary issue in a historical investigation on the emergence of peasantry in Amazonia, which did reveal important points for the discussion of the matter since it raises questions to the 'free land' approach, demonstrates that rubber tapers were not familial autonomous producers in rubber estates and, most importantly, this first approach to the subject did point out weaknesses in the thesis of non- or pre-capitalist work relations in entrepreneurial rubber production and made clear that the subject demanded systematic investigation.

Issues Raised in, and the Contribution of the Literature to the Effort to Build Workable Definitions and Concepts

The organising element in our argument is a workable definition of capitalist social relations of production. This was built by confronting the problems in the prevailing interpretations of *seringais* and the findings of the historical investigation with the debate on the definition of capitalist relations of production. The reference to this is necessary to mention the contribution of the literature and make precise our argument.

²² Euclides da Cunha 1946 and 1986; Calixto 1993.

²³ Martinelo op.cit. pp. 52-53; Dean 1989.

Two basic ideas subterraneously or explicitly govern the prevailing interpretations of *seringais*: (a) his reference to 'colonies' as 'free land' favouring the flourishing of peasantry²⁵ and obstructing the capitalist mode of production,²⁶ and (b) Marx's view on history as a succession of modes of production in which the definition of capitalist relations of production is centred on wage labour so that money invested in production would become capital only when it is used in the exploitation of wage labour in order to obtain surplus.

A quick reference to the problems in such interpretations is crucial in the exposition of our argument.

Problems of the view of 'Colonies' as 'free lands'

The view of 'colonies' as 'free land' involves different concepts and notions. First of all, even considering that at least four notions of history have been found in Marx's work,²⁷ this view is linked to the common conception of changes, as governed by impersonal structures or 'mechanisms' leading to predictable historical results, placing a central role on the technological changes. The consequent developmental notion of history links technological 'evolution' to transformation in exchange relations from use value to exchange value, interpreting industrialism as the last stage of the development of exchange value, being qualified as the superior development of human beings and the starting point of history.²⁸

According to Muszynski,²⁹ the central idea in this developmental concept of history is that all production, everywhere and at all times, creates use-value. It is exchange value that transforms production and, ultimately, use value itself. Assuming exchange

²⁴ Bentes, February 1992 and 1996

²⁵ Marx, 1989 p. 247.

²⁶ Macpherson op.cit. p. 61.

²⁷ Holton 1981.

²⁸ See this view in Marx, 1973 p.193 and 1974 pp. 112-13, and the study by Muszynski 1996 p. 53.

²⁹ Muszynski op.cit.

value-industry is the starting point of History, then use value/non-industrial societies would represent pre-history in which human capacity developed only to a slight degree and at isolated points.³⁰ Consequently, societies such as the First Nations are referred to as 'tribes' as opposed to societies or nations, and 'primitive' or 'mere hunting and fishing peoples lie outside the point where real development begins'³¹ in contrast to 'sophisticated,' 'civilised' peoples of industrial societies.

This simplistic view of human societies is inspired both in (a) the Western notion of civilisation and (b) the liberal economy. The term 'Western notion of civilisation' refers Eurocentric and monoculturalistic interpretations of world history,³² built in nascent industrial Western Europe, according to which civilisation was the result of an evolution of methods of human beings mastering nature:

'By accumulated changes, some good, some bad, human society developed to the stage that historians define as civilisation. This was based on five crucial discoveries: 'how to control fire, how to plant seed and grow crops, how to tame and use work-animals like dog, ox and horse, how to smelt iron and other ores to make tools and weapons, and how to use the wheel to move heavy loads'.³³

McLeish³⁴ stresses that the level of technological sophistication, insofar as the cultural and societal aspects play a secondary role, is the only criterion defining civilisation in the Western definition. According to Berki³⁵ a simplistic view of human societies by the liberal economy stems from the notion of rationality as synonymous with Western capitalist's rationality whereby the human being is reduced to and conceived of as the 'rational' wealth-maker in opposition to supposed 'irrational' and 'unconscious' human beings of previous Western non-industrial societies and non-western civilisations.

³⁰ Marx, 1973 p. 158.

³¹ Grundisse 1973, p.107; see also Muszynski 1996, pp. 51-62; Giddens 1997, p.229;

³² See an interesting debate on civilisation and Eurocentrism in Randall, 1940; Toynbee 1946; Quigley 1961; Wilkinson 1987; Frank, A & Gills, B. 1996. See comments on this literature on page 30 and footnote 84.

³³ McLeish 1991, p. 125.

³⁴ Ibid.

Further evidence of the influence of such simplistic views of non-industrial societies in Marx's thought is his concept of use value, which is associated with necessity and with the supposed 'domination' of nature over human beings in a cycle in which supposedly simple hunting and fishing peoples were caught trying to assume group survival without any great development of the knowledge that would later allow them to 'master' nature and, with it, 'necessity'.³⁶ This concept converges two notions. First, an a-historical view of human beings in which the Western capitalists' efforts to 'master' nature are conceived of as an expression of a superior stage of a generic and universal human 'nature'. Second, people who do not 'master' nature are considered 'primitive', 'unconscious' and 'irrational', expressing somehow the conception of non-devastated nature as a symbol of wildness or absence of civilisation, which was brought about by the Western Notion of civilisation.³⁷

The discriminatory character of such a view is revealed by Mecleish's³⁸ argument that in South America, the First Nations built cities several times the size of London at the time of Henry VIII. They had a written language (in the case of the Mayan hieroglyphics), produced artworks and jewellery, their calendar and science surpassed that of European scholars of the same period and as far as arithmetic was concerned, they were about a thousand years in advance of Europe. The First Nations in Amazonia not only had a method for extracting latex but also for manufacturing it into different rubber by-products, which was registered as early as 1511.³⁹ The French, English, Germans and North Americans only got to know about their manufacturing methods and started efforts to learn and adapt their methods to large-scale commodity production by the middle of the 18th century by means of a

³⁵ See discussion on this matter by Berki, 1988. p. 59

³⁶ Grundisse op.cit.

³⁷ Thomas (1983, p. 25) shows that in Tudor and Stuart England 'human civilisation was virtually synonymous with the conquest of nature'. And the idea of nature as meaning uncivilised men governed the actions of migrants Englishmen in the 17th century (Ibid p.15). Finally, he says that 'Man's domination over nature was the self-consciously proclaimed ideal of early modern scientists' (Ibid p.29).

³⁸ Ibid.

³⁹ Coates 1987 pp. 4-10; Woodruff, 1958, pp. 1-2.

report by Fresneau, who learned the methods from a man in Pará.⁴⁰ However, producers in Pará had long since been modifying and adapting these methods to commodity production. Since the beginning of the 18th century they had been making pumps, syringes, small animal figures, balls, and other small articles for exporting.⁴¹ As long ago as the beginning of the 19th century, small scale manufacturing had been established in Belém for producing waterproof articles such as ammunition bags, shoes, coatings and bottles, as well as syringes and balls to export to Portugal and the USA.⁴² Finally, Meggers⁴³ mentions the cities of the First Nation, their tools and techniques of production, conservation of food etc.

The question, then, is how Westerners and Marx saw them. It is clear that they looked at them from the point of view that their level of technological sophistication did not fit the Western concept of civilisation. They controlled fire and cultivated crops but did not use horses, oxen or other domestic animals as work-beasts, nor did they have metal tools or weapons and wheels, except on a few toys.⁴⁴

McLeish argues that in looking at them in this way, Europeans 'failed utterly to understand' that in no way were they 'inferior to the culture of the European incomers'; and they '(...) condemned its practices as satanic perversions and proceeded to plunder and destroy. Patterns of life and thought that had evolved over thousands of years were brought to an end in less than a generation by European firearms, explorers and Christian missionaries'.⁴⁵

Miles⁴⁶ does not consider this a 'failure', but an intentional act of class subordination, identifying the destruction of the First Nations with the destruction of feudal-peasantry in Western Europe. Thus, civilisation would be used as a tool to subdue those the Western European capitalists and State powers wanted to shape

⁴⁰ Ibid.; Drabble, 1973.

⁴¹ Ibid; Whittlesey, 1931 p. 1.

⁴² Cruz 1973 p. 310; Mourão 1989, p. 25; Santos, R. 1980; Weinstein, 1983; Coates op.cit.; Marin, 1985 p. 248; Dean op.cit. p. 32.

⁴³ Meggers 1977.

⁴⁴ McLeish op.cit. p. 126.

⁴⁵ Ibid p. 126.

as labour, not just outside but also inside Europe. Indeed, class subordination in Western Europe involved the destruction/subordination of feudal-peasantry just as the process of making labour in the American continent disorganised/destroyed/subordinated the First Nations. However, the later process is specific because it involves the invasion of territories occupied by peoples organised according to nations – with proper economic-political-cultural organisations, having diversified languages etc. In this case, it is implied that the Western concept of civilisation denied the status of civilisation to those societies. Muszynski⁴⁷ mentions the Western capitalists' auto-denominations as 'civilised races' in opposition to 'savage' natives⁴⁸ or 'harbingers of civilisation' applies to peoples without religion or culture, therefore, interpreting the forced integration of aboriginal peoples into wage labour as part of the 'civilising' process in British Columbia.⁴⁹

These are crucial processes revealing the biased and simplistic character of Marx's reference to 'colonies' as 'free land'. This involves three meanings or notions: (a) of the Western capitalist expansion abroad as the 'colonisation' of 'empty' territories, which has been reinforced even by the interesting recent debate on modern property by McPherson,⁵⁰ (b) of the First Nations as 'primitive' and 'uncivilised' peoples; and (c) of the absence of land property as monopoly.

In Capital the reference to 'colonies' as 'free land' favouring the flourishing of peasantry and obstructing the capitalist mode of production was used as an example to enforce Marx's thesis that land property as a monopoly of one class and the consequent expropriation of the people from the soil would be a necessary precondition for the birth of the capitalist mode of production.⁵¹ In stating this he

⁴⁶ Miles 1993 pp. 89-91.

⁴⁷ Musynski 1996.

⁴⁸ Ibid. p. 95.

⁴⁹ Ibid p. 54.

⁵⁰ See the debate on 'The Modern Theory of Colonisation' by Marx op.cit. and Macpherson 1978, chapter 5.

⁵¹ Marx, 1989 Part VIII; Macpherson 1978, p. 68-71.

mentioned wage-labour⁵² and one must question how this emerged in colonies considering that it was supposed to be a propertyless workforce, emerging from a situation of land being monopolised. Thus, instead of confirming his thesis, Marx's example raises questions to it.

Recent studies have raised important questions to this postulate. First, the emergence and spread of peasantry or familial producers in the USA has been explained not as a mechanical result of *free land*, but in the context of capitalism after the second half of the nineteenth century.⁵³ Second, the 'frontier peasantry' approaches to focus on Amazonia (see footnote 3) are questioned by my previous research,⁵⁴ which revealed important points: (a) the sweeping aside of Amazonian history by these approaches; (b) peasantry in Amazonia as a phenomenon brought about by the historical process of capitalism so that it is not pre-capitalist as feudal-peasantry was in Western Europe; (c) the emergence of peasantry after the middle of the 18th century, not as a result of 'free land' but linked to (1) the immigration of familial producers of food to the internal market, (2) official support to native families, and (3) the landless' resistance to be turned into wage labour; (d) Amazonia was not 'free land' but the territory of the First Nations, which was cleared from their occupation by a process of geomercantile privatisation of land in which entrepreneurs tended to privatise the best lands; so, (e) recent immigrant peasants are not 'pioneers' either of permanent occupation of land or of commercial relations.

Finally, the results of the present investigation raise questions to the supposition that in 'colonies' the separation of labour and their root, the soil, would not yet exist.⁵⁵ The privatisation of rubber fields is demonstrated to be a process re-affirming the historical pattern of privatising land in Amazonia (chapter 2), which was initiated by the freeing of land from the First Nations, and linked to the multiple historical process

⁵² Macpherson op.cit. p. 61.

⁵³ Abramovay, R. 1992, capítulo 5; Malagodi 1995, pp. 150 and 319-323.

⁵⁴ Bentes op.cit.

⁵⁵ MacPherson op.cit. p. 70.

of making the labour required by setting up enterprises to produce commodities (chapter 3).

Another finding was that the biased view on people who do not 'master' nature served as ideological tool in important processes regarding rubber production in Amazonia in the 19th and beginning of the 20th century. This was manifested in the ideas espoused by a British Consul⁵⁶ during the First International Exposition of Rubber, in London, in 1908, on the converging interaction between human beings and nature in *seringais*, without the massive destruction of nature. The non-devastated native Hevea forest was associated with 'wildness' or an 'inferior stage of technological evolution'. This view emerged at a time when the Western notion of civilisation had been enforced by the Spencerian theory of the 'survival of the fittest', which Bowler⁵⁷ demonstrated to be a re-interpretation of Darwin's evolution theory according to mainstream ideas and principles governing British imperialism after the 1870s. So, 'wild' or non-industrial societies also meant unfit ones. Unfit people interacting with 'wild' nature were contrasted with those who had mastered nature and were considered the fittest in the triumphant view of the pattern of civilisation and progress represented by large-scale monocultural rubber.

The re-edition of the Western notion of civilisation in this matter was apparent. The consular correspondence responding to criticisms of the report classifies the *seringalistas*' demands for interventionism by the central government as 'childish',⁵⁸ which means the identification of *seringalistas* with the First Nations. This term emerged in the evolutionary discourse of the 19th century to refer to the First Nations/remaining nations as not well developed human beings or 'inferior species', as discussed in chapter three. The common element between them was the use of methods of extracting latex and making rubber not based on the idea of 'mastering

⁵⁶ F.O. and The Board of Trade. Diplomatic and Consular Reports – Brazil (Report on the Trade of the Consular District of Pará), 1908, p. 21.

⁵⁷ Bowler, 1992.

⁵⁸ F.O. 368/274 (1909), letter by Mr. Casement of November 7, 1908.

nature'. Thus, the classification of 'childish' and the reference to *seringais* as 'desolated swamps and forest' - so incompatible with the modern notion of private property (see chapter two) - express the British Consul's depreciatory view about people who do not 'master' nature,⁵⁹ which at that time was being used in the attempts to sweep aside local rubber production, as discussed in chapter five.

Difficulties in the definition of capital centred on wage labour

In chapter four, it is demonstrated that *seringais* engaged different categories of labourers and, particularly in distantly located *seringais* until around 1912 immigrant labourers. Their engagement involved initial debt and the obligation to settle this before leaving the estate.

This particular feature has been improperly interpreted as compulsory forms of labour,⁶⁰ labour immobilisation⁶¹ or pre-capitalist relations of production,⁶² which are views inspired in authors viewing slavery as a mode of production,⁶³ or non-capitalism,⁶⁴ or identifying indebted immigrant labourers in coffee plantations in S. Paulo with debt and peonage and indentured labour⁶⁵ or with forms of servitude.⁶⁶

The interesting point in such accounts is the explanation of the end of slavery as a result of multiple historical processes such as the conjuncture of constantly decreasing sugar prices after the middle of the 18th century, technological changes and the abolitionist movement in Brazil, particularly the passive resistance of African

⁵⁹ This is a notion not mentioned by Anderson (Anderson, B. 1990) in his interesting discussion on nationalism. He interprets the metropolitans' discrimination against 'Creoles' (the author uses this term to refer to descendants of Europeans born in Spanish colonies) in the colonial bureaucracy of Spanish colonies in South America, linked to non-devastated nature, as a distortion of Rousseau's and Herder's statement that climate and ecology have a constitutive impact on culture and character.⁵⁹

⁶⁰ Silva, A. op.cit. p. 23; Paula, J. op.cit. p. 30.

⁶¹ Pinto de Oliveira, L. 1985.

⁶² Silva, A. op.cit.; Paula, J. op.cit.; Pinto de Oliveira op.cit.; Duarte, H. 1987

⁶³ Gorender, 1985.

⁶⁴ Dias, 1970.

⁶⁵ Holanda, S. 1951; Dean 1976, chapter 4. See discussion on this matter in Lamounier 1993 p. 11-13.

slaves by means of the organisation of *quilombos* (which were villages organised by fugitive slaves in distant places).

However, these accounts are inspired by the conception of history as a succession of modes of production and by the definition of capitalist relations of production centred on wage labour.

These are conceptions permeating even studies on sharecropping contracts which argued against the identification of indebted immigrant labourers in coffee plantations with debt peonage.⁶⁷ The focus on sharecropping contracts from the perspective of 'transition' to free labour or free labour market hides important differences among different regions of Brazil. At the same time, these studies over-emphasise the prohibition of traffic in slaves in 1852, giving secondary importance to the multiple internal historical processes mentioned by previous studies. Lamounier⁶⁸ does consider differences between the use of different categories of labourers in Cuba and in Brazil. However, she works on the notions of 'transition' and 'experiments' with different categories of labour, and despite arguing that a 'free labour market' might not have been the final end envisaged by 19th century planters, she does not deal with the theoretical issues on the table.

The idea that entrepreneurs started to 'experiment' with different categories of labourers only after the traffic prohibition is quite unsustainable when it is taken into account that this constituted a constant practice in Amazonia from the very beginning. In my previous research, and in chapter three, it is demonstrated that slave labour was never the exclusive type of labour, and it was not even the predominant one. From the beginning, non-slave and free labourers were predominant and the number of free labourers increased gradually, particularly after 1755, when the enslavement of natives

⁶⁶ Viotti da Costa 1982, pp. 104-105.

⁶⁷ Stolcke, 1988 and Stolcke and Hall, 1983.

⁶⁸ Lamounier, 1993.

was prohibited. In addition, colonial production employed wage labour in administrative jobs, and Furtado⁶⁹ mentions that this was a common feature all over Brazil.

Regarding *seringais*, although there are a few historical references to the use of slave labour in *arranchamentos*, that is expeditions to extractive areas situated in *terras devolutas*, before the middle of the 19th century, no records have been found of such a practice on rubber estates. In contrast to sugar and coffee plantations, rubber estates were not a mix of slave/free labour enterprises, changing to a system of free labour later. From the beginning, rubber estates were based on different categories of free labour.

As discussed in chapter three, *seringueiros* were not properties of the commander of the process of production. On the contrary, they were free labourers and, as such, they were responsible for their own keep even during the period between harvests and, in the case of immigrants, from the time they left their homeland.

The focus on work relations centred on indebtedness has not just ignored the fact that initial debt resulted from a loan to be re-paid with interest, it has also inevitably associated this with a view on both the interference of the boss's subjectivity and individual character and of oppression in general as 'abnormal' or incompatible with capitalism. This results from approaches interpreting economic processes as non-social phenomena and associating capitalism with 'civilisation', well-being, 'rationality' and the absence of violence/oppression in opposition to non- or pre-capitalism. In the discussion on this matter, I have referred to studies mentioning different levels of violence/oppression and interference of boss's subjectivity and individual character, for instance in England and on rubber plantations, not from a comparative perspective but as an argument to the point that the historical process of capitalism does involve those elements.

In *seringais*, debt did not mean labour immobilisation since there was an increase in labour rotation over time and oppressive elements can be understood in the context of

⁶⁹ Furtado, 1959.

fragile labour bargaining power at that time. Moreover, the results of the investigation show that in *seringais* commercial relations and indebtedness did not define work relations. Rather, they were historical circumstances. Work relations were defined by the ways the command of production were exerted or, in other words, the ways labourers were engaged, controlled and disciplined. *Seringais* employed different categories of free labour in which the direct producers of rubber are defined as *seringueiros*, being labourer or peasant-workers, who were engaged as single workers, specialised producers of rubber and as subordinate labour paid by results. They were not autonomous producers. Appropriately, owners were called *patrão*, which means boss, instead of patronage, as discussed in chapter four, characterising perfectly the class relations in *seringais*. The term *seringalista* is largely used in this thesis as a means of connecting landowner and boss.

These features require reference to be made to the broad controversies on the definition of capitalist relations of production.

First, the developmental/dualistic controversy on the definition of capitalism in which on the one hand, one defends the thesis of 'colonies' as non- or pre-capitalism⁷⁰ based on both the Marxian definition and the over-emphasis on nation-state approaches from the perspective of a developmental and dualistic view.⁷¹ This

⁷⁰ Defended by Banaji, 1972 and 1977; Brenner 1977 and 1985; Rey 1971 and 1975; Brewer 1990, chapter 10.

⁷¹ This is a view originated in the triumphant view of industrialism/modern technology as an expression of 'superiority', 'advance' and 'development' so that social inequalities and poverty are associated with non-industrialised countries or regions. The problems of the 'development'/'underdevelopment' approaches are not directly linked to our theme. However it is worth to mention two points, which are quite apparent in Brewer (1990). On the one hand, he does not consider the negative effects of modern technology in industrialised countries such as air pollution, acid rain, decreasing quality of food, noise etc in the evaluation of living conditions (In Europe just 1% of the lands is left in its original state, while 99% is exploited or 99% of the original forest/nature has been destroyed as mentioned by Buckley, 1992). On the other hand, he centres his argument on the questionable assessment that the benefits of increased productivity allowed by modern technology and by capitalist relations of production have not been shared with the working class and other groups in 'underdeveloped' countries but it would have been shared in 'developed' or 'advanced' countries. The latter would be guaranteed by trade union organisations and by bourgeois democratic institutions (Brewer, op.cit. p. 8-9). The effort to define the differences between Western countries and Latin American countries as the 'backwardness' of the latter compared with the former, hides the fact that the benefits of increased productivity allowed by modern technology/industrialism have not been shared

approach resulted in both (a) the view that capitalism started in industrialised S. Paulo and then expanded to the rest of the country in a linear expansion of space until it reached Amazonia, which is identified with 'free land' and the 'frontier' of commercial/productive capital,⁷² sweeping aside its History; (b) the approach of 'later capitalism'⁷³ which considered that before the emergence and spread of industry in S. Paulo the Brazilian economy was a simple commercial colonial economy. On the other hand, the opposing interpretations question neither the triumphant view of industrialism/modern technology nor the nation-state developmental/dualistic approach. They simply try to explain 'underdevelopment' or 'dependent capitalism' as an element brought about by capitalist relations of production-trade. This is a very interesting point posited by Frank⁷⁴ and other theorists of the 'dependency theory'.⁷⁵ Criticisms of this theory have been concentrated on the ambiguous and imprecise concept of 'dependency' due to the hesitation 'between a national approach and a class approach'.⁷⁶ Finally, Wallerstein's⁷⁷ alternative definition of capitalism is weak due to (a) the notion of a world-system as an impersonal structure, and (b) the secondary importance given to social relations of production, resulting from the erroneous argument that in regions with dense 'indigenous' populations in South America, the direct producers would not have been deprived of their ownership of the

with the working class in general and other social groups anywhere in the world. Actually, capitalist production is not meant to share benefits but to profit in order to ensure capital accumulation. Moreover, the author considers neither the critical view on triumphant interpretations of the historical process of capitalism in Britain by Cain and Hopkins (1994) nor the debate on increasing poverty and social inequalities in England (There plentiful literature on this. See for instance Green, 1995; Kaur, Lingayah and Mayo, 1997 and Edwards, P. and Flatley, J. 1996).

⁷² This is one of the most important views in the 'frontier peasantry' scheme previously mentioned.

⁷³ Mello, 1987; Cano, 1981.

⁷⁴ Frank, 1967, 1969 and 1978.

⁷⁵ Joining Frank op.cit. works by Maureen, 1973; Cardoso, 1972 and 1977; Cardoso & Faletto, 1970; Santos, T. 1973 can be considered.

⁷⁶ Weffort, 1978; Figueiredo, 1978.

⁷⁷ Wallerstein, 1974, 1983.

means of production.⁷⁸ This view sweeps aside the previously mentioned historical process regarding the First Nations.

Second, the controversy over the definition of capitalist relations of production in the debate on rural enterprises in post-colonial Brazil whose weakness is the reluctance to use historical findings on work relations based on different categories of labour to contest the Marxian definition of capitalism.⁷⁹ The result has been two opposing interpretations: the thesis of non-capitalist and capitalist natures of agricultural production. Therefore, while some stress the distinctive features of the organisation of work in rural enterprises to argue for their non-capitalist *nature*, others oppose this by using the Marxist argument that those relations of production were integrated and part of the broad process of capital reproduction, being capitalists from the broad perspective of capital expansion. Thus, even when they do not look like capitalists they would be work relations re-defined by capital expansion.⁸⁰

Studies on sharecropping labourers on coffee plantations, previously mentioned, have tried to shift from this debate by ignoring the theoretical issue on the table. Coffee plantations continued to use non-wage labour even after the 1880s. Even after the end of slavery, in the period from 1888 to 1930, familial producers represented 50 to 75% of the workforce on coffee plantations, and wage labour was contracted only on a small scale and for performing specific tasks.⁸¹ Finally, sugar and coffee plantations employed wage labourers even when they were mainly based on slave labour.⁸²

⁷⁸ Wallerstein, 1983 pp. 9-10.

⁷⁹ The strongest example of this is Palacios' (1980) interesting study on haciendas in Colombia. His expectation of wage-labour as the developmental 'normal' and 'necessary' form of capitalism account for both his conclusion that haciendas not based exclusively on wage labour seemed abnormal and difficult to define and his perplexity, questioning why the farmer did not adopt wage-labour as the only category of workforce as would be the normal development (*Ibid* p. 120).

⁸⁰ Bruij, H. 1982.

⁸¹ Sallum Junior, 1982. See also Lamounier, 1993.

⁸² Furtado, 1959.

Thus, the literature questioning Marx, directly or indirectly, is quite useful in order to build a workable definition of capitalist social relations of production. Changes in historical⁸³ and international historical⁸⁴ thoughts in the 20th century, stressing a multicultural historical view, which is more adequate than the Eurocentric approach to understand the cultural-economic-political multiplicity and diversity which characterise human history, have permeated the debate on the definition of capitalist social relations of production in the countryside in many ways.

Malagodi⁸⁵ discusses Marx's problematic view on the country economy, expressed in two points: (a) the conception of capitalism in the country as an extension or development of a mode of production regarded as originating in the urban environment, and (b) the internalisation of the theory of rent as the only way of focusing on the rural economy, resulting in Marx's problematic conception of forms of production other than capitalist/wage-labourers as *remnants of the past* or as a *bad formation of capitalism*.⁸⁶

The problem in this interesting discussion is the explanation for Marx's view on relations or forms of production other than capitalist/wage labour as a simple result of

⁸³ Iggers (1997, Introduction) discusses changes in historical thought in the 20th century, bringing about (a) the idea of a plurality of civilisations (one of the first authors to speak about it was Spengler 1926); (b) a shift from a sequence of events to the examination of conditions during a specific time period (Bloch, 1964; Braudel, 1972-74); (c) the new idea that even a specific epoch did not constitute an integrated unit or that historical times varied with the subject of study, each with a different speed and rhythm (Braudel op.cit.); (d) the notion that even within a set social framework, differing conceptions of time co-existed or competed (Le Goff 1980, Thompson, 1967) and (e) new histories sometimes integrated into a larger narrative, but often apart from it, resulting from claims by minorities excluded from historical narratives (women and ethnic minorities). Particularly the studies on different identities, implied in the recognition of different cultures interfering in human history, raise questions about the Marxist emphasis on the central role of politics and economics as the locus of power and exploitation (Iggers op.cit. p. 8).

⁸⁴ The debate on civilisation and Eurocentrism (Randall op.cit.; Toynbee op.cit.; Quigley op.cit.; Wilkinson op.cit.; Franc, A. & Gills op.cit.) argues a fundamental continuity between the ancient and modern world even when the specificity of capitalist relations of production is considered (Ekholm and Friedman, 1996 p. 71); and stresses a multicultural historical approach. The weakness in this debate is the use of the traditional notion of system and the dualistic view of centre-periphery to explain ancient societies.

⁸⁵ Malagodi, 1985.

⁸⁶ Malagodi op.cit. p. 241 and p. 423.

the theory of rent. In the classical economy,⁸⁷ consideration of the rural economy only by means of the theory of rent results from the concern to explain economic processes only when capital investment occurs and from the point of view of that investment. In Marx, on the contrary, the concentration on capital investments, identified in the relationship between capitalists/wage labourers, results from and involves, two basic issues: (a) the contradiction expressed in the attempt to define capital as social relations of production, resulting from his criticisms of the classical economists' focus on the economy as natural phenomena and not as social phenomena, at the same time as he conceived changes as governed by universal permanent forces as a sort of 'law' of nature; and (b) the translation of this notion of changes into a developmental notion of History in which the relationship between capitalists/wage labourers is regarded as the 'law of motion' so that this would necessarily be generalised, eliminating any other form or social relation of production.

In the 1970s, criticisms of the notion of economic processes as non-social phenomena resulted in the first proposition of an institutional approach by economists.⁸⁸ Clark⁸⁹ argues that Marx uses the classical economists' theory of natural value (instead of social value) to explain the economy, expressed in his explanation of prices in which offer and demand are conceived of as a sort of natural law regulating all the economy, reproducing the explanation of prices independent of society and history. This would be the weakness of the so-called 'transformation problem'⁹⁰ since it is attempted to explain economic processes by looking for an invariant measure of value in which the Marxian contradiction would have been treated as a purely logical problem, as if the forces that order society and the economy were universal.⁹¹

⁸⁷ The analyses on classical economy consulted were the following: Green,R. 1992; Aspromourgos 1995; Malagodi 1993 and 1995.

⁸⁸ See on this Clark (Editor), 1995 and Tool, M. (Editor) 1993.

⁸⁹ Clark, 1995 p. 38.

⁹⁰ See on this: Young, 1978; Pack, 1985; Potier, J. 1991;

⁹¹ Clark op.cit. p. 35.

However, the author proposes an institutional approach to meet a disciplinary concern of preventing economic theory's march to irrelevance,⁹² renewing the conception of 'economic/economy' as an impersonal matter, separated from the 'social'.⁹³

Institutional approaches by neo-classical studies on enterprise represents a step beyond previous neo-classical approaches due to the incorporation of the idea of economic processes being political.⁹⁴ However, according to Adelman,⁹⁵ the emphasis on the motives governing individual decision-making under different proprietary regimes, reproduces the old a-historical view on capitalist social relations, originated in the ontological problem of focusing on entrepreneurs as individuals representing a supposed human 'nature'. Adelman's contribution to the debate is in the use of the notion of property relations rather than rights, emphasising social relations giving substance to the right to use property, not vice versa.⁹⁶ However, he is concerned with differentiated patterns of 'development' and refers to social relations from the perspective of 'agents' without define this. Finally, institutional studies on rubber estates in Malaysia give a descriptive account in opposition to native smallholders, centred exclusively on the technology of large-scale monocultural rubber on a structure of plantation,⁹⁷ giving secondary importance to social relations of production.

Studies tackling the influence of a developmental notion of History in the Marxian definition of capitalist relations of production represent a step further in this debate. The previously mentioned developmental notion of History had been said to involve the generalisation of findings on the specific historical process of industrial capitalism

⁹² Clark, 1995.

⁹³ The same author shows that actually the classical economists' conception of economy as a discipline looking at 'ordering' or 'stable' elements in society in opposition to 'social sciences', which would deal with elements of 'disorder' and 'instability', governs the economic focus on institutions in which institutions have been identified with persistent forces of the society (*Ibid*).

⁹⁴ Harris, J.; Hunter, J. and Lewis, C. (Editors) 1995.

⁹⁵ Adelman, 1994.

⁹⁶ *Ibid* p. 12.

in Britain as 'laws' of capitalism, without distinguishing between the specific and the generic features of it.⁹⁸ At the same time, capital is conceived of as an English phenomenon, something criticised as not standing up, even considering that England assumed the hegemony in the process of industrialisation.⁹⁹ Moreover, Marxists and non-Marxists have contested the definition of capital as synonymous with industrialism.¹⁰⁰

The new element in Musynski's¹⁰¹ work is the stress on Marx's view on the relationship between capitalists/wage labourers as the 'law of motion' as a result of a conscious search for the law of motion or how capitalism contained its own seeds of destruction.¹⁰² As a result, the new element in the historical process of capitalism in England – the relationship between capitalists/wage labourers – was detached from historical conditions and interpreted as having the 'laws of motion' or containing the general force governing historical changes. This developmental notion of History implies the expectation of social homogenisation into capital/wage-labour in which work relations other than capitalist/wage-labourer would disappear for sure.

According to Muszynski¹⁰³ this is the reason why Marx's focus on rural society is centred exclusively on the capital/wage-labour relationship or in the process of proletarianisation. This view is shaped by Marx's search for signs of capital/wage-labour or 'pure' capitalism regarded as expressions of modernity or a superior stage of development, signs of civilisation and bearer of the seeds of transformation to another mode of production, rather than aiming to explain capitalism as it appears in the real historical process.

⁹⁷ McHale, 1967 p. 63; Barlow, 1978, p. 1.

⁹⁸ This has been mentioned by Holton op.cit. and in the debate from the perspective of criticisms to Marx's Eurocentrism in Amin, 1989; Bernal, 1987; Frank and Gills, 1996.

⁹⁹ Wallerstein op.cit.

¹⁰⁰ Wallerstein, 1993; Cain and Hopkins, 1983; Malagodi op.cit. pp. 239-240.

¹⁰¹ Muszynski, 1996.

¹⁰² This would be the contradiction between productive forces and social relations of production, which would be resolved through class conflicts, enabling the transformation of capitalism through revolutionary class struggle into, first, a socialist and, ultimately, a communist, society (Muszynski 1996, p. 254). See also Berki op.cit. p. 130; Giddens op.cit.

¹⁰³ Muszynski op.cit.

Consequently, the Marxian definition of capitalist relations of production does not stand up when pitted against the varying and multicultural character of the historical process of capitalism. Actually, there is no sign of homogenization in this. The debate on peasantry shows that the very expansion of capitalism has created conditions enforcing the emergence of peasants and forms of familial producers,¹⁰⁴ transforming migration into a survival strategy of peasants,¹⁰⁵ and involving the emergence of peasant-workers as a stable hybrid social condition of being peasants and proletarians at the same time, thereby presenting a specific identity.¹⁰⁶

Our previous investigation into the emergence of peasantry in Amazonia, as already mentioned, revealed that the historical process of capitalism in the region involved multiple processes.¹⁰⁷ The initial process of freeing land from the First Nations, which was also a process of making the labour required by setting up enterprises to produce colonial commodities, destroyed the First Nations as such, but resulted in multiple phenomena such as the survival of remaining nations, the emergence of peasantry and of different categories of free labour, including wage labour as discussed in chapter three. This is a range of transformations engendered by the historical process of capitalism, which is different from the historical process of capitalism in Britain where feudal-peasants were destroyed completely. In Amazonia, there were no feudal-peasants, but the First Nations, so that they were the societies prior to capitalism in the region, while remaining nations, peasantry and different forms of free labour resulted from, and are an intrinsic part of, the historical process of capitalism.

¹⁰⁴ Abramovay op.cit.; Malagodi, 1995.

¹⁰⁵ Garcia Fr. 1990; Woortmann, 1990; Meillassoux, 1977; Menezes, 1985.

¹⁰⁶ Menezes (1995) demonstrates this in North East of Brazil. Holmes (1983) and Sozan (1976) understand that the peasant-worker phenomenon is not new but goes back to the 17th century in Italy and in Hungary, constituting a theoretical and historical category of a relatively stable socio-economic nature.

¹⁰⁷ Bentes, February/1992 op.cit., Parte II, chapters 2 and 4.

This material raises questions about the assumption that there was just merchant capitalism in 'colonies'.¹⁰⁸ A transformation in the way production was organised and commanded was on course since 1615-16 in Amazonia. At the same time, and as part of the same long historical process of the birth of a capitalist interdependent transnational economy, capitalism was forged in the region, not just as mercantile capital, but as a social relation of production governed by the aim of profiting in order to ensure capital accumulation.¹⁰⁹ This indicates the need to consider such processes as early capitalism. This implies recognition that in Western Europe capitalism is a phenomenon forged through transformations in feudal society. However, this was just one of the multiple historical processes in which capitalism was built as a transnational inter-dependent economy.

Finally, evidence of non-social homogenization into industrialist/proletariat relationships and the existence of coercive/oppressive work relations is given even in relation to the historical process of capitalism in England where Marx concentrated his analysis. Feminist approaches¹¹⁰ have stressed Marx's concept of capital as based on the European male working class, ignoring the brutal character of child and female labour in England during the industrial revolution. Considering capital as synonymous with wage labour, Cain and Hopkins state that in England until at least 1914

"(...) capitalist activities in the service sector were accompanied by services which were not in themselves capitalist. In fact, all forms of capitalism attach services and servants to themselves and may also be subject to rulers who are not capitalists either".¹¹¹

Moreover, economic historical literature has shifted from the definition of capitalism centred on wage labour by considering the character of commodity

¹⁰⁸ Wallerstein op.cit; Holton op.cit.

¹⁰⁹ There are plenty evidence on investments in new technology of sugar and rum production, for instance, in colonial Amazonia, as mentioned in Bentes op.cit. appendix 1. Cruz (1964, pp. 35-37) mentions that in 1751 there were 24 'real' sugar mills in Pará, which means those mills based on the most sophisticated technology at that time.

¹¹⁰ See an interesting discussion of this literature in Muszynski op.cit. 29-31. See also Kuhm, A. and Wolpe, A. 1978, and McDonough, R. and Harrison, R. 1978.

production to maximise profits and rent in order to ensure capital accumulation¹¹² or simply by considering profitability.¹¹³

However, the debate on the concept of class goes further because it questions the use of impersonal structures or categories of analysis. Thompson¹¹⁴ argues that 'class in its modern usage arises within the 19th century industrial capitalist society' with its 'class institutions, class parties, class culture, etc.'¹¹⁵ He refers to that as the 'mature concept of class', which is specific in relation to the previous sense of class. He mentions the difficulty of using the category class in the sense it has in industrial society for analysing societies prior to it in England.¹¹⁶ In these quotations there is an implicit insight to class, not as a static and formal category of analysis but as a historical phenomenon. Yet, he focuses on the experiential historical process of class formation,¹¹⁷ without distinguishing between the two notions of class implicit in his work: (a) class as a social condition; (b) class-consciousness, both of which are historical phenomena. Yet, one clear facet of class is that it is a social condition in which the individual is inserted many times without his/her will. Another thing is his/her consciousness and political behaviour regarding this condition of class.

Muszynski's¹¹⁸ work expresses the conjuncture post-1960s in the USA¹¹⁹ in which Marxist conceptions of class appeared inadequate due to the increasing awareness of other social divisions such as gender, race, ethnicity, and life style. Actually, she questions the notion of class as an impersonal phenomenon by arguing about the influence of subjective elements of social relations such as discrimination of gender, age and race in relations of production in the fishery industry in British Columbia. She amplifies the Marxian concept of class, using the concept of patriarchy, arguing that

¹¹¹ Cain and Hopkins op.cit. p. 27.

¹¹² Sabato, 1990.

¹¹³ Miller, S. 1990.

¹¹⁴ Thompson, E. 1978.

¹¹⁵ Ibid pp. 133-65.

¹¹⁶ Ibid p. 148.

¹¹⁷ Ibid, p.149.

¹¹⁸ Muszynski, 1996.

¹¹⁹ See on this Iggers op.cit. p. 6.

the boss's attitude originated in the Western patriarchal mentality with regard to gender, race and age to a great extent influenced the categorisation of labour, according to which labourers were valued, receiving different levels of salary.

Workable Definitions and Concepts

Three basic definitions or terms guide our argument such as:

(a) Capital as a Social Relation of Production Historically Built

The workable definition of capitalist social relations of production guiding our argument is that this is a relation of production historically built and defined by (a) production organised to produce commodities for profit in order to ensure capital accumulation; (b) social relations of production characterised by class relations in which class refers to the opposing social conditions of owners versus workers, owners/propertyless of the means of rubber production (rubber fields and the enterprise) and commanders of the organisation/process of production versus subordinate labour. Relations of class are necessarily influenced by objective/subjective elements of social relations and by specific historical circumstances. Therefore, capitalist relations of production can never be expected to be homogenized into the pattern of industrial relations of production in Western Europe.

(b) Geomercantile Privatisation of Land

The *seringalistas*' class condition of owner of the means of production and, in general, the influence of the social relations of land property in the emergence of the labour market for *seringais* was understood by using the term geomercantile privatisation of land. This was a term used in my previous research to express the

highly selective way of privatising land in Amazonia.¹²⁰ Selectivity assumes a particular meaning in the effective appropriation and incorporation of rubber fields in rubber production because it was defined not just by location/soil fertility as before, but by location/density and species of gum. That is, the Hevea forest itself was transformed into land-forest to be appropriated according to private property in the modern sense.

The term geomercantile privatisation of land involves three different social elements: (1) the social relations of land property in which access to the best lands was socially unequal since the best lands tended to be privatised by entrepreneurs, who, besides privatising the best lands, created strategies to prevent direct producers from doing the same, so influencing the emergence and consolidation of a free labour market, as discussed in chapter three; (2) in this relation of property, land was appropriated as private property in the modern sense; (3) the converging relation with nature in which the search for profit does not necessarily imply 'mastering' or 'dominating'/destroying nature.

MacPherson's concept of modern property was adopted because it fits the features of *seringal* as estate when he defines modern property as individual ownership, being a right enforced by the State instead of by custom or convention as in previous societies, as well as an '(...) individual right unlimited in amount unconditional on the performance of social functions, and freely transferable (...)'.¹²¹ Moreover, the author's discussion of private property stresses the distinctive feature of Marx's accounts of private property in relation to the liberal views: the social implication of the private ownership of the means of production. That is, the historical transformation of the means of production in Western Europe into private property of the class commanding the process of production independent of any social requirements.

However, this is a point linked to the interpretation of the special condition of land as the monopoly of one class in England as a supposed 'law' of capitalism or the

¹²⁰ Bentes op.cit.

¹²¹ MacPherson, 1978 p. 10.

necessary pre-condition for the birth of capitalist relations of production. The consequent view on 'colonies' as 'free land' is contested in this thesis, first of all by demonstrating that there was no 'free land' in Amazonia but instead a long, slow historical process of freeing the land from the First Nations' occupation followed by a selective privatisation of land by Westerners, and second, by taking into account that this does not determine capitalist social relations of production as a mechanical result but it does constitute one important element in the long and multiple historical process in which the labour demanded by entrepreneurial commodity production was forged.

The selective view of nature resulting from the converging relation with nature was debated by classical economy by means of the theory of differential rent. Ricardo¹²² defines rent as 'that compensation which is paid to the landowner for the use of its original and indestructible powers.' Rent would be the difference between the produce obtained by the employment of two equal quantities of capital and labour. The extra gain above the average profit obtained in the best quality land would stem from the difference between the cost of production in the best quality land and market prices since prices would be determined by the highest cost of production in lower quality lands.

According to Malagodi¹²³ the problem with this theory is that it considers the rural economy exclusively from the point of view of capital, ignoring other forms of rent or production. Marx's theory of absolute rent, which tried to explain investments other than capitalist ones would not stand up and his contribution to the discussion on rural issues would be restricted to the improvement of Ricardo's theory of differential rent when he raised questions such as natural fertility and location being historical conditions as long as technological changes can modify them, and he distinguished surplus from profit. The author concludes that of the entire debate on the rural

¹²² Ricardo, D. 1962, chapter II, On Rent.

¹²³ Malagodi op.cit. pp. 139-148 and 441-42.

economy by means of differential rent, including classical economy and Marx, only the Ricardian theory of differential rent stands up, since the historical context in which it was built is taken into account and from the point of view that it explains why capitalists invest in land and with the consideration that it focuses only on land of superior quality, which can propitiate the generation of capitalist rent.¹²⁴ It does not mean that capital investment would necessarily generate homogenisation of the entire economy into capitalist production. His statements are useful for drawing attention to the existence of different forms of production in the country economy, particularly peasantry, as previously mentioned. Yet, the author reproduces the Marxian contradiction of trying to explain capital as a social phenomenon at the same time as conceiving it as governed by laws, as was previously mentioned.

Besides ignoring other forms of production, the theory of rent is based on the notion of the economic process as a non-social phenomenon. This is apparent in the attempt to explain prices as mechanical results of the cost of production in the lower quality land in which prices are not looked at as socially built.

Moreover, the classical theory of differential rent expresses the particular historical process of capitalism in rural England, where the extra gain in the best land was converted into rent to be paid to landowners. Although there is evidence of rent in rubber fields, it was not a significant feature, at least until the 1920s, as discussed in chapter two. Thus, the extra gain generated in conditions of superior quality of soils or advantageous situation appears not as rent, but as favouring superior profitability that justified the appropriation of distant lands. Every time the price of a product rose it favoured the transformation of new layers of soils or forests into valued lands because higher prices could cover the high cost of transport from distant lands to consuming centres and ports of exportation.

¹²⁴ Idem; see also Malagodi, 1993 and s/d.

(c) The Double Movement: English Rubber Dealers versus *Seringalistas*

This term 'double movement' refers to the relationship of *seringalistas*/merchant-*seringalistas* versus foreign rubber dealers, which was focused because the *seringalistas'* responses to the foreign rubber dealers' movements towards the rubber economy revealed important points such as (a) their project for rubber economy; and (b) the reasons for it.

Our argument is that the discussion on work relations is not enough to prove capitalist relations of production. It is necessary to demonstrate profitability and capital accumulation.

This matter has been neglected by the literature for different reasons such as the view of *seringalistas* as simple traders-usurers not keen on investing in production or the notion that *seringalistas* failed to adapt their enterprises to the pattern of modernity and progress represented by the modern technology of monocultural rubber.

I do not deny that *seringalistas* did not adapt their enterprise to the standard of modernity and progress represented by large-scale monocultural rubber. What I argue is that the literature does not consider the *seringalistas'* own project of economic and political changes. Did it include large-scale monocultural rubber? Actually, the literature does not give evidence about how *seringalistas* invested or re-invested the profit they got from rubber and why they did so. Although this matter requires to be researched in its own right, the subject is referred to by considering these actors' own project of economic and political changes for the rubber economy and by showing re-investments, changes and capital accumulation in one *seringal* located in the most important stretch rubber producer in Acre State (see discussion on sources).

Their project was not readily achieved, but was built and changed over time according to the way they conceived and responded to obstacles to profitability and capital accumulation imposed by the historical circumstances in which they were making decisions. One of the main historical circumstances imposing obstacles to the retention of profit from rubber production by *seringalistas* was the way they were related to foreign rubber dealers. They depended on services of exportation-shipment monopolised by foreign rubber dealers until around 1906, who also offered a considerable part of the credit available for rubber production, and used this position to impose low prices on local producers and in fact used it to provoke constant oscillations in rubber prices in Belém, as discussed in chapter five.

The relationship between local-foreign capitalists has been the object of controversy, which has to be mentioned in order to be precise in our argument.

At least three nation-state approaches can be identified. First, was the 'theory of development' and 'structural dualism'¹²⁵ at the end of the 1950s and beginning of the 1960s. Furtado¹²⁶ gives a brilliant account of the way the commercial treats with England affected the Brazilian exporting economy indirectly. Yet, the nation-state approach results in a sort of 'external' link between nations rather than inter-class interdependent relationships.

Second, was the 'dependency theory'¹²⁷ which emphasises features of what it calls 'dependent capitalism' such as industrialisation unable to produce means of production, which would characterise technological dependency, the presence of foreign corporations and so on. But it presents many difficulties as has been largely discussed.

¹²⁵ Furtado, 1954; 1959; 1960; see also comments by Lewis s/d.

¹²⁶ Furtado, 1959 cap. 17 and 19.

¹²⁷ Frank, 1967; Maurine, 1973; Cardoso, 1972; 1977; Cardoso & Faletto, 1970; Santos, T. 1973.

Third, was Gallagher's and Robinson's thesis of the imperialism of free trade.¹²⁸ This approach presents practical difficulties to apprehend the relationship *seringalistas*/merchant-*seringalistas* versus foreign rubber dealers. For instance, Graham¹²⁹ uses generic terms such as 'Latin America', 'Brazilians', and 'British'. The converging class interests among certain Brazilian and English capitalists around the principle of economic liberalism are interpreted as an 'imitation' of English imperialistic values. This represents the generalisation of actions by a few Brazilians and English businessmen to Brazilian and British citizens. At the same time, it expresses the interpretation of features of capitalism as nation-state imperialism. Capitalistic rationality and principles are misunderstood as 'values, attitudes and institutions of the expansionist nation infiltrate and overcome those of the recipient one.'¹³⁰ The consequence is that the convergence of class interests between a few Brazilian and English businessmen is over stressed and qualified as 'the native collaboration', ignoring the long history of convergence/divergence of interests, involving conflicts between English and Brazilian capitalists as well as between the diplomacy of both countries, as discussed in chapter five.

Cain and Hopkins¹³¹ recognise the importance of the recent thesis revealing the play by local societies in resisting imperialistic forces or negotiating with them. However, these attempts have been interpreted as claims that the fundamental cause of imperialism are to be found on the periphery itself. As a result, different authors have been trying to downplay the role of economic change in the metropole and to shift causation to the periphery.¹³²

The point to be stressed is that the nation-state approaches have sustained Eurocentric explanations of the world, confusing different matters. That is, if the

¹²⁸ Gallagher, J. & Robinson, R. 1953.

¹²⁹ Graham, 1976.

¹³⁰ Graham 1969, p. 29.

¹³¹ Cain and Hopkins, 1993 pp. 9-10.

¹³² Cain and Hopkins mention Platt and their own works as attempts in this direction (*Ibid.* pp. 10-15).

cause for the imperialistic movement by the British empire towards others countries and civilisations is to be found in the metropole it does not imply that it can explain exploitative relations as an intrinsic element of the expansion of capitalism. Capitalism after the second half of the 19th century had long been a broad matter in which the imperialism of Western European powers constituted just one element to be considered.

Moreover, even the debate based on nation-states approaches has raised important questions. Taylor¹³³ stresses well that imperialism in the 19th century had a special character and that empire means rule over others in which the imperial power has, or thinks it has, superior strength and civilisation. Although the English diplomats and rubber dealers thought they were superior and English rubber dealers did want to rule the local economy, they rule neither Amazonia nor the rubber economy. Actually, English rubber dealers controlled around half the rubber exported from Amazonia, but in partnership with the Germans and Portuguese. Platt¹³⁴ pointed out the distinctiveness between imperialism and imperialistic incidents involving a few British investors in different countries and times. He disagrees with the qualification of imperialism, even the so-called 'imperialism of free trade' to talk about South America.¹³⁵

Finally, the Western/North American capitalists' movement towards the rubber economy in Amazonia has to be distinguished from their home State own movement towards this economy. Bowler¹³⁶ stresses the Western European powers' own imperialism in which science and technology had a prominent role. He mentions the British Imperialist power's effort to control technologies through natural science as a fundamental element in the movement towards the rubber economy in Amazonia. In this process, science as an instrument of power, and social science as creator of

¹³³ Taylor, 1976.

¹³⁴ Platt 1973.

¹³⁵ Platt, 1968 and 1973.

¹³⁶ Bowler op.cit. p. 310.

ideological tools able to guarantee this power, is crucial, such as the idea of progressive evolution constituting one of the most important ideological tools of imperialism, forming a natural foundation for the belief that European civilisation was the highest point of human achievement destined to spread its value around the world by conversion or conquest.

This allows important distinctions to be made. First, the distinction between the movement by foreign rubber dealers, closely supported and influenced by their home States, and the movement by the British State and second, the renewal of the Western notion of civilisation through Spencer's theory of the 'survival of the fittest' as ideological tools, as previously mentioned. Our concern here is with the actions of rubber dealers rather than with European powers.

The alternatives to nation-state approaches are basically two. First, the debate on the 'colonial system',¹³⁷ which breaks the national fence. However, it is based on the notion of 'system' formed by impersonal structures, imposing difficulties on analysing social relations, and the over-emphasis on the dynamics of international capitalism does not allow an understanding of the specificity of internal social relations.

Second, the Marxist debate on imperialism¹³⁸ has incorporated the idea that the capitalists' opposing view and practical actions in exploitative relations abroad is an intrinsic element of the birth, consolidation and permanent expansion of capitalism. The ways it has been done changed over the time. Imperialism has been identified with the formation of monopolies and cartels, supported by European powers after the 1870s.

However, the way and the motives and ideologies governing foreign rubber dealers and Western powers movement towards rubber economy are different subjects from the effective relationship *seringalistas*/merchant-*seringalistas* versus foreign rubber dealers. The convergence of class interests between them manifested

¹³⁷ Novaes, 1974 and 1989.

¹³⁸ See debate on Marxist theories of imperialism in Brewer 1990.

in their common pursuit of profit in order to ensure capital accumulation cemented their commercial-financial relationship around rubber production-exportation in Amazonia.

Yet, their relationship also involved divergent interests, provoking clashes. *Seringalistas/merchant-seringalistas* constituted different segments of the capitalist class in relation to foreign rubber dealers. The former invested in the sphere of production, which involved interests linked to the place where their enterprises were based while the latter was personalised in merchants and financiers, who invested in mobile business, easily transferable to anywhere else, their capital being in the form of money and boats, mostly.

The movement by foreign rubber dealers clashed with internal economic and political processes, including the specific forms of profiting and accumulating capital by *seringalistas/merchant-seringalistas*. The reaction to it, designing a double movement, involved many actions, including the demand of interventionism to the central government as well as influencing the decisions of re-investments by the capitalists investing in rubber production.

Those issues drove our attention to Polany's notion of double movement because the relationship between *seringalistas/merchant-seringalistas* and foreign rubber dealers is essentially an interclass relationship. This perspective implies recognising the importance of the indirect influence of foreign rubber dealers insofar as *seringalistas* built their project of economic-political changes and decisions of re-investments, to a great extent acting-reacting to their movements towards rubber economy. Yet, the emphasis is on the crucial role played by local investors at the same time that the historical circumstances they were dealing with are considered.

However, Polany's¹³⁹ notion of double movement has to be re-thought in order to be workable. His notion implies a more complex view of capitalist society insofar as it is characterised not just by class conflicts but also by interclass clashes sustained by

different capitalist ideologies. But the emphasis is on markets and institutions to explain economic processes in which the law appears to determine social processes rather than expressing patterns of social relations. As a result, Polanyi¹⁴⁰ emphasises ideologies rather than the creators of it, or the social relations within these ideologies are built.

Consequently, the first specificity of the notion of double movement used here is the shift of emphasis from ideologies and institutions to the social relationship between the native landed capitalists and the foreign rubber dealers. The English rubber dealers were prominent since, in partnership with the Germans and Portuguese, they controlled around half of the rubber exported from Amazonia at the same time as being hegemonic in the shipment of rubber to Western European ports until the 1910s. Thus, the focus on the double movement is achieved by concentrating on the double movement of English rubber dealers versus *seringalistas/merchant-seringalistas*. On the one hand, the English rubber dealers, using the principle of economic liberalism, aimed at the establishment of a self-regulated market, as their ideology, and adopted largely laissez-faire and free trade methods.' On the other hand, the local landed capitalists, using the principle of social protection, aimed at the conservation of productive organisation, immediately affected by the deleterious action of the foreign rubber dealers, used productive legislation, restrictive associations, and other instruments of intervention as their methods.

However, this interclass relationship was a transnational interclass relationship, necessarily involving a certain level of State allowance/intervention. English rubber dealers did not enter the country as autonomous newcomers. On the contrary, their investments were allowed by changes in internal legislation and were linked to the internal struggles against colonial inequalities which were marked by the absorption of the principle of liberalism in a re-defined manner by the nationalism sustaining

¹³⁹ Polanyi, K. 1975.

¹⁴⁰ Ibid. p. 132.

those struggles. At the same time, foreign rubber dealers entered the country under rules established in commercial treaties. Thus, the relationship *seringalistas/merchant-seringalistas* cannot be understood just from the perspective of the English or other foreign powers economic-political expansionism whatever form they assumed. The dynamics governing the Brazilian State allowance and intervention in this relationship is a fundamental element.

The Brazilian State allowance and intervention in the relationship *seringalistas/merchant-seringalistas* was defined in the policy of the so-called First Republic (1889-1930), whose policy prioritising the national economy and giving secondary importance to regional economies to a great extent stopped *seringalistas* of power in the face of foreign rubber dealers, frustrating their demands for interventionism and leaving them practically alone in their decisions on re-investment.

Moreover, being a transnational interclass relationship, it involves particular ideologies. The English rubber dealers' principle of economic liberalism was mixed with the Spencerian principle of the 'survival of the fittest'/'progress by struggle' and with imperialistic mentality. They moved in both directions. They did make efforts to sweep aside local capitalists, imposing prices, causing deep oscillations of prices and attempting to prevent the establishment of new regulations in the rubber economy, as well as attempting to impose their principles and authority, disrespecting Brazilian institutions. The notion of imperialistic mentality is useful because it expresses imperialistic behaviour even in a situation of non-existence of imperialism. In Amazonia, the statement by Platt¹⁴¹ that British traders and investors themselves neither sought nor expected government intervention does not stand up. They asked for British military intervention in internal political processes such as '*a cabanagem*' in the 1830s, justifying it as protection for their businesses in which they acted together with certain local capitalists and government in a clear convergence of class interest, as discussed in chapter five. And they asked for commercial treats with the Brazilian

government to place them on equal terms with other foreign traders, whose governments had commercial treats with Brazil. In the 1910s they emphatically requested the British government for diplomatic intervention on issues relating to the internal rubber economy, as discussed in chapters five and six, using nationalistic arguments. These historical facts deny the supposition that British traders and rubber dealers took the principle of economic liberalism seriously. On the contrary, it was used as an ideological tool to try and prevent the establishment of internal regulations in the Amazonian rubber economy.

The Historical Investigation and Sources Used

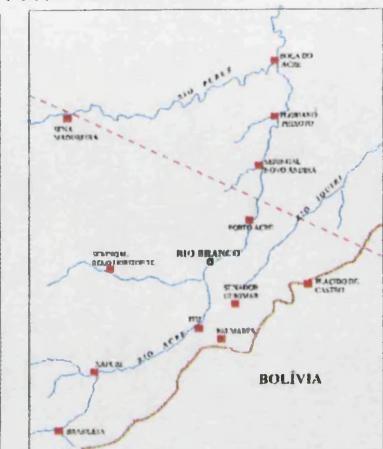
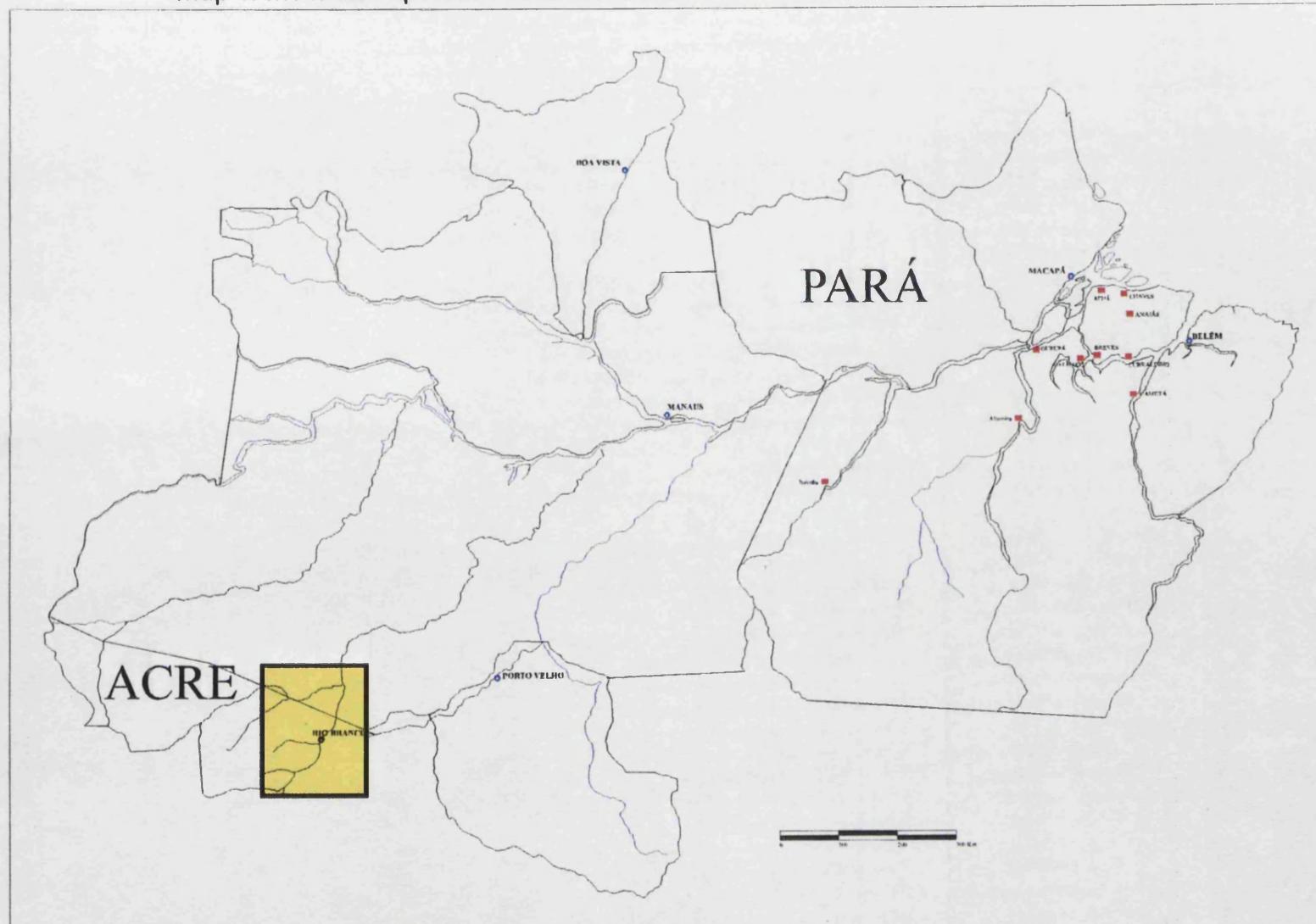
Due to the available sources and the aim of selecting a subject of analysis workable in a reasonably short time, the search for the specific features of capitalist relations of production in *seringais* emphasised an objective element, namely the *seringalistas*' class condition which was manifested in their private ownership of the means of rubber production, their command of the process of production of rubber (including command over the labour process, demands/proposals made to the government and effective decisions on re-investments/changes in *seringais*).

Thus, it was attempted to identify who the *capitalistas* were? How did they subdue (or interact with) nature and labour? Which issues did they face in doing so? How was production organised and commanded? What does it tell us about the definition of relations of production? Who were the labourers? How were they made or did they make themselves historically?

The investigation of the private ownership of rubber fields was based on the analysis of documents regarding the privatisation of the most important areas of rubber production in Pará State and in Acre, which are illustrated in map 1, such as:

¹⁴¹ Platt, 1968.

Map 1: The Most Important Areas Producers of Rubber in Para and in Acre States, and Seringal ITU in Acre River District



Acre River District

The Stretch along Acre river
in Between Port Acre and
Brasileia.

■ The most important
municipality producers of
rubber in Pará.

(a) the nine most important municipality producers of rubber in Pará; (b) the Acre River District which comprises the stretch having the densest rubber fields and being the most important producer of rubber in Acre State.

The first area was defined using statistics of rubber production by the *Revistas da ACP*. Next, to be carried out was an analysis of the 'registers of squats' and title deeds regarding the privatisation of rubber fields located in those municipalities in the archives of the ITERPA (Instituto de Terras do Pará), in Belém. A total of 2,927 properties producing rubber were found in the municipalities Afuá, Anajás, Altamira, Cametá, Chaves, Curralinho, Gurupá, Itaituba and Melgaço. The periods in which these properties were legalised vary slightly in each municipality as is discussed in chapter three.

However, priority was given to the Acre River District, called *Alto Acre Departamento* in the administrative division of the Acre Territory in 1912,¹⁴² comprising areas accessed by the rivers Abunã, Rapirrã, Iquiry, up Acre, Xapury, Riosinho and Alto Antimary. In 1912-13, this Department produced an average of around 5.000.000 kilos of rubber annually, which was higher than the sum of the production of Alto Purús and Alto Juruá Departments together.¹⁴³ The most important concentration of rubber trees was found along Acre river, particularly in its middle and up courses.¹⁴⁴ In this stretch the most opulent *seringais* were set up.¹⁴⁵ The INCRA (Instituto Nacional de Colonização e Reforma Agrária)'s investigation on the legal situation of *seringais* in Acre State, implementing Law no. 6383 of 7/12/1976, came across with 105 early *seringais* in Acre River District.

¹⁴² The Decree 1.181 of 15/02/1904 and Decree 5.188 of 07/04/1904 gave the first administrative organisation of Acre as a Federal Territory, which was altered by the Decree 6.901 of 26/03/1908. The Law no. 9.831 of 23/10/1912 divided the Territory into four Departments such as Alto Acre, Alto Purús, Alto Juruá and Tarauacá (Chaves 1913, p. 17).

¹⁴³ Ministério da Agricultura, Indústria e Comércio. Relatório do Dr. Oswaldo Cruz., 1913, p. 21; Chaves 1913, p. 18.

¹⁴⁴ Euclides da Cunha, 1976; Labre, A. 1887; Tocantins 1961, p. 129; Chaves op.cit., p. 18; Ministério da Agricultura, Indústria e Comércio op.cit.

¹⁴⁵ Ministério da Agricultura, Indústria e Comércio op.cit, pp. 14-30.

Data were collected using two forms (see appendixes 1 and 2). The completed forms were analysed using Excel spreadsheet version 5, later converted to the version 7. The analysis of variables whose definition demanded crossvariables was done by means of the program *Statistical Package for Social Scientists (SPSS)*, version 6 because it is an easier means of analysis.

Records on legalisation of *seringais* and on lawsuits about land disputes in Acre River District in the years 1903-04 in Arquivo Nacional do Rio de Janeiro constituted an interesting complementary source.¹⁴⁶

The investigation on social relations of production in *seringal* was centred particularly in Acre River District for two reasons: (a) the INCRA-Acre lawsuits give information not just on land affairs but also on the economy, topography etc. of the 105 early *seringais* along the stretch of the most important producers of rubber in Acre, which results from systematic investigation carried out by a group comprised of agronomists, lawyers, historians, economists, sociologists and topographers into the records of Registry Offices and official institutions in Bolivia, Manaus, Rio de Janeiro, Rio Branco and Xapuri as well as into private records kept by *seringalistas*' families; (b) the availability of documents in accountancy of some of those early *seringais* in the Museu da Borracha in Rio Branco/Acre. These sources were compared with historical literature mentioned in the bibliography.

Another primary source was the register of firms in the *Juntas Comerciais* in Pará and in Acre.¹⁴⁷ The records contain information about the business and changes over time.

In the records of the Registered Office Cartório Chermont (CC) in Belém the investigation was concentrated on deeds relating to transactions by export houses and *casas aviadoras*, supplying credit in cash and in kind to *seringais* in Acre River District such as deeds of partnership, deeds of transfer, deeds of loan, etc, in the

¹⁴⁶ Arquivo Nacional do Rio de Janeiro, SDA 001.

period from 1812 to 1932.¹⁴⁸ Finally, lawsuits¹⁴⁹ about rubber economy were analysed in the Archives of the Court of Justice in Belém (Tribunal de Justiça do Estado, TJE) as well as books on Commercial Law in the Library of the TJ E.

The analysis of these records was useful for selecting one *seringal* for detailed analysis on work relations, profitability and capital accumulation - *Seringal ITU-Palmares*. This was a middle size rubber enterprise, initially producing around 100 to 120 tons per year, which was reduced to around 80 tons later as a result of the splitting up of the property, originally having 40,592,0554 ha,¹⁵⁰ situated on both banks of the Acre river, in the stretch having the densest rubber fields in Acre (see maps 1 and 2). The available accountancy records of this estate cover three important periods: (a) the year 1910, when rubber prices reached a peak, followed by increasing production, as discussed in chapter five; (b) the years 1913-15 until the middle of 1916, which represent the deepest decrease in prices, provoking economic difficulties and bankruptcies in the region; (c) the year 1930, which can be considered a period in which the economic changes implemented in *seringais* in response to the difficulties imposed by low rubber prices were consolidated.

A *seringal's* accountancy records were composed of the following: (a) *Livro de Conta-Corrente* (Balance of current account); (b) *Diário do Seringal* (Diary of commercial transactions, payment of salary and any other movement by the firm); (c) *Livro de Balanço Geral Annual* (Yearly Balance Sheet); (d) *Livro caixa* (Balance Sheet concerned with the movement of cash only); and (e) *borrões*, which were notebooks containing fiscal notes and/or receipts, listing goods, quantities, dates,

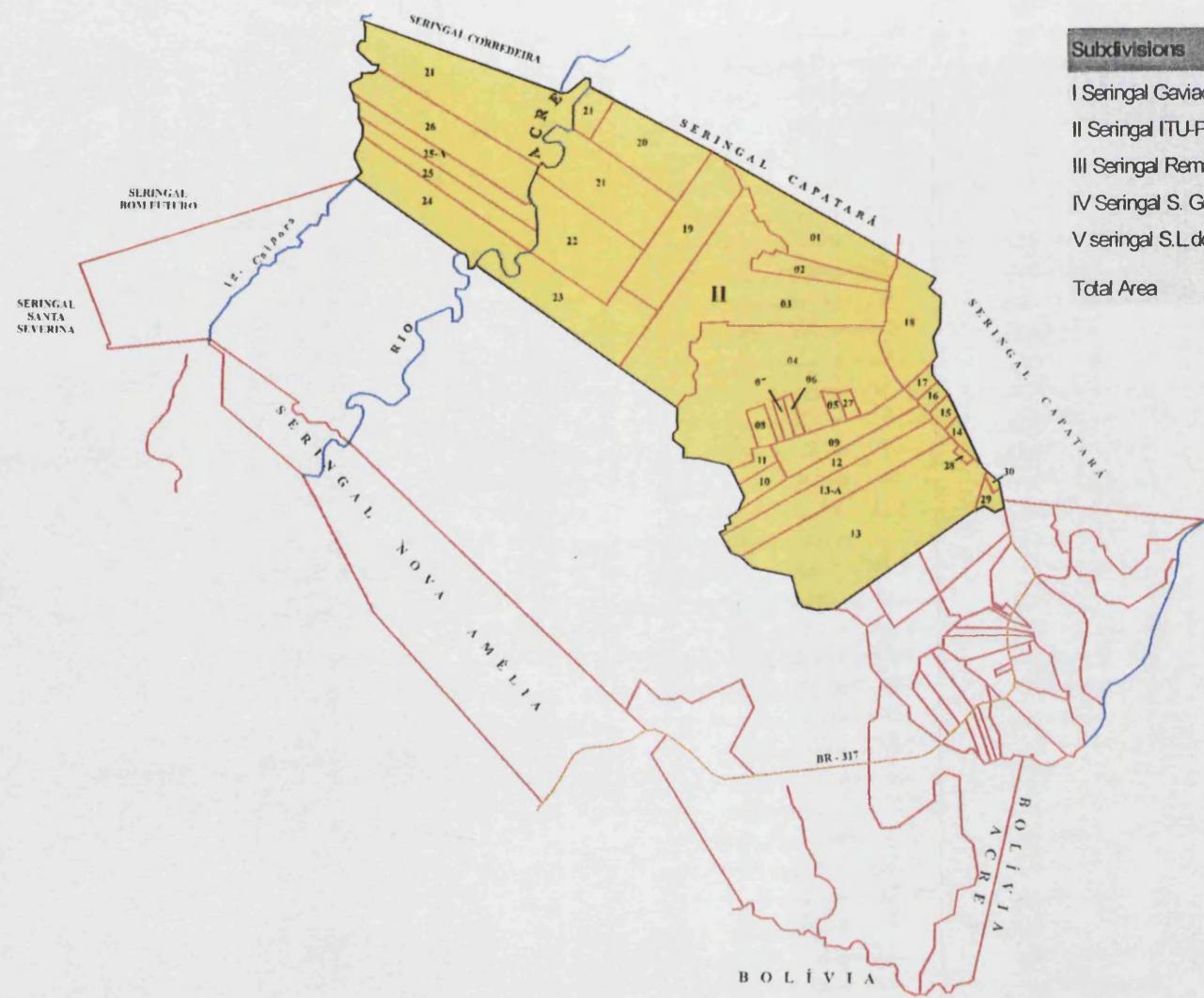
¹⁴⁷ Junta Commercial do Para (JUCEPA), Registro de Firmas; Junta Commercial do Acre (JCA), Registro de Firmas.

¹⁴⁸ Cartorio Chermont (CC), Índice de Escrituração.

¹⁴⁹ Tribunal de Justiça do Estado (TJE), Autos Civis.

¹⁵⁰ In 1983, the INCRA-Acre's investigation on the legal situation of early *seringais* in Acre resulted in the recognition of an area of 27,207,77 ha as being the legalised extension of *seringal ITU-Palmares*. This means that an area of 13,384,28 ha of *terras devolutas* (non-privatised lands legally under the condition of State lands) were incorporated to the estate. This matter is better discussed in chapter 2.

Map 2: Seringal ITU and Neighbour Estates



Subdivisions	Total Area (ha)	Legalized Area(ha)	Excluded Area(ha)
I Seringal Gaviao	12.608,80	11.629,69	979,11
II Seringal ITU-Palmares	40.592,05	27.207,77	13.384,28
III Seringal Remanso	39.717,67	39.717,67	
IV Seringal S. Gabriel	11.460,00	11.460,00	
V seringal S.L.do Remanso	5.269,80		5.269,80
Total Area	110.008,33	90.015,13	19.993,19

Source: Acre-INCRA 1983.

prices etc. I came across all these books for the years mentioned, with the exception of *borrões*.

The main heir of the *seringal* ITU - who was born there, studied agronomy in Rio de Janeiro and was in charge of the enterprise after the 1950s - today is alive and well at 94 years old. He remains lucid and holds private records about the estate. Apart from access to his private records, he was interviewed (open interview) in order to sort out doubts about terms used by accountants in the old documents and to clarify points relating to the records.

Seringal ITU was administered by the owner and his descendants individually or in partnership since the last decades of the 19th century until recently, illustrating the continuity of rubber production in Amazonia.

The analysis of the theme, availability of labour, was based on my previous historical investigation already mentioned and was mostly based on historical documents from archives in Belém, including reports by the President of the Pará Province in the period 1838-1907, and historical literature. The way labour was engaged, disciplined and controlled as well as changes in these matters were focused on by concentrating in the analysis on the accountancy documents of the *Seringal* ITU such as the Diary of the *Seringal* for the years 1910,¹⁵¹ 1913¹⁵² and 1930.¹⁵³ The Diary was an accountant's book, on manuscript, containing all the movements of current accounts of labourers and owners as well as of the commercial-financial houses and/or banks the *seringal* ITU performed transactions with. The Diary, as well as the Balance, were presented to the judge in charge of the matter in Rio Branco who evaluated them, confirming or not the legality of those documents and of all accountancy documents of the *seringal*. In bearing the judge's signature and meeting all the legal requirements these documents could be

¹⁵¹ *Seringal "ITU"*, Diário de 1910.

¹⁵² *Seringal "ITU"*, Diário de 1913.

¹⁵³ *Seringal Itu*, Diário de 1930.

considered valid and used as proof in lawsuits and trials. All the accountancy documents analysed bore the judge's signature.

The labourers' current accounts contain data such as type of commodities produced, prices, time and means of sale, kind of employees and the way they were remunerated, transactions among labourers, and the way they were engaged and left the *seringal*. However, the Diary does not describe the labourer's shopping, rather mentioning monthly shopping only and giving the total amount of it. The description of goods was done in *borrões* as previously mentioned. Accordingly, it was not possible to define to what extent the oscillations of foodstuff prices affected the *seringueiros'* remuneration rather than only the oscillation of rubber prices.

The analysis of the *seringueiros* and salaried/wage-labourers' current accounts was done using samples. Since the main concern was not just finding out features of work relations but also changes over time, the criterion for the sample was the permanence in the *seringal* at the beginning of February 1910 and at the beginning of March 1913, when the accounting years started. It was found that a total of 64 *seringueiros* worked in Seringal ITU at the beginning of the accounting years of 1910 and 1913. This represents 32% of the total of 202 *seringueiros* in 1910 and 40% of the total of 160 *seringueiros* in March 1913. The sample for 1930 is composed of 65 *seringueiros*, representing 30% of the total of 215 *seringueiros* in that year. This sample was selected at random considering that the proportion of remaining *seringueiros* from 1913 was minimal – just two of them. The sample of salaried and wage labourers represents 30% of the total of 27 in 1910. A higher rotation was found among the salaried workers compared to *seringueiros*. Some of them went out and came back so that in 1910 the salaried sample refers to 7 salaried workers because the account of one of the eight considered had no movement in 1910 but had in 1913. Of the eight making up the sample only two remained in the *seringal* throughout the year 1913 because it happened that one became a rubber taper in this year and five left. Actually, the number of wage labourers increased from 27 in

1910 to 40 in 1913 and to 52 in 1930. As the focus is on *seringueiros* who were paid by results, wage labour is mentioned only to specify *seringueiros'* condition.

These samples were analysed using Excel spreadsheet version 7.

At the same time, analysing the total labour's current accounts focused questions such as the degree of labour rotation and the way they left the enterprise.

The commercial-financial house within the *Seringal ITU* acted as three different businesses at the same time – banking, commercial house and as the head office of the rubber enterprise. Considering that *seringal* is focused from the perspective of social relations of production, the Diaries were analysed aiming to answer questions such as: What do these data reveal regarding the relations of production? What does this suggests in relation to the theoretical debate on relations of production in the rubber economy? What was the specificity of *seringueiros*, as labourers paid by results, in comparison with waged and salaried workers?

The data from the Diaries were compared with and complemented by the historical literature on the matter, particularly that by Cabral¹⁵⁴ and Ferreira de Castro,¹⁵⁵ who reported work relations in a *seringal* in Acre River District in 1897-1907 and along the bank of Madeira river around 1913-14, respectively, from the perspective of workers. In addition, publications by merchant-*seringalistas*¹⁵⁶ gave statistical and general information on the main issues in the rubber economy, and particularly on rubber production in Acre River District. The statistics available on immigration to Acre have been quite well evaluated in various thesis – they are mentioned by Santos (1980) and Martinelo (1985), and exhaustively analysed by Calixto (1993) and in masters dissertations.¹⁵⁷ The latter were considered an important source because a masters dissertation in Brazil has to be based on original research and supported

¹⁵⁴ Cabral 1949.

¹⁵⁵ Ferreira de Castro 1955.

¹⁵⁶ Neves, 1981; Mendes, 1910; Chaves op.cit.

¹⁵⁷ Pinto de Oliveira, L. (1985); Duarte, E. op.cit.; Paula op.cit.

by a theoretical framework. As a result, there are quite a few dissertations containing plenty of original information.

The double movement of English rubber dealers versus *seringalistas*/merchant-*seringalistas* was visualised by the analysis of the following records: (a) the records of the Associação Comercial do Pará (ACP) such as minutes, correspondence, books, collections of articles on rubber published all over the world; international journals on rubber; the association's printed annual reports and the monthly journals;¹⁵⁸ (b) the Revista da Associação Commercial do Amazonas (ACA); (c) official correspondence by the Governments of Pará in the records of the Arquivo Público do Pará, in Belém;¹⁵⁹ (d) the records of Palácio do Itamaraty in Rio de Janeiro such as consular correspondence and reports by The Brazilian General Consulate of Liverpool and its representative in London;¹⁶⁰ (e) records of The Public Record Office - Kew, in London, such as correspondence by The British Consulate in Pará; correspondence by the British Legation in Petrópolis and in Rio de Janeiro; (f) Printed Annual Report by The British Consulate in Pará for the period 1910 a 1916, at the LSE Library.

When compared with those sources, particularly with confidential consular correspondence, the Printed Annual Report by the British Consulate in Pará ended up being a strongly political-ideological source.

Local newspapers available were also investigated (see bibliography).

Outline of the thesis

The discussion is organised as follows.

Part two: deals with the social relations of land property, geomercantile privatisation of rubber fields and the emergence of an internal labour market.

¹⁵⁸ See Bibliography.

¹⁵⁹ See Bibliography, Manuscripts.

¹⁶⁰ Ibid.

In chapter two it is argued that from 1848-50 to the 1870s rubber fields were privatised according to *seringais* as synonymous with large estates and reproducing the traditional geomercantile pattern of privatising land in Amazonia, being a privatisation concentrated on the best lands, which tended to become the private property of entrepreneurs. However, this was specific because rubber fields were privatised not as land-soil but as land-forest.

In the third chapter, the geomercantile privatisation of land initiated in 1615-16 is evaluated as a long process, being an important element of the social relations in which a free labour market was built in Amazonia. However, this market was not wide enough to meet the increasing demand for labour by distant *seringais* in Acre territory. This demand was met by means of private recruitment of immigrant labour or by means of the official immigration of labour after the 1870s-1880s. The recruitment of labour or immigration supported by official policies to *seringais* in Acre is a process leading to the emergence and consolidation of a local labour market, which is apparent, particularly after the 1910s.

Part three: focuses on work relations in *seringais*: engagement and forms of controlling and disciplining labour.

In the fourth chapter, it is argued that social relations of production in *seringais* were defined by the ways labour was engaged, controlled and disciplined. The command of production by the owners, manifested in administrative procedures, defined the sort of labour to be engaged: *seringueiros* according to the definition previously mentioned. These procedures and evidence of *seringueiros*' strategies of bargaining power, clearly reveal the capitalist character of relations of production in *seringais*.

Part four: discussion on profitability and Capital Accumulation.

The first task was to understand the *seringalistas*' project of economic-political changes in chapter five. The investigation on the double movement of English rubber dealers versus *seringalistas* revealed: (a) the manipulation of rubber prices by foreign

rubber dealers, provoking constant deep oscillations and causing uncertainty; (b) the *seringalistas'* responses to this in demanding interventionism by the central government, reveal their concerns with the control of the market-banking system, taxation, system of transport and offer of labour rather than with monocultural rubber.

In chapter six it is argued that *seringalistas/merchant-seringalistas'* project of economic-political changes as well as their geomercantile view on the privatisation and use of natural resources played a major role in their decisions on re-investments. So, they invested in technological improvements governed by converging relations with nature. At the same time, they increasingly diversified economic activities, combining rubber production with a commodity production for the internal market or the production of different commodities for the international market. Moreover, they used to run their rubber enterprises in partnership in order to cope with the risky nature of the business, particularly before the 1930s when there was no national market for rubber. In this way they guaranteed profitability and capital accumulation.

PART TWO: Seringal as Estates and Labour Availability: Social Relations of Land Property, Geomercantile Privatisation of Rubber Fields and the Emergence of an Internal Labour Market

Chapter 2

SERINGAL AS PRIVATE PROPERTY

The subterraneous ideas governing the classifications of *seringal* as temporary encampment¹⁶¹ or mercantile undertaking¹⁶² are in great extent those presented by the British diplomat in the Consular District of Pará in the First International Exposition of Rubber in 1908, which was published by the Foreign Office.¹⁶³ He attempted to mischaracterize *seringal* as private property arguing that: (a) the term estate as definition for rubber enterprises in Amazon would not stand up because it would not be legally enforced as private property; (b) there would be no permanent occupation of rubber fields. To question these arguments is crucial to demonstrate that *seringal* was private property in the modern sense. This requires focusing on two important aspects. First, the privatisation of rubber fields as a highly selective process as the search was not for land-soil but for land-forest of the best species of gums. Second, to a large degree the best Hevea forest became the private property of entrepreneurs rather than of the direct producers of rubber, which represents the continuation of a historical pattern of social relations of land property in Amazonia.

In order to present the argument clearly, the chapter is organised as follows: (a) the historical circumstances in which *seringal* or rubber estate emerged; (b) the notion of *seringal* as private property in the modern sense; (c) the geomercantile privatisation of rubber fields as land-forest and its consequences on the concept of *benfeitoria* by Brazilian law; and (d) the geomercantile privatisation of rubber fields in which the best Hevea forest became to a large part the private property of entrepreneurs.

¹⁶¹ Prado Junior op.cit.

¹⁶² Velho op.cit. p. 33.

¹⁶³ F.O. and The Board of Trade 1908, pp. 21-22.

The Historical Circumstances For the Birth and Expansion of *Seringais*

Seringais emerged in the period from 1848 to the 1870s. This period was characterised by the conjuncture of increasing demand and shortage of rubber in the international market, resulting in a general tendency towards rising prices, which endures until around 1912 (as is discussed in chapter five). This constitutes one of the main circumstances favouring the emergence of *seringais*: that is by turning rubber fields into valuable land-forest to be sold or used as the means of producing the commodity rubber. Another fundamental circumstance in the emergence and spread of *seringais* was the encouragement of large-scale production of raw material by international capital, and particularly, the encouragement towards the privatisation of rubber fields by the local governments.

The North American and Western nascent industries in by-products of rubber were heavily dependent on rubber from Amazonia, which was the sole supplier to the international market until the 1880s, as can be seen in chapter five. The increasing demand for raw material by these industries contrasted with the limited supply since initially it was produced to supply pioneering processes in small-scale manufacturing in Amazonia. Since the beginning of the 18th century, local producers had been made pumps, syringes, small animal figures, balls, and other small articles for exporting.¹⁶⁴ And since the beginning of the 19th century small manufacturers had been established in Belém, producing waterproof articles such as ammunition bags, shoes, coatings and bottles, as well as syringes and balls for export to Portugal and the USA.¹⁶⁵ Only in 1844 did Amazonia begin to export raw material (oversized rugby

¹⁶⁴ Coates 1987, pp. 4-10 and 14; Drabble 1973; Whittlesey 1931, p. 1.

¹⁶⁵ Cruz 1973 p. 310; Mourao 1989, p. 25; Santos op.cit.; Weinstein op.cit; Coates op.cit.; Marin 1985, p. 248; Dean op.cit. p. 32.

footballs of rubber) and in 1855 nearly all of it was unworked raw material for industrial use.¹⁶⁶

This change represent a positive response to the foreign capitalists' efforts to make Brazilians produce raw material instead of continuing to manufacture rubber products. These efforts were manifested in learning/transferring local manufacture methods to their new factories and in offering basic services to the production of raw material such as easy credit,¹⁶⁷ services of commercialisation-exportation and after the 1860s even the internal steam navigation was carried out by an English company, given easier access to most distant *seringais*.¹⁶⁸

Under these circumstances, the production of rubber for export increased from only 185.251 Kilos of manufactured gum in 1836-37 to more than one thousand Kilos (1.466.550) of raw material in 1850-51 and to 3.500.000 kilos in 1863.¹⁶⁹ The United Kingdom imported 381 tons in 1850 and it has been estimated that the amount of rubber consumed rose twenty-fold in the 28 years between 1850 and 1878.¹⁷⁰

The increasing practice of exporting raw material goes hand in hand with the bankruptcy of local rubber manufacturers.¹⁷¹ And the positive response to the encouragement of raw material production can be explained by the Brazilian capitalists' pursuit of profit in an economy exposed to instability, a result of dependency on exporting primary products.

First, this legacy of the colonial period contrasted with the struggles of the Brazilian governments and segments of the upper class for political-economic autonomy in the face of European colonialist powers in the period after the political

¹⁶⁶ Coates op.cit. p. 43.

¹⁶⁷ ACP, 1884; F.O. and Board of Trade, Diplomatic and Consular Reports – Brazil – the Trade of Pará District, 1901, p. 4; Santos op.cit. pp. 134-36; Martinelo op.cit. pp. 31-32.

¹⁶⁸ Grahame 1969, pp. 30-31.

¹⁶⁹ See Cordeiro, 1920 Apud Universidade Federal do Pará (Org.) p. 26; see also Santos op.cit. and Martinelo op.cit.

¹⁷⁰ Coates op.cit. pp. 43-4.

¹⁷¹ Santos, R. op.cit.; Weinstein op.cit. and Marin s/d.

independence of Brazil from Portugal, in 1822. The dependency on export products resulted in severe economic fluctuations due to an international market which was strongly influenced by the interference of European colonialist powers or by monopolies from these nations.

Second, the legacy of the colonial period was manifested not just in the dependency on export products, but also in commercial treaties. Furtado¹⁷² demonstrates that the process of impoverishment and political difficulties experienced in the 1830s and 1840s, provoked by fluctuating international markets but also aggravated by the indirect influence of commercial treaties held with England, was a legacy of colonial policy.

Third, the consequent difficulties were particularly stressed in north-east and in Amazonia. In south-east they were minimised due to the emergence of the coffee export economy in the 1830s. In the north-east, however, the main export economies - sugar and cotton - were intrinsically affected by the persistent falls in price.¹⁷³ The decrease in sugar prices and the resultant social effects, which began in the last quarter of the 18th century, continued throughout the first half of the 19th century, and beyond. In Amazonia, sugar producers had to deal not just with decreasing sugar prices but also with difficult transport to export ports and with the discouraging policy of Pombal from 1751 to 1777, which gave priority to the sugar economy in the Northeast.¹⁷⁴ In response to these difficulties, a gradual shift from sugar to rum production occurred,¹⁷⁵ which became a stable economy in the long term.¹⁷⁶ Sugar was exported only until 1864 in gradually smaller quantities, and later this production was not even enough to supply the internal market.¹⁷⁷ By 1860, Amazonia already

¹⁷² Furtado 1959.

¹⁷³ Furtado, op.cit.; Werneck Sodre, N. 1976; Cano, W. 1981.

¹⁷⁴ Bentes 1992, appendix I.

¹⁷⁵ Ibid.

¹⁷⁶ See on this economy Anderson, S. 1991.

¹⁷⁷ Bentes op.cit.; Cordeiro op.cit. and Lima 1986 p. 159.

imported sugar and coffee.¹⁷⁸ The export economy, whose main products were cocoa, rice, cotton and different extractive products, was characterised by price fluctuations through the first half of the 19th century.¹⁷⁹ The local manufacture of rubber by-products did not receive any special incentives from the government and there was no credit system for agricultural production.¹⁸⁰

In such conjuncture, local capitalists saw the international capitalist's promotion of raw material production as an opportunity to increase their capital. The increasing rubber prices and the offer of easy credit and basic services to raw material production attracted investors. In 1868, rubber had already assumed the leading position in the export economy.¹⁸¹

The expanding entrepreneurial production of raw material favoured the valorisation of rubber fields.¹⁸² Nevertheless, the privatisation of rubber fields is a direct result of the local governments' incentive. They encouraged the privatisation of rubber fields as an aim to tackle specific issues. First, they aimed at stopping and preventing the destruction of natural resources since the predatory exploitation of non-privatised rubber fields by *arranchamentos* continued until the 1850s and in less scale until the 1860s. According to the local government, the environmentally irresponsible exploitation of rubber fields by *arranchamentos* was a direct result of non-ownership,¹⁸³ considering that *seringalistas*, on the contrary, preserved their natural resources. Moreover, *arranchamentos* produced rubber in poor economic and hygienic conditions.¹⁸⁴

¹⁷⁸ ACP, Relatório Anual de 1868 pp. 15-16.

¹⁷⁹ Cordeiro op.cit.; ACP, Relatório Anual de 1867; ACP, Relatório Anual de 1868; ACP, Relatório Anual de 1869; ACP, Relatório Anual de 1870; See analysis on the economy in 1872-78 in: Pará. Presidente da Província 1878a, p. 106.

¹⁸⁰ ACP, Relatório Anual de 1868 pp. 15-16.

¹⁸¹ Ibid. See also Reis 1953; Cordeiro op.cit.; Santos, R. op.cit.; Martinelo op.cit.; Weinstein 1983.

¹⁸² Reis op.cit.; Bonfim op.cit.; Santos, R. op.cit.

¹⁸³ Bentes February/1992 op.cit.

¹⁸⁴ Cordeiro, op.cit, p. 17.

Second, the government tried to solve the shortage of foodstuffs. The demand for food constituted one of the main justifications for the official policy of immigration of familial producers of food from the middle of the 18th century onwards, this being one of the most important historical conditions for the emergence of the peasantry in the region.¹⁸⁵ This persisted throughout the 19th century and was aggravated by the increased production of rubber, particularly in the 1870s-1910s.¹⁸⁶ The emergence and spread of large-scale production of rubber engendered a tendency towards a shortage of cereals and a high cost of living.¹⁸⁷ The reasons for this are multiple. Rubber production attracted investors and labourers from the agricultural economy, leading to a decrease in the production of cereals.¹⁸⁸ At the same time, rubber production provoked rising demand for foodstuffs since the population increased owing to the immigration of labour to this activity, and a considerable proportion of entrepreneurial production of rubber emerged as a specialised activity, demanding food in the local market. As can be seen in chapters six (Table 20), until the 1920s around 67% of the original *seringais* in the most important rubber producing area in Acre produced rubber only. According to the ITERPA's records, in Pará, around 41.5% of the early *seringais* located in the nine most important rubber producing municipalities produced rubber only. The President of Pará Province analysed this situation as an inversion of the previous economy because different from other country enterprises, which used to supply food to the internal market, rubber estates demanded it.¹⁸⁹ The ACP's report of 1870 mentions that in this year there was a

¹⁸⁵ Bentes op.cit. and 1996.

¹⁸⁶ Ibid. and Lima, E. 1986.

¹⁸⁷ See on this matter Cordeiro op.cit.; Lima op.cit.; Bentes op.cit. Reports and speeches by the Presidents of the Para Province are quite emphatic on this, for instance Pará. Presidente da Província 1870, pp. 39-40, 1870a, p. 33, 1880, p. 56, Fala 1883, p. 66, Mensagem 1893 and Mensagem 1897, p. 22.

¹⁸⁸ Pará. Presidente da Província agosto/1858, p. 6 and 1863, p. 12.

¹⁸⁹ Pará. Presidente da Província, 1871.

shortage of cereals.¹⁹⁰ In 1872 the President of Pará Province reported an increase in the importation of foodstuffs.¹⁹¹ This was tackled by means of both (a) besides the policy of immigration of labour from 1870 to 1910, the local government adopted a policy of immigration of peasants and small entrepreneurs,¹⁹² and (b) the encouragement of the entrepreneurial privatisation of rubber fields not to produce rubber only but to make rubber in association with the production of cereals.¹⁹³

Third, the governments were concerned with settling the population and stopping migration. It was not only *seringais* in Pará which were absorbing labour. The increasing production of rubber and urban activities in other Provinces also attracted and absorbed labour and investors from Pará. There are no statistics available before 1872, but the statistics for the following period show that from 1872 to 1890 Pará lost around 32,000 inhabitants through migration to Amazonas, Acre and Roraima.¹⁹⁴ The census of 1920, covering the period from 1872 to 1890, shows that while the population of Manaus, the capital of Amazonas, increased by 32%, the population of Belém, the capital of Pará, dropped by 19%.¹⁹⁵

Finally, the governments aimed to increase public income by selling non-privatised rubber fields and by taxing rubber economy. Before 1891, local government channelled those proposals to the central government, which was in charge of land, at the same time that they encouraged the privatisation of rubber fields by offering public support to the immigration of labour to *seringais*, by implementing policies towards remaining nations, by subsidising internal navigation etc. as previously mentioned. The

¹⁹⁰ ACP, Relatório Annual de 1870.

¹⁹¹ Pará. Presidente da Província, 1872.

¹⁹² On the Policy of immigration of peasants and small entrepreneurs to the Bragantina microregion in 1870s-1910s see Penteado 1967, De Lima op.cit.; Moraes, R. 1984, Carneiro da Conceição, M. 1990.

¹⁹³ See reports by the President of Pará Province and proposal by Silva Coutinho analysed by Calixto op.cit. p. 84. See also chapter seven.

¹⁹⁴ See the evaluation of the available statistic by Calixto 1993, pp. 83-92; see also Santos op.cit.

governments of Amazonas Province did so also aiming to increase population and expand the economy in a conjuncture of economic and political hegemony of Pará in Amazonia.¹⁹⁶ The privatisation of rubber fields in the area now called Acre State, following the waterways, represents an expansion of the process of privatisation of rubber fields in Amazonas State, which was supported by the governments of the Amazonas Province.¹⁹⁷ In 1891, the administration of land was transferred to the States' governments as a result of the inauguration of the Republican political system in the country. The governments of Pará and Amazonas States passed legislation encouraging and legitimising the privatisation of rubber fields.

Seringal as Private Property

In 1908, it was argued that the term 'estate' as a definition for rubber enterprises in Amazonia could not be corroborated as it would not be legally enforceable as private property.¹⁹⁸ On the contrary, I argue, that *seringal* is synonymous with 'estate' since it is private property in the modern sense. In Pará State rubber fields were located on old slavery property, State properties, peasantry property and in *terras devolutas*.¹⁹⁹ *Seringais* were set up in *terras devolutas*. This is the legal definition for non-privatised lands, meaning that free land does not exist in legal terms, non-privatised lands were owned and administrated by the State. The privatisation of *terras devolutas* involved different steps. At first, the future owner had to occupy the area effectively according to the law, that is, in accordance with size in hectares and giving evidence of permanent residence and economic exploitation of the land, which

¹⁹⁵ Ministério da Agricultura Indústria e Comércio – Diretoria Geral de Estatística. Resenciamento do Brazil (realizado em 1 de setembro de 1920) – Vol. IV (1a. Parte) – POPULAÇÃO. Rio de Janeiro, Tipografia da Estatística 1926, pp. X e XII.

¹⁹⁶ Calixto op.cit. p. 86.

¹⁹⁷ Ibid.

¹⁹⁸ F.O. and The Board of Trade 1908.

is called *benfeitoria* in juridical terms. The land had to be measured and provisory title deed had to be required in governmental institutions that were located far away in towns or, more usually, in cities such as Belém, Manaus or Rio de Janeiro.²⁰⁰ Later, the provisory deed would be re-placed by a definitive title deed, which had to be registered in Registry Offices also located in those cities, insofar as Brazilian property law foresees that every property has to be registered in a Register Office in order to be recognised as a legal property.²⁰¹

This resulted in a time-consuming bureaucratic process.²⁰² In the meantime, between the requirement of title deed and the expedition of it by the State, the rubber enterprise was installed and started to work normally from the point of view of a private business.

There are two issues revolving the legalisation of *seringais*: (a) the geomercantile way of privatising rubber fields as land-forest, raising questions as to the definition of *benfeitorias* in Brazilian law; (b) the question of domain in Acre, involving historical circumstances with regard to sovereignty, since it was originally a Bolivian territory; and (c) even when Acre became Brazilian territory, the question of domain was specific to this State because the lands had the legal status of a frontier region.

The Geomercantile Feature of *Seringais*: Questions about the Definition of *Benfeitoria*

The process of privatisation of rubber fields from the middle of the 19th century onwards represents the persistence of the geomercantile pattern of privatising land in

¹⁹⁹ Bentes 1992 Part II, chapter 2.

²⁰⁰ Acre was a Federal Territory so administrated by central government located in Rio de Janeiro, the capital of Brazil until the beginning of the 1960s.

²⁰¹ See Magalhães 1977 for a comprehensive analysis of the Laws called *Lei Hipotecária* 1.237 of 24/09/1864, Dec. 169-A of 19/1/1890 and 370 of 2/5/1890; modified by the Dec. 4.657 of 9/2/1939, the called Law of public registers.

Amazonia. Demonstrating this requires a quick reference to the notion of geomercantile privatisation of land in Amazonia, which was discussed in my previous research. Selective appropriation of land was not brought about by the capitalist privatisation of land. Also, the First Nations had a selective way of occupying/appropriating land. They preferred the fertile soils along the bank rivers for producing subsistence products. This is a matter of agreement even among divergent analysis on The First Nations in Amazonia. For instance Clifford Evans, Betty Meggers, Donald Lathrap and Engracia de Oliveira agree that the most populated First Nations were concentrated along fertile bankrivers.²⁰³ Devevan²⁰⁴ estimates the population of the First Nations in Amazonia, Central regions of Brazil and the north east Atlantic cost as 6.8 million. In Amazonia he estimates a high density of 14,6 inhabitants per square kilometre in *varzeas* areas, and only 0,2 inhabitants per square kilometre inland.²⁰⁵ Even considering that they used to barter (particularly tobacco) with European travellers in the period from 1500 to 1615-16,²⁰⁶ the geographic pattern of land possession did not express capitalist purposes. Their production was not the production of commodity in order to optimise profit and accumulate capital. They produced for self-consumption. Consequently, the question of location in relation to markets, ports and waterways was not posed. Location as a criterion stems from Western capitalist purposes. The Portuguese selected lands suitable for both producing commodities for the international markets, and for their geopolitical purposes. They were entering an inhabited territory and wanted to guaranteeing their effective control over the region, eliminating Western competitors. Accordingly, from

²⁰² Reis 1953, p. 79.

²⁰³ Engracia de Oliveira, 1983 p. 148; Meggers 1977 pp. 156-157 quoted from Bentes op.cit.

²⁰⁴ Devevan 1976 p. 230.

²⁰⁵ See on this debate also Carneiro da Cunha 1992 pp. 9-24.

²⁰⁶ The practice of bartering by The First Nations all of Brazil in the period from 1500 to 1580 is analysed by Marchant 1942. But in Amazon Region the relationship between The First Nations and European based on barter was extended until 1615-16 when Portuguese

1615 onwards, the Portuguese invaded the territory by founding military posts at strategic points in the entire region,²⁰⁷ which combined the search for the best land with the expulsion of The First Nations. By this way the geomercantile privatisation of land was initiated.²⁰⁸

Therefore, selectivity expresses the entrepreneurial view on nature in a context in which the fluvial technology of transport was the most practical and the fastest as well as the technic of production were not based on heavy machines and agro-toxic.²⁰⁹ In these circumstances entrepreneurs tried to maximise profit by rationalising space and the use of natural resources to reduce investments and the cost of production. The extensive fertile soils of varzeas, which are irrigated by the annual river flood, combining the best natural fertility of soils²¹⁰ with the best location in relation to proximity and facility of transport to ports and consuming centres. The fertile varzeas were the first to be taken from the First Nations and transformed into individual ownership by the Portuguese.²¹¹ This preference for fertile lands along river banks close to or with easy access to local markets and export ports was still clear in 1950 when IBGE (*Fundação Instituto Brasileiro de Geografia e Estatística*) published a map showing the distribution of Amazonian population (see map 3).

In this context, changes in export commodity prices favoured the transformation of different extension of soil into land, which were privatised, sold or used as the means of producing agro-extractive commodities, designing a kind of ecological-economic zone. At first, entrepreneur privatised lands proper for producing agricultural

initiated the appropriation of land and set up of enterprises in the Region (Bentes 1992, part II, chapters 2 and 4).

²⁰⁷ Reis, 1942.

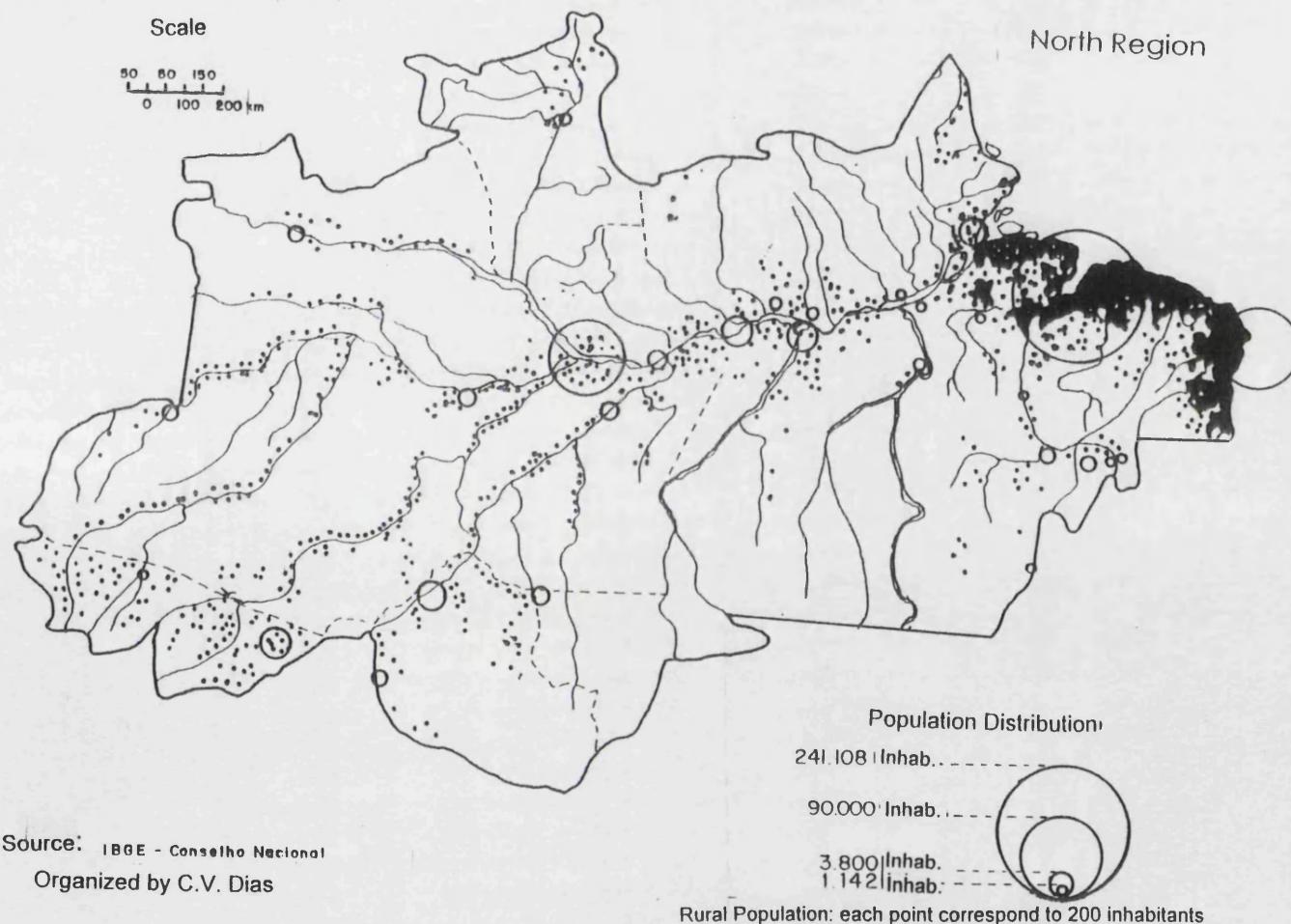
²⁰⁸ Bentes op.cit.

²⁰⁹ Ibid.

²¹⁰ On fertile varzeas and the extension of the proper soil for agriculture in Amazonia, see Nascimento and Homma 1984, p. 25.

²¹¹ Bentes op.cit. ; Bates 1979, p. 127.

Map 3: Population Distribution in the Brazilian Amazon According to the IBGE Census of 1950



exporting commodities.²¹² Then, they started to invest in pastoral economy, privatising lands with natural grass where they did not need to plant grass, reducing investments.²¹³ The existence of particular municipalities in Pará characterised by agricultural-pastoral economies²¹⁴ results from this geomercantile privatisation of land.

Yet, the geomercantile privatisation of rubber fields is peculiar. In the selection of land to be privatised *seringalistas* considered the criteria of location to local markets and port of exportation, conditions of transport and navigability as the previous landowners had. However, it was the prevalence of the best species of gum that determined the selection of land.²¹⁵

According to IBGE statistics²¹⁶ rubber fields in the Amazon river vale and its branches comprise an area of around one million square miles. Around half of it is in the Brazilian Amazonia, with the most important rubber fields situated in Pará, Amazonas and Acre States. However, the extension in land-soil is not fundamental to understand the logic governing the privatisation of rubber fields in Brazilian Amazonia. The density of the best species of gum being the factor in the selection of land to be privatised meant that the forest of rubber plants itself was turned into land so that land signified land-forest instead of land-soil. Although some of the best species of gum could be found on dry land, it was along the riverbanks that the

²¹² Bentes op.cit, appendix 1. Many authors mention areas where agriculture was performed even if they do not work with the notion of geomercantile privatisation of land to apprehend it such as: Salles, 1971; Edwards 1847, p. 130; Wallace 1939, p. 173; Bates 1979, p.102; Cordeiro 1920, p.16; Bastos 1938, p. 207; Anderson, R. 1976 p. 10 note 9; Marin & Castro 1993, p. 10.

²¹³ Bentes op.cit., chapter 1.

²¹⁴ Jornal The Brazilian Review (supplement). Extracts from The Message of the Governor of the State of Para H.E.Dr. Augusto Montenegro to the Legislative Assembly 1908, Rio de Janeiro, Tuesday, October 20th, 1908, n° 42, p. 10.

²¹⁵ Guedes, M.1920, pp. 91-92; Reis 1953, p. 80; Magalhães 1977, pp. 15-16.

²¹⁶ Fundação Instituto Brasileiro de Geografia e Estatística (IBGE). Séries Estatísticas – vol. 2, Tomo 1 – Introdução – Industria Extrativa, IBGE, Edição fac-similar, 1907, p. 2-3. On rubber fields and species of gum in Amazon vale see also Collins, J. 1869; Wright 1907.

highest density occurred.²¹⁷ However, the best quality gums could also be found in Acre State, in the regions not reached by flood, but characterised by high pluvial level, and the species *caucho* was typical of dry lands.²¹⁸ Nevertheless, when the rubber trees were located some distance from the margin of the rivers, owners had to consider location in relation to waterways with good conditions of navigability, insofar as they were dependent on navigation to transport rubber to export ports.

Besides the location and geographical distribution of rubber trees, there were two other criteria defining the quality of land-forest. First of all, the species of gum, predominantly, as different species produced different kinds of rubber, which were variously priced as discussed in chapter four. Second, the level of density in the distribution of the best species of gum, as well as topography and quality of soil as these affect the productivity of the trees and the quality of rubber.

These divergent natural features greatly influenced the definition of the productivity of different rubber fields or land-forest. In 1908, this was expressed in monetary terms. For instance, the daily productivity of rubber fields situated along the Acre river was equivalent to £12.00, those in the low Purús River £ 5.50, those in the Madeira River £ 7.00 and those in the Javary River £ 4.00.²¹⁹ Furthermore, the quality of raw material made from the same species could vary depending on the type of soil.²²⁰ For example, the latex of *Hevea brasiliensis* generated softer rubber in the island regions in Pará State, in comparison with that from dry land in Acre.²²¹ In general terms the different features and incidence of rubber trees represented different valuation of rubber fields as land-forest, and as such were sold or used to produce the commodity rubber of deferring types and values.

²¹⁷ ACP, Diversas especies de seringueiras. Clima e terrenos apropriados. In: Revista da ACP, 9, e 10, Set.Out/1927, Anno XVII, p.131; IBGE op.cit. p. 3.

²¹⁸ ACA, Editorial 'A Borracha do Amazonas na Exposição de Lodres'. In Revista da ACA, Manaus, 5, November 1908, pp. 1-6.

²¹⁹ Ibid.

²²⁰ IBGE op.cit. p. 3.

These conditions led to a geomercantile privatisation of rubber-fields in which large estates were set up in the best land-forest - those with the highest density of the best species of gum and situated along riverbanks near to, or with easy access, to markets and export ports. The privatisation of rubber fields as land-forest and into large estates situated mostly along the riverbanks can be seen in Appendix 3. The List shows that only two out of 80 *seringais* in the densest rubber fields in Acre, in 1906-07, were located inland. Several authors²²² have mentioned this characteristic.

The geomercantile privatisation of land-forest meant that the density and geographic distribution of rubber trees defined the size and contours of a *seringal*.²²³ The non-gregarious distribution of trees²²⁴ was used as ideological justification for the entrepreneurial privatisation of rubber fields into large estates. According to Bonfim:

"(...) an extractive property in order to be profitable has to be a large estate. Due to the heterogeneity of the tropical forest and the dispersal geographic distribution of rubber trees, a *seringal* with 30 rubber-tappers, for instance, which is considered a small estate, must have at least 9.000 rubber trees. This means that the extension of this *seringal* would be around 10.000 hectares".²²⁵ (our translation)

This very argument was used by Reis.²²⁶ Even in the area having the highest density of the best species of gums, around Acre River, in which it was possible to organise 16 paths in one league square, it was estimated that a middle size estate with 200 paths reached 15 leagues square.²²⁷

What has to be stressed is that instead of being a direct result of different features of nature, *seringal* as synonymous with large estates does express the entrepreneurial rationality of producing rubber for profit and capital accumulation,

²²¹ Ibid.

²²² See Euclides da Cunha, 1946; Bonfim, 1954 p. 15 and p. 18; Silva, L. 1962, p. 71; Silva, 1982 p. 43; Duarte op.cit. pp. 25-26.

²²³ Reis 1953, p. 80; Magalhães 1977, pp. 15-16.

²²⁴ Arkers, 1914; McHale op.cit.; Costa, J. 1913, pp. 9-10; Santos, 1980 pp. 82-83; Weinstein 1983, p. 14 and footnote no. 19.

²²⁵ Bonfim op.cit, p. 18.

²²⁶ Reis op.cit.

²²⁷ Euclides da Cunha op.cit.

which requires certain level of productivity. It was this sort of rationality that turned rubber plants into land-forest. The non-gregarious distribution of trees constituted just the natural circumstance in which land-forest had to be privatised in large proportion by capitalists.

The notion of land-forest did not correspond to the Brazilian land legislation. In fact, *seringal* fits the Brazilian law only partially for being an entrepreneurial privatisation of *terras devolutas*, which was encouraged by the *Lei de Terras* (Law 601/1850). However, *seringal* was not based on modern technology, neither in the sense of large-scale monocultural rubber, nor of the mechanical process of making raw material so that its infra-structure of extraction of latex and non-mechanical methods of transforming it into rubber could not be considered *benfeitoria* in the sense foresees by the law. The Brazilian law was based upon the Western notion of civilisation discussed in chapter one, according to which extractivism and non-mechanical production of rubber would be interpreted as 'primitive', 'pre-historical', and 'uncivilised' forms of production. The Brazilian property right discouraged these methods of production by not considering them as *benfeitoria*. Consequently, the *seringal*'s infra-structure, which was composed not just of infra-structure of extractivism and manufacture of rubber but also of rubber tapers' huts, commercial house, offices, warehouses and ports, characterised *benfeitoria* only partially.

This partial adjustment to the law brought about difficulties to a reasonable proportion of *seringalistas* whose enterprises produced rubber only in order to legalise their states before 1912-13. As was previously mentioned, 67% out of 105 early *seringais* in the Acre River District and 41.5% of those in the nine most important municipality producers of rubber in Pará produced rubber only.

Seringalistas questioned the criteria defining *benfeitoria* in the Brazilian right property and local governments tried to meet their demand directly. After 1891, when

²²⁷ Euclides da Cunha op.cit.

the republican regime was inaugurated in the country, the governments of Pará and Amazonas Provinces changed the definition of *benfeitoria* in their legislation. In Pará, soon after the administration of land affairs was transferred to the State in 1891, this definition was widened, incorporating also the conservation of extractive forest and natural grass since it was the object of effective and permanent occupation and economic exploitation.²²⁸ In 1903, the Amazonas Province did the same.²²⁹ In Pará, the modifications on the definition of *benfeitoria* were associated with the fixation of the maximum of 545 ha for a private property in extractive areas,²³⁰ which was turned into 1.098 ha in 1918.²³¹ Thus, squats in rubber fields were legalised according to this legislation. Later, in 1920, the government created other forms of encouraging entrepreneurial privatisation of *terrás devolutas* in Pará State,²³² changed the system of pricing those lands²³³ and foresaw that the concession of pieces of land larger than two leagues squares would be done exclusively to industrial and agricultural entrepreneurs. Moreover, extractive areas with the status of *terrás devolutas* received special treatment due to the government's aim at controlling the payment of tax by extractive undertakings more effectively. The State began to hire *terrás devolutas* with high density of exporting extractive products instead of selling them. The Art. 2º of that Law created the called *aforamento* title deed which meant the perpetuation of the State as owners of extractive areas in *terrás devolutas*. These lands were hired by the State and the rent value was the equivalent to 2% of the extractive production in 10.000 hectares and 1% of any

²²⁸ Decree 410/1891, article 6th.

²²⁹ By the Decree 644 of 01/12/1903, art. 12. It was enforced by the Decree 79 of 31/12/1926, art. 7th and the Law 112 of 28/12/1926, art. 7th-C. See also Lando, A. O Seringal Nativo – Síntese Histórica e Jurídica. In: Jornal O Guaporé, 24/07/1977.

²³⁰ Ibid.

²³¹ By the Law 1741/1918.

²³² The Law 1.947, of 11th November 1920.

²³³ The Law 1.947 de 11th November 1920 changed the way land was priced according to the Law 82, of 15th September 1892 article 15 which was reinforced by the Law 1.741 of 18th of November 1918, art. 5.

excess of it. This new legislation was the base of the privatisation of land in new areas of rubber production, and especially in areas of Brazil nut production.²³⁴

However, the question around the definition of *benfeitoria* assumed complexity in Acre since at first it was a Bolivian territory. Later it was incorporated to the Brazilian territory as a Federal Territory, therefore, regulated by the federal law and administrated by the central government as well as it was an area of frontier between Brazil and Bolivia so that it was object of special regulations.

The Question of Sovereignty and Domain in Acre

At first, Acre State was part of Bolivian territory, sharing a frontier with Amazonas State. From 1848 Brazilians started to exploit rubber fields in Acre. The Bolivian land law did not define non-privatised lands as *terrás devolutas* as expressed by Brazilian property right, which is a heritage of the Portuguese law. The Bolivian Civil Code, article 285, defines land other than private property as 'vacant and free goods' and foresee that occupants of such lands are entitled to have its occupation legalised.²³⁵

Since the 1850s-1860s the conjuncture was of increasing rubber prices, particularly after 1895 with the development of the car industry as is discussed in chapter five,²³⁶ and Acre was the region with the highest density of the best species of gums, so it became the most important producer of rubber in Brazil.²³⁷ As a result, the number of Brazilians investing in Acre increased. In 1887 rubber fields along and around the bank of Alto-Purús and Acre rivers already produced 500.000 kilograms of rubber with a population of 10.000 people²³⁸ without considering remaining nations. Analysing INCRA-Acre lawsuits I found out that 94 out of the 105 original

²³⁴ See Emmi 1988; Bentes 1992a.

²³⁵ Magalhães, op.cit.

²³⁶ See also Furtado, 1959 pp. 130-131; Santos, R. 1980; Duarte 1987, p.16.

²³⁷ Prado Junior 1956, p. 236.

²³⁸ Labre, 1887; Tocantins 1961, p. 129.

seringais in Acre River District²³⁹ have information on the date of the first acquisition, being 60% of them acquired in the period from 1848 to 1907, and 70% until 1913. Moreover, 52% were got in the period from 1895 to 1907.

Since the beginning Brazilian *seringalistas* had occupied and exploited this Bolivian territory but commercialised the raw material with traders from Belém and Manaus, paid taxes and tried to legalise their lands according to the Amazonas State's law mostly. This behaviour represented a challenge to the sovereignty of the Bolivian government over the area. This had no support by the Brazilian governments. On the contrary. The Brazilian governments enforced the Bolivian sovereignty over the area at first by means of the Treat of Ayacucho in 1867, which last until 1903, and by means of a new Treat signed in 1895 between the Brazilian and the Bolivian governments, establishing new limits that even enlarged the Bolivian sovereignty. In 1896, the Bolivian government created a Syndicate of Rubber and in 1899 it was installed a customs house in Acre.²⁴⁰ At the same time, *seringalistas* were called to legalise their squatters according to the Bolivian law.²⁴¹ *Seringalistas* reacted to this by different ways, including armed struggles in 1899 and in the period from 6/8/1902 to 24/1/1903, supported by Amazonas State's governments and by traders of Belém and Manaus.²⁴²

When the Bolivian Syndicate became a reality after 1901, neighbours such as Peru and Brazil reacted against it. The syndicate was a North American and English capitalist consortium, whose head office was situated in New York, having a contract with the Bolivian government, according to which the syndicate would be in charge of the land affairs and taxes over rubber production in the area. It was in this conjuncture that the Brazilian government assumed a position favouring the

²³⁹ The lawsuits of eleven among the 105 original *seringais* have missing information about the date of first acquisition.

²⁴⁰ Duarte 1987, chapter 1.

²⁴¹ Neves 1981, p. 17.

integration of Acre to Brazil, which was the claim by *seringalistas* and traders commanding armed struggles with Bolivians in the area. Even so, it took long time until the final solution comes. In the meantime, until 1903, rubber estates in Acre was legalised according to the Bolivian Civil Code according to which Acre had the status of frontier.²⁴³

When the territory was at last incorporated into Brazil in November of 1903, by the Treaty of Petrópolis,²⁴⁴ the Bolivian and the Brazilian governments agreed to respect land property of Brazilian and foreign investors in the area.²⁴⁵ Moreover, land other than private property assumed the status of *terrás devolutas* according to the Brazilian property right. The *Lei de Terras* of 1850 terminated the donation of *terrás devolutas*, but Acre was an area of frontier of Brazil with Bolivia, and the Brazilian property right treats *terrás devolutas* in such areas as an exception. This Law foresees that it is prohibited the acquisition of *terrás devolutas* by title other than sale. Except those land situated in the frontier of the Brazilian Empire with foreign countries in zone of ten leagues, which can be given freely. This law also foresees not only the free concession of land in zone of frontier but also even the possibility of donation of land having subsidy by the government to those entrepreneurs willing populate it. So, the government would finance both Brazilian and foreign settlers in this area.²⁴⁶ The Brazilian law even allowed the formation of large estates in *terrás devolutas* located in areas of frontier. The decree nº 1.318 of 30/1/1854 foresees the maximum of ten leagues square or its equivalent per colony of 1.600 people.

²⁴² On the Acre Revolution see Calixto op.cit.

²⁴³ Magalhães op.cit. pp. 47-48.

²⁴⁴ The treat of Petropolis was signed in 17/11/1903, when Acre became part of the Brazilian territory, and was approved by the Brazilian National Congress by means of the Decree 5.161, of 10-3-1904.

²⁴⁵ See art. 11 of the Treat of Petropolis.

²⁴⁶ ACP, "Zona de Fronteiras - Terrenos Ribeirinhos". In: Revista da ACP, 6, set. 1919, pp. 136-138; Magalhães op.cit. pp. 31-32.

Thus, it was easy to legalise large extensions of land in frontier areas. And Acre is an frontier area. The strict control over the size of land property as well as changes in the notion of frontier with other countries are recent features of the Brazilian law after the constitutions or *Emendas Constitucionais* of 1934, 1937, 1946 and particularly 1964.²⁴⁷ Consequently, new notions and changes in the definition of frontier and in the way lands of frontier would be privatised are not useful for understanding the question of *seringal* as private property in Acre before 1930.

Acre was organised as a Brazilian Federal Territory only in 1904.²⁴⁸ Furthermore, only in 1906 Registry Offices were installed locally. In the period from 1903 to 1906, the registration of title deeds of land in Acre was done in Registry Offices situated in Manaus or in Rio de Janeiro. However, there were still conflicts around land affairs because Perú had areas around Alto-Purús and Acre rivers. Only in 1909 the Brazilian government signed a Treat with the government of Peru ending frontier questions in Acre. Then, the area of 152.000 kilometre square was incorporated to the Brazilian territory without any question by neighbour countries.

After that an internal question of jurisdiction between the Amazonas State and the Brazilian central government emerged. Acre was located in the zone of frontier between Bolivia and the Amazonas State, and *seringalistas* started to privatise rubber fields in the area as an expansion of the same process in Amazonas State, closely supported by the governments of this State since the beginning, as it was already mentioned in chapter one. Besides that the Federal Constitution of 1891, which established the Republican political system and transferred the administration of *terras devolutas* to the States' governments, provoked controversies about frontier zone. The controversy stem from the fact that this constitution did not specify if this zone would be considered as an area having different status from *terras*

²⁴⁷ Magalhães op.cit. pp. 13-15.

²⁴⁸ See Decree 5.188/1904.

devolutas in which case it would be administrated by the central government and not by the States' governments. As a result, the States' governments continued basing their actions on the *Lei de Terras* of 1850, which *treat zone* of frontier as an exception of *terras devolutas*. As such, it can not be said not being *terras devolutas*, but only that it is a special case of it, and *terras devolutas* are administrated by the States' governments after the Constitution of 1891.

This was the interpretation of the Pará and the Amazonas States' governments.²⁴⁹ In the meantime between 1867 and the final incorporation of Acre to Brazil, as a Federal Territory, the Amazonas State's governments legalised squats in Acre. It was natural to them to do so since they gave political and institutional support to the privatisation of *seringais* there, and they claimed that Acre should be incorporated as part of the Amazonas State's territory. They even went into Court claiming for this. When Acre was at last organised as a Federal Territory all those old title deeds were enforced by the Brazilian law. *Seringais* in Acre have different categories of title deeds such as Bolivian deeds, deeds supplied by provisory governments of Acre during the period of transition from a Bolivian to a Brazilian territory²⁵⁰ as well as Brazilian deeds originated in the legalisation of squats or private transfer of *seringais* by commercial transactions. As it can be seen in table 1, in the total of 66 title deeds out of 105 original *seringais*, which have information on the source of the deed, 42% was given by Amazonas State's government and 40% by other sources. Other sorts of Brazilian deeds include title others than the original one, which stem from transmissions of *Seringais* or part of them by sale, permute, concession, heritage. These title deeds were given by Register Offices as part of the legal procedures regarding these transactions.

²⁴⁹ Revista da ACP, op.cit.

²⁵⁰ See on the governmental organisation and juridical system during these period in Calixto op.cit.

Table 1: Origin of Old Seringais' Deeds in Acre River District

Sources	Quantity of Deeds	Percent
Bolivian government	6	9%
Amazonas State Government	28	42%
Acre provisory Government	5	8%
Other Brazilian deeds	27	41%
Total	66	100%

Source: INCRA-Acre lawsuits

The point to be stressed is that the process of privatisation of rubber fields was enforced by the State so that the individual ownership of pieces of land was a right. The existence of different title deeds in no way denies that. On the contrary, this expresses two issues originated in the special situation of Acre as a frontier area. First of all, there was a dispute between Bolivia and Brazil concerning the sovereignty of the territory. Second, the incorporation of Acre as a Brazilian territory brought about a dispute between the Amazonas State and the Federal government around the jurisdiction of the area. However, neither the former nor the latter issue can be confused with domain. Domain concerns to individuals' right over pieces of land, while the two other are political matters in terms of the State's power over the population as well as the administration of public affairs. Thus, the existence of different kind of title deeds expresses two aspects. First, the landowner's will of having their rights enforced by the State by means of a title deed. It was necessary for getting a loan since it implied in the offer of the property as mortgage. Second, the State (as a political institution of Bolivia or Brazil) enforced this right. The distinction between domain and sovereignty, and next between domain and

jurisdiction served as justification for the Brazilian Law to enforce old title deeds in Acre.²⁵¹

Nevertheless, the juridical definition of *benfeitoria* in order to legitimate domain was not tackled by the Brazilian Federal Governments until 1912-13. In fact, the governments were contradictory in this matter since they tried to tackle specific issues without changing the definition of *benfeitoria* itself. In 1860, a Federal Law tackled the question of the size of *seringais* by fixing the maximum extension of a property in $\frac{1}{2}$ league per $\frac{1}{2}$ league.²⁵² In 1874, a Decree²⁵³ intended to meet the specificity of extractive economy but ended up reproducing the same old perspective of trying to make people adopt modern technology, abandoning 'primitive' methods of production. In 1890, even not changing the definition of *benfeitoria*, another Decree foresaw that *seringais* could be registered and as such could be given as mortgage.²⁵⁴ Only in the Plan of Defence of Rubber²⁵⁵ in 1912 the Central Government foresaw modifications in the juridical definition of *benfeitoria* to incorporate specificity of economies in Amazonia. In 1913 it was done by means of Decree²⁵⁶ in which natural grass, when used to sustain cattle, and *seringais* and *castanhais*, when object of effective occupation and economic exploitation, are defined as *benfeitoria*.

Consequently, before 1913, the situation of *seringais* in Acre in regard to legalisation was different from Pará and Amazonas where the re-definition of *benfeitoria*, which was done since 1891-03, allowed a relatively easy process.

In Acre, the problem of the definition of *benfeitoria* in the federal legislation, which persisted until 1913, created difficulties for transferring *seringais*. In the transfer of

²⁵¹ Magalhães op.cit. This author comments the Decree 4.657 of the 9/11/1939, called Law of the Public Registers.

²⁵² Law 1.114 of 27/09/1860.

²⁵³ Decree 5.655 of 3/06/1874.

²⁵⁴ Decree 370 of 02/05/1890.

²⁵⁵ Law 2.543-A of 05/01/1912, regulated by the Decree 9.521 of 17/04/1912.

seringais by sale, heritage, dissolution of commercial partnership and so on, a rubber estate was evaluated and priced as land-forest. The deeds about these transactions in Register Office Archives refers to the size of land-soils in kilometre or metre square, but most of them mentions only the land-forest or the number of rubber paths.²⁵⁷ In some cases the size in land-forest was not the same as the land-soil size so that an extension of *terras devolutas* was incorporated to the *seringal* without being covered by the original title deeds (see chapter 1 footnote 150). It was not illegal, however, because the register in Registry Offices characterises a procedure of legalisation of private property. *Seringais* in Acre were registered in Register Offices since 1904, which means that they were legitimised by the juridical system.²⁵⁸ Consequently, one could not question the legality of a registered rubber estate by means other than by trying to annul the registry of property, and the only way to do so is by taking the case into court, which results in a very slow and complex lawsuit. Moreover, *seringalistas* could argue that they were privatising *terras devolutas* in a area of frontier, which was encouraged by the Brazilian law as was already mentioned.

Furthermore, *seringais* were recognised as estates by the Brazilian governments and governmental institutions, which bought rubber estates in Acre.²⁵⁹ Official banks such as *Banco do Brasil* and *Banco da Amazônia* always regarded *seringais* as legitimate properties, buying, sale and accepting them as mortgage.²⁶⁰

The analysis of INCRA-acre lawsuits confirm the status of *seringal* as private property since it indicates that 44% of the 105 original *seringais* in Acre River District

²⁵⁶ Decree 10.105/1913.

²⁵⁷ Magalhães (op.cit. p. 16) says that *seringais* were sold by public deeds in which only the limits in terms of number of paths of rubber trees were mentioned. So, no-one had the exact idea about the size of the rubber estates in metres square or hectare.

²⁵⁸ See footnote no. 201. The Decree 4.657 of 9/22/1939, the called Law of public registries, art. 293 and 294 which was kept by the Law 6.015 of 30/6/1975 art. 250 and 252 enforced previous registers.

²⁵⁹ Magalhães op.cit. pp. 50-51.

was object of transfer once or very often by heritage, dissolution of entrepreneurial partnership and/or sale since the beginning of the 20th century. It also informs that 16% of those *seringais* was transferred by sale once or many times since the last decades of the 19th century, while 18% was kept by heirs until around the 1960s and the 1970s and then started to be sold as a whole or partially. Thus, *seringal* was an individual right in the sense discussed by MacPherson,²⁶¹ that is, the owner is not required to fulfil any social functions in order to have it and he/she could and can transfer the property freely.

The meaning of *seringal* as individual ownership reveals the weakness of both assumptions by the British Consul's report in 1908, previously mentioned. Indeed, there was nomadic exploitation of the specie Castiloa. But this represented just around 20% of the Amazonia rubber production. Actually his statement was not supported by investigation on the Brazilian property right and on the formal procedures to legalise *seringais*. The Consul said: 'I am not acquainted with the terms of Brazilian land legislation'.²⁶² His letters defending himself from criticisms to his report by newspapers²⁶³ in Belém and by the Revista da ACA²⁶⁴ are quite contradictories. He argued that he was referring to questions around rubber fields in Acre State.²⁶⁵ But the question between Brazil and Bolivia concerned to those rubber fields had already been solved since 1903-04 as previously discussed. And the question of sovereignty over the area of Acre State is different from that of *seringais* as private property, which refer to domain. Moreover, the reports says that 'Very many of the so-called rubber estates are in the nature of claims set up by 'pre-emption' to a prescriptive right rather

²⁶⁰ Ibid.

²⁶¹ MacPherson op.cit.

²⁶² F.O. and Board of Trade 1908, p. 21.

²⁶³ Jornal A Província do Pará, artigo 'A Borracha – O Pará e seu Comércio, 25/20/1908 and artigo 'A Nossa Borracha', 02/11/1908.

²⁶⁴ Benoliel, R. 'A Borracha do Amazonas na Exposição de Londres'. In: Revista da ACA, 5, Manaus, 5/11/1908, p. 3.

²⁶⁵ F.O.368/274 (1909), letter of November 5th, 1908.

than by title deeds to a constitutional property'.²⁶⁶ This is true in part considering that many *seringais* had a provisory deed and were waiting the definitive one which could take years. However, since the moment one required a title deed the estate was legally recognised. Therefore, the owner could sell it as possession. The Consul also used Bates and Wallace's quick reference to the temporary extraction of latex in the lower Tocantins river. But they wrote in 1848 when temporary *arranchamentos* were still being carried out in non-privatised rubber fields. In 1908, when the report was written, the situation was completely different as the most rubber fields were already private property. Finally, the report expresses the distorted interpretation of the difficulties estates producing rubber only had to be legalised due to the concept of *benfeitoria* in the Brazilian law.

The main point is that in fact, the British Consul expressed the stigmatisation of non-devastated nature originated on the Western notion of civilisation when he associates preserved Hevea forest with 'wildness'/'primitivism' and its supposed unfitness with the notion of land property. He says: '(...) the term 'estate' and the idea of settled occupation the world calls up is misplaced when applied to the immense areas of isolated swamp land and virgin forest (...).'²⁶⁷

The association between extractivism and absence of land property by recent literature left this biased description of *seringal* unquestioned as well as the biased view on preserved nature and non-modern technology intrinsic to the notion of *benfeitoria* in the Brazilian law. Like the British Consul, this literature also ignores the historical process of privatisation of rubber fields due to the lack of historical investigations. This allowed the surviving of the notions of temporary undertakings even when the historical context they referred to does not exist anymore. Temporary encampment can be expressing the surviving of the idea of *feitoria* and

²⁶⁶ F.O. and the Board of Trade, 1908, op.cit. pp. 21-22.

²⁶⁷ Ibid p. 21.

arranchamento. *Feitorias* were temporary extractive undertakings during the colonial period, being official or private expeditions to distant areas of valuable extractives products.²⁶⁸ Quintiliano²⁶⁹ refers to similar undertakings to rubber fields as *arranchamentos* around the 1850s and the 1860s, registering the shift from this to *seringais* as estates. Other authors just mention the temporary entrepreneurial production of rubber during the harvest.²⁷⁰

A difference between *feitorias* and *arranchamentos* is that the former were based in slave labour, combined with forms of free labour, and *arranchamentos* were based on free labour only. However, this was not the only form of entrepreneurial production of rubber since agro-exporting farmers around the mouth of Amazon river also produced rubber by hiring rubber tree paths to rubber tapers.²⁷¹ The *arranchamentos* disappear around 1850s and 1860s when it was initiated an expanding process of privatisation of rubber fields.²⁷² Santos²⁷³ says that this process had already reached the distant Madeira and Purús rivers in the Amazonas Province in 1850-70. As was already mentioned the set up of rubber estates or the regionally called *seringal* started around 1848 even in Acre, whose rubber fields were the most distant from the mouth of Amazon river.

The historiography mentioned is more descriptive than analytical. Yet, this historiography indicates the process of privatisation of *seringais* clearly. Thus, absence of historical investigation and the neglect of the local historiography accounts for the sweep aside of this history.

²⁶⁸ Bentes op.cit.

²⁶⁹ Quintiliano op.cit.

²⁷⁰ See Cordeiro 1910, p. 17; Reis 1940; Bonfim op.cit. p. 16.

²⁷¹ Bentes op.cit.

²⁷² Quintiliano op.cit; Bonfim 1954; Reis 1953.

²⁷³ Santos, R. op. cit. p. 72.

Seringal as Private Property of Entrepreneurs Mostly

The sense of *seringal* as rubber estate or private property in the modern sense is useless if not analysed from the broad perspective of historical social relations of land property.

As was mentioned, in my previous research it was found out that the best lands in Amazonia tended to be privatised by entrepreneurs. This is a tendency stressed in the process of privatisation of rubber fields. The possession of initial outlay was the fundamental condition for privatising pieces of rubber fields as long as the donation of *terrás devolutas* finished with the called *Lei de Terras* of 1850. In the delta of Amazon river, initial outlay was necessary for buying either a title deed or a squat from old holders. And the appropriation of *seringais* in *terrás devolutas* required payment to the state and expenditure at least with transport to the wished area. Furthermore, as was discussed in previous chapter, *terrás devolutas* were the most distant areas from local markets and ports.

Thus, the production of extractive rubber in these lands required initial expenses with foodstuffs necessary for surviving during the entire harvest that lasted for 6 or 7 months, and the set up of a minimal physical infra-structure such as houses, warehouse, port. It required also initial investment in workforce skilled in initial tasks such as the recognition of the species of gum, their level of concentration and the first plan of the physical organisation of the enterprise. This work would last a minimum of two days in small *seringais*, having gregarious distribution of rubber trees, and if performed by one *mateiro* (labourer skilled on the task of localising and recognise the species of gum) and two *toqueiros* (the labourer with the attribution of tracing the contours of the future paths). It would be required much more than that time in large estates or in non-gregarious rubber fields. In 1913, one *mateiro*

received around £66,00 per tree localised, and *toqueiro* was a salaried worker receiving from £100,00 to £120,00 per month. So, if this service lasted two days it would cost from £265,00 to £332,45 to the landowner.²⁷⁴

Such economic requirements qualified those people having initial outlay or credit to privatise the best rubber fields. Credit was offered by the local commercial-financial capital, represented by commercial houses, usually backed by foreign rubber dealers or by Brazilian private banks or credit associations as is discussed in chapter six. Exporting houses required easy accessible valuable properties as mortgage such as urban properties, imported boats or official financial titles. As a result, commercial houses became the intermediary in the flux of credit from exporting houses to *seringalistas* since they had the sort of properties accepted as mortgage by exporting houses. At the same time, commercial houses accepted *seringal* and rubber as mortgage, which constituted the *seringalistas'* main properties.

Seringalistas had initial capital and credit. They were immigrants ambulant-merchants and ex-farmers from North East or merchant and farmers from Pará and Amazonas States. In Acre Territory there are evidences of a few salaried workers, performing administrative jobs in estates, who managed to become *seringalistas*. As is discussed in chapter five, salaried workers assuming important positions in the administration of *seringais* could make important savings. There are two published cases. Cabral's brother, who, according to his description, was an accountant in a *Seringal* in Acre in 1890s, becoming a small scale *seringalista* in 1900,²⁷⁵ and the *Seringal* ITU's owner.²⁷⁶ In both cases, salary savings were added to savings brought from their homeland and, then, invested in ambulant trade in Acre, transforming it in expanding capital. After that they could buy small scale *seringais* in less important

²⁷⁴ Chaves op.cit, p. 33.

²⁷⁵ Cabral 1949.

rubber fields. In the case of the *Seringal* ITU's owner, he could buy a middle scale *seringal* in the stretch with the densest rubber fields in Acre. Yet, he had special conditions for that. He got married with the owner's adopted daughter in 1896 and the previous owner was old and planning to go back to north-east. So he could buy the estate according to payment in parcels, getting the legal transmission of the property when he finished the payment in 1902. In this year he required the title deed of property transmission by sale, which was received only in 1906 when Acre was already a Brazilian Federal Territory.²⁷⁷

Moreover, commercial houses from Belém and Manaus as well as foreign companies increasingly bought *seringais*, particularly, in the 1910s. In 1903-04 several commercial houses from Belém requested the legalisation of *seringais* in Acre River District.²⁷⁸ As can be seen in Appendix 1, in 1906-07, seventeenth *casas aviadoras* owned *seringais* in the densest rubber fields in Acre, being eight of them from Belém. In 1913-15, during one of the deepest crises of rubber prices, *casas aviadoras* received several *seringais* as payment of debts by *seringalistas*.²⁷⁹ According to Dean²⁸⁰ European and North American investors increased their investment in Amazonia in 1903-13. Pará's Laws in 1909 and the increasing rubber prices in 1910 encouraged several North American and European companies to buy *seringais*.²⁸¹ In fact, although it was more frequent in the 1910s, since the last decades of the 19th centuries foreign companies and individual capitalists used to buy or rent *seringais*. In 1899 a commercial house from Belém sold 35 of its *seringais* to a company from New York. The total area reached 800 million square metres, having 2.475 rubber

²⁷⁶ Neves, op.cit.

²⁷⁷ Ibid pp. 17-18. See also Diário Oficial 'EL ACRE', Ano II nº 42, 1902; and the Book nº 221 of Registers of property in Register Office of the Tabelião Manoel Antonio Lessa, fls 8 and verse, 02/03/1906, Manaus, in Amazon State. See also ACRE-INCRA lawsuit referring to Seringal ITU in Acre river District.

²⁷⁸ ANRJ, SDA, Cod. 988, vols. 3-5.

²⁷⁹ CC, Índice de Escrituração op.cit.

²⁸⁰ Dean op.cit. p. 81.

tree paths, being all *seringais* situated along the bank of a river in Amazonas State.²⁸²

At the beginning of the 1900s, English entrepreneurs rented rubber estates in Pará.²⁸³ In 1909, two commercial houses from Belém, having several rubber estates in Acre, constituted commercial partnership with English capitalists.²⁸⁴

As landowners of rubber fields and entrepreneurs of rubber, *seringalistas* emerged from 1848 onwards in Amazonia. They had access to credit and were encouraged to privatise rubber fields by local governments as was already discussed in chapter one. Besides that, the *Lei de Terras* of 1850 encouraged the entrepreneurial privatisation of *terrás devolutas* at the same time that it created obstacles to peasants to do so as is discussed in chapter four and the policy for rubber economy in the 1910s encouraged entrepreneurial investments. In such conditions, the most important rubber fields ended up being private property mainly of one class – the capitalist class personalised by *seringalistas*, commercial-financial firms and companies.

Weinstein²⁸⁵ says that the figure of Amazonian *patrão* with his vast domains would be a product of the later boom years when the upriver districts had become the most productive rubber zones and the control of the best hevea fields had been divided between the major commercial houses and a small group of powerful *seringalistas*. Instead, she argues that in the more heavily settled rubber municípios such as Breves, Anajás, and Melgaço in the oldest area of rubber production in Pará State smallholders controlled rubber fields according to small size pieces of land and familial organisation of work.²⁸⁶

²⁸¹ Ibid.

²⁸² CC, Escritura Publica de 17/7/1899, Livro 66, fls. 102-104v.

²⁸³ TJE, Autos Civis op.cit.

²⁸⁴ JUCEPA, Registro do Commercio.

²⁸⁵ Weinstein 1983, p. 45.

²⁸⁶ Ibid.

This is true in part. First of all, because *seringais* as synonymous with large estates emerged in Acre in 1848 and not only in the latter 'boom' years, even so the set up of *seringais* was more intense in the period from 1895 to 1913 as was already mentioned in chapter two. Moreover, the author's findings such as members of one only family holding many plots, one person having even four plots²⁸⁷ in rubber fields in those municipalities as well as the existence of different sorts of owner were not valued as useful for defining who had the effective control over rubber fields.

As was mentioned in chapter one, the analysis of registers of squats in the nine most important municipalities producers of rubber in Pará was carried out. Breves is not included because the questionnaires were damaged in the transport to London. As can be seen on Table 2, it was found 2927 properties producing rubber in these municipalities. The years of concentration of registers can be indicating the expansion of the process of geomercantile privatisation of *seringais*. In most of the six municipalities oldest producers of rubber, more than 80% of rubber estates were legalised in 1892-1898, while in Melgaço 85% were legalised in 1895-1904, Anajás 91% in 1900-11 and, finally, Altamira where 82% were legalised in 1914-15.

Table 2: Registers of Seringais, Pará, 1891-1942			
Municipality	Total of Registers	Period	Concentration Period
Itaituba	619	1891-1911	71% in 1892-1894
Afua	474	1891-1915	62% in 1892-1895
Chaves	231	1891-1905	87% in 1892-1897
Gurupá	297	1891-1903	97% in 1892-1898
Curralinho	224	1892-1903	84% in 1892-1898
Cameta	459	1891-1905	92% in 1893-1898
Melgaço	223	1891-1904	85% in 1895-1904
Anajás	264	1900-1928	91% in 1900-11
Altamira	136	1913-1942	82% in 1914-15
Total	2927		

Source: Registers of legalisation of *seringais* - ITERPA

²⁸⁷ Weinstein op.cit. p. 46.

Table 3 shows that the number of properties does not coincide with the number of owners. There are 2383 owners for a total of 2927 properties since 316 owners in eight municipalities owned a total of 910 plots, each of them having between two and twelve plots. The number of people having two or more plots is even higher, considering that it was not possible to analyse this matter in Altamira. The data processing could not be finished in Belém and in the transport to London questionnaires of Altamira were partially damaged. Consequently, the definition of owners in Altamira does not include the analysis of those having two or more plots, who in fact were entrepreneurs as it was found out in the other municipalities. It means that the number of entrepreneurs in Altamira probably was less than the number illustrated in Table 3.

In the eight municipalities, the type of owner was defined by correlating three variables such as *benfeitoria*, type of owner if individual or companies and quantity of plots owned. In the analysis of *benfeitoria*, deeds mentioning only residential house, which in general was typical of those plots having just a few paths were considered probably peasant properties. Deeds containing residential house and *abarracamentos* or only *abarracamentos* were considered entrepreneurial properties as long as *abarracamento* was the denomination for *seringueiro*' hut. *Seringueiro* was the labourer producing rubber as a subordinate form of labour as is discussed in chapter four.

The results indicate that in the rubber fields situated in the nine most important municipalities producers of rubber in Pará, particularly in eight of them, 55% of owner were entrepreneurs and 45% peasants. However, in the total of 2927 properties producing rubber, 63% were enterprises and 37% peasant properties. In Itaituba 85% were entrepreneurial property, in Gurupá 72%, in Cameta 70% and in Anajás 62%. In the others municipalities 50% or more were entrepreneurial property, with

exception of Altamira where the great majority seems to be peasant property and only 18% entrepreneurial property.

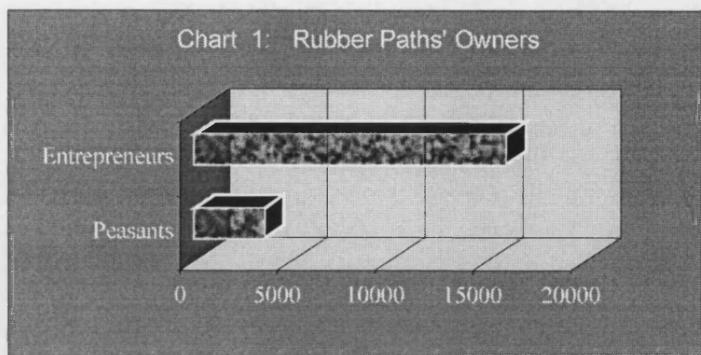
Table 3: Categories of Owner, Para, 1891-1942							
Municipality	Owners	Entrepreneur	Percent	Peasant	Percent	Entrepreneurial properties	Percent
<i>Itaituba</i>	485	395	81%	90	19%	529	85%
<i>Afua</i>	428	215	50%	213	50%	261	55%
<i>Chaves</i>	188	79	42%	109	58%	122	53%
<i>Gurupa</i>	223	139	62%	84	38%	213	72%
<i>Curralinho</i>	160	47	29%	113	71%	111	50%
<i>Cameta</i>	405	268	66%	137	34%	322	70%
<i>Melgaco</i>	153	37	24%	116	76%	107	50%
<i>Anajas</i>	209	109	52%	100	48%	164	62%
<i>Altamira</i>	132	20	15%	112	85%	24	18%
Total	2383	1309	55.00%	1074	45.00%	1853	63%

Source: Registers of legalisation of seringais - ITERPA

The entrepreneurial control of rubber fields is even more meaningful when the geomercantile feature of privatisation of land as land-forest already discussed is taken into account. As illustrated on chart 1, the results of the correlation between the variables 'number of rubber tree paths' and '*benfeitoria*' shows that the Hevea-forest was massively owned by entrepreneurs rather than by peasants. There is missing information about the number of rubber paths in around 25% of peasant properties and around 19% of entrepreneurial properties. The valid cases illustrated that in the total of around 19.915 Hevea paths, only around 18% were located on peasant properties, while more than 82% lied on the entrepreneurial properties.

Besides that, while in entrepreneurial properties one path usually had between 100 and 150 trees, rubber paths having just 40 to 80 trees were quite frequent in peasant properties. To sum up, although peasants owned a reasonable percentage

of properties producing rubber, entrepreneurs owned the majority of property and more than 80% of the Hevea land-forest.



Source: Registers of Seringal legalisation - ITERPA

These results deny the notion that in Pará smallholders controlled rubber fields according to small size pieces of land and familial organisation of work. In fact, rubber fields as land-forest in Pará were owned by entrepreneurs mostly. When the variables 'number of rubber paths' and '*benfeitoria*' are considered, there is a higher percentage of small scale entrepreneurial production of rubber in Pará, around 75% of valid cases, when compared to Acre. Nevertheless, it has to be considered that 316 or 24% of entrepreneurs owned between two and twelve properties. So, small scale rubber production in one property does not mean small scale entrepreneur. Furthermore, it has to be taken into account that only 41% of the total of 2927 properties produced rubber only. That is, 59% produced rubber in association with other economic activities. Although in Gurupa, around 60% produced rubber only, in Itaituba 54% and in Melgaco 50%, in Altamira and in Cameta only properties producing rubber in association with cocoa reached 85 and 42% respectively. In the other municipalities the properties producing rubber only reached less than 50%. So, if most of entrepreneurial properties producing rubber in Pará can be considered small scale producers of rubber it does not mean that they were small scale agro-

extractivist familial producers because many entrepreneurial agro-extractivist properties had a few rubber paths, which were hired to rubber tapers during the harvests. In my previous research I found out that it was done even by State agro-extractivist farms in the 1860s,²⁸⁸ and Wallace mentions entrepreneurial farms cultivating cocoa in association with rubber production around Belém in 1848.²⁸⁹

In Acre River District in Acre Territory, the stretch of densest rubber fields, were privatised according to entrepreneurial property only. The INCRA-Acre's lawsuits about the original *seringais* in this area shows the existence of just 105 original large rubber estates, comprising an extension of 1.592.676,5378 ha. This re-enforces information by Falcão,²⁹⁰ who mentions 80 *seringais* situated along and around Purús and Acre rivers, in 1907, which constituted the stretch with the most important rubber fields in Acre River District.²⁹¹ As can be seen in Appendix 1, in 1906-07, this stretch was owned by 39 *seringalistas* and 17 commercial-financial firms, being 8 firms from Belém, which owned 15 estates, and 4 businessmen from Manaus and Belém. Among them, 74 produced around 4.540 tons of rubber, considering that 6 have missing information on this matter.

Thus, the most important rubber fields in Pará were turned into private property of entrepreneurs mainly, while the stretch with the densest rubber fields in Acre River District, in Acre Territory, was privatised as large estate only. The census of 1920 and 1940 shows land concentration in Acre. As Table no. 4 illustrates in 1920 the proportion of properties having more than 10.000 hectares was only 6% of the total. However, they represented almost 85% of the privatised lands in Acre Territory. In 1940 land concentration was intensified. The properties having more than 10.000 hectares represented 19% of the total number of properties, covering almost 92% of

²⁸⁸ Bentes op.cit., part II, chapter 1.

²⁸⁹ Wallace 1939, p. 92.

²⁹⁰ Falcão, 1906-07.

²⁹¹ Euclides da Cunha 1946.

the privatised lands. Regarding the person in charge of the property, in 1920, 74% was owner, 16% tenant and 10% administrator. Yet, in 1940, the number of properties under the responsibility of tenants reached 46%, while 28% remained in charge of the owner. This indicates the increasing hire of *seringais* by *seringalistas* after the deepest crisis of rubber in 1913-15. A new category in 1940 was the occupier, which is mentioned for the first time, representing almost 14% of the responsible for the property.

Table no. 4: Land Property in Acre - Census 1920 and 1940

Owner/Area(ha)	Quantity of Establishments				Area (ha)			
	1920		1940		1920		1940	
	Quant.	Percent	Quant.	Percent	Ha	Percent	Ha	Percent
Category of Owner								
Individuals	1128	96,4%	460	43,9%	3.617.429	87,2%	4.089.692	59,2%
Other private property	42	3,6%	195	18,6%	530.154	12,8%	2.678.894	38,7%
Public Institution			377	36,0%			30.108	0,4%
Without Information			15	1,5%			116.015	1,7%
Responsible for the property								
Owner	864	7,8%	294	28,0%	1.222.460	29,5%	2.599.033	37,6%
Tenant	185	15,8%	479	45,8%	1.753.433	42,3%	3.456.693	50,0%
Occupier			144	13,8%			14.702	0,2%
Administrator	121	10,4%	118	11,2%	1.171.690	28,2%	770.201	11,1%
Without Information			12	1,2%			74.08	1,1%
Property Area(ha)								
Less than 100	647	55,3%	540	51,6%	11.402	0,3%	12.067	0,2%
100 to less than 1.000	303	25,9%	124	11,8%	116.420	2,8%	44.149	0,6%
1.000 to less than 10.000	150	12,8%	137	13,1%	508.189	12,2%	515.608	7,5%
10.000 or more	70	6,0%	197	18,8%	3.511.572	84,7%	6.342.885	91,7%
Without Information			49	4,7%				
Total	1.170	100%	1.047	100%	4.147.583	100%	6.914.709	100%

Source: IBSGE, Censos Economicos 1975, Censo Agropecuario Acre, Serie Regional, Vol. I, Tomo 2, pp. 2-3
Duarte op.cit. pp. 28-29

Conclusion

Seringal emerged in 1848 and expanded intensively particularly in and after the 1870s favoured by both a conjuncture of general tendency to increasing rubber

prices, resulting from the increasing industrial demand for rubber, and the offer of easy credit and export services to large-scale production of raw material by foreign capitalists, and encouraged by local governments.

Seringal means rubber estate or private property in the modern sense. The specific feature to be stressed is that the privatisation of rubber fields represented the continuation on time of the historical pattern of land property in Amazonia in which the best lands tended to be privatised by entrepreneurs. The stretch having the densest concentration of the best species of gums in Acre was privatised according to *seringais* as synonymous with large estate. Moreover, different from the idea of *seringal* as entrepreneurial property being a phenomenon of the later boom years in Acre State, it is a phenomenon which emerged from 1848 onwards all over Amazonia, including Acre. Furthermore, in Pará State rubber fields in the nine most important rubber producing municipalities were privatised in great extent by entrepreneurs individually or under the form of companies. Although peasants owned a reasonable percentage of properties producing rubber, the best Hevea forest was greatly owned by entrepreneurs.

The material presented reveals that the association between extractivism and absence of private property represents the neglect of the geomercantile process of privatisation of rubber fields in Amazonia and biased view on non-devastated nature and non-modern methods of production intrinsic to the Western notion of civilisation. This view on nature was expressed in the definition of *benfeitoria* in the Brazilian law, imposing difficulties to the legalisation of those *seringais* producing rubber only. This definition was changed in the Brazilian law only after 1912 as part of the plan of defence of rubber. As a result, in 1908, these difficulties could be manipulated and distorted by the British Consul in Pará in an attempt to mischaracterize *seringais* as private property, presenting rubber production as nomadic and lacking permanent and legal privatisation of land. Thus, the revival of the association between

extractivism and absence of land property by recent literature results from the absence of historical investigation, ignoring the historical process of geomercantile privatisation of rubber fields. As a result, the definition of *benfeitoria* in the Brazilian law before 1912 and the biased view on *seringais* presented by the British Consul in 1908 were left unquestioned so that they could survive somehow through the literature.

Chapter 3

THE AVAILABILITY OF LABOUR FOR SERINGAIS

The material presented thus far raises questions about the extent to which the existence of free land shaped rubber tapers as autonomous producers²⁹² and gives ground to the discussion of our argument that rubber tappers were engaged in *seringais* as subordinate labour. The best Hevea forests constituted the private property of entrepreneurs rather than of peasants, suggesting that the peasantry's rubber production was secondary to entrepreneurial production. Moreover, it has to be considered that peasant rubber production can be said to be non-capitalist but can never be said to be pre-capitalist. Familiar producers or peasants in Amazonia do not constitute a pre-capitalist phenomenon as feudal-peasants did in Western Europe since they emerged in and from the historical process of capitalist expansion, and even peasants or peasant-workers from different areas in Amazonia and the North East Region were attracted by, and engaged in, *seringais* not as autonomous producers but as subordinate labour.

A fundamental step in demonstrating the condition of the direct producer of rubber as subordinate labour is to discuss the availability of labour or the existence of a free labour market as a result of a long historical process of making labour, involving multiple social relations and processes in which the geomercantile patterns of social relations of land property plays an important role. As Malagodi²⁹³ argues, taking command of the process of production in capitalism, subduing the work of direct producers, requires as one of the first conditions the ownership or control over means of production. In the geomercantile pattern of privatising land, it is apparent that land property has the meaning posited by MacPherson, this is, it is an institution '(...)

²⁹² Pacheco de Oliveira op.cit.; Weinstein 1983, chapter 1, and 1984.

²⁹³ Malagodi 1995 pp. 29-30.

created or re-created and kept for the aim of meeting the wants of the class which command the process of production".²⁹⁴ In this sense, the social relation of land property is connected with the entire process of subduing direct producers or turning them into labour.

The argument is presented by dealing first with the historical formal and informal process of making labour in Amazonia to demonstrate the internal availability of labour to *seringais*. The rest of the chapter deals with the problem of shortage of labour for distant *seringais* in Acre, particularly from the 1870s to the 1910s when the conjuncture was of intense production and spreading rubber enterprises. The shortage of labour brought about recruitment as an intrinsic part of labour engagement. *Seringais* in Acre had a problem even anterior to that of controlling their labourers; they had to find and recruit them first. Therefore, the first main problem confronting employers was the recruitment of sufficient labour which involved tasks such as the attraction of labour with a willingness to learn the skills consonant with the methods of producing rubber, the promotion of the work pattern and the recruitment of labour in distant labour markets.

The Formal Historical Process of Turning Natives into Labour

In the geomercantile privatisation of land the best lands tended to be privatised by entrepreneurs. This tendency expresses social relations of land property in which direct producers were to a great extent excluded from the best lands. This condition had a major influence in the making of labour. The starting point in the history of labour in Amazonia is the freeing of land from The First Nations, initiated in 1615-16. This was followed by the geomercantile privatisation of land that was combined with the process of turning them into labour. The Portuguese and other Westerners depended upon The First Nation's labour and skills in order to exploit local resources and produce commodities. Natives were the exclusive source of labour until 1680. When their

²⁹⁴ MacPherson op.cit. p. 1.

enslavement was outlawed in 1755, followed by the increasing adoption of African slaves, they were still the predominant source of labour.²⁹⁵ Accordingly, apart from African slavery which was a phenomenon of the period from 1754 to 1888 (although African slaves had started to be adopted slowly and on a small scale since 1680) the history of labour, particularly until the first decades of the 19th century, was fundamentally a historical process of transforming natives into labour.

Early capitalism in Amazonia assumed the form of a colonial economy, employing different kind of labour, including slaves who were used as commodities. As such, native slaves were cheaper than African ones. This was one of the main reasons for the predominance of native slaves in poorer areas throughout the country.²⁹⁶ The higher prices of African slaves, in turn, transformed them into a characteristic of the richest economies and their possession into a sign of status and prosperity²⁹⁷ in which, according to Lobo,²⁹⁸ natives were replaced by African slaves as soon as an economy expanded.

The prohibition of the enslavement of natives in 1755 followed by the incentive to adopt African slaves in Amazonia, stemmed from a slight economic expansion represented by the central role Belém assumed as the only official port for the export of gold produced in Mato Grosso.²⁹⁹ However, the Pombalina policy aimed at rationalising the economy during the period 1751 to 1777,³⁰⁰ played a central role. This policy was part of the Portuguese crown's policy of economic recuperation of Portugal initiated in 1640.³⁰¹ It involved the politico-administrative reorganisation of Brazil through the centralisation of administration to improve control over tax receives,³⁰² and stronger imposition of Western economic rationality.

²⁹⁵ Bentes Feb./1992, chapter 3, p. 158.

²⁹⁶ Werneck Sodré 1979; Lobo 1952.

²⁹⁷ Gorender 1985

²⁹⁸ Lobo op.cit. p. 327.

²⁹⁹ Lapa 1973.

³⁰⁰ Alvara with power of Law of 07/06/1755, analysed in Bentes op.cit. p. 172.

³⁰¹ See Dias, M. 1970; Lobo 1952; Arquivo Nacional (Brasil) 1985 and analysis of this literature in Bentes Feb.1992 Part II, chapter 1.

³⁰² Arquivo Nacional (Brasil) 1985, p. 55, Lobo op.cit. p. 374.

African slaves did not become the dominant kind of labour, though. In 1823, after the independence of Brazil from Portugal, the population of Pará Province was 128,127, of them 22% were slaves.³⁰³ Santos³⁰⁴ data on the number of black slaves in Amazonia from 1800 to 1840 indicates an annual average of 30,841, reaching a peak in 1830 with 39,958 black slaves. In 1862, there were 30,847, but representing only 15.5% of the total population of Pará province.³⁰⁵ In June 1884, there were 20,849 slaves working in 9,872 sugar and rum mills, but by 1888, when black slavery was abolished this number had been reduced in around 50%.³⁰⁶

This reduction was the result of a number of factors including escapes to *quilombos*,³⁰⁷ death, and the sale of some of them to 'owners' in South East Brazil.³⁰⁸ Regarding interregional trade, there are indications that Pará won slaves.³⁰⁹ Yet, the sale of African slaves to the Southeast was an important feature of the last decades of slavery in Pará, expressing their high cost to local investors. This relatively high cost resulted not only from the great distance from Africa and distance from redistributor ports in Brazil but also strong competition among slavers which put slavers from Pará at a disadvantage to those from city-ports such as Recife, Salvador and Rio de Janeiro.³¹⁰ Moreover, as Marin³¹¹ stresses, slavers in Pará faced difficulties keeping African slaves, not only due to the end of trafficking in slaves in the middle of the 19th century and the direct political pressure of the internal abolitionist movement, but particularly due to slaves constantly escaping and organising *quilombos*. This demanded both government and private expenditure to organise means of capturing

³⁰³ Baena, A. 1839, pp. 282-371. See analysis of this book as source of historical research on Marin 1985, pp. 244-255.

³⁰⁴ Santos, R. op.cit., p. 59.

³⁰⁵ Pará. Presidente da Província, 1862 pp. 57-66.

³⁰⁶ Moraes 1984, pp. 39-40, quoted from Bentes Feb. 1992, chapter 3, p. 188

³⁰⁷ See on this subject Salles 1973 and Marin op.cit.

³⁰⁸ Bastos, A. 1938, p. 179; Viotti da Costa 1982; Marin op.cit.; Bentes Feb./1992, chapter 3, p. 188.

³⁰⁹ Marin op.cit; Pará. Presidente da Província 1871 p. 39, quoted from Bentes op.cit.

³¹⁰ Gorender 1985, pp. 189. On the difference of prices between 'Indian' and African slaves in Pará see Lobo op.cit. p. 319 and D'Azevedo 1900. On the high price of African slaves, particularly during the ascension of the mining economy in Minas Gerais, see Simonsen 1957, p. 199.

fugitives. In the last decades of slavery, the high cost of keeping African slaves was used as a justification by local merchants opposed to the Dec. no. 6980 of 20/7/1878 and Law no. 2940 of 31/10/1879, under which both the hiring and selling of slaves were taxed as a disincentive to the idea of merchandising human beings.³¹² They opposed the Pará custom, arguing that:

'(...) the slave exists and that is bad, but the law allows it. Consequently, it can not prevent the owner from exerting his/her legitimate interest. One can not and may not prevent the owner from transferring slaves if he/she can not afford to keep them. Under these circumstances, the selling of slaves does not appear as the stigma of human traffic'³¹³(our translation).

The declining number of African slaves was also a result of the progress, albeit slow, made in releasing different categories of them, particularly after Law no. 2040 of September/1871 that set aside federal funds for this purpose. The President of Pará Province reported that this grant led to the release of a total of around 472 African slaves in 1882.³¹⁴

The point to be stressed is that African slavery was a secondary form of labour used in conjunction with the important native labourers in Amazonia. Regarding labour, and particularly rural labour, it can be seen mainly as a historical phenomenon created by dispossessing The First Nations of land, thereby training-constraining the natives to work as subordinate labour. This was a process commanded and intentionally carried out by the Portuguese monarchy and Western capitalists, who imposed their roles and rationality on the organisation of work and life. This was a long historical process lasting from 1615-16 to at least the third decade of the 19th century, involving many secondary processes.

The geomercantile privatisation of land required the freeing of land from The First Nations, a process that was combined with making them labourers through a combination of the use of force and strategies of ideological subordination. The chief

³¹¹ Marin op.cit. pp. 308-314.

³¹² Decree 6980 of 20/7/1878 and Law 2940 of 31/10/1879.

³¹³ Request to the ACP. In: ACP, Relatório Annual de 1881, p. 31.

³¹⁴ Pará. Presidente da Província 1882a, pp. 84-87, quoted from Bentes op. cit. pp. 188-189.

ideological strategy adopted by the Predatos constituted the absorption of the natives' knowledge, followed by the dispossession by the latter of this knowledge. In the period 1500 to 1615, representatives of the Portuguese Crown and traders were not just bartering with the natives. On the contrary, absorption of their accumulated knowledge and skills on nature and exploitation of natural resources, and on their economic, social, cultural and political organisations were being carried out concomitantly. This was done by manipulating the friendly way natives received the Portuguese and Westerners in general, as well as the way in which the society shared knowledge and skills - by oral processes, for free.³¹⁵ That is as use value instead of as a commodity.

The natives' dispossession of their lands was based on the use of this knowledge against them. At the same time, that they were classified as 'savage', 'uncivilised' and unable to produce knowledge. This intellectual exclusion assumed the form of scientific and institutionalised ideology. In the 17th and 18th centuries, Western intellectuals classified the inhabitants of The First Nations of the American continent as not human beings but half way between humans and animals.³¹⁶ The evolutionary scientific discourse of the 19th century argued that they had imperfect development, so that they would degenerate without ever reaching maturity. For this reason, they were classified by science as remains of an old humanity, destined to extinction.³¹⁷

Despite controversy over this view, which never reached the point of recognising them as normal human beings, and in spite of the Brazilian legislation not accepting this scientific explanation entirely, the classification of natives as under-developed human beings constituted the ideological justification for the set up of a system of tutelage and 'civilisation' that was, in fact, a process of making the natives into the labour required for the production of commodities for the international market.

'Civilisation' was a policy carried out to meet the needs and demand of labour by the class commanding the production of colonial commodities. The removal of The

³¹⁵ Bentes Feb. 1992, Part II, chapter 2.

³¹⁶ Carneiro da Cunha 1992 and 1992a. See also Giddens 1993, chapter 2.

First Nations from their land and their subsequent transformation into labour involved two legal and institutionalised procedures, chiefly by official war expeditions. At first, catholic priests, who were salaried workers of the Portuguese Crown, tried to convince them to abandon their lands and move to catholic *aldeias*. Those refusing this 'pacific' form of recruitment were arrested as prisoners of war, and under such status were legally sold into slavery.³¹⁸ Those who were recruited were turned into so-called *Indio forros*, who were salaried workers under the condition of wards of priests, by special training in *aldeias*.

Aldeia was the chief institutional structure under which these people were cleansed of their mother languages, cultural background, way of living and were taught-constrained to behave according to the Portuguese pattern of religion, culture and way of living, not as autonomous producers, but as labour. They were trained in professional skills and taught-constrained to acquire submissive and passive behaviour according to the hierarchical organisation of work and life in the society that was emerging in the region, which contrasted with their previous social organisation of work and life. Catholic priests administered their lives and allocated them to farmers and other businesses until the middle of the 18th century. Even so, in the first stage of the process of making labour, the First Nations' cultural background survived partially. The priests organised a common language (the *lingua geral*), which originated from the mix of their different mother languages.

Nevertheless, in 1663, a slow process of secularisation of *aldeias* began, which was completed in 1751,³¹⁹ when *aldeias* were given the institutional form of *Diretórios* under secular administration. This was combined with the prohibition of their enslavement in 1755 and encouragement for the Portuguese to intermarry with them. This policy

³¹⁷ Carneiro da Cunha op.cit; Carneiro da Cunha e Farage, 1987.

³¹⁸ They could be prisoners taken in official or private wars against them (Bentes February 1992, chapter 3 pp. 160-161). See on legal forms and processes of turning people from The First Nations into either slaves or labour under the tutelage of catholic priests, Raiol 1900, p. 122; D'Azevedo op.cit. p. 48, Malheiro 1867; Leite 1943, Lobo 1952; Quintiliano,1963; Cruz 1973.

included the prohibition of the *língua geral* and stronger constraints to speak Portuguese and adopt the pattern of behaviour established by the Portuguese. This policy was justified on the grounds of economic rationalisation and integration of natives into the colonial society.

Except for those who intermarried with the Portuguese, integration was achieved mainly through the use of native as labour under different forms of tutelage, such as *ex-índio forros* who received plots around villages and *Diretórios* who became peasant wards of the secular administration of *Diretórios*, a situation that lasted until December 1831.³²⁰

In fact, most of the *ex-índio forros* were kept as salaried workers under tutelage. What changed was the form in which the tutelage was exerted. They were made wards of the administration of the *Diretórios*³²¹ instead of priests as before. In 1761, in the Capitania of Pará, half of the 2,520 *ex-índio forros* were distributed to farms. The other half who remained in villages or *Diretórios* was distributed as labour to different official and private businesses. In the Capitania of Rio Negro in 1774-5, there was a similar situation. Among 3,243 *ex-índio forros*, just 15% were working on their own land, while 85% were labouring on private farmland or in businesses situated in the villages.³²² Moreover, farmers could now keep those with the status of ex-slave, who had became wards of judge, provided application was made to the judge who was known as the 'judge of orphans' for permission to keep the ex-slaves as serfs.

Apart from tutelage, *ex-índio forros* and ex-slaves were already free in the sense that they were acculturated workers, not owners of the means of production and were dependent on the owners for performing their job. Most of them seem to have continued under this condition even when they became free of any form of tutelage in the first half of the 19th century.

³¹⁹ Bentes op.cit., pp. 168-175; D'Azevedo op.cit. p. 108.

³²⁰ Bentes op.cit p. 179.

³²¹ Ibid, chapter 3, pp.173-178.

³²² Ibid.

After the middle of the 18th century, native ex-*indio forros* and ex-slaves constituted one of the main historical sources of free labour.³²³ They increasingly blended with European peasants brought about both by spontaneous and official immigration from the middle of the 18th century onwards. The mixed population expanded even more as African slaves or ex-slaves were blended in.

This process coincides with the appearance of temporary or unemployed labourers. Seasonal or temporary labourers living in Belém are estimated to have reached 13% of the population in 1793. According to the racist classification of the official statistics, the black, 'Indian' and mixed population reached a total of 1,099 people. In 1822, this population constituted 9% of the Belém population.³²⁴ According to Marin,³²⁵ the owners' difficulty in imposing their own rules on this labour was expressed in the national law that treated those without permanent jobs as indolent and nomads, naming them vagabond, which was the ideological justification for treating them as cases for the police. According to this author, it was from this perspective that the President of Pará province said that the problem of Pará was not the lack of labour but the fact that labourers were not keen on working in plantations.³²⁶ One issue not mentioned by Marin is that this population was the heir to the social stigma that had originated in the ethnic-cultural discrimination against The First Nations or against African slaves who were expected to be nothing more than subordinated labour, which made them susceptible to that sort of classification, and to official recruitment even if they were free.

These reasons together brought about the idea of creating the so-called *corpo dos trabalhadores* in 1838, which was an organisation of labour combining the use of force

³²³ Free labourers are, in both senses as non-slave and non-possessors of the means of production.

³²⁴ Salles 1973, p. 154.

³²⁵ See analysis on the national law and discourse by Brazilian and Pará Province governments about those they considered as having an indolent and nomadic style of life, in Marin, 1985 pp. 245-151.

³²⁶ Marin op. cit. p. 244.

with contracts of location of service. Marin³²⁷ argues that this organisation represented the persistence of the official conception of creating labour by means of official institutions combining tutelage and hierarchical internal organisation until the middle of the 19th century. The *corpo dos trabalhadores* recruited, trained and distributed labour to farmers and factories and other private and public businesses in villages, towns and in Belém when there was a shortage of labour in the period *post-cabanagem*. The author shows how similar this conception was to that of *Diretórios* (the secular institutional form assumed by the previous catholic *aldeias*) insofar as labourers were under the central hierarchical administration being trained, as the type of labour demanded by manufacturing, commercial and country enterprises. In 1848, the *corpo dos trabalhadores* was composed of 5,562 labourers, 62 officials and 56 subalterns; in 1853-1854 it had 2,544 labourers, 41 officials and 299 subalterns, and in 1855, 4,064 labourers, 47 officials and 280 subalterns.³²⁸ However, this organisation did not absorb all of the unemployed and temporary labourers. In 1849, the President of Pará Province stated that there were around 60,000 male individuals available without a permanent job, which would represent $\frac{3}{4}$ of the Province's population.³²⁹

The Informal Historical Process of Turning Direct Producers into Labour

Besides the official policy of creating labour by means of institutions such as *aldeias*, *diretórios* and *corpo dos trabalhadores*, there was an informal economic and political process of achieving this by narrowing the conditions whereby the landless could become autonomous producers, or reducing the number of remaining nations. Deep forests and lands far away from the main riverbanks and ports that had the status of *terras devolutas* constituted the space where remaining nations managed to survive and fugitive black slaves ran away and organised *quiilombos* as well as where

³²⁷ Marin op.cit.

³²⁸ Marin op.cit. p. 252.

³²⁹ Pará. Presidente da Província Fala 1849, p. 22.

the poor landless could appropriate pieces of land. Life on those lands was hard, though.

First of all, this population already depended on the market for products that they could not produce themselves. Usually, they traded with nearby landowners who had a commercial house in their properties or with mobile traders, the *regatões*, who came irregularly. In both cases it meant buying over-priced goods and selling their products according to the price offered by these merchants, as they had no options. According to Salles,³³⁰ people leaving in *quilombos* around Alenquer and Óbidos came to Óbidos in secret in the evenings to commercialise their products with *regatões*. There are also plenty of references to remaining nations trading with *regatões* (or mobile merchants) as well.³³¹

Second, they were confined to a poor and difficult life far away from health care, education etc. The autonomous occupation of those lands involved risks of disease or death owing to unhealthy living conditions. Even official settlements sometimes failed as a result of improper sanitary services in swamp areas.³³² Official Reports mentioning the availability of *terrás devolutas* far away from consuming centres date back to 1705. They say that the poor landless had access only to those distant lands in contrast to the powerful people with large estates in fertile *varzeas* near waterways and consuming centres.³³³ When some of them got land of good quality they were vulnerable to expulsion depending on the valorisation of different layers of land provoked by changing markets as well as the legal complexities of the matter. In 1848, Bates mentioned that all land around the riverbanks was divided into large estates.³³⁴ In my previous research I found out evidences that the expulsion of the landless trying to occupy a piece of land was an immediate and commonplace action

³³⁰ Salles op.cit. pp. 236-238.

³³¹ Bentes op.cit. Part II, chapters 3 and 5.

³³² For instance the private settlement colonial N.S. do O in 1858-59 in Para State (Bentes op.cit. Part II, chapter 5, p. 250)

³³³ See Bentes op.cit., Part II, chapter 5, pp. 236-237.

³³⁴ Bates 1979, p. 86.

taken by landowners in order to prevent them from creating the legal condition foreseen by the Brazilian law.

In this context, geomercantile land property served as a barrier to direct producers. The Brazilian land property rights after 1850 created obstacles to direct producers' access to *terras devolutas*, insofar as it encouraged entrepreneurial privatisation and prohibited appropriation of those lands by any way other than by sale, so that the poor landless had no means of accessing them legally. Remaining nations and peasants were expelled or had their free access blocked in *terras devolutas* that become valuable as a result of changing markets. For instance, areas of free extraction of latex disappeared after the middle of the 19th century,³³⁵ as did areas of free picking of Brazil nuts in South East of Pará State in the 1920s.³³⁶ Regarding the remaining nations, a policy of legalising and/or donating them land appeared after the middle of the 18th century. Even so, attached to this practice was a policy of turning them into Portuguese subjects and different forms of official tutelage, during the 18th and the 19th centuries.³³⁷ In this sense, they were in a similar condition to remaining nations all over Brazil.³³⁸

Carneiro da Cunha³³⁹ does not distinguish forms of tutelage over remaining nations from those over *Indio Forros* and slaves. She talks about 'Indian Reservations' as if they were ex-catholic *aldeias*. Although there may have cases of it, catholic *aldeias* in Amazonia were turned into villages and towns from the middle of the 18th century onwards. Engracia de Oliveira mentions 42 towns that originated from catholic *aldeias* or the merger of two or more of them.³⁴⁰ Câmara shows this same process in Bahia State,³⁴¹ while the so-called 'Indian' Reservations emerged from another

³³⁵ Reis 1953; Engracia de Oliveira 1983.

³³⁶ Da Matta 1979; Emmi 1988; Bentes 1992a.

³³⁷ See Malheiro 1867; D'Azevedo 1900; Leite 1943; Bentes op.cit, chapters 3 and 5.

³³⁸ Carneiro da Cunha op.cit.

³³⁹ Ibid.

³⁴⁰ Engracia de Oliveira 1983, pp. 189-191.

³⁴¹ Camara s/d.

historical process involving the secular struggles by remaining nations to keep their old territory or get new lands.

However, Carneiro da Cunha stresses that the official policy towards remaining nations' lands was combined with the intent to make them labour. The tendency throughout the 19th century was to confine remaining nations into reduced areas until they could not perform their traditional organisation of work and life while at the same time they were offered manufactured instruments of work in order to get used to and dependent on them, until they started to buy these instruments. When they did so, farmers tried to take their lands arguing that they were not 'Indian' anymore.³⁴² The legislation gave ground for the expulsion of some remaining nations from rubber fields, engaging some of their members as labour into *seringais* after the middle of the 19th century.³⁴³ At the conjuncture of the ascension of the rubber economy, English and North American companies constructing railways demanded and caused the physical elimination, removal or destruction of remaining nations.³⁴⁴ English engineers demanded a quicker removal of remaining nations, who, according to them, were 'infesting' the areas where they wanted to build railways.³⁴⁵

Despite this history, several remaining nations survived. For instance, in Acre alone there are 25 'Indian Reservations', which occupy 11.5% of the total area of the State³⁴⁶ nowadays. This historical result stems from different processes such as, for example, the remaining nations' struggles. Yet, the geomercantile pattern of social relations of land property played a great role. Remaining nations usually moved to distant central lands since it was almost impossible to keep or get tracts of the best lands that were the object of competition by investors. Regarding Brazilian direct

³⁴² Carneiro da Cunha op.cit. pp. 141-149.

³⁴³ Ferreira de Castro, 1955, pp. 78, 85, 87-88; Chaves op.cit. p. III and p. IV; Brockway op.cit. p. 148.

³⁴⁴ F.O.13-492 (1872) and F.O.13-543 (1878); see also the romance 'Mad-Maria' by Marcio Souza.

³⁴⁵ F.O. op.cit.

³⁴⁶ SEPLAN-Secretaria de Estado de Planejamento (1993) Programa Estadual de Zoneamento Ecológico-Econômico do Acre. Rio Branco, Acre: Governo do Estado do Acre, quoted from De Carlo,S. 1996.

producers, the geomercantile land property created difficulties for them too in getting or keeping pieces of the best lands. This social relation of land property constitutes one of the main reasons why peasants, as autonomous producers and sellers of their products, emerged mainly from official settlements of familial producers aimed at supplying the internal market with foodstuffs.³⁴⁷ From the middle of the 18th century and in the 19th century there was a permanent policy of settlements.³⁴⁸

The point to be stressed, however, is that the geomercantile privatisation of land was linked to forms of turning direct producers into labour, as already discussed. Even the policy of immigration was also a policy of making labour. During Pombal's policy of immigration, from 1751 to 1777, natives were settled close to some of these settlements under the ideological justification of 'civilising' them by their contact with Westerners. In fact, native settlements were aimed at offering labour to those immigrants wanting to ascend to entrepreneurial small production.³⁴⁹ Moreover, the *Lei de Terras* of 1850 authorised the immigration of labour by private enterprises. This enforced previous law that conceded layers of the empire's lands to the organisation of free labour colonies.³⁵⁰ Private immigration usually aimed at the immigration of labour that was also encouraged by Brazilian legislation. However, Westerners usually wanted to become autonomous producers and the clash between those different interests led them to abandon private settlements as was the case of the colônia N.S. do Ó in 1858-59 that was abandoned by foreign immigrants, who were replaced by Brazilian immigrants.³⁵¹ Furthermore, even considering difficulties and failures of some official Western settlements, they made an important contribution to the supply of labour. The fact that some immigrants abandoned their plots due to distance from consuming centres and ports, poor natural fertility of soil,

³⁴⁷ Bentes Feb.1992, chapter 5.

³⁴⁸ See on this matter: Penteado 1967; Marin op.cit.; De Lima op.cit.; Moraes op.cit.; Carneiro da Conceição op.cit.; Bentes op.cit.

³⁴⁹ Bentes op.cit., pp. 243-245. Marin (op.cit. p. 339) also mentions native settlements.

³⁵⁰ Marin op.cit.

³⁵¹ Bentes op.cit., chapter 5, pp. 250-255.

diseases, or even insufficient initial support by governments is well recorded.³⁵² They moved to towns or joined the population of the landless, which originated in the blend of Europeans with native and ex-African slaves.

The existence of free labourers in both senses of non-slaves and of non-owners of means of production did not mean a smooth and automatic passage to the condition of subordinate labour. On the contrary, it was marked by struggles. Even in the structural condition of being non-owners of the means of production, the landless' reaction to staying in this condition or to becoming subordinate labourers was always manifested by means of attempts to get a piece of land individually or collectively. Land conflict marked the historical process of capitalism in Amazonia, involving remaining nations struggling to keep their land, the landless trying to keep their squats or getting a piece of good land.

There is plentiful historical information on this phenomenon, the most dramatic event being the *Cabanagem*. During the time that the leaders of this movement assumed power in Belém, the landless occupied large estates of sugar production and destroyed mills, occupied cattle and agricultural farms or estates not exploited by owners.³⁵³ This happened not only in Pará State but all over Amazonia.³⁵⁴ Although the solution to this conflict came by military intervention enforced by British warships, it also involved the concession of land and title deeds to many of them.³⁵⁵

As Marin³⁵⁶ evaluates *cabanagem* from the perspective of the transition from black slavery to free labour, she does not distinguish the claims by the landless and rural workers from those against slavery. However, she criticises the historiography that analysed this movement from the perspective of its leaders, saying that *cabanagem* was a political movement involving different claims and aspirations such as a nationalistic movement headed by layers of the upper class - which needed the

³⁵² Moraes 1984; Carneiro da Conceição 1990; Penteado 1967.

³⁵³ Bentes op.cit., chapter 4, p. 200.

³⁵⁴ Bates op.cit. pp. 126-127.

³⁵⁵ Quintiliano op.cit. p. 141.

political support of subordinated classes in order to challenge the still dominant position of the Portuguese despite the independence of Brazil from Portugal - and a social contest. Moreover, she enlarges on this view, saying that the transition from black slavery to free labour was very complex, involving different 'factors' such as the '*revolte des opprimes*' (cabanagem, political movement against slavery, including passive reactions such as escape etc), demand for technical training of labour to work with machines, economic difficulties such as those concerned with market prices of African slaves, and political issues such as the treaties and the emergence of Brazilian state.³⁵⁷

I argue that because Marin centred her analysis on the transition from black slavery to free labour, she does not stress the complex historical process of making labour in Amazonia. During the time of African slavery, there was a contemporaneous process involving non-slaves, poor peasants and the landless reacting to becoming labour. The aspiration to be autonomous producers was expressed and persisted over time, as one of the motivations for political organisation in rural areas, which also inspired several technical proposals for agrarian reform in fertile varzeas.³⁵⁸

Despite some landless peasants managing to become autonomous producers, the majority was already in the condition of labour. From the middle of the 18th century there are references to free labourers working as tenants on farms, and to forms of wage labour. The tenants' work was characterised by high rotation. One of the reasons for this was the owners' wish to prevent them questioning their right to a land property.³⁵⁹

³⁵⁶ Marin op.cit.

³⁵⁷ Marin op cit. p. 255.

³⁵⁸ Rocha, 1952; Departamento de Imprensa Nacional, 1954 pp. 55 e 160.

³⁵⁹ Cartas do governador Mendonça Furtado de 14/02/1754 e 15/05/1754. In: Annaes da Biblioteca e Archivo Publico do Pará, Tommo III.

Lapa³⁶⁰ says that wage labour appeared first in the navigation business, in which it was already dominant in 1805, because it was easy for slaves to escape during journeys. Mills too employed wage labour to perform administrative tasks and the called *indio forros* received salaries. So, there were forms of wage labour from the very beginning. What is quite clear is that wage labour free of tutelage is a phenomenon more apparent in towns and in the navigation business.

However, it became increasingly apparent after the first decades of the 19th century in rural activities. Records from rural State factories in 1838 and 1839 show that they were run using daily wageworkers.³⁶¹ Moreover, payment of wages in cash seems to have been less common than payment in kind in rural areas. Quintiliano³⁶² mentions the salaried receiving their payment in kind instead of cash soon after the Independence of Brazil in 1822. This is a form of remuneration that very often resulted in workers' debt so further evidence of it is apparent in the revolt of *cabanagem* in which besides the claim for land, rural workers denied their debts.³⁶³ In the middle of the 19th century, the President of Pará Province reported high levels of rural workers' debts.³⁶⁴ In 1863, he reported that ex-members of remaining nations that were inserted in a few *aldeias* organised by governments in the first half of the 19th century were working temporarily in rubber estates under the same form of remuneration.³⁶⁵ The predominant employment of free rural workers was quite clear in 1862 when the President of Pará Province reported that there were 2,849 agricultural establishments in Pará Province, employing 6,856 free labourers and 2,391 slaves, plus 556 pastoral establishments employing 875 free labourers and 554 slaves. It means that 72% of the labour employed in rural enterprises was free labour

³⁶⁰ Lapa 1973 pp. 33-34, see analysis with other historical information in Bentes op.cit, p. 5, footnotes 10 and 11.

³⁶¹ Cartas do Comandante Militar da Expedição do Amazonas of 16/07/1838 and 15/07/1839. In: Governo do Amazonas, 1839. Correspondências com o Governo em 1838 e 1839. Belém, Códices da Biblioteca e Archivo Publico do Pará (originais), volume 837.

³⁶² Quintiliano, 1963 p. 97.

³⁶³ See Bentes op.cit. Part II, chapter 3, p. 200.

³⁶⁴ Pará. Presidente da Província Faria 1849, p. 82.

³⁶⁵ Pará. Presidente da Província Relatório 1862a, p. 12.

and just 28% slave. In artesian and industrial activities there were 1,905 establishments, employing 9,708 free labourers.³⁶⁶ The total population is mentioned to have reached 167,909, being 84.5% free people and 15.5% slaves. Analysing this same data, Marin says that the predominance of free labour included a variety of categories of labour from smallholders to wage labour.³⁶⁷ In the middle of the 19th century, slavers or administrators of slavery farms used to advertise in newspapers available paths of rubber plants to be hired inside their farms and the final selection of the tenant was made by auction, suggesting a high availability of labour.³⁶⁸

Belém was the main local labour market in the region, having the highest number of artisan and industrial establishments in 1862, so that in this city could be found a higher proportion of free labour. According to the President of Pará Province, in 1862 there were 1,905 artisan and industrial establishments in Pará employing 9,708 free labourers. 67% of these businesses and 78% of those labourers were located in Belém.³⁶⁹ In 1897, the British Consul said that 'Labour is fairly plentiful, and for most kinds of rough heavy work local labour is preferable to imported, the native population supporting life more cheerfully and resisting the two or three 'standard' diseases far more vigorously than any imported element.'³⁷⁰ He also stated that 'per head of its inhabitants the Amazon valley is far and away the most productive region of Brazil...while the productive capacity of the whole country was 34\$011 reis per inhabitant in 1905-06, the Northern or Amazon states produced 559% more than that of any zone and 176% more than the coffee-bearing estates'.³⁷¹ Although this statement provides no information as to the difference in prices between rubber and other products included in these values, it unquestionably indicates the internal availability of labour.

³⁶⁶ Ibid.

³⁶⁷ Marin op. cit. p. 420.

³⁶⁸ Pará. President da Província, 1863, Annex: Relatório do Administrador de Fazendas Rurais, p. 13-14.

³⁶⁹ Para. Presidente da Província Relatorio 1862, pp. 57-66.

³⁷⁰ F.O. and The Board of Trade, Report on Trade of the Consular District of Para, 1908, p. 16.

The Attraction of Labour to *Seringais*

Seringais increasingly attracted labour. The expanding geomercantile privatisation of rubber fields according to *seringais* meant that the only way rubber tappers could perform their jobs in the best rubber fields was under the entrepreneurs' command. Rubber fields in *terras devolutas* were far away. As was discussed in chapter two, the set-up of rubber estates in Acre started in 1848, which indicates that the privatisation of rubber yield from the mouth of the Amazon river inland was not a linear expansion as the idea of the frontier suggests, but a selective concomitant process. Under such circumstances, the unequal access to the best land is stressed. The slow and expensive system of navigation, particularly before the introduction of steam navigation in the middle of the 19th century, did not eliminate the social implications of the long distance of rubber fields with the status of *terras devolutas*. For it took around 30 days to reach rubber yields in Acre from Belém. Furthermore, the travel tickets were dear, as discussed in chapter four, and the privatisation of those lands involved strong competition. This is mentioned by Reis³⁷² and the analysis of lawsuits on Acre affairs for the period 1903 to 1904, kept in the Arquivo Nacional do Rio de Janeiro under code 988, confirms this. Among the total of around 55 lawsuits, ten refer to land conflicts, and of these eight are concerned with conflicts in which the claimant's allegation is that his neighbour invaded his rubber estate either when the engineer was demarcating a nearby estate or the defendant exploited paths of rubber tree inside the claimant's property deliberately.

Apart from the competition, tapping required an initial outlay for subsistence products during harvesting from the middle of April to November when direct producers had to be far from local markets. Thus, the process of privatising rubber

³⁷¹ Idem, pp. 10-11.

³⁷² Reis op.cit. p. 79.

fields required economic resources to reach these areas, creating the infrastructure required by law in order to legalize the property and for facing the high competition for those lands. Besides that, it occurred in a context in which the political-institutional apparatus such as local government policies and national and local legislation encouraged the entrepreneurial privatisation and exploitation of rubber yields, as has already been discussed in chapter two.

In this context, poor direct producers of rubber had none of the mentioned economic requirements for exploiting high density rubber fields. Moreover, even considering that the land legislation allowed them to privatise *terrás devolutas*, since they paid the State for it, the politico-institutional apparatus considered them mainly from the perspective of colonisation in which they were supposed to be nothing but familiar agricultural producers or labour under entrepreneurial command.

What has to be stressed, however, is that the geomercantile privatisation of land assumed the form of a barrier to direct producers accessing the best land, as previously discussed. Bonfim stresses that with the privatisation of rubber fields:

“(...) all over the main waterways in spite of their huge extension and low demographic density, there is no free land, because all of those area have owners”³⁷³ (our translation)

As discussed in chapter two, despite autonomous familial producers owning 37% of properties producing rubber in the nine most important municipality producers of rubber in Pará State, just 20% of the total of rubber paths that existed in those municipalities lay in their properties. They did not exist in the stretch having the densest rubber yields in Acre State, at least until the 1920s, as has already been mentioned.

Under such circumstance *seringueiro*, who was the direct producer of rubber, cannot be said to have owned or controlled the best rubber fields, which were the most important means of rubber production. In fact, the direct producers of rubber in *seringais* were subordinated labourers recruited or attracted from the available population of labourers, landless or peasant-workers. Most of the first rubber estates

employed native labourers. However, the more the rubber price increased the more they attracted immigrant labour. Audrin³⁷⁴ refers to seasonal labourers coming from North East Brazil to work on rubber estates around the Araguaia and Tocantins rivers for 5 or 6 months who then went back home from the middle of the 19th century.

The flux of landless and peasant-workers to *seringais* was stressed or minimised according to different conjunctures in terms of peasant conditions in relation to the rubber economy. In 1871, the President of Pará Province reported that one of the problems in peasant settlements in Bragantina micro-region was that many of them started to perform the role of temporary labour on rubber estates.³⁷⁵ The reasons were not just problems in the official policy of settlements but also the weakness of cereal prices when compared to rubber prices. This same issue was emphasised by the director of the Benevides colony in 1880.³⁷⁶ According to Bonfim,³⁷⁷ at the beginning of the 1870s in Belém, the mid-price of 1 kilo of rubber was around 1 or 2 dollars, but with this amount one could buy around 30 kilos of rice, 45 kgs of sugar, 10 kgs of coffee, 10 kg of animal fat, 1 hammock and 10 metres of rough cloth.

Thus, the existence of high rubber prices favoured not only the appearance of rubber estates after the middle of the 19th century, but also the labour required for it. Ferreira de Castro³⁷⁸ mentions that even employees in business in Belém who were getting low salaries often left their jobs, preferring to work on rubber estates instead.

The Recruitment of immigrant labour

Immigrant labourers or peasant-workers went hand-in-hand with the increasing shortage of labour which accompanied the spread of rubber estates, which was a

³⁷³ Bonfim 1954, pp. 15 and 18.

³⁷⁴ Audrin 1963, p. 93.

³⁷⁵ Pará. Presidente da Província Relatório 1871, quoted from Bentes op.cit, Part II chapter 5, pp. 261. See also Penteado 1967.

³⁷⁶ Pará. Presidente da Província Relatório 1880, p. 46, quoted from Bentes op.cit.

³⁷⁷ Bonfim, 1954 p. 17.

³⁷⁸ Ferreira de Castro op.cit. p. 31.

feature much more apparent in the most important areas of rubber production in Acre. Here, the physical or geographic distance of rubber fields from local markets and ports of exportation emphasised the historical condition in which the only way rubber tappers could perform their labour in the most important rubber yields was under the owner's command. It also stressed their dependence upon owners even to reach the area. At the same time, it transformed the engagement of labour into an internal-external administrative procedure. In 1910, Seringal ITU twice sent an associate to Belém to recruit labour at a cost of £14,624.84 as can be seen in Table 5.

The expenses of recruitment illustrated in Table 5 was part of the financial capital outlay at the beginning of the harvest in April or in December, which assumed the form of a loan to the *seringueiros* who had to repay it with 20% interest. At the end, the enterprise would have a profit of around £ 2,924.97. This means that rubber tapers or *seringueiros* were free labour in charge of their own expenses with mobility from their homeland to the estate. The need to borrow money to cover this explains the *seringueiros'* engagement as indebted labour and under the obligation to settle this before leaving the estate.

Table 5: Seringal ITU Recruitment Expenditure, 1910

Period	Expenses Items	Total Value
Jan-Mar	Labourers' travel tickets, cash loan, food during the journey	£4,447.99
	Associate's expenses	£990.75
December	Travel tickets, cash loan and food for 25 labourers	£6,362.65
	Associate's expenses	£,823.45
Annual Expenditure		£14,624.45

Source: *Seringal* ITU, Diary of 1910.

These features have been referred to as compulsory forms of labour,³⁷⁹ labour immobilisation³⁸⁰ or pre-capitalist relations of production.³⁸¹ These conceptions followed the tendency among authors studying slavery as a mode of production³⁸² or non-capitalism³⁸³ to refer to experiments with different forms of labour as transition to capitalism or as forms of servitude.³⁸⁴ The interesting point in these studies is the explanation of the end of slavery as a result of multiple processes such as the conjuncture of constant decreasing sugar prices after the middle of the 18th century, technological changes and the abolitionist movement in Brazil, particularly the passive resistance of African slaves by means of the organisation of *quilombos*. The weakness in these studies is the conception of history as a succession of modes of production, as already discussed in chapter one.

These are conceptions permeating even studies on sharecropping contracts, which argued against the identification of indebted immigrant labourers in coffee plantations with debt peonage.³⁸⁵ They stated that the primary aim planters pursued in charging immigrants with transport costs and food advances was to recover their initial investment. Lamounier³⁸⁶ considers this controversial since aspects of the sharecropping scheme that could reinforce its similarities with indentured labour have not yet been researched as for instance the role and expectations of the companies involved in the trade in *colonos*. However, she does not give evidences able to characterise the recruitment of *colonos* with 'trade' but mentions only planter attempt to establish this.

The subterranean notion of history as a succession of modes of production, governing these studies, took special connotation in the term 'transition'. The common

³⁷⁹ Silva, A. op.cit. p. 23; Paula, J. op.cit. p. 30.

³⁸⁰ Pinto de Oliveira, L. 1985.

³⁸¹ Silva, A. op.cit.; Paula, J. op.cit.; Pinto de Oliveira op.cit.; Duarte, H. 1987.

³⁸² Gorender, 1985.

³⁸³ Dias, 1970.

³⁸⁴ Viotti da Costa 1982, pp. 104-105 refers to debt and peonage in coffee plantations as compulsory labour or servitude.

³⁸⁵ Stolcke, 1988 and Stolcke and Hall, 1983

³⁸⁶ Lamounier op.cit. p. 12-13 and footnote 23.

element in this approach is the over-emphasis on the prohibition of traffic in slaves in 1852, giving secondary importance to the multiple internal historical processes mentioned by previous studies. And the linear historical view has hidden important circumstances. Stolcke's³⁸⁷ disagreement with Eisenberg's³⁸⁸ explanation for the adoption of sharecropping contracts as a result of declining profitability, is based on the argument that planters introduced free labour because of their increasing awareness that slavery was doomed, and as a strategy for facing two main issues: how to find a new source of labour to replace the slaves, and how to organise and control free labour efficiently. However, she does not consider that declining profitability was an important matter in North East (where Eisenberg's study is concentrated) after the middle of the 19th century. The North East's declining sugar economy led to the sale of many slaves to the ascendant coffee plantations in S. Paulo,³⁸⁹ to a great extent due to sugar planters' difficulties in keeping their slaves. Moreover, there being no shortage of labour³⁹⁰ because the declining economy as a whole was just liberating labour or generating unemployment. In S. Paulo, on the contrary, the expanding economy and the shortage of labour posited different issues for coffee planters.

Lamounier's³⁹¹ comparative study on different categories of contracted labour in coffee plantations and the 'coolies system' in Cuba considers different circumstances. However, the 'transition' historical perspective governs her study too. She distinguishes two senses of transition. In the language of the time it meant a 'transition from slavery to free labour (non-slave labour)', signifying a time in between two systems or possibly as a near permanent condition, given that the gradual abolition of slavery was expected to take a very long time in Brazil and in Cuba. In the academic debate 'free labour' has often been displaced by 'wage labour' and 'transition' is viewed as representing the period in which the bases for a free labour market were set up. The author's argument is

³⁸⁷ Stolcke op.cit. p. 2.

³⁸⁸ Eisenberg op.cit. p. 355.

³⁸⁹ Viotti da Costa op.cit.; Marin op.cit.

³⁹⁰ Eisenberg op.cit.

that these early experiments influenced the process of gradual abolition and set the parameters for the 'transition to free labour' as perceived by contemporaries. Actually, Lamounier³⁹² refers to those contracts as 'experiments' and despite arguing that a 'free labour market' might not have been the final end envisaged by 19th century planters, indeed, she does not face the theoretical issues on the table.

The idea that slavers started to experiment with new forms of labour only after the traffic prohibition is quite unsustainable when it is taken into account that those experiments constituted a constant practice in Amazonia for the very beginning. As already mentioned, slave labour was never the exclusive type of labour in Amazonia, and it was not even the predominant one.

Regarding *seringais*, although there are a few historical references to the use of slave labour in *arranchamentos*, that is expeditions to extractive areas situated in *terrás devolutas*, before the middle of 19th century, no records have been found of such a practice on rubber estates. In contrast to sugar or coffee plantations, rubber estates were not a mix of slave/free labour enterprises, changing to a system of free labour later. From the beginning, rubber estates were based on free labour. Even slavers in Pará exploiting paths of rubber trees inside their enterprises did not adopt slaves for this job. Indeed, they hired out paths to free rubber tapers, as previously mentioned.

The main reason for this was the specificity of rubber production in the face of the slow disappearance of slavery – which, in fact, was initiated by the prohibition of native enslavement in the middle of the 18th century and the increasingly difficulty of keeping African slaves due to multiple processes which was also initiated around this time. The production of wild rubber was temporary, during the harvest from the middle of April to November, so during more than four months of the year there was no production. Since slaves were the sort of labour bought and maintained by owners who had to care for them like a property that had to be fit for sale at any time, the physical condition of

³⁹¹ Lamounier op.cit. p. 16.

³⁹² Ibid. p. 17.

slaves interfered with their prices. The adoption of slave labourers in rubber production would mean that the owner was responsible for them even during the four months when they were not tapping. This would have been irrational from the entrepreneurial perspective of producing for profit and capital accumulation, particularly when slavery was slowly disappearing and it was already expensive to acquire and keep slaves, as previously mentioned. *Seringueiros* were responsible for their own keep from the time they left their homeland and even during the period between harvests when they were not producing rubber. Both native and immigrant *seringueiros* were labourers in charge of their own keep.

Immigrant labour in the second half of the 19th century and the beginning of the 20th century was a sensitive issue because, like every capitalist, *seringalistas* wished for an abundance of cheap labour because the level of labour availability influences the degree to which labour can be exploited. According to McHale,³⁹³ the plentiful and cheap labour in West African and Malay rubber yields allowed capitalists to utilise higher physical labour inputs, implementing higher degrees of exploitation of labour. Barlow³⁹⁴ shows the high level of exploitation of immigrant labour in 'Peninsular Malaysia, particularly after 1909, by rubber planters. They were recruited by a foreman and employed without contract to prevent them from leaving the estate for other work,³⁹⁵ as is mentioned in the next chapter. Even contract categories of workers could come to estates already burdened with debts as a result of the expenses of transport and subsistence, together with a commission paid by the contractors.³⁹⁶

Although *seringais* in Acre shared such rubber plantations' characteristics as the contract of immigrant labour involving debts and the settlement of debts as a condition for leaving the estate, as discussed in the next chapter, rubber planters managed to create plentiful cheap labour. In Amazonia, on the contrary, many authors frequently

³⁹³ McHale op.cit. p. 16.

³⁹⁴ Barlow, 1978.

³⁹⁵ Ibid p. 42.

³⁹⁶ Ibid p. 46.

mention the lower level of labour offered.³⁹⁷ This circumstance gave a labour degree of bargaining power and required some form of commitment by capitalists, who had to face not just the problem of finding labourers but also of convincing them to work in distant *seringais*. There was a high death rate at the beginning, which persisted throughout the first half of the 19th century, owing to improper sanitary conditions in certain swamp areas. Memories of that time³⁹⁸ made people in *seringais* in Acre consider the health conditions in 1912 quite good even if Dr. Oswaldo Cruz was still concerned about the high level of diseases.³⁹⁹

Seringalistas' strategies of recruitment changed over time according to the main issues they faced. Although there are indications of immigrant *seringalistas* in Acre bringing familial producers along with them, regional labour was the main source at the beginning. Calixto⁴⁰⁰ shows the engagement of families recruited in Manaus and the attraction of labour from Pará is a problem constantly mentioned in reports by Presidents of Pará Province and already analysed by Santos⁴⁰¹ as was mentioned in chapter two. There are no accurate serial statistics on the population of and immigration to Acre before 1920. The census included this area only in 1920, although historical literature and documents present estimates before this time, which are useful as an approximation. Calixto⁴⁰² does a good analysis and systematisation of the quantitative information available on the immigration to Acre before the 1920s, and his results are going to be considered here in order to avoid repetition. Calixto shows that the migration from Pará was an important feature. In the period 1872-1890, Pará lost

³⁹⁷ MacHale op.cit.; chapter one; Arkers op.cit.; Chaves op.cit.; Mendes op.cit.; Santos op.cit.; Weinstein op. cit.; Martinelo op.cit.

³⁹⁸ Neves, C. 1981.

³⁹⁹ Ministerio da Agricultura, Relatorio Oswaldo Cruz, op.cit.

⁴⁰⁰ Calixto op. cit. p. 83.

⁴⁰¹ Santos op.cit.

⁴⁰² Calixto 1993, pp. 83-92. He evaluated the following literature: Bulcão, S. (1973) *O Comendador João Gabriel - A Origem do Nome Acre*. In: *Revista do Instituto Historico e Geografico do Ceará*, Tomo XLV, s/d; Graham, R. (1973) *Grã-Bretanha e o Início da Modernização no Brasil (1850-1914)*. Coleção Estudos Brasileiros. S. Paulo, Editora Brasiliense; Benchimol, S. (1944) *O Cearense na Amazônia*. Rio de Janeiro, Conselho de Imigração Colonização, p. 38; Hollanda, S.B. (1982) *Da Maçonaria ao Positivismo*, in HGCB. O Brasil Monárquico. Vol. 3, Tomo II. S. Paulo, Difel; Santos, 1983.

around 32,000 inhabitants who migrated to Amazonas, Acre and Roraima.⁴⁰³ This migration from East to West Amazonia was confirmed by the census of 1920, which informs us that in 1872-1890 while the population of Manaus, the capital of Amazonas State, increased 32%, the population of Belém dropped 19% in the same period.⁴⁰⁴ The statistics on the whole population of Pará and Amazonas show that while the population of Pará Province kept growing in the period 1872 to 1920, its growth during this time was just 19% while the population in Amazonas Province increased 157% and until 1900 it had a population growth higher than Pará, as can be seen in the Table 6.

The internal migration was not enough to meet the expanding demand of labour by *seringais*. *Seringalistas* gradually increased the recruitment of labour in the north-east, which, according to Calixto,⁴⁰⁵ was encouraged by the government of Amazonas. Information on immigration by Pinto de Oliveira,⁴⁰⁶ Calixto⁴⁰⁷ and Audrin⁴⁰⁸ confirms that the immigration from the North East to Amazonia started around the middle of the 19th century. Since *seringais* in Acre started to be set up in 1848, as mentioned in chapter two, it confirms the immigrant labour from the North East as a phenomenon characterising *seringais* in Acre from the start.

Table 6: Population Growth: Para, Amazonas - 1872-1920

State	Quantity				Percentage Growth		
	1872	1890	1900	1920	1872-1890	1890-1900	1900-1920
Amazonas	57,61	147,915	249,756	363,166	157%	69%	45%
Para	275,237	328,455	445,356	983,507	19%	36%	121%
Acre				92,379			
Total	332,847	476,37	695,112	1,439,052			

Source: Ministerio da Agricultura, Industria e Commercio, Censo populacional, op.cit. pp. IX e X.

⁴⁰³ Calixto op.cit.

⁴⁰⁴ Ministerio da Agricultura Industria e Commercio - Diretoria Geral de Estatistica Resenciamento do Brazil (realizado em 1 de Setembro de 1920) - Vol IV (1a. Part) - População, Rio de Janeiro, Typ. da Estatistica 1926, pp. X e XII; see Table 6.

⁴⁰⁵ Ibid. p. 86.

⁴⁰⁶ Pinto de Oliveira, L. op.cit., pp. 9-12.

⁴⁰⁷ Calixto op.cit..

⁴⁰⁸ Audrin op.cit.

The inter-regional immigration gradually increased, transforming labour from the NorthEast into the main source of labour in Acre. This is a phenomenon linked not just to labour shortage but also to *seringalistas'* responses to changing circumstances. As mentioned previously, the first rubber estates in Acre engaged immigrant familial producers by means of the sharecropping form of remuneration to perform diversified activities.⁴⁰⁹ After the 1870s-1880s, *seringalistas* changed the way rubber tapers were engaged and performed their job in response to direct and indirect pressure to produce large-scale cheap raw material.

First, in this conjuncture, different standards of capital accumulation, involving diverse conceptions of time and rhythm of production by local and foreign capitalists, were materialised locally into an ongoing incompatibility between local rubber production and the foreign capital's requirements. Foreign industrialists, traders and financiers pursued higher levels of and faster capital accumulation in comparison with the local standard. Consequently, they sought higher level of productivity. This pursuit governed their evaluation of the population density in Amazonia from the perspective of labour availability, according to which low population means low offer of labour, which would be an obstacle to the production of the quantity of rubber required to lower the price to the level they wished.⁴¹⁰ In the 1870s, the British government initiated a policy of heavy support for a systematic study aimed at agricultural production of rubber as part of its policy to control the production/commercialisation of this raw material.

Second, as this technology was not yet available, in the 1880s, foreign capitalists' efforts were concentrated on finding new sources of extraction, whose non-gregarious distribution of trees could be compensated for the availability of plentiful

⁴⁰⁹ Letter analysed by Bulcão, Soares. O Comendador João Gabriel - A Origem do Nome Acre. Revista do Instituto Historico e Geográfico do Ceará, Tomo XLV, s/d, p. 27, mentioned by Calixto op.cit. pp. 83-4.

cheap labour.⁴¹¹ They initiated the exploitation of the poor rubber yields in Africa and Asia, based on intense physical exploitation of low-cost labour.⁴¹²

Finally, they intensified their presence in the region, setting up exporting houses and banks, changing the system of credit and interfering in the local rubber market.

The *seringalistas'* reaction to this conjuncture is many-sided as discussed in chapters five and six. Regarding labour, the level of exploitation was intensified as discussed in the next chapter and this also involved modifications to the way in which they were recruited. After the 1880s, labourers were recruited as individual and specialised producers of rubber and not as familial producers of diverse products as before. From this moment onwards, tapping and making rubber became a task performed by specialised producers and other activities became the task of wage labourers. The recruitment of individual and specialised producers of rubber was particularly strong in the 1890s-1910s.

Consequently, the recruitment of labour in distant labour markets became more selective and intense. In this context, Chaves⁴¹³ says that *patrões* in Acre (he was one of them) recruited labourers in the North East, Belém and Manaus. Chaves⁴¹⁴ and Ferreira de Castro⁴¹⁵ stress that *patrões* preferred labourers from Ceará State. One reason for this was the availability of cheap labour. According to Pinto de Oliveira,⁴¹⁶ the migration from the Northeast to Amazonia in this period was of labour recruited by *seringalistas* rather than the simple migration of familial producers leaving areas in the dry seasons. This is a phenomenon linked to the formation of 'excess population' or unemployed labourers in the North East as a result of the decadence of the sugar economy since the last quarter of the 18th century and particularly after the middle of the 19th century, as well as of the crisis of the cotton economy at the beginning of the

⁴¹⁰ This view can be seen in: Akers, C. 1914, p. 1; McHale op.cit. Chapter 1.

⁴¹¹ McHale op.cit. p. 16.

⁴¹² Ibid.

⁴¹³ Chaves op.cit p. 66.

⁴¹⁴ Ibid.

⁴¹⁵ Ferreira de Castro op.cit.

1870s. In this context, dry seasons only aggravated the process of the formation of plentiful cheap labour in particular areas such as the so-called *sertão* (central lands where dry seasons usually occurred) in Ceará State.⁴¹⁷ Peasants living in those areas in Ceará were impoverished and became vulnerable to recruitment by *patrões* from *seringais* in Amazonia.⁴¹⁸

One question mentioned in the historiography is why labourers from the North-east preferred rubber estates to coffee plantations in the south-east. Santos⁴¹⁹ lists six reasons, as follows: (1) the repudiation of the slavery system of work on coffee plantations, (2) expectations of rapid enrichment during the rubber boom, (3) propaganda by *seringalistas* and their representatives, (4) subsidies for their transportation by the governments of Pará and Amazonas Provinces, (5) easy access to Belém and (6) reduced opposition to the migration of labour by landowners in the Northeast. Pinto de Oliveira⁴²⁰ stresses two of these reasons: the recruitment of labour by *seringalistas* and the absence of resistance by landowners in the Northeast.

Although all these reasons can be found in historical documents, the main debate in that epoch was about the *seringalistas'* strategies to attract labour. Manipulating landless or poor peasant-workers' resistance to subordinate forms of labour, *seringalistas* presented the work pattern in *seringais* as profit-sharing in which *seringueiros* would constitute a commercial partner rather than labour and in which the payment by results would mean the possibility of savings and social ascension.

The efficiency of this discourse is shown by different facts. First of all, the payment by results was mediated by commercial relations since *seringueiros* sold the rubber they produced to the owner (see the next chapter), given the appearance of autonomy in the process of production. Second, a few *seringueiros* and wage labourers managed to achieve social ascension. A memoir book written by a rubber tapper who worked in a

⁴¹⁶ Pinto de Oliveira op.cit. Chapter 1.

⁴¹⁷ Ibid.

⁴¹⁸ Chaves op.cit, p. 81.

⁴¹⁹ Santos, R. 1980.

seringal in Acre in the period 1897 to 1907⁴²¹ stresses his brother's ascension from being a rubber estate's accountant to manager and, then, *seringalista* in less valued rubber yields. In the Northeast, the author and poor local people were so impressed by his brother's social ascension that some of them too decided to become rubber tapers. Honório Alves went on to become the Seringal ITU's owner after working as a rubber taper and wage labourer as was already mentioned in chapter two. Moreover, considering the tendency towards increasing rubber prices until around 1912, labourers could make savings from their intense work since payment was by results. Actually, a reasonable proportion of *seringueiros* did so. In the *seringueiro* sample in Seringal ITU, 17% had positive balance in December 1910 and 22% in December 1913. Moreover, taking into account the total number of *seringueiros* in 1910, 1913 and 1930, the percentage of those leaving the estate with a positive balance increased from 13% in 1910, to 26% in 1913 and 35% in 1930, as discussed in the next chapter. Actually, rubber taper rotation was slightly higher than rotation of sharecroppers on coffee plantations. Analysing the current accounts of *seringueiros* who were in Seringal ITU in February 1910, I found out that the majority managed to settle debts and leave the estate within the period of 2-4 years. Of the total 202 *seringueiros*, around 55% worked for a period from three to four years, while 11% managed to leave the estate in just two years. Those staying for 5 or more years represented 20%. On coffee plantations, on the contrary, sharecroppers signed a contract for a minimum of five years, which was usually then prolonged indefinitely owing to unsettled debts.⁴²²

What has to be stressed is that the few cases of social ascension referred to people having initial savings as well as skills that allowed them to perform administrative jobs on rubber estates. Employees in the administrative organisation of *seringais* had high salaries and no food expenses, so that they could make savings (see chapter four).

⁴²⁰ Pinto de Oliveira op.cit. p. 13.

⁴²¹ See Cabral, op.cit.

⁴²² Gorender 1982 pp. 591-592; Viotti da Costa 1982 pp. 104-105; Sallum Junior op.cit. pp. 73-80; Stolcke op.cit.

Furthermore, the cases mentioned above happened in the second half of the 19th century in a period when rubber had not reached the peak of high prices that occurred in the period from the 1890s to 1910-11 when the competition for rubber fields was higher. Yet, the positive effect of those few cases in Ceará is apparent. The aspiration to continue as or become peasants or other sorts of autonomous producers is the other side of the fact that wage labour was not a chosen condition. In Amazonia there is strong evidence of the landless' reaction to that, as previously mentioned. It also interfered in the immigrants' decision to become rubber tapers in Acre. According to report by a Commission of Senators and Deputies in charge of making proposals about the rubber economy to the National Congress in 1912:

"The *sertanejo* (the inhabitant of central lands in the North East) sees the receipt of a salary not as the payment of a performed service, but as the alienation of the personality because of the obligation to do what is decided and determined by the boss. They identify this with the automation of an obedient beast"⁴²³ (our translation).

The report stresses the sharecropping contracts as being a stimulus for hard work in the Northeast and labourers' repugnance of the condition of wage labour, which they referred to as "working as hired". According to the report, the main cause of migration to rubber estates was the labourers' expectation of working under forms of sharecropping contracts instead of wage labour, which became the main ideological support for the *seringalista*'s propaganda for recruiting labour.⁴²⁴

Ferreira de Castro⁴²⁵ argues that owners preferred not just the condition of being from Ceará State but particularly the combination of this with the status of single or married workers coming alone without their families. Under these conditions, immigrant labourers wished to go back home soon as autonomous producers and this wish encouraged them to intensify their efforts. Moreover, it was expensive to bring families, and married labourers with family would work less hard in rubber production, preferring

⁴²³ De Souza, E. A Crise da Industria da Borracha na amazônia. In: Revista da ACA, Manaus, ano VI, 67, Janeiro/1914, p. Editorial (Parecer da Comissão Mixta de Senadores e Deputados Federais, incumbida de estudar as causas da crise da borracha) p. 3

⁴²⁴ Ibid. p. 4.

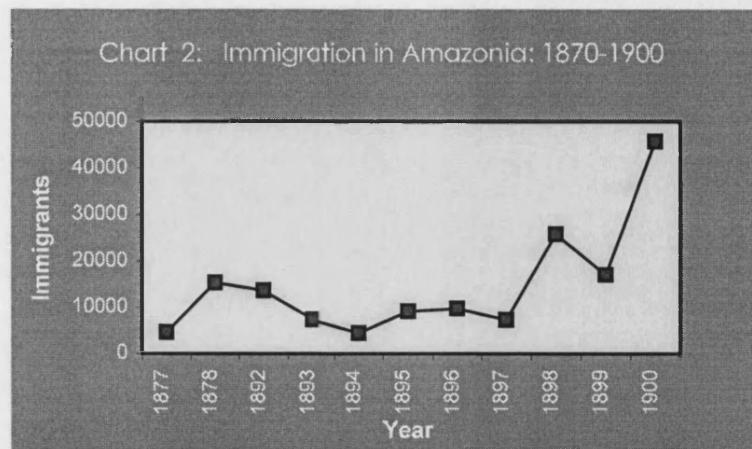
to perform other activities on the land. There is no statistics on this matter before 1920. But the IBGE census of 1920⁴²⁶ shows that Acre population presented the highest proportion of male in the country. In each 1,000 inhabitants in Acre in 1920, 63% were men. Calixto⁴²⁷ mentions the requirements of resistance to and familiarity with hard work and submissive behaviour in the process of recruitment. Resistance to diseases and ruggedness were important because rubber was made in an environment far away from medical services, sometimes in swamps, which presented improper sanitary conditions, as already mentioned. Submissiveness was required since the form in which labour was engaged and the circumstances under which they performed commercial relations in *seringais* involved debt and they had to accept the condition of leaving the estate only when they had settled that debt.

The gradual increase in immigration in Amazonia in the period 1872-1900 is confirmed by the quantitative data organised by Benchimol, as illustrated in chart 1. He gives a total of 160.125 immigrants in 1872-1900, which does not include the period 1879-1891, so that it is really an underestimation of the total. As we can see in Chart 2 immigration increased in 1878 in comparison to 1877, reflecting the effects of the dry season in 1877. Nevertheless, in the following period, the annual immigration dropped, persisting until 1897. It then rose steadily in 1898-1899 and sharply in 1900, expressing the intensification of the recruitment of labour for the increasing production of rubber, which was enforced by the local government's policy of immigration of labour and peasantry in the last decades of the 19th century and beginning of the 20th century which has been studied by several authors, as previously mentioned.

⁴²⁵ Ferreira de Castro op.cit. p. 103.

⁴²⁶ Ministério da Agricultura, Indstria e Comércio – Diretoria Geral de Estatística – Recenseamento do Brasil em 1/9/1920, vol. IV (1a. parte). População, Rio de Janeiro, tipografia da estatística, 1926, p. XXII. See also Pinto de Oliveira op.cit. pp. 27-28.

⁴²⁷ Calixto op. cit.



Source: Benchimol op.cit p.38

Calixto⁴²⁸ points out that in the period 1872-1900, approximately 78% of the immigrants in Amazonia went to Amazonas, Acre and Roraima. He estimates an average of 138,625 immigrants in Amazonia in that period, 67% being the percentage going to Amazonas, Acre and Roraima. The increasing immigration post-1890s and the tendency towards West Amazonia re-affirms the intensification of recruitment of labourers by *seringalistas* as previously mentioned.

Apart from recruitment, immigrant labour also came to Belém spontaneously⁴²⁹ or under the already mentioned governmental policy of peasant and labour immigration in the last decades of the 19th century and beginning of the 20th century. Particularly after 1878 this policy offered many options of destiny to immigrants, who could opt for settlements, labouring in the building industry in Belém or working on rubber estates in Amazonas and Acre.⁴³⁰ In this case, they stayed in official accommodation around Belém awaiting recruitment by *seringalistas*. In 1877-78, British Consul accounts show that 16,000 cearenses were brought to Pará Province, and 7,000 or 44% of them went to rubber districts while 56% was allocated to agricultural settlements in Benevides in

⁴²⁸ Calixto op.cit.

⁴²⁹ Ferreira de Castro op.cit.. pp. 124-126; Chaves 1913, p. 66.

⁴³⁰ Pará. Presidente da Província Falla, 1878b, anexos, pp. 1-2, quoted from Bentes op.cit. chapter 5. See also Moraes op.cit.

Bragantina microregion.⁴³¹ Spontaneous, private and official immigration reinforced the position of Belém as the main labour market in the region, as already mentioned. According to Table 7, the population of Belém that in 1872-1890 had dropped by 19%, increased by 93% in the period 1890-1900, and 145% in the period 1900-1920. Belém became the main point in the region where owners from Acre Territory came to recruit native and immigrant labour. In 1910, one of the two associates in the *Seringal ITU* went to Belém twice to recruit employees, as previously mentioned.

Capital	Population Growth: Belem, Manaus - 1872-1920						
	Quantity			Percentage Growth			1900-1920
	1872	1890	1900	1920	1872-1890	1890-1900	
<i>Belem</i>	61,997	50,064	96,560	236,402	-19%	93%	145%
<i>Manaus</i>	29,334	38,720	50,300	75,704	32%	30%	50.50%
<i>Total</i>	91,331	88,784	146,860	312,106			

Source: Ministerio da Agricultura, Industria e Comercio, Censo Populacional,op.cit. pp.X e XII

The internal availability of labour in Acre

Accounting documents of *Seringal ITU* show that the recruitment of immigrant labour persisted until around the middle of the 1910s. The diary of 1913 does not refer to the initial outlay in the recruitment of labour in Belém or the North East as in 1910. The report by Oswaldo Cruz⁴³² mentions villages in Acre already in 1912. As can be seen in Table 8, there were 8 villages which altogether accounted for a total population of much more than 4,200, insofar as the author does not estimate the population of Senna Madureira, *seringal* Cachoeira and Seabra. The report mentions villages as centres of rubber tapers or points were they stayed during the period between harvests

⁴³¹ Report by Consul Green on the Trade and Commerce of Pará for the years 1877 and 1878, p. 49. In: F.O. Accounts and Papers, Pará, 1880, p. 29.

⁴³² Ministerio da Agricultura Industria e Comercio, Relatorio Dr. Oswaldo Cruz, op.cit. p. 21.

or when they were unemployed, or waiting boats to return home. Moreover, the city of Rio Branco had 2,000 inhabitants in 1912.

Pinto de Oliveira⁴³³ discusses labour on the light of data by Costa,⁴³⁴ who estimates that when Acre was incorporated into Brazil in 1903, its population was around 100,000 inhabitants, and by Santos,⁴³⁵ who estimates this population as only 75,000.

The questionable point in the author's account is his presupposition of labour immobility on rubber estates, which contradicts his own discussion on the high level of male labour in *seringais*, as well as there being plentiful indications of labour mobility, as previously mentioned. The available data on population is meaningful when compared with Oswaldo Cruz's report that clearly indicates the appearance of a labour population in Acre, which seems to be a result of a slow process initiated with the setting up of rubber estates. When the so-called crises of rubber happened in the period 1911-12 onwards, these processes were intensified. That is, the liberation of workers from rubber estates increased, and some of them went back to the NorthEast while others stayed in Acre. According to Oswaldo Cruz's report, in November 1912, the population of Acre was around 35,000 to 40,000 inhabitants, 6,000 living in the four most important populated centres such of Empresa (a neighbourhood of Rio Branco, the capital of Acre), Xapuri, Porto Acre and Braziléia, and the other part distributed on rubber estates and small villages. This can be considered the lowest level of population. According to the census, in September 1920, there were 5 municipalities and 5 districts in Acre, 3 municipalities of which had a population of between 10,001 and 20,000 inhabitants and 2 municipalities which had a population of between 20,0001 and 60,000.⁴³⁶ The total population, then, reached 92,379 inhabitants, which means an increase of 131% over November 1912. Another important aspect is that the immigration in Acre was not just of people from Pará, Amazonas and the NorthEast,

⁴³³ Pinto de Oliveira 1985, pp. 5, 15-16.

⁴³⁴ Costa, C. 1974, p. 128.

⁴³⁵ Santos, R. op.cit. p. 111.

⁴³⁶ Census of 1920 op.cit. pp. IX and X.

but also from neighbouring countries, particularly Peru. In 1920, for every 1,000 Peruvian in Brazil, 23% were in Acre.⁴³⁷ Moreover, Soares⁴³⁸ suggests that there was increasing immigration in 1924-25 as the Stevenson Plan restricting the production of rubber in British colonies seems to have improved the perspective of rubber production again. The statistic of 1936⁴³⁹ shows that Acre population increased from 92,379 inhabitants in 1920 to 99,976 in 1925, 107,511 in 1930 and 115,451 inhabitants in 1935. Increasing population meant increasing offer of labour, provoking changes in the way they were engaged in rubber estates. The diary of *Seringal ITU* in 1930 has no register of master travelling to Belém to recruit them and mentions male workers with families living in Rio Branco instead of in the NorthEast as before. They came to the estate on their own. Thus, shifts in the way *seringueiros* were engaged resulted from the increasing local population, which generated local labour available for work on rubber estates.

8

⁴³⁷ Ibid. p. LXII.

⁴³⁸ Soares, L. 1963, p. 122.

⁴³⁹ Instituto Nacional de Estatística. Anuário Estatístico do Brasil – 1936, Rio de Janeiro, tipografia do Departamento de Estatística e Publicidade, 1936, pp. 61-62.

Table 8: Villages and Population Centres: Acre, November 1912			
Village	Location (river)	Population (quantity)	Characteristic
Seabra	Muru/Tarauaca		the biggest centre of rubber tappers
Camutana	Purus	400	close to reasonably important rubber estates
Labrea	Purus	600 to 700	close to important rubber estates
Cachoeira Rubber Estate			Port and point where people stayed awaiting boats or being engaged in <i>seringais</i>
Antimary or Floriano Peixoto	Acre	500	close to important rubber estates
Porto Acre	Acre	500 to 600	obligatory stopping for boats and navies because the federal custom house was located there; close to important rubber estates
Xapury	Acre	1.500 to 2.000	the terminal point of Acre river steam navigation, and situated in the most important area of rubber production in Acre
Senna Madureira	Yaco		this municipality had extensive agricultural production, particularly corn and manioc, and the Yaco river was an important area of rubber production almost comparable to that of Acre river

Source: Ministerio da Agricultura, Relatorio Oswaldo Cruz op.cit.

Conclusion

In opposition to the notion of free land shaping autonomous producers, I would argue that there was no free land but rather a process of freeing land from the First Nations in Amazonia as a pre-condition for the geomercantile privatisation of land, which was attached to the formal processes of turning natives into labour. The end of the enslavement of members of the First Nations in the middle of the 18th century and the gradual disappearance of African slaves after the middle of the 19th century mark the end of formal processes of making labour. Then, the link between geomercantile

privatisation of land and turning direct producers into labour became informal. The non-slave population originated from the blend of natives with immigrant Europeans enlarged again as Africans was gradually released from slavery, which was enforced after the proihition of slavery in 1888.

This is the population that constitutes the source of labour in the region. The possibility of getting tracts of land in distant *terras devolutas* and, particularly, the persistent official policy of immigration of familial producers of food after the middle of the 18th century favoured the emergence of peasants or peasant-workers. Yet, peasants or peasant-workers were made and made themselves into this as part of the historical process of capitalism in which a great deal of the free population was turned into labour instead. When *seringalistas* started to set up *seringais* there was already labour to be recruited.

Despite the internal offer of labour, it was not enough to respond to the increasing demand for labour, particularly after the 1870s, by distant *seringais*. This resulted in immigrant labour or peasant-workers being recruited. The particular condition of plentiful cheap labour in the NorthEast constituted the main source of immigrant labour. Although it is not possible to be precise statistically, there are strong indications that considerable proportions of immigrant labour to *seringais* were peasant-workers, working temporarily as a strategy to survive as peasants instead of becoming subordinate labour. At the same time, the constant immigration of labour which accompanied the setting up and expansion of *seringais* also led to a gradual increase in the population, leading to the emergence of a local labour market from which *seringais* could draw. This is particularly apparent after the 1910s.

**PART THREE: Work Relations in *Seringais*: Engagement and Forms of
Controlling and Disciplining Labour**

Chapter 4:

Forms of Controlling and Discipline Labour

A discussion of the relations of production is crucial in order to demonstrate that direct producers of rubber were subordinated to the owners' direct or indirect command. Results of the investigation of partnership contracts and registers of firms in the ACA and JUCEPA have revealed that although *seringalistas*' command of the process of production varied in many cases because some *seringais* were administered by managers, their rule as commanders of productive activities was deeper than the absenteeism supposed by the traditional historiography⁴⁴⁰ can suggest. The results show that *casas aviadoras* used to invest in rubber production by means of partnership with *seringalistas* or others who would run the rubber estate, although some of them contracted managers, particularly after the 1870s-1880s. *Seringalistas* did the same when they had more than one *seringal*. What has to be pointed out is that they did not need to be in direct command of production to be considered productive capitalists since even when they contracted managers at the apex, they still retained overall control.

Actually, most *seringalistas* in Acre River District lived on the estate or nearby in country towns. Particularly at the beginning, there were cases of *seringalistas* living alone on the estate without their families owing to an epidemic of malaria.⁴⁴¹

Moreover, the existence of a commercial house within many estates does not implies that *seringal* was a mercantile undertaking. Until the 1910s *seringalistas* had to invest in an internal commercial-financial house to supply distantly located estate with foodstuffs. However, this was attached and subordinated to the process of

⁴⁴⁰ Reis, 1953; Quintiliano op.cit.; Bonfim op.cit.; Santos, 1980.

⁴⁴¹ Neves op.cit.

reproduction of productive capital, which can be visualised in the discussion of profitability and re-investments in chapter six, which was guaranteed by surplus and profit produced by different categories of subordinated labourers. Interestingly, in Acre River District there existed *seringais* with no internal commercial house which were supplied by shops on nearby estates.

The results of the research clearly indicate the command of the process of production by capitalists and the labourers' class condition of subordinate forms of labour. Because *seringueiros* constituted the main category of labourer in rubber production, this chapter discuss their condition of class as labourers paid by results by focusing on the way their work was subdued. In *seringais*, as in any other capitalist enterprise, the capitalist's will and command over the process of production assumed the form of administrative rule and procedures of direct and indirect means of retaining, controlling and disciplining labourers. At the same time, the ways labourers were controlled and disciplined constituted the circumstances under which they identified issues and built responses, influencing the course of class relations within the estate. In other words, these were the circumstances under which labourers' bargaining powers were defined.

In dealing with the forms of engaging, retaining, controlling and disciplining the direct producers of rubber, the following items will be discussed: (a) *seringueiros'* engagement as Labourers Paid by Results; (b) the indirect and direct means of controlling and disciplining labourers in the process of rubber production; (c) the indirect means of controlling labour by controlling credit/debt; (d) *seringueiros'* strategies to deal with debts: re-evaluating debt and abscondment; (e) Bonuses, Gratification or Discounts; (f) rotation of labourers and changes in work conditions.

Seringueiros' Engagement as Labour Paid by Results

Seringueiros had a distinct class condition. As previously discussed, *seringalistas* presented the work pattern in *seringais* as a profitable share by employers, which has been defined as the distinct feature of sharecropping contracts.⁴⁴² Moreover, like sharecroppers on coffee plantations in S. Paulo, *seringueiros* were immigrant labourers whose engagement involved debt, originated in the expenses incurred when they moved to the estate.

However, *seringueiros'* class condition was essentially different from sharecroppers. First of all, after the 1870s-1880s, work relations in *seringais* changed towards intensification in the engagement of individual exclusive producers of rubber, as previously discussed. In contrast, on coffee plantations, particularly after 1884, and especially in the period 1888-1930, the engagement of familial sharecroppers, non-exclusive producers of coffee, was intensified.⁴⁴³

Furthermore, the role of indebtedness as an instrument of labour subordination and retention in *seringais* was different from coffee plantations. According to Stolcke⁴⁴⁴ the distinctive incentive to hard work typical of sharecropping contracts - the idea of profitable share by capitalists - was frustrated on coffee plantations due to labourers' difficulties in settling debts. The perpetuation of these contracts, as a result of indebtedness, was the centre of class struggles and changes in work relations. So, the elimination of initial debt after 1884, when the imperial and provincial governments started to subsidise labour immigration, seems to have minimised the role of debt on coffee plantations, although Sallum Junior⁴⁴⁵

⁴⁴² See on this matter Eisenberg op.cit.; Stolcke op.cit.

⁴⁴³ Sallum Junior op.cit.; Martins, 1979; Stolcke op.cit.

⁴⁴⁴ Stolcke op.cit.

⁴⁴⁵ Sallum Junior op.cit.

demonstrates that debt and the utilisation of it as a form of constraint to hard work persisted for many more years.

In *seringais* in Acre initial debt was eliminated gradually according to the emergence of an internal labour market, instead, although the policy of immigration of labour played a role in it, as previously discussed. Yet, indebtedness persisted permeating work relations.

The point to be stressed, however, is that indebtedness did not define work relations in *seringais*. Actually, it was simply a consequence of singular circumstances under which labour was engaged and performed commercial relations. What defined work relations in *seringais* were the ways labourers were engaged, controlled and disciplined.

Rubber estates employed different categories of subordinate labour such as: (a) workers paid by work time, as for instance wage and salaried labour, and (b) labourers paid by results instead such as *seringueiros*. So, surplus, rent and freight were the basis of the process of accumulation. These different categories of labour were contracted to perform different tasks in an enterprise characterised by a clear internal division of labour in which even the internal supply of cereals and firewood constituted the exclusive tasks of particular labourers. As mentioned in chapter one, in seringal ITU *seringueiros* constituted the dominant form of labour (they were 202 in 1910, 160 in 1913 and 215 in 1930), even considering that the number of wage labourers increased in the long term (from 27 in 1910 to 40 in 1913 and to 52 in 1930).

Regarding *seringueiros*, after the 1870s-1880s they were engaged in two different ways, differing only in the level of their autonomy in the process of rubber production-commercialisation. According to Chaves,⁴⁴⁶ in the first form of contract rubber tapers had to do the following: (1) clean the rubber tree paths which in the case of first

exploitation would take 20 to 25 days for one man;; (2) be trained by a skilled rubber taper on the method of extracting latex and of transforming it into raw material, which usually took 15 days; (3) when they started to produce rubber regularly, they had to deliver it periodically according to the internal scheme of transport provided by the *comboios* whose service was planned administratively. The *comboios* would take the rubber and leave an IOU (I owe you) giving the gross weight of the rubber transported to the warehouse; (4) the balance was calculated twice a year (in June and in December). Usually when the final one was done at the end of the harvest, the *seringueiro* would come or send a representative to the commercial house to witness the calculation of their total rubber weight, and at this moment the IOUs would be replaced by a receipt specifying the total weight net, kind and value of rubber. This receipt would also contain the rubber taper's authorisation for boarding this to Belém or Manaus and record his acceptance of full liability for expenses of transport. In this sort of contract, the rubber taper paid 10 to 15% of freight and 10 to 15% over the net production for the rent of the paths.

In the second kind of engagement, rubber tapers were denominated *aviado* or *freguez*, signifying rubber tapers who, according to previous deals, worked on their own.⁴⁴⁷ That is, they had autonomy in the process of production. They neither paid rent nor freight expenses and they did not have to depend on nor did they have to match their rhythm of production to the internal system of transport. Any time they produced rubber they could deliver it to the owner and be paid immediately, at a rate about 50% of the prevailing rubber price at that time.⁴⁴⁸

However, *aviado* was a rare condition. In Seringal ITU in 1910 and 1913 there was just one case. Almost every rubber taper was engaged according to the former

⁴⁴⁶ Chaves, 1913 pp. 8-69.

⁴⁴⁷ See on the terminology *aviado*, *seringueiro*, *patrão*: Guedes, M. 1920, p.119; Santos, R. op.cit. p. 160 footnote 8; Calixto 1993, chapter 3, footnote 3.

⁴⁴⁸ Chaves op.cit., p. 70.

method of engagement under which they paid rent, freight and the owner had a great deal of control over the process of rubber production and commercialisation. The boss labelled them *seringueiro*, which meant a labourer dedicated exclusively to the production of rubber.

Seringueiros were not autonomous in the process of production. Rubber production was under the owner's command. Appropriately, owners were called *patrão*, which means boss, characterising perfectly the class relations in *seringais*. This work relation does not fit with the recent classification of merchants as patrons in order to qualify commercial relations between them and familial or 'indigenous' producers as patronage or paternalism.⁴⁴⁹ The meanings of patronage (a) giving support such as charity or funds; (b) the power a person has to give contracts for work etc. bear only slight resemblance to work relations in *seringais* for in relation to (a) 'support' given by *seringalistas* to the transport of labourers to the estate was not really support at all but a loan to be paid back with 20% interest, as mentioned in the previous chapter. With regard to (b) this meaning is not sufficient to define the class relations of *seringueiros/seringalistas* which are disciplined by administrative procedures of direct and indirect control of labour in the process of production itself.

Actually, the regional terminology *patrão* was used in the second half of the 19th century and beginning of the 20th century to refer to the *seringalista* (which means rubber fields landowner) who was running the estates. The term *seringalista* emerged only in the 1960s in the context of land conflicts in Acre, when a reasonable proportion of *seringalistas* had become simply landowners, living in cities and hiring or selling their estates. Thus, the regional nomenclature *patrão* and *seringueiro*, expresses particular features of class relations in *seringais* whose appreciation

⁴⁴⁹ See, for instance, the anthropological debate on patronage and paternalism in Meira, 1996; Guillaud, 1996; Geffray, 1996; Picard, 1996.

requires a discussion on the way *seringueiros*' work was subdued by *seringalistas*.

The term *seringalista* is largely used here to mean jointing landowner and boss.

The Indirect and Direct Ways of Controlling and Disciplining Labour in the Process of Making Rubber

The linking between technological issues, quality control and the search for suitable means of controlling and disciplining labour in order to maximise productivity shaped the process of setting up and running *seringais*. The industry required particular raw material and rubber dealers imposed a quality standard⁴⁵⁰ guaranteed by a local system of quality control, involving the classification of rubber according to different kinds, which was formally checked by institutional quality control in Belém and Manaus. Moreover, the making of wild rubber is quite a specific process involving tapping and manufacturing and it was made by adapting the First Nations' methods of making rubber to entrepreneurial production, which raised specific issues. Those methods had been developed according to a converging interaction with nature and to produce rubber on a small scale and as a non-commodity.

This became a problem since using these very methods entrepreneurs sought to produce rubber on such a scale as to generate profit to ensure capital accumulation. Therefore, the effects of the different rhythm and quality of nature on time and quantity production intrinsic to these methods had to be minimised to increase productivity. Rubber production was directly influenced by the cycle of harvest, by the non-gregarious distribution of trees and also by the incidence of different species of gum. The harvest epoch varied in different rubber fields depending on the ecosystem. In Acre, the harvest was initiated around the middle of April and lasted until

⁴⁵⁰ Rubber should reach Britain uniform in quality, containing a constant degree of moisture ranging from 15 to 20% (Coates op.cit. p.52).

the end of November.⁴⁵¹ Moreover, different species of gum generated different kinds of raw material which, in their turn, were priced differently. The *Fina* hard Para was made of the best species of gum, the *entrefina* of latex from inferior species of gum, *sernamby* of the latex not smoked or of latex residues produced during the process of smoking, clots left in the latex containers or formed around the cuts on the trees during extraction. Finally, *caucho* was made of latex from the *Castillôa Ulei* a species, which required a different method of latex extraction and of making rubber. In 1912, *caucho* represented 20% of the rubber production in Amazonia. It would have been priced about 50% below the price of *fina* depending on the level of its purity.⁴⁵² In 1913, *entrefina* reached 84% of the *Fina* hard Para price, while *sernamby* reached only 54%.⁴⁵³ These percentages increased a bit in 1914 when they represented 85 and 65% of the *fina* price respectively.⁴⁵⁴ Besides the influence of the species of gum, productivity depended on the tree age. Trees were quite productive in the first month of extraction, with the second year showing the highest level of productivity overall after which productivity decreased gradually with the trees' age and time of extraction. The overall time that paths could be exploited also varied. In 1908, the Director of the Commercial Association of Amazon State estimated this at between 30 and 40 years.⁴⁵⁵ In 1913, however, local *seringalistas* and experts mentioned paths that had been in exploitation for 70 years.⁴⁵⁶

Seringalistas tried to minimise these natural influences on time and quantity of production by improving the technology of production, which is discussed in chapter

⁴⁵¹ Chaves, 1913 p. 42.

⁴⁵² Revista da ACA, Manaus, 10 de novembro de 1912, Anno V, 53, p. 3.

⁴⁵³ De Souza, E. A Crise da Industria da Borracha na Amazônia. In: Revista da ACA, Manaus, 67, Janeiro/1914, p. 4.

⁴⁵⁴ Chaves op.cit. pp. 58-59.

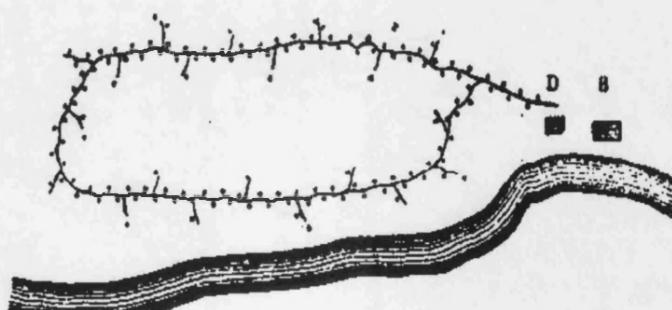
⁴⁵⁵ Benoliel, R. A Borracha do Amazonas na Exposição de Londres. In: Revista da ACA, Manaus, 5, Novembro/1908, p. 1.

⁴⁵⁶ Jornal Folha do Norte, Debate sobre o problema da borracha, Belém, Sabado, 16/04/1913, p.1.

six, and by rationalising space, building paths and *colocações* aimed at standardising and increasing productivity.

To build a path meant the organisation of rubber trees according to paths or sections, interlinking trees lying close to each other in circuits, irregularly and more or less elliptic and parallel to the rivers. When a few trees were distributed not according to closed circuits but nearby, one (or more) short paths would be built in order to join them to the circuit. These short paths were called *mangas* and one rubber path would contain many *mangas*. The whole, composed of one to three paths, a hut and a *defumador* (see appendixes 4 and 5 on methods of making rubber) was called *colocação* (Map 4). Internal roads or paths were built for interlinking each *colocação* to the administrative and commercial infra-structure – composed of the internal commercial house, warehouse and office – which was usually located close to the estate port. However, this rationalisation of space and nature did not standardise productivity. In fact, it only minimised the different productivity of paths and *colocações*.

Map 4: Schematic Map of a *Colocação*



Rubber Paths Plan: black points indicate the trees, B the *seringueiro's* hut and D the *defumador* (Chaves 1913)

The rationalisation of space/nature defined the potential productivity of paths and *colocações*, setting conditions on the use of inspection, not just as a procedure of quality control, but also of direct labour control and discipline. Inspection was justified as necessary for quality control, grounded in the fact that making rubber required special skills of tapping and manufacturing *pelles* (which were oversized rugby footballs of rubber). Direct producers had to be trained under strict supervision to control the method of cutting rubber trees in order to prevent damage to them.⁴⁵⁷ Yet, this was combined with forms of controlling *seringueiros'* time and rhythm of working. According to Ferreira de Castro,⁴⁵⁸ inspection was done not only when newcomers were being trained. Inspectors used to come to *colocações* to examine the way labourers were making rubber and to find out if they were working according to the intensity required by the owner. If they were not, this was reported to the owner who could use this information as a justification for controlling their credit in the commercial house. The author mentions labourers' difficulties in justifying incapacity to work for health reasons. Moreover, when rubber prices dropped sharply in 1913-15, and rubber tapers attempted to work less in tapping, owners reacted immediately by introducing daily inspection.⁴⁵⁹

In this way, rubber tapers were compelled to match their method, time and rhythm of working to the owner's expectations. Reactions or resistance to this were treated in different ways including dismissing, expelling, legal action etc. In seringal ITU one *seringueiro* was expelled in 1910 due to 'bad behaviour' and among the lawsuits on *seringais* in Acre in the Museu Nacional do Rio de Janeiro, Code 988, there are a few referring to *seringalistas* seeking the legal removal of *seringueiros* or *aviados* from their estates.

⁴⁵⁷ Chaves op.cit. p. 8.; Ferreira de Castro op. cit. p. 72.

⁴⁵⁸ Ferreira de Castro op.cit. pp. 95, 108-110.

The administrative control and discipline of labour in *seringais* are clearer when it is considered as a set of measures that changed over time. After the 1870s-1880s, and particularly in the 1910s, one of the strategies *seringalistas* adopted in the face of different conjunctures in the rubber economy was the intensification of labour exploitation within rubber estates, which was achieved in many ways.

First, the preference for individual instead of familial labourers goes hand in hand with the *seringueiro*'s condition of exclusive producers of rubber since it imposed the physical impossibility of individual labourers combining tapping and making rubber with different economic activities. According to Chaves,⁴⁶⁰ upstream of the Acre river, which was the most important area for rubber production in Acre State, the harvest endured around 140 days, and one *seringueiro* usually laboured on two paths, which were composed of around 200 trees, using 800 to 1000 small balls, getting an average of 6 to 8 litters of latex per path. Only the very exceptional among them got 18 litres per path per day.⁴⁶¹ His description suggests that more than 10 hours work a day was required to get around 6 to 8 litters of latex, producing around 45 to 50 Kilos of rubber in 4 or 5 working days.⁴⁶² Besides that, the literature⁴⁶³ suggests that subsidiary activities – such as fishing and subsistence agriculture - were tolerated since they did not affect the work required in the making of rubber.

The *seringueiros*' entire dedication to rubber production is confirmed by the results of the analysis of *Seringal* ITU diaries. In 1910, their monetary income originated almost exclusively from rubber (Table 9). In the *seringueiro* sample, just one rubber taper sold firewood and wood to the commercial house. The only alternative means to get extra income was to sell belongings or work temporarily as wage labourers in

⁴⁵⁹ Ibid. p. 136.

⁴⁶⁰ Chaves 1913, p. 41.

⁴⁶¹ Ibid.

⁴⁶² Chaves op. cit pp. 41, 47-49.

⁴⁶³ Cabral op.cit.; Ministério da Agricultura, Indústria e Comércio, Relatório Oswaldo Cruz op.cit; Ferreira de Castro op.cit. pp. 99 and 108.

other activities within the estate. Table 9 shows that in the *seringueiro* sample, only 3% sold belongings, while 11% worked temporarily as daily wage labourers.

Table 9: Other Sources of Income: Seringal ITU, 1910, 1913

Case no.	1910					1913				
	Products	Sale	T.Labour	Salary	P.A.	Products	Sale	T.Labour	Salary	P.A.
1	£84.83				10%					99%
6				£ 1,493.47					£1,493.47	100%
9	firewood									
	£ 63.24			£ 58.62		11%	beans £102.00			
14							plantation			
							£ 497.20,			
							work tools			
							£ 124.30			46%
17								£ 602.21		100%
20								£ 901.74		100%
23								£ 158.58		100%
25						1/4 meat	£ 77.73			
28	£59.24				8%			£1,060.59		69%
							wife labour			
30							£149.16	£2,109.52		61%
32								£ 842.66		100%
40	£34.03				5%				£2,321.10 (son);	
44									£ 2,065.96	
									(father)	91%
45									£ 939.64	51%
48	£157.83				20%					
51							£158.68			100%
54								£231.06		14%
57							work tools			
							£ 49.75			2%
63		£ 568.18		26%						
64		£94.70		8%						

Source: Diary of Seringal ITU 1910 and 1913

Notes: P.A.I.= Percentage of Annual Income

T.Labour = Temporary Labour

The same list indicates that in 1913, when the rubber price was plummeting as can be seen in chapter five, a reasonable proportion tended to abandon or reduce rubber production in favour of wage labour since 22% of the sample got extra income by performing temporary or permanent wage labour. Among them, 42% left the job of producing rubber to become wage labourers, as their wage income represented

100% of their annual income in 1913. Moreover, while in 1910, 11% of the sample had part of their income originating from a daily wage or salaried work, in 1913, 17% did so. Finally, the percentage of a daily wage or salaried income in the total income of these cases increased. While in 1910 this percentage varied from 5 to 26%, in 1913 the variation was from 51 to 100%. The exceptions were one case with 14% of wage income and three cases having the percent of wage income rising from 8 or 10% in 1910 to 61, 69 and 99% in 1913. Thus, in seringal ITU, in 1910 and 1913, *seringueiro* persisted as subordinated labour and exclusive producers of rubber, who could perform temporary wage work or even become permanent wage labourers within the estate. The diversification of the estate's economic activities at least until 1913, discussed in chapter six, did not imply diversification in *seringueiros'* economic activity, engagement of familial producers, or changes in class relations.

In the 1910s, besides the engagement of individual exclusive rubber producers, estates intensified labour exploitation in two other ways: (a) by increasing the number of rubber trees, compounding one path from 100 trees to 120, 150 and 180⁴⁶⁴ and (b) by reducing the number of *seringueiros* on the estate. Seringal ITU had 400 rubber paths. The number of *seringueiros* was reduced from 202 in 1910 to 160 in 1913 so that every *seringueiro* tapped a higher number of paths. This is even clearer when it is taken into account that in 1930, the number of *seringueiros* was increased to 215 - 26% more than in 1913. The higher level of work exploitation in this year is indicated by the fact that in 1913 the tendency towards diversification of rubber tapers' economic activity, which appears clearly in 1930, was still quite slight. Table 9 illustrates that in 1913 just 3% got extra monetary income by selling cereal and small cereal plantations (and tools) to settle debt in order to leave the estate.

⁴⁶⁴ Chaves op.cit. p. 32.

Indirect Means of Controlling *Seringueiro* by Controlling Credit/Debt

The *seringueiros'* condition of being individual and exclusive producers of rubber is an important element in understanding the meaning of the strict control of debt/credit in the internal commercial house as an indirect means of retaining, controlling and disciplining labour. As individual exclusive producers of rubber, they depended on the market to get foodstuffs. Yet, the circumstances under which they performed commercial transactions favoured indebtedness.

First of all, because they worked and lived in enterprises situated far away from markets, they depended on the internal commercial house to buy foodstuffs. Table 9 illustrates shopping frequency, estimate of monthly expenses and annual shopping of the *seringueiro* sample in 1910 and in 1913. The distribution of the sample is positively skewed so that dispersion is not readily achieved by the range, the mean of deviation or standard deviation. Searching for simplicity and a clear argument, it was verified that, in 1910, 32% of the sample shopped above and 28% according to the average (ten times a year). This means that 60% shopped according to or above the average frequency. Moreover, the percentage of those shopping eight or more times a year reached 89%. Thus, the great majority of *seringueiros* depended entirely or greatly on the internal commercial house for getting subsistence products.

Table 10 also shows that this dependency was slightly lower in 1913 with the annual shopping average (£815.14) being considerably lower than in 1910 (£1,215.57) and the maximum annual shopping (£2,534.16) being around 16% lower than that in 1910 (£3,036.56). This is much clearer when the frequency distribution is considered. First of all, in 1913, the average shopping frequency was 9, which is lower than that in 1910. Moreover, there was no *seringueiro* shopping every month and the percentage of those shopping eight or more times decreased from 89% in

1910 to 64% in 1913. More importantly, 21% of the sample did not shop at all in 1913. These results show a clear tendency to less dependency on the internal commercial house in *Seringal ITU* in 1913 in comparison to 1910. Yet, *seringueiros* still depended on the internal shop, considering that the average shopping frequency reached 9 times a year, 53% of the sample shopped above the average (10 or 11 times a year), and average annual shopping reached £ 815,14. The tendency to decreasing dependency on the internal shop is clearly confirmed only from the long term perspective as is discussed later, while in and before 1913, *seringueiros* depended on the internal commercial house to buy foodstuff.

Table 10 Seringueiro Shopping - Seringal ITU 1910,1913

Statistics	Annual Shopping		Monthly Expense		Shopping Frequency	
	1910	1913	1910	1913	1910	1913
Average	£ 1,215.57	£ 815.14	£ 110.98	£ 85.18	10	9
Median	£ 1,125.81	£ 818.96	£ 101.91	£ 84.66	10	10
Max	£ 3,036.56	£ 2,534.16	£ 253.05	£ 253.42	12	11
Min	£ 123.66	£ 24.56	£ 39.47	£ 11.10	2	1
Stdev	£ 554.59	£ 579.28	£ 45.82	£ 50.22	2	3
Avedev	£ 426.18	£ 448.25	£ 35.39	£ 37.40	1	2

Source: *Seringal ITU* diaries of 1910 and 1913.

Foodstuffs were expensive in the internal commercial house due to historical circumstances, such as, for instance, the high cost of transport. Acre River District was supplied most by commercial houses from Belém. According to invoices referring to the sale and transportation of goods from the *casa aviadora Alves Braga & Cia*, in Belém, to the *Seringal Guanabara* in Acre River District, in March 1913, goods reached Acre River District 64% more expensive solely due to transport expenses from Belém, and 57% more expensive simply because of the payment for freight, as illustrated on Table 11.

Table 11: Goods Transport Expenses, 1913

Expenses	Value	Percentage of the Goods' Value
Goods (£ 16,226,27)		
Transportation to the navy plus official registers	£ 132,59	
Export Taxes	£ 335,94	
Freight	£ 9,323,42	57%
Insurance and Other	£ 608,43	
Total	£ 10,400,37	64%

Source: Chaves, 1913 pp. 71-2

Considering that the internal commercial house may have made a profit from the business, the final prices to *seringueiros* must have been dear compared to prices in Belém and Manaus. According to the law, if the owner's profit from the sale of products in the internal commercial house was higher than 140% over the average prices of those products in Belém and Manaus, consumers could complain to the court.⁴⁶⁵ Yet, *seringueiros* could easily be out of date on prices in those markets owing to the distance and low frequency of shipment even considering that they had radio and many estates had a telegraph service.

However, the dependency on the internal commercial house and the high cost of goods do not explain debt in itself. So, it is necessary to discuss the circumstances under which *seringueiros* were engaged and remunerated.

Seringueiros were engaged as indebted labour. The owners financed their mobility from Belém or from the North East to the estate. This assumed the form of *seringalistas'* capital outlay, as previously mentioned, and of *seringueiros'* initial debt to be paid with 20% interest. In the *seringueiro* sample for 1910 and 1913, 36% were newcomers in 1910. As can be seen in Table 12, the average initial debt, including

⁴⁶⁵ This served as argument of defence in a Lawsuit in 1904 in which the claimant won the case (Arquivo Nacional do Rio de Janeiro - Seccao Historica, doc. Codigo 988, vol. 3, docs. 17-18).

20% interest reached £475.53. The initial debt included items such as travel ticket from Belém to *Seringal ITU* that in April was priced at £104.01 for third class and £412.14 for first class, cash and on-board expenses. The cash item together with the travel ticket represented the highest percentage of the initial debt. Considering the real expenses without interest, the price of travel tickets represented an average of around 45% and cash represented 41% of the initial debt.

Table 12 : Newcomers' Initial Debt, 1910

No. Persons	T.ticket	Cash	On-board expense	Shopping	Interest (20%)	Total
1	£104.01	£145.48	£ 2.26	£35.52	£ 57.45	£ 344.45
1	£104.01	£160.59	£ 29.39	£174.10	£ 93.62	£ 561.71
1		-	-			£ 223.41
1	£104.01	-	£ 78.68	£209.04	£ 78.36	£ 470.09
1	£103.36	£29.91	£94.96	-	£ 44.06	£ 240.31
1	£104.00	£150.00	£7.75	-	£ 52.33	£ 254.08
1	£10.01	£234.37	£ 16.80		£ 71.06	£ 426.24
1	£104.01	-	£10.66		£ 54.20	£ 325.33
1		-				£ 799.38
1	£412.14	£470.13	£11.95		£ 179.45	£1,973.72
2	£213.81	£278.55	£38.84	£73.71	£ 120.98	£ 725.89
1	£104.01	£117.70	£ 26.81	-	£ 49.70	£ 298.22
1	£105.55	£365.37	£58.53	-	£ 105.89	£ 635.29
2	£364.34	-	£128.55	-	£ 98.58	£ 591.47
1	£104.00	-	£301.35	-	£ 81.07	£ 406.42
1	£104.01	£78.94	£25.78	-	£ 41.73	£ 250.46
2	£208.01	-	£156.98	-	£ 73.00	£ 437.98
1	£104.01	-	£159.56	-	£ 52.71	£ 316.28
1	£10.01	-	£279.23	-	£ 76.65	£ 459.89
1	£4.01	-	£24.55	-	£ 25.71	£ 154.27
1	£80.75	£25.45	-	-	£ 21.25	£ 127.45
1	£115.10	£68.07	-	-	£ 36.63	£ 219.80

Source: *Seringal ITU* Diary of 1910

Notes: (1) The value £1,973.72 refer to December 1910 + £900.05 of advance payment in Belém. Thus, the interest rate is on the total of £ 894.22 only; (2) The information for 2 persons means a *seringueiro* and his wife.

The majority of newcomers, 61%, asked for cash in Belém, probably to buy foodstuffs and tools before coming to the estate. As already mentioned in chapter 1, *Seringal ITU*'s accounting documents do not give the price of single commodities, but considering that only 15% of newcomers did a first monthly shopping in the internal

house in 1910, it is almost certain that most of them got tools in Belém where it was cheaper. In 1913, *seringueiros'* expenses with tools could reach £506.49 on estates, as illustrated in Table 13. Although the prices in Belém were cheaper, they were still dear to *seringueiros* because they had to pay 20% interest over the cash borrowed. The official policy of encouragement to rubber production during the deepest crisis of rubber prices, initiated in 1911-12, considered the expenses with tools one of the main reasons for the high labour cost. The Plan of Defence of Rubber in 1912⁴⁶⁶ foresaw that in the official accommodation for immigrant labourers there should be available tools to be sold at cost price. Chaves⁴⁶⁷ disagrees with this Plan saying that tools prices did not represent a high proportion of the *seringueiros'* initial debt. However, this argument contradicts his own information illustrated in Table 13 in which tools prices are quite high. Actually, his disagreement shows the efforts owners went to, to go on selling tools in their commercial houses. Nevertheless, Chaves' argument that the cost of transport constituted one of the most important items in the initial debt is confirmed insofar as it represented an average of 45% of the initial debt, as previously mentioned. He stated that:

"The men engaged in Ceará State or in any other place, leave the little they have to their families, so, they need everything from the owners in order to come to the *Seringal*. From Ceará they go to Belém. The transport to this port, the accommodation in small hotels in this city and the travel ticket in steamboats cost 220\$000 *contos de reis*. The travel ticket can be even more expensive because the commandants charge each passenger 5\$000 to 10\$000 per day when bad conditions of navigation force delays during the journey. So, people never know the extra amount they will pay at arrival. They reach rubber estates in Acre after 30 to 45 days in an uncomfortable and suffering journey'.⁴⁶⁸ (Our translation)

⁴⁶⁶ The Federal Law 2.534A of January 1912 and its respective regulation in May of the same year.

⁴⁶⁷ Chaves 1913 p. 80.

⁴⁶⁸ Ibid. p. 67.

Table 13: Seringueiros' Tools - Prices in 1913

Tool	Quantity	Price
<i>Small Bowl</i>	100	£326.00
<i>Zinc basin (28 m)</i>	1	£ 54.45 to £ 72.60
<i>Small axe</i>	1	£ 9.07 to £ 18.15
<i>Big knife Collins no. 128</i>	1	£36.30
<i>Big Knife Collins smaller</i>	1	£27.22
<i>Zinc bucket (6 litres)</i>	1	£18.15
<i>Iron or clay jar</i>	1	£ 36.30 or £ 72.60
Total		£ 506.49 or £ 571.02

Source: CHAVES, 1913 p.67

The engagement of *seringueiros* as indebted labour persisted until at least the 1910s. In the Seringal ITU Diary of 1913 there is evidence of changes in that cases of engagement without debt as well as there being no register of masters travelling to Belém or to the North East of the country to recruit labour. In the Diary of 1930, there is no investment in recruitment of labour at all, no engagement of indebted labour and plenty of evidence of labourers having families living in Rio Branco or in nearby country towns instead of in the North East Region. This information confirms the emergence of an internal labour market in Acre, particularly after the 1910s as well as the existence of spontaneous immigration of labourers, as was discussed in the previous chapter.

These changes eliminated initial debts but not indebtedness in work relations because of the remuneration by results under particular circumstances. Remuneration by results meant uncertain income, depending not just on the work results such as quantity and quality of rubber produced. It also depended upon rubber prices to the direct producers and on the circumstances under which they sold rubber. Rubber prices in Belém and Manaus varied in the market daily and indeed many times a day, as seen in chapter five. Yet, rubber tapers could not benefit from these variations insofar as they sold their rubber within the estate according to

internal prices and at a time defined by work conditions. In *Seringal ITU*, *seringueiros* delivered the rubber they produced according to the calendar followed by the internal system of transport, but it was weighed, conferred and priced when boats from Belém came to take the production. This happened four times in 1910, once on April 30th and three times at the end of December. In 1913, it happened more than twice that year, at the end of January and on April 4th as well as there being references to the sale of rubber in Bolívia. Besides that, *seringueiros* sold their rubber on those occasions, not according to the prices in Belém, but according to the prices within the estate, which were around 40 to 50% cheaper than those.⁴⁶⁹ Finally, from the total amount achieved from the sale of rubber, was deducted rent and freight from each of them, representing 10 to 15%.

Moreover, *seringueiros* bought foodstuffs at expensive prices, as previously mentioned. Most importantly, they produced rubber for only about eight months a year, so that for four months, from the end of November to the end of March or the middle of April, they just consumed subsistence products but did not produce-sell rubber. This applied equally to those who went home during this time. Thus, the conditions under which *seringueiros* were remunerated and performed commercial relations tended to perpetuate indebtedness.

Such harsh conditions made possible the use of the accountant's strict control on their credit as an indirect way of retaining and constraining them to work. Rubber tappers bought goods on account to be paid with their future rubber production. However, in this commercial relationship rubber tappers were not autonomous buyers or sellers. They were obliged to sell the rubber they produced to the owner, who was in the position of owner-buyer and commander of the process of production, exerting direct control over their work, besides acting as creditor by means of the internal

⁴⁶⁹ This information on prices in *Seringal ITU* confirms estimates by Chaves (Chaves 1913, p. 70) and information by Ferreira de Castro (Ferreira de Castro op.cit. pp. 15, 74, 112-114).

commercial house, defining the level of loans and shopping on account. According to Ferreira de Castro,⁴⁷⁰ the rule in this matter was 'He who does not produce does not consume'. He states that the manager always reduced the rubber tappers' demand for goods when they had high debt. They were not sold anything beyond their level of production.⁴⁷¹

In *Seringal* ITU, however, even highly indebted rubber tappers had credit since they continued producing rubber because indebtedness also imposed difficulties for owners in controlling labour. Claims on non-payment of debt could be made according to the Commercial Code. The creditor could ask for *aresto*, which was the confiscation of belongings and proprieties under the mediation of authorities. *Seringueiros* had no valuable belongings or proprieties to be confiscated and their arrest would mean no payment anyway. Thus, the usual way to recover debt was to keep the debtor working on the estate.

The debtors, in turn, had to stay in the enterprise until the debt was settled. This could force *seringueiros* to stay on the estate for longer than they expected so that debt would also work as a means of retaining labour. However, the efficiency of it was limited. *Seringueiros* had an unequal level of productivity/consumption. Consequently, they had different levels of remuneration, defining different levels of income in relation to subsistence level. When they managed to pair their remuneration to their expenditure in the commercial house, they earned at the level of subsistence, which was expressed in their current accounts by the absence of debt or credit. Debt, in turn, would indicate earnings below the level of subsistence as a permanent or temporary condition. In *Seringal* ITU, in December 1910, 78% of the *seringueiros* sampled had debts. In December 1913, only 49 *seringueiros* or 76% of the sample in 1910 remained in the *seringal*, and 77% of them had a negative

⁴⁷⁰ Ferreira de Castro op.cit. p. 71 and p. 74.

⁴⁷¹ Ibid.

balance. This high percentage of indebtedness expresses the particularity of those making up the sample. They were selected among those staying in the *seringal* at the beginning of February 1910 and at the beginning of March 1913, when the accounting year started. After March 1913, 21% of the sample left the estate. Despite the existence of a considerable percentage of *seringueiros* staying there for years even having positive balances, most of those who stayed for long periods had negative balances. Finally, the percentage of the sample earning above the level of subsistence was not that low, considering that 17% had a positive balance in December 1910 and 22% in December 1913 (this percentage referred to those staying on the estate throughout the year, which means a total 21% lower than the sample in March 1913).

Moreover, as already mentioned, of the total of 202 *seringueiros* in *seringal* ITU in Feb-1910, around 55% worked for a period from three to four years, while 11% managed to leave the estate in just two years.

The results thus far raise questions about the extent to which work relations in *seringais* were characterised by labour immobilisation and abscondment, as suggested by the literature. The next step in this direction is the discussion on labour's strategy of dealing with indebtedness as well as labour rotation.

Seringueiros' Strategies of Dealing with Debt: Re-Thinking Debt and Abscondment

Seringueiros had different forms of resistance to the use or role of debt as a form of retention, control and discipline. In the accounting documents of *Seringal* ITU in 1910, 1913 and 1930, there is plentiful evidence of *seringueiros'* strategies for facing indebtedness. Most cases indicate collective forms of resistance and mutual aid. Those *seringueiros* and wage labourers having positive balances used to lend money

to their indebted colleagues without charging interest. This saved them from getting loans in the commercial house at 20% interest, and they could buy goods with cash, which was crucial to those who were highly indebted and had their credit controlled by accountants, which in some cases included the stoppage of buying goods on account. In 1910, 25% of the *seringueiro* sample borrowed money from 27 lenders whose transactions reached the amount of £1,835.69. In 1913, 19% did the same, the number of lenders, being 27. Although the number of borrowers was lower in 1913 than that in 1910, the total amount involved was higher at £2,493.98. Moreover, they used to lend them goods too. That is, they authorised the commercial house to sell them goods and register it in their current accounts. Authorising a deposit back to the lender's accounts, usually at the end of the year when the annual balances were done made the payment back.

Especially when they wished to leave the estate, *seringueiros* used to sell belongings, including tools, in order to settle debt. List 1 illustrates that in 1910, 3% of the *seringueiro* sample sold belongings.

Finally, they performed jobs inside the rubber estates as daily wage labourers. The List shows that 11% worked temporarily as daily wage labour or salaried workers in 1910. In 1913, there was a reasonable proportion of *seringueiros* tending to even abandon or reduce the production of rubber in favour of wage labour, as 22% of the sample did this.

This tendency is also indicative of the *seringueiros'* strategies to cope with the falling rubber prices in 1913, as discussed in chapter five. In this scenario, *seringueiros* were directly affected because not only did they sell rubber at lower prices than those prevailing in Belém and Manaus, but they bought expensive subsistence products too. Under such conditions, being a wage labour seemed a good strategy because wage labourers had clear advantages. They had fixed daily wages or salaries and most of them had free meals. Consequently, they tended to

shop less. Considering a sample composed of 8 wage and salaried workers, earning salaries of £120.00, £150.00 and £200.00, it was found out that their annual average income was £1,077.40 in 1910. As such it was higher than the *seringueiro*'s annual average income in this year at £1,017.16. Most importantly, wage labourers expended less in the internal commercial house. Their annual shopping average was just £460.78 in 1910 and £327.10 in 1913, while the *seringueiros*' annual shopping average reached £1,215.57 in 1910 and £815.14 in 1913, as shown in Table 12. In the selection of a wage labour sample it was attempted to keep the criterion of permanence on the estate at the beginning of February 1910 and at the beginning of March 1913, but the rotation among wage labourers was higher in comparison to *seringueiros*. As a result, in 1910 the salaried sample refers to 7 salaried workers because the account of one of the eight considered had no movement in 1910 but had in 1913, and of the eight making up the sample, only two remained in the *seringal* throughout the year 1913 because one became a rubber taper in this year and five happened not to be there anymore.

Moreover, wage labourers tended to have positive balances. Analysing the wage labour sample from the point of view of the final situation, I came across with 75% leaving the *seringal* with a positive balance. It also has to be considered that workers at the top of the estate administration always had positive balances. The accountant received a salary of 700\$000 *contos de reis* in 1910, and 1:000\$000 *contos de reis* in 1913, which was equivalent to that of the accountant in the *Instituto Paulista da Defesa Permanente do Café*.⁴⁷² The accountant had a positive balance of £416.57 in December 1910, and £12,510.82 in December 1913, leaving the *seringal* in June 1914 with high savings. Another administrative worker was contracted in 1910 with an annual salary of 10:000\$000 *contos de reis*. He is recorded as having lent money to *seringueiros* a lot, without interest.

Besides the reasonable tendency towards wage labour, *seringueiros* had to intensify their tapping and making of rubber since the owner reduced the number of *seringueiros* from 202 in 1910 to 160 in 1913, as previously mentioned.

Finally, *seringueiros* faced declining rubber prices in 1913 by augmenting the sale of rubber by consignation. In the sample just 2% sold part of the rubber they produced by consignation in 1910, while 44% did so in 1913. This could allow them to get better prices in comparison to what they could get at the end of the year when the final balance of their production was done, considering the tendency to permanently decreasing rubber prices. Nevertheless, because they were not *aviado*, they could not sell all the rubber they produced in this way.

The material presented raise questions to the prevailing accounts of work relations centred on indebtedness and abscondment. Calixto⁴⁷³ states that *seringalistas* must have been violent and arbitrary. His statement is based on Cabral's description of the assassination of an indebted fugitive *aviado* by a *seringalista* in Acre.⁴⁷⁴ The author criticises Ferreira de Castro⁴⁷⁵ and Jose Potyguara,⁴⁷⁶ who, according to him, tended to see *casas aviadoras* or the commercial-financial capital as the cause of low remuneration and arbitrary work relations in *seringais*. Yet, Ferreira de Castro mentions it as the owner's justification for the low remuneration of indebted *seringueiros*. Moreover, what this literature indicates is the existence of different attitudes to indebtedness and abscondment, even by the same *seringalista*. Ferreira de Castro describes two different attitudes of his boss in 1914. He forgave the debt of one *seringueiro*⁴⁷⁷ but had a violent reaction to an occurrence of abscondment in which three fugitive *seringueiros* were

⁴⁷² See comments on the Law 2.004 of December 1924 in: Queiroz, P. 1927 p. 63.

⁴⁷³ Calixto op.cit. pp. 97-99.

⁴⁷⁴ Ibid. p. 98 (the author refers to a description by Cabral op.cit. p. 71).

⁴⁷⁵ Ferreira de Castro op. cit.

⁴⁷⁶ Potyguara, J. 1942.

⁴⁷⁷ Ferreira de Castro op.cit. p. 287.

captured.⁴⁷⁸ In reaction to the capture, an old ex-slave who lived in the *Seringal* set fire to the owner's residence, killing him.⁴⁷⁹

This is an important element in the novel by Ferreira de Castro because it expresses the repugnance of this, particularly of labourers and ex-slaves, in a post-slavery conjuncture in which labour's freedom was regarded as a precious principle. Actually, these situations constituted a dramatic expression of the *seringueiros'* condition of subordinated labour in a historical circumstance of weak working legislation in Brazil, stressing the different existing standards of workers' treatment by capitalists. The commercial transactions in *seringais* were regulated by the Commercial Code, which was the first legislation to be improved by Brazilians after independence from Portugal. Regarding work legislation, however, there were sparse laws on particular aspects in a conjuncture in which even urban strikers were treated as police cases. The Brazilian Work Legislation was promoted as a set of laws only in 1930.

At the beginning of the 20th century, Euclides da Cunha⁴⁸⁰ was one of the pioneers in questioning *seringueiros'* living conditions. Stressing labour treatment as a matter of employers' character and over-emphasizing cases of abuse of power by certain employers, he refers to *seringais* as 'the most criminal of work organizations'. He also denounces the absence of official assistance in terms of health care and education, which were installed in the countryside only as part of the *Plano de Defesa da Borracha* after 1912.

However, Euclides da Cunha's comments have been taken a-critically.⁴⁸¹ Actually, the cases of interference of *seringalistas'* subjectivity and individual character in work relations have been interpreted from the view of economic processes as non-social

⁴⁷⁸ Ferreira de Castro op.cit. pp. 199-211.

⁴⁷⁹ Ibid. pp. 215-18.

⁴⁸⁰ Euclides da Cunha 1946.

⁴⁸¹ See for instance Calixto op.cit.

phenomenon and from the perspective of the Western notion of civilization, idealizing capitalism as synonymous with 'rationality', 'civilization', well-being, progress and absence of violence in work relations in opposition to non- or pre-capitalist relations.

These views have shaped biased interpretations of work relations in *seringais* and posited obstacles to a more consistent debate on the matter. For instance, the fragile condition of *seringueiros* facing *seringalistas* has been focused on as if it were a singular situation, ignoring that working class fragility facing capitalists constituted a general characteristic of capitalism in the period of this research,⁴⁸² the situation of rubber tapers in rubber plantations in 'Peninsular Malaysia', particularly after 1909, was referred by Barlow as an 'evil system',⁴⁸³ which is a remark quite similar to that by Euclides da Cunha. According to Segatto,⁴⁸⁴ in Brazil, until 1930, the work time depended on the bosses' will and need, the work journey in many urban industries reached 12, 14 and until 15 hours per day and workers had no right to remunerated

⁴⁸² Russel (1991, pp.9-10; 17-18; 21, 27) shows that in British industry, on which Marx based his concept of capital, labour treatment was a matter of employers character. Incentives and rewards were selectively distributed; favour was bestowed upon those whose conduct and attitude were deemed to merit special privilege and this was intended to encourage emulation by the rest. Actually, for farm workers, any real progress began only from 1924, and in Scotland only after 1937. Moreover, it was not common practice for employers to continue to pay wages to manual workers during sickness absence and in many firms, retirement pensions for wage workers were at the discretion of the employer, and given selectively to 'deserving' individuals who qualified by length of service and good character.

⁴⁸³ Like *seringueiros*, rubber tappers in rubber plantations were immigrants whose contracts involved debts. According to Barlow, they were employed, without contract also, to prevent them from leaving the estate for other work. Moreover, 'Ears and other advances were recovered by making deductions from pay (...) Employees were not kept properly informed of the state of their accounts, extra sums were frequently debited, and interest was charged. They used to pay wages one or two months in arrears, as a means of discouraging abscondment. This made it difficult for workers to check on whether they were credited for the right number of days. In consequence of such practices many immigrants were permanently short of cash; they were often forced to procure food and other supplies on credit, and this inevitably led to a vicious circle of further poverty and debt' (Barlow op.cit. p. 42). Even contract categories of worker could come to states already with debts as a result of the expenses of transport and subsistence, together with a commission paid by the contractors. Moreover, the contractors (...) did not permit the immigrants to leave them until all debts had been repaid; this often took a long time, for expenses were frequently exaggerated and swollen by interest charges. Debts were also enhanced by the practice of contractors in charging high prices for food, selling opium, and running gambling establishments' (Ibid p. 46).

⁴⁸⁴ Segatto, 1987 p. 22.

weekends off or any security for health purposes. Moreover, he says, many times urban proletariat were engaged and dismissed verbally, without formal contracts.⁴⁸⁵ Finally, according to him urban proletariat were under rigorous system of coercion and discipline to guarantee maximum productivity, which could involve even physical constraints, threats and other kinds of coercion.⁴⁸⁶ Changes were not readily achieved or intrinsic to capitalism but were built in complex, difficult and violent class struggles as the vast literature on trade unions has revealed.

Finally, the a-critical reproduction of Euclides da Cunha's accounts of work relations in *seringais* has ignored two important points. First, that *seringueiros* were not passive but had strategies to deal with different issues and that *seringalistas* were dealing with relatively low pool of labour. Such a condition required some commitments by employers, expressed not only in passive strategies to convince labourers to work in distant *seringais*, as discussed in the previous chapter, they also had to use different forms of incentives.

Bonuses, Gratification or Discounts

Seringueiros' labour was controlled and disciplined not just by inspection and by strict control of credit/debt. The *seringal* ITU diaries show that the *seringalista* also used different strategies of motivation and ways of retaining labour such as by offering schooling to those few who had children,⁴⁸⁷ by bringing priests to assist religious workers, by supplying loans to those requiring health treatment in cities or nearby country towns, by offering temporary wage labour to those who were highly indebted or their young sons or even to their wives who could perform house services in the owner's residence or cleaning in the office. Moreover, *seringueiros*

⁴⁸⁵ Ibid.

⁴⁸⁶ Ibid. p. 23.

⁴⁸⁷ Neves op.cit.

were also motivated by incentives and rewards in the form of bonuses, gratification or discounts.

These incentives and rewards were certainly given selectively to 'deserving' individuals who qualified by length of service, good character and expected behaviour. Table 14 illustrates that incentives were given to indebted and non-indebted labourers. In 1910, just a slight majority of receivers had a positive balance (56%) while most of the rest had low debt levels. However, in 1913, almost all receivers had debt instead of credit in the commercial house, and two out of the three cases among them who had a positive balance were ex-rubber tapers who became wage labourers. Moreover, rewards were often disproportionate to their balance. In 1913, just three *seringueiros* received discount of 50% or more of their balance and just four received gratification. Considering this and that in 1910 one *seringueiro* was dismissed due to 'bad behaviour', there existed different standards of labour treatment by the boss.

Table 14: Bonuses, Gratification and Discounts: Seringal ITU, 1910, 1913

Case no.	1910				1913			
	Bonus	Discount	P.A.D.	P.P.B.	bonus	Discount	Gratification	P.P.B.
1	£64.62		6%		£104.58		5%	
5					£117.44		5%	
10					£ 1,926.47		50%	
11	£51.65		53%					
12	£33.42	£ 154.39	167%					
13	£127.72			11%	£125.76		6%	
17						£ 12.44		5%
18	£55.03	£ 271.38	16%		£242.78			77%
25		£ 113.48		6%	£267.05	£ 573.60		31%
26					£62.52	£ 584.23		37%
28						£ 104.54		15%
30					£127.17			31%
34	£58.61		22%		£91.82			8%
35	£106.74			7%	£17.89			1%
39					£ 621.50			19%
45						£ 171.13		91%
46					£ 83.95			5%
47					£ 62.27			1%
50					£ 31.31			11%
52					£ 1,970.16			61%
55					£ 364.49			15%
56					£ 1,892.79			50%
59					£ 231.68			25%
61					£ 260.56			7%
63	£ 32.80		2%		£ 21.42	£ 559.70		46%
Sum	£ 530.59	£ 539.25			£ 2,206.71	£ 8,134.43	£ 288.11	

Source: Diary of Seringal ITU for 1910 and 1913

Notes: P.A.D.= Percentage of the Annual Debt.

P.P.B. = Percentage of the Annual Positive Balance.

However, it should be noted that incentives were also given according to strictly profitable criterion. Table 14 illustrates that 10% of the *seringueiro* sample received incentives in 1910 and 31% in 1913. This was done twice a year, at the end of June and at the end of December. Apart from three cases in 1910 and four cases in 1913, incentives and rewards were given to those having high productivity and a relatively high level of consumption in the commercial house. Tables 15 and 16 show that in 1910, the receivers average value of rubber production is almost double (£1,608.71) the value of non-receivers (£888.57). Data distribution in which, in 1910, 30% is far

above the average of £1,608.71 and around 65% close below the average confirm the tendency to higher levels of rubber production among receivers. In contrast, the non-receivers' data distribution express lower levels of rubber production with 41% below and far below the average value and just 20% above. In 1913, receivers and non-receivers present higher average values of rubber production in comparison to 1910. However, the figures are quite similar. The receivers average value of rubber production is £1,736.28, with the distribution presenting 15% far above the average, 65% close below the average and just 20% below. The non-receivers' data present uneven distribution, tending to values far below the average in 1913, with 31% above the average and 86% below or far below.

Table 15: Gratification Receivers - Production Value and Shopping, 1910, 1913

Statistics	Annual Shopping		Rubber Production	
	1910	1913	1910	1913
Average	£1,285.94	£972.73	£1,608.71	£1,736.28
Median	£1,133.66	£1,013.34	£1,408.04	£1,621.58
Max	£2,273.66	£2,534.16	£3,045.10	£3,259.26
Min	£473.61	£77.73	£458.55	£481.90
Stdev	£622.41	£630.83		
Avedev	£531.18	£457.47		

Source: *Seringal ITU* diaries of 1910 and 1913

A similar tendency was found with regard to annual shopping, though in a slighter proportion. Receivers' annual shopping frequency was higher than that of non-receivers. Receivers' average shopping frequency was 10 in 1910 and 9 in 1913, while non-receivers' average shopping frequency was 9 in 1910 and 6 in 1913. Moreover, the great majority shopped according to or above the annual shopping frequency average and the few exceptions shopped more than eight times a year. Furthermore, receivers tended to have higher levels of consumption in the internal commercial house. In 1910 receivers' annual shopping was £1,285.94, while non-receivers' annual shopping reached £1,199.41. In 1913, the difference was higher.

The average of receivers' annual shopping reached £972.73 and non-receivers just £696.95 as can be seen in Tables 15 and 16.

Table 16: Non-receivers -Production and Shopping 1910,1913

Statistics	Annual Shopping		Rubber Production	
	1910	1913	1910	1913
Average	£1,124.25	£726.32	£810.13	£1,284.50
Median	£1,099.28	£625.71	£669.16	£1,018.13
Max	£2,506.76	£2,169.68	£2,834.88	£3,404.23
Min	£123.66	£24.56	£70.56	£14.93
Stdev	£499.83	£552.05	£575.07	£857.10
Avedev	£362.22	£429.47	£425.32	£711.24

Source: *Seringal ITU* diaries of 1910 and 1913

Another aspect to be considered is that *seringalistas/seringueiros* work relations also involved negotiation of debts and changes over time, as discussed below.

Labour Rotation and Changes

Since the last decades of the 19th century and particularly after the 1910s, *seringalistas* responded to the constant deep oscillations in rubber prices by diversifying economic activities on the estate, as discussed in chapter six. Together with agriculture and cattle, Brazil nuts increasingly became an important export commodity, particularly after the 1920s.⁴⁸⁸ On those rubber estates with *castanhais*, rubber production became an activity combined with the picking of Brazil nuts. As discussed in chapter six (see Table 20) until the 1920s around 6% of the early *seringais* in Acre River District produced Brazil nuts, yet those estates diversifying the production of commodities reached 33%. The 67% appearing as producer of rubber only signify that rubber was the only commodity product, while the diversification of economic activities occurred towards the production of cereals for

⁴⁸⁸ See on this matter Emmi, 1988.

internal consumption. The general tendency to diversification of economic activities particularly after 1912-13 is well mentioned.⁴⁸⁹

This tendency affected the *seringueiros'* work condition in a long-term perspective. In Seringal ITU, Table 17 illustrates that in the *seringueiro* sample of 1930, representing 30% of 215 *seringueiros* working in the estate, 12% combined rubber production with the picking of Brazil nuts during the year, one case sold corn, and 5% worked temporarily as wage labour.

Table 17: Other Sources of Annual Income, 1930

Case no.	Products	temporary work	P.T. A.I.
7	Brazil Nuts - 90.42		8%
9	Brazil Nuts - 161.15, pork skin -5.32, corn - 9.45		19.51%
14		26.6	1.51%
15		1758.24	85%
17	Brazil Nuts - 74.47		11%
21	Brazil Nuts - 255.32		12.56%
30	Brazil Nuts - 250.00		18%
45	Brazil Nuts - 481.48		7%
46	Brazil Nuts - 49.45		82%
48	Brazil Nuts - 218.09		14.50%
58	Brazil Nuts - 29.26		3%
62		611.38	39%

Source: *Seringal* ITU, Diary of 1930.

Note: P.A.I.= Percentage of Annual Income.

The diversification of *seringueiros'* economic activity allowed them to develop a degree of autonomy in relation to the internal commercial house, which is expressed in the tendency to a lower level of shopping in 1930 in comparison to 1910 and 1913.

⁴⁸⁹ See Reis, 1953 p.107-108; Bastos, A. 1958, p. 38 and p. 43; Pinto de Oliveira op.cit. pp. 25-26; Paula op.cit.

In the *seringueiro* sample of 1930, 12% did not shop at all during the year and 53% shopped just three times. Moreover, 75% shopped less than 5 times during the year. Table 18 illustrates that the average value of annual shopping in 1930 dropped sharply. It represents 56% of the average of annual shopping in 1913 and 44% of that in 1910. Thus, in contrast to their colleagues in the other two years considered, in 1930 rubber tapers diversified their source of monetary income and means of subsistence, so that they could shop less in the internal house.

Table 18: Seringueiros Shopping: 1930

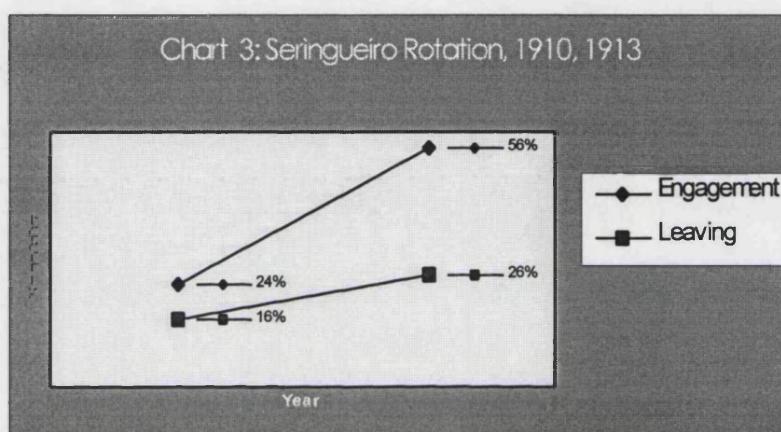
Statistics	Annual Shopping	Monthly expense	Shopping Frequency
Average	£ 548.78	£ 48.52	3
Median	£ 383.18	£ 32.63	3
Max	£ 2,477.80	£ 225.25	11
Min	£ 74.82	£ 6.80	1
Stdev	£ 502.47	£ 45.05	2
Avedev	£ 370.66	£ 33.52	1

Source: *Seringal ITU* Diary of 1930

Diversification of economic activities goes hand in hand with a higher level of labour rotation. The first point to be stressed in the discussion of rotation is that the idea of labour immobilisation characterising work relations is questioned by the results of this investigation. Many *seringueiros* with positive balances stayed on the estate for years contrary to the dogma that suggests only indebted labour did so. In December 1910, 17% of the *seringueiro* sample had positive balances and all of them stayed on the estate until 1914 or the middle of 1916. Moreover, just one out of the 20% having positive balances in December 1913, left in February-1914, while the majority stayed for many more years. In 1930, 5% of the total 215 *seringueiros* stayed on the estate with positive balances. Moreover, as previously mentioned, some *seringueiros* left the estate and came back the following year. Finally, many

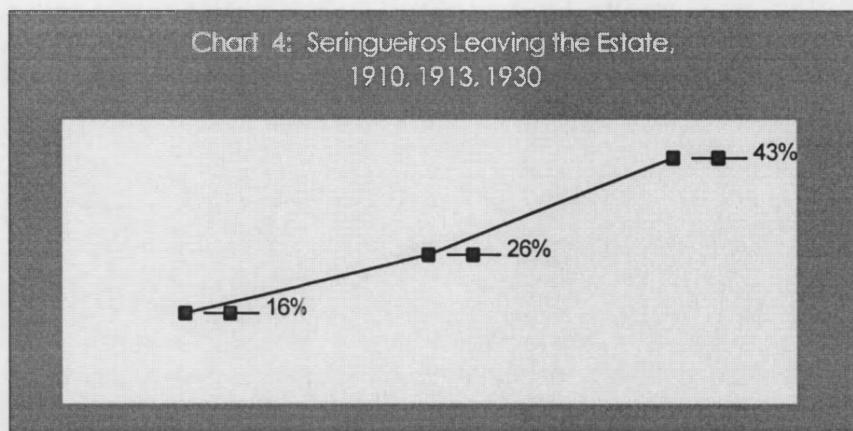
indebted *seringueiros* left via different forms of negotiations, as previously mentioned.

Furthermore, there was an increasing rotation of labour in Seringal ITU. Chart 3 illustrates that the engagement of *seringueiros* increased from 24% in 1910 to 56% in 1913. At the same time, the percentage of *seringueiros* leaving the estate was 10% higher in 1913.



Source: Seringal ITU Diaries of 1910 and 1913

Chart 4 shows a firm tendency to an increasing percentage of *seringueiros* leaving the estate when the three years (1910, 1913 and 1930) are considered. Taking into account that in 1930 the total number of *seringueiros* on the estate reached 215, 26% more than the total in 1913 in addition to a higher percentage leaving, there was an intensification in the engagement of labour. In other words, there was increasing rotation of labour in Seringal ITU.



Source: Seringal Diaries of 1910, 1913 and 1930

Finally, changes in the way *seringueiros* left the estate were found. In 1910, two *seringueiros* died, one was dismissed owing to 'bad behaviour', and 30 left their jobs. Among those leaving the estate, only 13% had positive balance and 3% had their debt settled. The rest represented 53% who moved to a neighbouring estate, having their debts assumed by the new boss and 31% who were indebted *seringueiros* leaving by negotiation. Some of them had their debts assumed by other *seringueiros* while others had half of the debts assumed by other *seringueiros* and half by the owner. In 1910, the amount transferred from *seringueiros*' debt to the estate *Lucros & Perdas* account reached 4.982.680 *contos de reis*, including debts of the two *seringueiros* who died. In 1930, 43% left the estate at the end of the year and 81% of them had positive balances.

Conclusion

Seringalistas commanded the process of rubber production, contrary to what is popularly suggested by the literature. Moreover, work relations in *seringais* were not defined by indebtedness. Although *seringueiros* were engaged as indebted immigrant labour at least until 1912 and the circumstances under which they performed

commercial relations within the estates favoured indebtedness or the perpetuation of initial debts, what defined work relations were the ways labour was subdued by the owner of the means of production and the commander of the process of production.

In *seringais*, as in any capitalist enterprise, the capitalist's will assumed the form of administrative procedures of retaining, controlling and disciplining labour. The search for technological improvements, efficient systems of quality control and suitable forms of controlling and disciplining labour in order to maximize productivity shaped the process of setting up and running *seringais*. The organization and rationalization of space/nature in which rubber trees were organized according to paths and *colocações*, which were linked to the administration by internal paths, reduced production time and defined potential labour productivity. This was the basis for the use of inspection as a means of quality control and of direct control over *seringueiros*' labour, which was part of a set of administrative procedures. *Seringalistas* controlled the level of labour exploitation by increasing or decreasing the number of *seringueiros* engaged, altering the number of rubber paths to be exploited by each of them and also by increasing the number of rubber plants compounding one path.

Besides that *seringalistas* used different forms of indirect control and discipline. First, as a result of circumstances such as the *seringueiros*' dependency on the internal shop to get foodstuffs insofar as they were exclusive producers of rubber in an enterprise situated far way from markets, the strict control over their credit was turned into a form of retention and control. Second, incentives were given such as bonuses, discounts and gratification, which were certainly given selectively to 'deserving' individuals who qualified not only by length of service, good character and expected behaviour but also according to profitable criterion such as high productivity combined with high level of consumption in the internal shop.

In these ways, *seringueiros*' labour was subdued to capitalists' will and objective of producing rubber as a commodity to profit in order to ensure capital

accumulation. They were not autonomous in the process of production but were labourers paid by results. Their subordination was manifested not just by means of the administrative measures of retention, control and discipline, they had an obligation to deliver the rubber they produced to the owner and they had to sell it according to internal work conditions. As a result, their remuneration was defined not just by the quantity and quality of rubber produced but also by the conditions that commercialised it - under pre-determined administrative rules and according to the frequency of shipments.

These forms of controlling and disciplining labour subdued *seringueiros'* work by the *seringalista*, indicating class relations in which the boss and labourers personalised distinct social conditions.

**PART FOUR: Profitability and Capital Accumulation: the *seringalistas'*
project of economic-political changes, re-investments and changes
in *seringais***

Chapter 5:

The Double Movement English Rubber Dealers Versus Local Capitalists and The Seringalistas' Project of Economic and Political Changes

However fundamental, the previous discussion on *seringueiros*' class condition of subordinate labour is not sufficient to prove that *seringal* was a capitalist enterprise. It is, therefore, necessary to focus on profitability and capital accumulation, which demonstrate the ways *seringalistas* re-invested the profit they got from rubber and expanded capital, and why did they do so.

This has been neglected in previous literature for different reasons. On the one hand *seringalistas* have been classified as traders-usurers not keen on investing in production, as previously mentioned. On the other hand, the neo-classical technical-economic approaches focus solely on the non-adaptation by *seringais* of the pattern of civilisation and progress represented by the modern technology of large-scale monocultural rubber, which is interpreted as a 'failure'. This is a distorted view of the matter which originated in the a-critical absorption of the Western notion of civilisation and progress, implying an automatic negative view of *seringais*. Moreover, this interpretation does not consider *seringalistas* as historical actors. Consequently, the literature does not consider the *seringalistas*' own project of economic and political changes and gives no evidence about how *seringalistas* invested or re-invested the profit they got from rubber and why.

This chapter aims at understanding the local capitalists' project of economic-political changes/re-investments in rubber production and the reasons for it. This is sought in their response to the obstacles to profitability imposed to a great extent by their complex relationships with foreign rubber dealers, particularly the English capitalists, which is focused in the use of the term double movement.

The exposition of the argument is organised as follows: (a) the Brazilian counter movement to colonial inequalities and the English movement towards the rubber economy; (b) the foreign rubber dealers' influence on rubber prices in Belém; (c) the *seringalistas'* counter movement to rubber dealers; (d) the demand for interventionism and the counter-reactions of foreign rubber dealers; (e) the demand for interventionism and the plan of defence of rubber; (f) the *seringalistas'* project of economic-political changes and the central governments' pattern of response

The Brazilian Counter Movement to Colonial Inequalities and the English Rubber Dealers and the British State's Movements Towards the Rubber Economy

The English rubber dealers and the British State's movements towards the rubber economy cannot be understood from the point of view of England's economic-political expansionism alone. On the contrary. The crucial element is the way in which the English gentlemanly capitalists' search of markets for English goods and capital converged with the demands and dynamics of economic-political processes in Brazil. They were not autonomous newcomers. Rather, their investments entered the country under regulations - for instance, the opening of commerce to foreigners in 1808 and the remission of the major barriers to foreign investment under the Constitution of 1824 - and by means of commercial treaties and strong restrictions in many sectors.⁴⁹⁰

The relaxation that led to foreign investments being permitted in Brazil was to a great extent, linked to internal struggles against colonial inequalities within which nationalism was born. In this process, liberalism assumed a particular meaning since

⁴⁹⁰ For instance, in the mining industry foreigners had to pay 5% higher taxes than nationals and offer one third of their company stock to Brazilian investors as well as to pay a deposit of 150,000 milreis to the Treasury as a guarantee against future payment of taxes and duties (Eakin 1986, p. 702).

it was used to enforce claims in opposition to the close colonial economy in which exportation/importation could be performed only through the medium of Portuguese. This claim was an intrinsic part of the gradual internal process of ascension of Brazilian capitalists and the middle classes to the position of rulers in political-economic affairs, at first characterised by struggles to get rid of the Portuguese. In this slow and complex process, the Imperial government was, in fact, a temporary arrangement in which fundamental features of the colonial economy and policy were still alive,⁴⁹¹ for example, the commercial treaties held by England, expressing the pattern of economic relations of Portugal with England since 1808 when the Crown moved to Brazil.

The 1830s-40s were marked by increasing criticisms of these treaties. The main point was England's double standard regarding the principle of liberalism and the self-regulated market.⁴⁹² On the one hand, the treaties gave privileges to British products and capital in Brazil while England had enacted protective legislation regarding its industries and the products imported from its colonies. On the other hand, Brazilian products and capital in England were denied any privilege, based on the principle of liberalism and the self-regulated market. Brazilian diplomacy questioned the double standard and denounced the unequal economic results. The treaties benefited English insurance companies, merchants, refineries and the government (by means of taxes), but imposed difficulties on the Brazilian economy.⁴⁹³ They also had indirect political effects. Furtado⁴⁹⁴ demonstrates that they prevented the Brazilian government from increasing import taxes so that the only alternative left was to tax exports which meant taxing the profits of agricultural capitalists who were in political ascension in the country, thereby reducing the central

of 150,000 milreis to the Treasury as a guarantee against future payment of taxes and duties (Eakin 1986, p. 702).

⁴⁹¹ Barman, R. 1981, p. 239.

⁴⁹² AHI, Consulado de Liverpool – Ofícios 1842-1853, Ofício reservado no. 56, maço 252/4/8; Furtado 1961, p. 13.

⁴⁹³ Ibid.

government's authority at a time of increasing economic difficulties and political movement all over the country, particularly by rural workers and peasants.⁴⁹⁵

In 1841-5, during negotiations on the renewal of the 1827 Treaty Brazil attempted through diplomacy to eliminate such inequalities. England refused to accept their proposals, however, and it was this rather than the trafficking of slaves which Coates⁴⁹⁶ suggests that led to the non-renewal of the treaty.

In Amazonia, English investments started around 1808 and increased steadily until around the 1850s. They supplied the internal market with coal, machinery for sugar production, boats for internal navigation and other goods and were prominent in the shipment of export products to Western European markets. After the 1840s they increasingly offered credit and export services to the rubber economy. Then, in the 1860s they bought the main Brazilian company running internal navigation and began to receive a subsidy from the Brazilian government that composed more than 50% of the total governmental subsidy to the sector.⁴⁹⁷ Coates⁴⁹⁸ shows that English traders increasingly became the main intermediaries in the exportation of rubber, favoured also by the prominent position of sterling. Only sterling letters of credit were accepted in external trade and in Brazil only through sterling could foreign earnings be converted into milreis.⁴⁹⁹

However, the crucial point regarding the English rubber dealers' movement towards the rubber economy is that they did not want to just offer credit, to buy and to export rubber. They intended to do on their own terms. They constrained local producers to make rubber according to the quality (see footnote 450), quantity and

⁴⁹⁴ Furtado op.cit.

⁴⁹⁵ Ibid.

⁴⁹⁶ Coates op.cit. p. 46.

⁴⁹⁷ ACP, Relatório Annual de 1870; ACP, Relatório Annual de 1877; ACP, Relatório Annual de 1879; ACP, Relatório Annual de 1881; ACP, Relatório Annual de 1885; ACP, Relatório Annual de 1909; ACP, Relatório Annual de 1911; ACP, Relatório Annual de 1913.

⁴⁹⁸ Coates op.cit., chapter 7.

⁴⁹⁹ Ibid. p. 47.

prices required by the international capitalists' pattern of accumulation, and wished to establish their political and 'moral' order in rubber commercialisation, thereby imposing their authority. These efforts were guided by the imperialistic mentality and ideological tools such as the western notion of civilisation and progress combined with the principle of liberalism and self-regulated markets and Spencer's theory of the 'survival of the fittest,'⁵⁰⁰ shaping a particular way of doing business. They attempted to impose these ideologies locally, trying to prevent the creation/implementation of regulations in the internal market. At the same time, they performed their business guided by a highly competitive pattern, attempting to sweep aside those they considered as competitors, which resulted in a certain tendency to dominate services in the rubber economy.

This pattern of doing business first of all clashed with the Brazilian struggle for autonomy in the face of European colonialist powers. Foreign capitalists invested in the region with formal permission and many times by means of economic deals or contracts with the Brazilian government. They were supposed to obey Brazilian institutions and laws. However, this matter constituted one of the greatest sources of clashes not just because of their pattern of doing business but also because they were closely supported by the international branches of their home states.

These relations changed over time, however in the period until around the 1870s or even the beginning of the 1880s, there was a direct connection between English merchants and the local branch of the British State, illustrating the prevailing strong character of class of the international branch of the British State. This is clear in many situations. In the selection of a new diplomat, the indication of or agreement by English firms constituted an important requirement. Moreover, when diplomats were absent, the consulate was left in charge of merchants.

⁵⁰⁰ See on this ideology Bowler 1992, p. 330.

This same feature accounts for the military interference in the *Cabanagem*. As was mentioned in chapters 2 and 3, rural labourers contested the control of the best lands by entrepreneurs by occupying farm, including slavery sugar and rum mills owned by the English. Moreover, English merchants living in Belém feared that their private properties would be damaged somehow during the conflict. As a result, they were willing to meet the local government's demand for military help. In a meeting with English capitalists, the British diplomat decided to meet this demand. British war ships bombarded Belém, after removing English capitalists. This was justified on the ground of defending 'British' interests, and was crucial for defeating this political movement. In fact, class interests were supposed to be threatened. British capitalists were also dissatisfied with the nationalist element of *cabanagem*, which was headed by nationalist factions of the native elite.

This does not mean that the British State was a sort of resonance box of their interests. Their demands to London involved more complex processes, some of which were not positively responded to. After the *cabanagem* and even until the 1850s, English capitalists repeatedly demanded the foreign office interference to convince the Brazilian government to compensate those who had their farms damaged somehow during this conflict. This was always denied based on the international law.⁵⁰¹

Finally, in 1882, it happened that the acting consul disobeyed Brazilian Customs regulations. He owned and ran the most important import-export house in Belém and in Manaus and one of his ships arriving from Liverpool did not stop at the port as required by customs' regulations, thereby, preventing it from being inspected. He reported the immediate reaction by the inspector of the custom house as constituting

⁵⁰¹ F.O. 13/327 – Letters of 18th February 1848 and 25th March 1854.

disrespect for a British consul.⁵⁰² However, a report by the Inspector of Customs accused the merchant of not distinguishing between his position as acting consul from that of businessman and reported similar behaviour by his firm on several past occasions,⁵⁰³ claiming that the firm did not want to respect and obey the Brazilian law and institutions.⁵⁰⁴

The English merchants practices and ideologies is clearer in the clashes which marked the debate on commercial-financial regulations at the Associação Commercial do Pará.⁵⁰⁵ Local and foreign capitalists running businesses in Pará were members of this association on the ground of common class interests. However, local landed capital, manufacturers, those investing in the service sector and running middle and small sized businesses in commercial-financial transactions wanted to establish protective regulations. Thus, clashes were commonplace in these meetings. The discussion of the Directory's proposals for improving the regulations regarding commercial transactions in 1870 is particularly illustrative. English merchants were against them. They were not keen on respecting the adoption of the decimal metric system and they were against the directory's proposal to regulate the legal procedures regarding receipts and bills. An English merchant argued that he was against them 'because I do not like regulations. I do my job and the buyer has to defend himself'.⁵⁰⁶ The President replied stating that 'it is the seller's obligation to sell any good according to legal and moral procedures'.⁵⁰⁷

⁵⁰² APP, Carta do Consulado Britânico assinada pelo Consul Substituto Arthur Sahuston em 01/10/1882. In: APP, Ofícios Diversos. Consulados do Pará, 1880-1887, origem: Secretaria da Presidência da Província, Caixa 374.

⁵⁰³ Idem, Relatório do Inspetor da Alfândega de 13/10/1882 ao Inspetor da Thesouraria da Fazenda.

⁵⁰⁴ APP, Ofícios Diversos. Consulados do Pará, 1880-87, origem: Secretaria da Presidência da Província, Caixa 374.

⁵⁰⁵ See Minutes (Atas) of the ACP in the bibliography under manuscripts.

⁵⁰⁶ ACP, Livro de Atas de Reuniões Ordinárias e Extraordinárias e Assembléias Gerais do período de 13/02/1864 a 9/1/1877. Ata de Reunião Extraordinária em 10/02/1870, pp. 69 and 71 (our translation).

⁵⁰⁷ Ibid. p. 71.

The Spencerian subterranean conception governing the English merchants' behaviour was that they could act as aggressively and as harmfully as they wanted and the consequences of their acts were not their fault but the victim's problem. When one had no condition to defend him/herself it was interpreted as weakness, and the principle 'survival of the fittest' conceives the exploitation of 'weaker' as 'normal' and 'acceptable' as it is in the lion eating other animals. In Amazonia, English capitalists had favourable conditions to practice such a principle because most of them ran temporary businesses, investing in mobile or easily disposable capital, having no links with the land, the culture or the local society. Despite individual differences, the frequent fronting of Customs laws and attempts to prevent the creation of suitable protective regulations survived in the long term as a general pattern of doing business.

These practices were somehow benefited by national political context of the First Republic (1889-1930) which was marked by the political ascension of the so-called 'Group of oligarchy', who assumed power throughout the period 1898 to 1920, representing successful groups investing in coffee plantations, who were well articulated with the international financial bourgeoisie,⁵⁰⁸ defending their ideology of progress and civilisation.⁵⁰⁹ This articulation was manifested soon after they assumed power when they dealt with the State's financial difficulties by getting an external loan. A funding loan was signed with English gentlemanly capitalists in June 1898 in a situation in which they already dominated the import economy,⁵¹⁰ and acted as one of the most important lenders of money to the nascent Brazilian industries.⁵¹¹

⁵⁰⁸ This term is preferred here instead of 'Haute Finance', which was used by Polany (op.cit) in his 'institutional' approach, and instead of 'financial oligarchy' as Lenin (in: Imperialismo Fase Superior do Capitalismo, S. Paulo, 1979, pp. 46-59) refers to them, which is linked to his view of capital in its monopolist stage, reproducing Marx's notion of History.

⁵⁰⁹ Calixto op.cit. p. 15.

⁵¹⁰ Singer, P. O Brasil no Contexto do Capitalismo Internacional, 1889-1930, in: H.G.C.B. III. O Brasil Republicano, Difel, S. Paulo, 1982, p. 355, quoted from Calixto op.cit. p. 37.

⁵¹¹ Graham, R. 1973, pp. 140-142.

Topik⁵¹² raises important features of the role of the State in the Brazilian economy during the First Republic. However, he defines it as a mediator between strong foreign capitalists and a weak domestic bourgeoisie, resulting from a nation-state framework combined with a view on the principle of liberalism and the self-regulated market as a model to be adopted by Brazilians. As a result, Brazilian state interventionism is interpreted as an 'abnormality' or loss of purity resulting from (a) the dependency on the services and credit offered by foreign capitalists; and (b) the strength of foreign capitalists and weakness of native bourgeoisie, which demanded strong State action both to protect them and to provide the infrastructure necessary for their agricultural export economy.⁵¹³

This nation-state interpretation shadows the specific features of demands for interventionism in Brazil and minimises the divergence and varying actions and ideologies internal to both native and foreign capitalists. The demands for interventionism in Brazil expresses both the landed capitalists' principle of self-protection in the face of deleterious actions of traders-financiers and the counter-movement to the foreign capitalists' Spencerian way of doing business, which was marked by struggles against colonialist inequalities. Font⁵¹⁴ shows that, in Santos in S. Paulo State, the planters-*commissario*' reactions against foreign commercial-financial capitalists goes back to 1909. Most importantly, he says that this assumed the form of demands for interventionism and involved varying and complex processes. So, the State's policy of protection and valorisation of coffee, which was one of the most important policies during the First Republic, was a complex issue. This involved different interests and historical circumstances and oppositions by representatives of other Brazilian states.

⁵¹² Topik, 1979, 1980 and 1985.

⁵¹³ Ibid. 1979, pp. 328-29.

⁵¹⁴ Font, 1990 p. 45.

Moreover, the First Republic (1899-1930) itself was marked by different internal pressures and oppositions.⁵¹⁵ Calixto⁵¹⁶ shows different groups of the upper class assuming power during the First Republic. The previously mentioned 'group of oligarchy' implemented a policy opposing the previous republican government (1889-1897) and important political factions. This is crucial to an understanding of the gradual set of political principles and practices that characterised their governments in 1898-1920 such as (a) detachment from regional interests; (b) treatment of financial affairs as the fundamental issue to be tackled by the government; leading to (c) the organisation of an administrative government, banishing the relative autonomy of the national Parliament and building a 'Unitary Presidentialism', consolidated in the elections of 1900, and attached to the so-called 'politics of governors'.⁵¹⁷ The federate government was characterised by the relative autonomy of States, which was in fact an autonomy integrated to the order imposed by the 'Unitary Presidentialism'. This policy met the interests of national-international exporters and financiers and provoked reactions by national landed capitalists, the military, journalists, lawyers, bankers and industrialists.

The policy stemmed from the increasing complexity of internal economic-political affairs and from the double movement: foreign commercial-financial capitalists versus native landed capitalists. In the rubber economy, the First Republic's policies welcomed both the foreign capitalists' efforts to make Brazil produce rubber, and the intensification of their investments in other businesses. According to Weinstein,⁵¹⁸ followed by Calixto,⁵¹⁹ the decade of the 1880s was marked by the increasing

⁵¹⁵ See Calixto op.cit. 42-46; Tannuri, L. 1981 p. 73 and p. 85; Queiroz, S. 1984; Weffort, C. (org.), 1991 and Viotti da Costa, E. 1977; Carone, E. 1988; Singer, P. 1982; Souza, M. 1973; Saes, D. 1985; Bello, J. 1972; Love, J. 1982; Queiroz, M. 1982; Levine, R. 1978; Topik op.cit.

⁵¹⁶ Calixto op.cit. p. 21-41.

⁵¹⁷ There are plenty of studies on this policy. See for instance: Viotti da Costa, E. 1977.; Carone, E. 1988; Singer, P. 1982; Souza, M. 1973; Saes, D. 1985; Bello, J. 1972; Love, J. 1982; Queiroz, M. 1982; Levine, R. 1978; Topik op.cit.

⁵¹⁸ Weinstein, 1983 p. 145.

⁵¹⁹ Calixto op.cit. p. 71-74.

submission of the local commercial-financial capitalists to Foreign export houses. However, an analysis of Public Deeds in the CC and reports by the ACP indicates that foreign capital invested in credit, commercialisation and the export of rubber from the very beginning. The privileges given by the commercial treaties of 1810 and 1827 held by England allowed English capitalists to become prominent in the international transport of rubber to Europe and also sometimes as intermediaries in the exportation of rubber to the USA. What changed after the 1880s was the kind of capitalists involved. Before the 1870s-1880s, most of them were small scale commercial-usury capitalists from Liverpool, Manchester and other English towns. Despite a few of them investing in the same business for decades, intermarrying with the Portuguese and living in Belém or Manaus, usually they invested in short term businesses, for two or three years, usually in the form partnerships.

After the 1880s, the English investors were mostly what Cain and Hopkins⁵²⁰ term gentlemanly capitalists (the association of aristocracy and financiers centred in London and offering services abroad). The gentlemanly capitalists were an intrinsic part of the international financial elite organised in trusts and cartels, defending State interventionism in its imperialist form as the tools to guarantee their expansionism, materialising changes in the initial form of liberalism as ideological tools of previous foreign commercial-usury capitalists.⁵²¹

The gentlemanly capitalists were given incentives and contracts of service by the Brazilian central government or by the governments of Pará and Manaus. They financed a wide range of businesses, carried out by English companies and engineers. After the 1870s, English companies increasingly invested in transport (navigation and railways), and urban infrastructure in Belém and Manaus by supplying services such as trams, gas, electricity and water. At the same time, the

⁵²⁰ Cain and Hopkins op.cit.

⁵²¹ See reference to this in Calixo op.cit.

gentlemanly capitalists offered credit or invested directly in the exportation and shipment of rubber, performed by export houses. The scope of these businesses was larger than the previous ones. In rubber economy, it was manifested in partnership with German or Portuguese capitalists.⁵²² The English rubber dealers' actions were characterised (a) by attempts to sweep aside the local commercial-financial capitalists, represented by *Casas Aviadoras*, trying to prevent them from expanding their businesses to export-import services; and (b) by making efforts to impose their principles.

This was happening in a conjuncture in which the British State was supporting imperialistic actions by English capitalists abroad at the same time as it was carrying on its own imperialist policy marked to a great extent by the efforts to control and use technology as political tools.⁵²³ This gives another dimension to the reasons governing the British State's policy aimed at developing the technology of large-scale monocultural rubber in its colonies. According to Martinello⁵²⁴ this policy was a response to the automobile industry's boom and to challenges posited by new nation-states such as Brazil to the international capitalists' imperialistic purposes. Actually, this policy started in the 1870s when the automobile industry had not yet developed. Demand at this time then resulted from the growth of the British and world industry of rubber by-products⁵²⁵ which was a historical condition for the British State's main motivation: the search for the technology of large-scale monocultural rubber as a tool of the Spencerian intention to dominate rubber production, establishing control of the supply of this important raw material as well as establishing themselves as owner-sellers of this technology.

⁵²² CC, Índice de Escrituração, 1812-1932 and JUCEPA, registros de firmas. See also Santos op.cit. p. 129 and Weinstein op.cit. 145.

⁵²³ Bowler op.cit.

⁵²⁴ Martinello, 1988 p. 154.

⁵²⁵ Hancock, T. 1857.

In Amazonia, strategies aimed at defeating the local rubber economy, particularly in 1906-08, represent one of the main manifestations of the Spencerian principle, governing the movement of the British State towards the rubber economy. In 1906, tropical America was the most important producer of rubber (about 60%), tropical Africa the next (30 to 35%), and tropical Asia the least important, contributing just 3%.⁵²⁶ Moreover, the highest quantity Fina Hard Para, constituted the greatest proportion of the rubber exported by Brazilian Amazonia,⁵²⁷ and this was the kind which usually commanded the best price and was most in demand.⁵²⁸

This contradicted the British empire's wish to become the most important supplier of rubber. Rubber plantations emerged under heavy institutional, economic and political support by the British State⁵²⁹ facing difficulties which were sorted out only after 1909. The attempts to cultivate rubber failed in many areas. For example, the level of productivity in Ceylon was low at the beginning due to uncertain methods of extracting latex and young trees.⁵³⁰ Moreover, the cultivation of rubber was not viewed favourably and this started to change only after around 1907.⁵³¹ Entrepreneurs, in addition to facing plant pests, exhaustion of soils and other problems, which had frustrated the attempts to implement large-scale cultivation of coffee in Malaysia,⁵³² were also afraid of over production.⁵³³ Entrepreneurs also thought that cultivation of rubber would be more an affair of the government than for

⁵²⁶ Wright, 1907 p. 615.

⁵²⁷ Ibid. pp. 619-620. See also the article Production of India-Rubber, Journal of the Royal Society of Arts, August 10, 1906, p. 919 and Collins, J. 1869, p. 82.

⁵²⁸ Ibid. See also Coates op.cit. p. 52.

⁵²⁹ See article Rubber Planting, Journal of the Society of Arts Vol.LIV, January 26, 1906 pp. 272-73; Barlow op.cit. pp. 27-30; Drabble, 1973 chapter 2; Santos, R. op.cit.; Dean op.cit.

⁵³⁰ Dean op.cit. p. 76.

⁵³¹ Wright, 1907 p. 631.

⁵³² Barlow op.cit. p. 29.

⁵³³ See debate at the end of the article by Wright op.cit.

private individuals due to the high cost involved.⁵³⁴ As a result, before 1909 there was shortage of finance in the Malay States.⁵³⁵

Under such circumstances, the British government not only had to invest heavily in research, infra-structure of transport and exportation, offers of credit etc, but also to convince entrepreneurs about the efficiency of the technology of large-scale monocultural rubber, trying to drive investments towards rubber plantations.

The Spencerian principle governing these efforts was manifested in the conception of the rubber economy in Amazonia as an enemy to be defeated. In spite of the ever-increasing demand for rubber by an expanding industry, they were apprehensive about potential expansion of rubber production in Amazonia. Actually, foreign investments in rubber production increased from 1900-10 as already mentioned in chapter two and there existed non-privatised rubber fields in central areas (distant from waterways). Most importantly, English scientists evaluated that the success of rubber plantations would depend, to a great extent, on the rubber production in Amazonia.⁵³⁶

These apprehensions were manifested in Spencerian attempts to sweep aside local rubber production. In 1906, the British diplomacy discussed the possibility of reducing or stopping credit or direct trading by British firms in Amazonia. However, such ideas were shelved because the vice-consul in Manaus warned that if British firms did so, the Germans would step in to offer these services to local capitalists.⁵³⁷ At the same time high promotion of rubber plantations was combined with counter-propaganda against the rubber economy in Amazonia. In publications and debate by

⁵³⁴ Ibid. p. 641.

⁵³⁵ Barlow op.cit. pp. 29-31

⁵³⁶ See comments on Wright's paper published in the India Rubber Journal of September 21, 1908 in Jornal 'A província do Pará, Coluna Assuntos Oportunos, A Extração da Borracha e seu Futuro no Amazonas, 28/10/1908.

⁵³⁷ F.O. 368/172 – Report for the year 1906 by the vice-consul to the Consul Casement.

the Royal Society of Arts⁵³⁸ in that conjuncture, when the high cost of producing large-scale monocultural rubber was mentioned (the cost of opening 500 acres of land, and planting around 108 trees per hectare would reach £5,946 17s.6d. Sterling, with added interest on all money expended, and investors would have to wait 5-6 years to begin obtaining profit),⁵³⁹ it was followed by a negative evaluation of rubber production in Amazonia. The main argument was that after seven years the profit in monocultural rubber would be considerable. In contrast, investments in extractive production would be expensive and would become even more so because of its presupposed nomadic and predatory production, which would require long journeys to reach new rubber-producing districts in the near future when the rubber trees on the coast would be exhausted.⁵⁴⁰

This version was over emphasised in the First International Exposition of Rubber in London in 1908 when the British Consul in Pará⁵⁴¹ attempted to mischaracterize *seringais* as private property as was discussed in chapter two. His arguments were used to warn investors to be careful if thinking in investing of rubber in Amazonia.⁵⁴²

These attempts to sweep aside the rubber economy in Amazonia went hand in hand with the rubber dealers' actions as brokers in the rubber market in Belém in a conjuncture of fragility of the local capitalists facing the First Republic policy.

The Foreign Rubber Dealers Influence on Rubber Prices in Belém

One of the greatest movements of English rubber dealers towards the rubber economy was the manipulation of rubber prices in Belém, which was hidden by the liberal explanation of prices as the impersonal results of the interplay of supply and

⁵³⁸ See articles in the Journal of the Royal Society of Arts vol. LI, June 5, p. 643; vol. LIV, dez. I, 1905 pp.61-62 and vol. LIV, February 16, 1906, p. 382.

⁵³⁹ Ibid.

⁵⁴⁰ Ibid.

⁵⁴¹ F.O. and The Board of Trade. Diplomatic and Consular Reports op.cit.

demand as if it were a 'law' of nature. As illustrated in Table 19, Brazil was the only supplier of rubber until 1860. In the 1870s, Africa started to produce wild rubber and the production of monocultural rubber started only in 1900 so that in 1910, Brazil was still the main producer, accounting for 57% of world rubber production. The shortage of rubber had become more intense since the 1880s when the tyre industry emerged, initially for bicycle and carriages, and particularly when the pneumatic industry appeared after the 1890s, demand expanded quickly. Therefore, there was a clear tendency to steadily increasing demand and higher prices in the world market. The temporary fall of prices at the beginning of 1885, expressing the initial movement of large African supplies, lasted just a few years and by 1890, prices were establishing record highs in London and New York.⁵⁴³ Although experiments with monocultural rubber started in the 1870s, it was only in the 20th century that investments in rubber plantations were initiated and only by the end of the first decade of this century that monocultural rubber was demonstrated clearly to be more profitable than the traditional methods of production in Amazonia.⁵⁴⁴ The years 1900 to 1910 were marked by the tremendous demand for rubber by the automobile industry. This industry, which had used practically no rubber in the 1880's and only a few tons in 1900, consumed 100,000 tons by 1910, representing 70 to 80% of all rubber produced in the world at that time.⁵⁴⁵

⁵⁴² Jornal A Província do Pará, A Borracha – O Pará e seu Comercio, Belém, 25/10/1908.

⁵⁴³ McHale 1967, p.15.

⁵⁴⁴ Ibid. p.17.

⁵⁴⁵ Ibid. p.16.

Year	Quantity.(ton)	% of world production
Table 19: Brazilian Rubber Production, 1822-1930		
Year	Quantity.(ton)	% of world production
1822	31	100%
1830	156	100%
1840	388	100%
1850	1467	100%
1860	2673	100%
1870	6591	93%
1880	8679	91%
1890	16394	84%
1900	27650	50%
1910	38177	57%
1920	23587	7%
1930	12852	2%

Source: McHale 1967, p.28; Soares, 1930.

Moreover, before 1912, there was no over-production. Rubber production in Amazonia increased annually during the years 1896 to 1906, at an average of 6.5%, with the exception of two harvests in 1897-98 and 1902-03 when production dropped by 0.03% and 0.25% respectively.⁵⁴⁶ According to official statistics illustrated in Chart 7, in chapter six, the highest level of production occurred in 1912, with 42,000 tons. In fact, before 1913, rubber production was never able to satisfy the ever-growing demand,⁵⁴⁷ and there was the technical impossibility of getting synthetic rubber to the market in a short time.

According to the liberal explanation of prices, this conjuncture of low supply and high demand would result in increasing prices. Indeed, prices did present the tendency to increase in the international market. According to Knorr⁵⁴⁸ rubber prices shot up from about 67 cents a pound in the 1890s to over \$1.00 in 1903, and in 1910 averaged \$2.09 per pound. Nevertheless, prices in Belém were marked by profound oscillations. Records⁵⁴⁹ show daily profound oscillations in prices as being

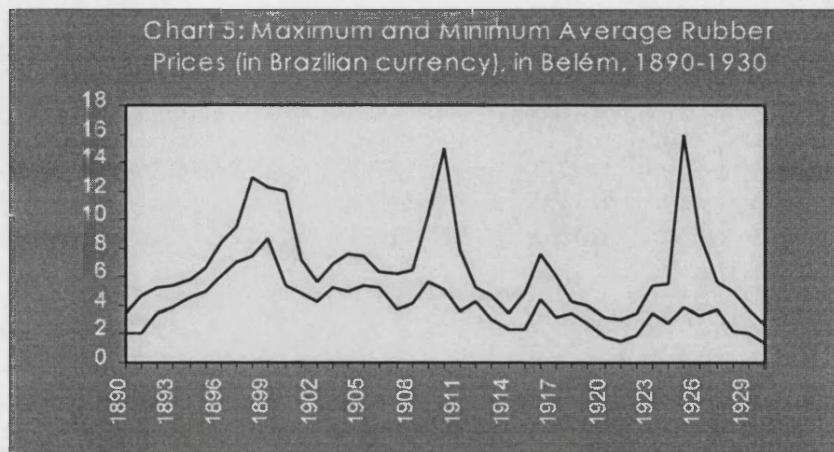
⁵⁴⁶ Montenegro, Augusto(Governor of the State of Pará). Message to the Legislative Assembly in 1908. Journal The Brazilian Review, supplement, Rio de Janeiro, Tuesday, October 20th, 1908, vol. XI, no. 42.

⁵⁴⁷ Knorr, K. 1945, p. 9.

⁵⁴⁸ Ibid.

⁵⁴⁹ Ata de Sessão Ordinária em 20/12/1872 e Parecer de José R. P.Junior sobre a Pauta Semanal de Preços da Borracha. Em 24/06/1872). In: ACP, Livro de Atas referente ao

commonplace. This is expressed in the maximum and minimum annual average prices in Belém in the period 1890 to 1930, illustrated in Chart 5.



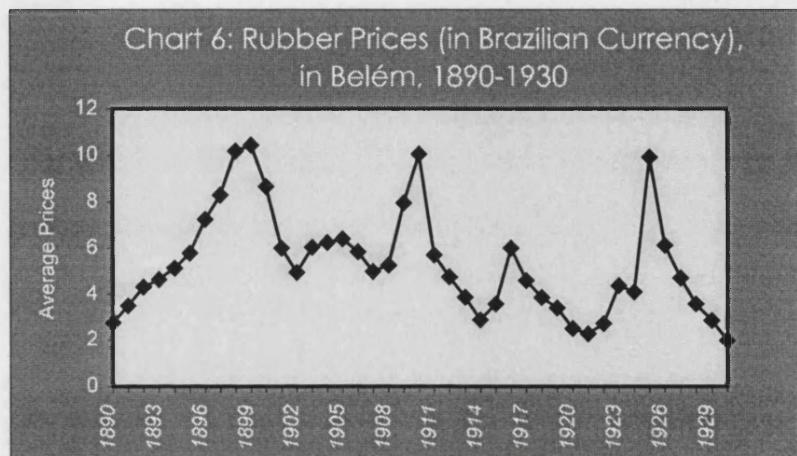
Source: Anuário Estatístico do Ministério da Indústria e Comércio, Janeiro a Dezembro 1956, p.23

The causes of this phenomenon are of an economic, political and historical nature, revealing that prices are man-made instruments of social relations, rather than the mechanical results of the interplay between supply and demand. Before 1912, the most important cause was the interference by foreign rubber dealers. As can be seen in Chart 5, the average prices of rubber in Belém increased sharply in the years 1890 to 1899, which may be seen in the light of the increasing demand provoked by the birth of the tyre industry. However, despite the higher demand resulting from the growth of the automobile industry in 1900-10, as previously mentioned, prices fell off violently in 1899 and were kept low until 1908. The sharp fall in prices in 1903-08 coincided with the attempt to sweep aside local rubber production, as previously mentioned. The *Journal, the Brazilian Review*,⁵⁵⁰ pointed

periodo 03/10/1870 a 17/06/1881; Ata da Sessão Ordinaria em 26/02/1880. In: Ibid. Livro de Atas de 03/10/1870 a 17/06/1881, p. 89; Ata de Sessão Ordinaria em 20/03/1883. In: Ibid. Livro de atas de 01/07/1881 a 23/03/1888, p. 28.; ACP, 1914, p. 40.

⁵⁵⁰ The *Brazilian Review*, article Rubber, March 9th, 1909.

out a margin of manipulation and interference left to traders, supposedly by the 'law' of supply and demand, which could be eliminated by intervention in the market to try and keep supply and demand even.



Source: Anuário Estatístico do Ministério da Indústria e Comércio, Janeiro a Dezembro 1956, p.23

Confidential consular correspondence, however, informs us that foreign exporting houses were in the position of brokers, who, 'by withholding supply and other manipulations, produce artificial prices and otherwise disturb the market'.⁵⁵¹ Moreover, local capitalists and the governor of Pará went further, stressing manipulations by foreign rubber dealers as the main cause of oscillations in rubber prices, questioning the 'law' of supply and demand directly.⁵⁵² They argued that (a) the increase of 9.09% in production in 1906-07 in comparison with the harvest of 1905-06 was a result of entries belonging to the latter crop that were delayed or held by producers. And even if it constituted a real increase in production, it would never be considered over production in a market characterised by increasing demand; (b) in contrast to coffee whose price dropped as a result of over production, rubber was

⁵⁵¹ F.O. 368/274, confidential letter by Milne Cheetham to the Foreign Office, Petropolis, March 14th 1909.

⁵⁵² Montenegro op. cit.

a scarce commodity so that the fall in prices by 40% in the short space of four months from June to October 1908 could not be explained as being the result of increasing production; (c) this fall in prices could not be the result of the crisis in America either as economists or agronomists had argued,⁵⁵³ because this crisis caused a stock exchange movement and not an economic upheaval.⁵⁵⁴ Finally, they conclude that (d) the constant profound oscillation of rubber prices in Belém was the result of manipulations by exporting houses.

Manipulation of prices by foreign rubber dealers had been the object of discussion in Amazonia since 1884, when prices had fallen by 44%, expressing the impact of the international consumers' reactions to the speculative high prices that exporting houses were trying to impose.⁵⁵⁵ As these houses were subsidiaries of head-offices in the main international consuming centres, these capitalists controlled the international rubber market, using many different strategies of holding prices down in Belém and pushing them up abroad.⁵⁵⁶

Particular circumstances were manipulated by rubber dealers. First, Brazilian producers depended on their international merchant fleet services. There were no Brazilian shipping companies that provided a service to international ports until August 1906, when a line was initiated to New York.⁵⁵⁷ The prominence of English Gentlemanly capitalists in the rubber export trade from Amazonia was apparent. In the 1910s, seven English companies and firms, the great majority from London, the two most important of them in partnership with German and Portuguese, controlled half the volume of the rubber exporting trade from Amazonia.⁵⁵⁸ Moreover, an English

⁵⁵³ See for instance Da Costa, J.S., 1913, pp. 25-26.

⁵⁵⁴ Ibid.

⁵⁵⁵ ACP, 1885, p. 10-11.

⁵⁵⁶ Jornal 'Folha do Norte', artigo A crise..continuação, 30 de junho de 1913; Mendes, J. 1908, pp. 74 e 84; Santos, R. op.cit. p. 129.

⁵⁵⁷ F.O. 368/92 (1907) – Dispach commercial no.20 of April 5th 1907.

⁵⁵⁸ F.O. 368/274 (1909), letter by solicitors of those companies and firms in London to the Foreign Office in 12/11/1908.

navigation company controlled the transatlantic transport of rubber to Europe. To a certain extent, it dominated the exportation to Harvre and Hamburgo, re-packing the rubber from Amazonia in Liverpool and re-exporting it to those markets.⁵⁵⁹

Second, there was no well-developed banking system in Brazil.⁵⁶⁰ This is why the Brazilian and local States supported the offer of credit in the rubber production by foreign financiers. If in the coffee economy, *comissários* lent money to planters representing the traditional reliance on commission merchants for loans,⁵⁶¹ in the rubber economy, *seringalistas* borrowed money from *casas aviadoras*. The gradual increase in the offer of credit-banking services by Brazilian banks, insurance companies, popular credit houses and foreign export houses and banks after the 1870s did not eliminate the problem of the absence of a proper financial system to *seringalistas*. Export houses and banks preferred easily accessible assets such as mortgages on boats, urban properties etc. *Seringalistas*, who had distant *seringais* and rubber as their main capital, could not meet such requirements. Accepting *seringais* and rubber for mortgage, *casas aviadoras*, whose main capital was usually manifested in boats, urban buildings and other investments, could perpetuate their commercial-usury businesses as intermediates, fulfilling the requirements of international financiers and bankers and meeting the *seringalistas*' demand for credit for production.

The way these transactions were performed is more complex than the idea of a functional net (in which exporting houses-commercial houses-*seringalistas*-extractors appear to have defined and complementary functions) suggested by the economic literature.⁵⁶² First of all, 'casas aviadoras' did not accept the 'complementary' function

⁵⁵⁹ ACP, Correspondências - Letter by G. Maschke, who was the president of the Teuto-Brazilian Commercial Association, Berlin 22/01/1916; Telegram by the ACP to the Ministro das Relações Exteriores, Lauro Miller, in 05/05/1916, signed by A. Mendes.

⁵⁶⁰ See on this Font op.cit. pp. 43-45.

⁵⁶¹ Font op.cit.

⁵⁶² Santos, R. op.cit. p. 125; Martinelo op.cit.; Calixto op.cit. p. 82.

of commercial-usury intermediates. On the contrary, they constantly implemented efforts to sell rubber directly to industrialists in order to break the monopoly by foreign merchants and financiers and many times headed the counter movement to foreign rubber dealers. Second, these houses also invested in rubber production. They not just received *seringais* as a mortgage from indebted *seringalistas*, which happened quite often, particularly in 1913-15 as mentioned in chapter two. These firms privatised rubber fields,⁵⁶³ investing in production or/and speculating with land. As mentioned in chapter two, only one *casa aviadora* from Belém sold 35 *seringais* in Amazonas State, keeping just a few for its own exploitation. *Casas aviadoras* represented the conjugation of commercial, productive and usury capital as previously mentioned. Moreover, two important *casas aviadoras* constituted commercial/productive partnerships with English capitalists from Liverpool in the 1910s.⁵⁶⁴ One of these houses owned and ran four *seringais* on the left bank of the Acre river, in the main producing area in Acre.⁵⁶⁵ Actually, the results of the investigation raise questions over Santos'⁵⁶⁶ statement that transactions of importing trade and credit were transferred to Portuguese traders, while international capital ran the services of exporting trade. Indeed, capitalists from London, Germany and France concentrated their investments in such services. Yet, North American and small or middle scale English capitalists from Liverpool also invested in rubber production.⁵⁶⁷ As previously mentioned, these investments increased in the 1910s, encouraged by the governments, of the countries concerned.

⁵⁶³ ANRJ, SDA, Cod. 988, volume 5.

⁵⁶⁴ JUCEPA, Inscrição Registro do Comércio no. 1550000 868-2.

⁵⁶⁵ According to Public deeds of CC and Falcão, E. 1906-07.

⁵⁶⁶ Santos, R. op.cit. p. 123-29; Martinelo op.cit. p. 32.

⁵⁶⁷ TJ E, Autos Civeis, anos 1900-05, autos 194 (1904-Juizo do 2o.Distrito – Autos Civeis de Carta Testemunhavel).

In the local system of credit the cost of money was characterised by constant oscillations – the highest interest rate was 15% in 1884 and 1889,⁵⁶⁸ but 12% in 1896 and 1915⁵⁶⁹ – and the export houses lent money according to the highest rate to be paid in three months. The Popular Credit Society and foreign and Brazilian banks acted in the market following the same procedures, despite insurance companies usually charging lower interest rates. In 1907, while exporting houses charged 12%, they charged 10%.⁵⁷⁰

The practice of lending money attached to the future delivery of rubber at prices always below the actual quotations in the consuming market was quite common. This was pointed out by the governor⁵⁷¹ as one of the main ways rubber dealers could impose low prices on local producers. Yet, *casas aviadoras* did get loans from exporting houses and particularly from Brazilian banks and insurance companies to be repaid in cash instead of rubber.⁵⁷² In several cases, *seringalistas* carried out transactions directly with export houses or borrowed money from commercial houses without attaching it to the delivery of rubber. Moreover, there were a few insurance companies and small English companies from London which offered them loans at lower interest rates,⁵⁷³ despite being attached to repayment in rubber, meaning pre-defined prices, usually lower than those prevailing in the market.

The point to be stressed is that *seringalistas* and *casas aviadoras* had a relatively varied range of credit options. The latter borrowed money from different lenders such as export houses, banks, credit societies or insurance companies. Although *seringalistas* in Acre usually got loans and goods from *casas aviadoras* attached to the future delivery of rubber, they also got loans to be repaid in cash and sold their

⁵⁶⁸ CC, Escritura de Dívida e Obrigação, Livro 115, fls. 52 and Escritura de Confissão de Dívida com Penhor in Livro 166, fls.139.

⁵⁶⁹ Ibid Livro 184, fls. 39, and Livro 233, fls. 36v.

⁵⁷⁰ CC, Escritura de Empréstimo com Garantia de Penhor em 20/3/1907, Livro no. 199, fls 12v.

⁵⁷¹ Montenegro, op.cit p. 3.

⁵⁷² CC, Índice de Escrituração 1812-1932.

rubber to different buyers from Belém, Manaus or Bolivia. Finally, commercial-financial transactions were relatively flexible and changed over the time. In 1910, Seringal ITU performed financial and commercial transactions with nine *casas aviadoras* from Rio Branco or the surrounding neighbourhood, five from Manaus and ten from Belém. Throughout 1910-16 the greatest volume of transactions was performed with three firms from Belém. But, in fact, the estate performed transactions with different firms at different times. In 1913-1916, the transactions were performed with six companies from Rio Branco or the surrounding neighbourhood and eight from Belém. In 1930, however, the estate performed financial transactions with banks only, three of which had agencies in Rio Branco and the agency of Banco do Brasil in Manaus. This shift meant the transformation of *casas aviadoras* into commercial businesses as a result of the improvement of the Brazilian banking system in Amazonia and the elimination of the financial mediation of *casas aviadoras* or export houses, solving the problem of credit attached to the future delivery of rubber, thereby enlarging sale options.

However, despite the relative flexibility, throughout the second half of the 19th century and until the 1920s, the credit to and the exportation of rubber was controlled in the last instance by export houses, which gave them the power to manipulate prices.

Another circumstance favouring their manipulation was the long distance of the main areas of rubber production from the main export port and the poor transport facilities in important producing areas in Acre. During the dry season, distance and bad transport conditions, owing to the low water levels in the Acre river, forced *seringalistas* to hold the rubber for a while and deliver it all at once later. As rubber dealers controlled a great part of the credit system, they had a large margin for manipulating prices. Around May and June when they made their contracts for the

⁵⁷³ CC, Escritura de Quitação e Hipoteca, Livro 182, fls. 75.

coming supply, either with or through commercial houses, they lowered their offer of prices. The rubber began to come in from the *seringais* around October and continued to do in great quantities until February. Whatever the quantities arriving at Belém and Manaus, it was all disposed of, only very little ever remaining in stock.⁵⁷⁴ In these conditions, those who got credit attached to the future delivery of rubber had just to accept the price imposed by exporters and even those with sufficient ability to negotiate prices were weak when faced with buyers who could impose low prices since large stocks of rubber were arriving at the same time in Belém making supply plentiful.⁵⁷⁵

After 1913, the increasing supply led to a tendency for prices to decrease. In 1913, agricultural rubber reached 48,000 tons, while Brazilian rubber reached 39,560 tons, according to Santos,⁵⁷⁶ and 42,000 tons according to official statistics illustrated in Chart 7, in chapter six. Whittlesey⁵⁷⁷ deals with figures showing that the offer of monocultural rubber surpassed 'wild' rubber only in 1914. Even in this conjuncture, political actions or processes played a major role in the oscillation of prices. Regardless of increasing supply being a phenomenon of the conjuncture after 1913, the period 1911-1913 presented a scenario of deeply decreasing prices, as can be seen in Chart 6. From June-July of 1913, prices increased again and this tendency was maintained until 1916, while plantation rubber prices were falling.⁵⁷⁸ This was explained by Whittlesey⁵⁷⁹ as a result of the manipulation of figures by the War Trade Board. However, he does not take into account some important factors. First, the strategy of rubber producers in Amazonia was to concentrate on the

⁵⁷⁴ Ibid. See also F.O. 368/172 (1908) – article 'Rubber' in the *Jornal do Comercio*.

⁵⁷⁵ Ibid.

⁵⁷⁶ Santos, R. op.cit. p. 237.

⁵⁷⁷ Whittlesey op.cit. p. 12.

⁵⁷⁸ ACA, O Mercado da Borracha. In: *Revista da ACA*, 61, Manaus, julho de 1913.

⁵⁷⁹ Ibid. p. 12.

production of the Fina Hard Para because of its good reputation,⁵⁸⁰ while monocultural rubber did not reach the same quality. Actually, England increased the importation of rubber from Amazonia from 19,000 tons in 1913 to 37,000 tons in 1914, 37,500 tons in 1915, 36,500 tons in 1916 and 41.500 tons in 1917.⁵⁸¹ Second, during the First World War, a few producers in Amazonia were secretly selling Fina Hard Para to Germany, exporting by submarine, which meant a reduction in the quantity offered in the formal market.

Moreover, the ACA demonstrated that as a result of the non- implementation of a policy of control of rubber prices by the Brazilian government, foreign rubber dealers intensified their practices of manipulating prices in 1913.⁵⁸² Finally, Whittlesey⁵⁸³ shows prices being influenced by elements brought about by the First World War such as fears and deeper struggles to control sources of rubber, restrictions on imports imposed by the allied governments and the elimination of Germany and Russia from the formal rubber market.

In Belém, rubber prices fell heavily again in 1918-1922, as can be seen in Chart 6. Actually, the Revista da ACP⁵⁸⁴ considers the period throughout 1911-1924 as the first great crisis of the rubber economy in Amazonia. However, only the decline in prices of 1918-22 can be said to have been influenced by over production in the international market (resulting from an accumulation of rubber due to the scarcity of shipping during the war and the enormously increased yield from the newer plantations), and strengthened by the severe industrial and trade depression of

⁵⁸⁰ On the good reputation of Fina Hard Para and its usual position of leading prices see: AHI, volume 270/2/5 - Consulados Brasileiros, Adido Comercial em Londres, article by Wilson, P. The Rubber Problem in the USA. In: Newspaper The Sphere , March 17th 1928, attached to the Oficio 17 E.C. by J.A.B. Carneiro, London, April 10th 1928.

⁵⁸¹ AHI, volume 253/4/7- Consulados Brasileiros – Liverpool - Oficio no.49 em 25 de setembro de 1918.

⁵⁸² ACA, Crise da Borracha na Amazonia. In: Revista da ACA, 65, Manaus, novembro de 1913.

⁵⁸³ Ibid. pp. 11-12.

⁵⁸⁴ ACP, A Desvalorização da Borracha. In: Revista da ACP, 26, 2º semestre de 1928, p. 12.

1920.⁵⁸⁵ This was the reason for the political interventionism of the British government after 1922 by means of different schemes and of the Stenvenson plan.⁵⁸⁶

In 1924-25, rubber production was restricted in British colonies by the Stenvenson plan which favoured Amazonian rubber,⁵⁸⁷ whose prices rose again in 1923-26, reaching their highest point in 1925, as illustrated in Chart 6. In the years 1929 to 1934, without the interference of the Stenvenson plan, consumption was reduced, while the production of agricultural rubber increased heavily, provoking stockpiling and devaluation of the product.⁵⁸⁸

To sum up, rubber prices in Belém were characterised by deep oscillations throughout the period considered, for economic, political and historical reasons among which manipulations of prices by foreign rubber dealers, which played a major role in the conjuncture before 1912. Oscillations in 'wild' rubber prices stopped only in 1942, not as a mechanical result of the 'law' of supply and demand, but owing to political measures – the called deals of Washington – which established a standard price.⁵⁸⁹

The manipulation of prices meant that even before the increasing supply of rubber could really affect prices, rubber producers in Amazonia were already facing permanent economic uncertainty. Constant deep oscillations in prices meant that the rubber economy was characterised by crisis. In 1884, the 44% fall off in prices led to a reduction in government revenue of around 50%.⁵⁹⁰ The deep crisis in 1900 was also aggravated by a flexible exchange rate provoking a sudden rise in the value of the

⁵⁸⁵ Ibid. p. 13, Martinelo op.cit. p.142; Phelps, D. 1957, p. 7.

⁵⁸⁶ For more details on this matter see: Martinelo op.cit.; Whittlesey chapter II; Barlow op.cit. chapter 3; McHale op.cit. pp. 48-61; Knorr op.cit. pp. 90-101; Lawrence, J. 1931, pp. 38-39; McFadyeam, A. 1944; Soares, J. 1930, pp. 41-55; Gehlsen, C. 1940, chapter 1; Barlow et al. 1994, pp. 42-45.

⁵⁸⁷ Soares, L. op.cit. p. 122.

⁵⁸⁸ Ibid. p. 143.

⁵⁸⁹ Martinelo op.cit. p. 141.

⁵⁹⁰ Ata da Sessão ordinária de 18/06/1884. In: ACP, Livro de Atas de 01/07/1881 a 23/03/1888, pp. 61 e 63; ACP, 1885, pp. 10-11.

currency.⁵⁹¹ But the acute economic crisis during the period October 1907 to February 1908 was provoked by the fall off in rubber prices and the shrinkage in the Pará crop amounting to 1,278 tons.⁵⁹² At this time, bankruptcies represented 50.000:000\$.⁵⁹³

The uncertainty resulting from the oscillation of prices was aggravated by the reduction or even stoppage in the offer of credit by export houses in 1913.⁵⁹⁴ Consequently, the impact on the local rubber economy provoked by the deepest reduction of prices in 1913-15, which can be regarded as the result mainly of the higher supply of rubber in the international market, was much more harmful because local producers were already weak after having experienced constant difficulties in producing rubber in previous years. The bankruptcies in Belém reached 100,000,000 francs or 59,524 *contos de reis*, around 20% of this amount being debts with the Banco do Brasil.⁵⁹⁵ But the main export house was characterised by a permanent boom. The English-German exporting house boasted an increase in capital from 300:000\$000 in 1884 to 2.400:000\$000 in 1912 when the English share was 54% of profits, without considering the capital exported to the head-office in London.⁵⁹⁶

The Seringalistas' Counter Movement to Rubber Dealers

The *seringalistas*' counter movement to the English Gentlemanly capitalists differed over time. Before the 1880s, *seringalistas* satisfied the international capitalists' efforts to make them produce raw material. They evaluated this as an opportunity to make profit in order to ensure capital accumulation.

⁵⁹¹ F.O. and The Board of Trade, Report on the Trade of Pará and District, 1901.

⁵⁹² Montenegro, op.cit.; F.O.368/274, Letter by the Vice-Consul Fletcher to the Consul Casement, Manaus 20th June 1908.

⁵⁹³ Ibid.

⁵⁹⁴ ACP, 1914, p. 15.

⁵⁹⁵ Martinelo op.cit. pp. 237-238.

⁵⁹⁶ CC, Escritura de Continuação de Sociedade. Livro 115, fls. 95v and Escritura de final de sociedade e criação de nove sociedade no Livro 218, fls. 132v.

However, the agricultural and pastoral landed capitalists reacted to this. They feared an intensification of competition for labour in a local market already reduced from the perspective of the capitalists' expectation of plentiful cheap labour. At the same time, they reacted to *seringalistas* as a new growing segment of capitalists that could alter the distribution of power among the regional elite. Most importantly, reactions and arguments by local landed capital, intellectuals and local governments, also expressed issues linked to struggles against colonial inequalities. They denounced the re-emergence of old features of the colonial economy, represented by the shift from production for the internal market to an economy of heavy export product dependency.⁵⁹⁷ They also denounced the nomadic and destructive exploitation of natural resources that characterised the production of rubber by *arranchamentos* in some areas before the 1850s and even in the 1860s,⁵⁹⁸ representing a renewed of colonial practices by the Portuguese who used to produce extractive commodities by destroying natural resources. These criticisms were turned into encouragement for the entrepreneurial privatisation of rubber plant areas by the governments of Pará and Amazonas States, as was discussed in chapter two.

Moreover, as in the rest of Brazil, local political affairs were permeated by the particular features the ideology of liberalism assumed, as a result of struggles against colonial inequalities. Before the 1870s, investors in the rubber economy and considerable parcels of small scale traders, particularly mobile traders, defended free trade by seeking the opening up of the Amazon river to free navigation, opposing the conservatives' strategy of keeping national unity by exerting strict control over Amazonia, restricting navigation in the Amazon river to Brazilian capitalists,⁵⁹⁹ and allowing exportation only from the port of Belém. When these liberals assumed power in

⁵⁹⁷ See for instance: Araujo Lima, J. 1943, p. 405; Santos, R. op.cit. p. 70; Martinelo op.cit. pp. 29-30.

⁵⁹⁸ Pará. Presidente da Província, 1871; Pará. Presidente da Província, 1851; Euclides da Cunha, 1946, p. 53.

1862-67 they managed to liberate navigation. Santos⁶⁰⁰ states that expressing the Smithian mentality, these liberals did not suspect the effects of this measure would be to transfer the Brazilian ship company, controlling internal navigation, to English capitalists which meant a reduction in the efficiency of ship services, increasing prices and a reduction in the level of hygiene aboard. Calixto⁶⁰¹ shows, on the contrary, that their proposals did not represent a capitulation to foreign capital expansionism. Actually, they defended federalism, autonomy and progress combined with interventionism because they conceived the State as the force able to discipline the excesses and abnormality of laissez-faire. What old liberals such as Tavares Bastos could not predict was the subordination of local commercial-financial capital to the international financial bourgeoisie after the 1870s-1880s. This was opposed and denounced by contemporaneous merchant-*seringalistas* such as Amando Mendes.⁶⁰²

In and after the 1880s, however, *seringalistas* and merchant- *seringalistas*' direct opposition to the gentlemanly capitalists was increasingly apparent. They were increasingly aware of the fact that in responding positively to their encouragement, they became dependent on the international market and on the services offered by foreign capitalists. At first, particularly merchant-*seringalistas*, questioned the existence of exporting houses as monopolies, implementing efforts to break this by creating a competitor in the market. In 1883 they set up the *União Comercial*, which endured for two years.⁶⁰³ In doing this, they faced two basic problems. First, the lack of sufficient capital to cope with the competition by exporting houses. Second, the barrier intentionally created by the international commercial-financial capitalists, enforcing old strategies and creating new ones in order to prevent them from establishing direct commercial relations abroad. In this process, patronage and

⁵⁹⁹ Calixto op.cit. p. 67.

⁶⁰⁰ Santos, R. 1980, pp. 55-6.

⁶⁰¹ Calixto op.cit. p. 70-71.

⁶⁰² Mendes, 1910; Santos, R. op.cit. p. 129.

personal links characterised their action in the international market to guarantee social exclusion. The international firms or companies of rubber dealers formed a small group acting together against Brazilian attempts to break their barrier.

These experiments lasted for a few years. *Seringalistas* learned the subterranean problem of the rubber economy: this economy simply perpetuated the colonial pattern of producing commodities to satisfy foreign capitalists' interests.

The Demand for Interventionism and the Counter-Reaction by Foreign Rubber Dealers

The constant clashes with foreign capitalists at the ACP led *seringalistas* to organise their own associations. In 1903-08, these associations used to bring their formal demands to the ACP, which acted as a formal mediator with local and federal governments.

In 1908, their counter movement to the foreign rubber dealers was manifested through the Governor of Pará State's proposal of interventionism to the central government. This proposal was a systematisation and slight reformulation of the proposal by the ACP, which expressed their main concern about market control and financing. They proposed two measures, one short-term measure that consisted of the establishment of a branch of the Bank of the Republic and one long term measure that was the establishment of a regulated market and, at the same time, a bulwark.⁶⁰⁴

⁶⁰³ ACP, Relatório Anual de 1883, pp. 19-10; ACP, Relatório Anual de 1885.

⁶⁰⁴ Montenegro op.cit. p. 2.

The *seringalistas* demanded a Brazilian bank aiming at freeing trade from the credit attached to the future delivery of rubber. They also aimed to tackle the control of exchange operations and collections by foreign bankers or export houses.⁶⁰⁵

At the same time *seringalistas* expressed their concern over taxation by demanding incentives under the form of a reduction of the Export Duty from 22-24% to 18%, or around 4% in Pará and 6% in Acre, to syndicates of producers of rubber, according to Federal Decree no. 979, of January 6, 1903.

This last proposal was strongly combated by rubber dealers from England, the USA, Germany and France, who acted together, protesting through the British Minister in Rio, the Chamber of Commerce in London, and the Foreign Departments in London, Washington, Paris and Berlin.⁶⁰⁶ They argued that this law constituted a violation of a principle of the Brazilian Constitution, which guaranteed equal rights to all persons. Yet British rubber dealers reacted in a different way to the other foreign investors. The measure was not unconstitutional and foreign exports could form syndicates themselves on the condition of owning and investing in rubber fields.⁶⁰⁷ After a while, North American capitalists accepted the idea of forming syndicates according to the Brazilian law.⁶⁰⁸ Some companies from the USA had already invested directly in rubber production as mentioned in chapter two. Yet, the English gentlemanly capitalists did not want to invest in production and they saw this law as a threat, not just to their principle of a self-regulated market, but to their authority and Spencerian sense of superiority. They argued that:

'(...) the unconstitutional proceedings in the Brazils, the threatened violation of rights of British subjects residing there, together with the resulting prejudice to British interests at home, combine to justify our Government in holding Brazil responsible for any injuries which may be caused, and we would respectfully suggest that action be taken on these lines'.⁶⁰⁹

⁶⁰⁵ Ibid. p. 3.

⁶⁰⁶ F.O. 368/274 (1909); 3230 (1909); F.O. 368/274-33521 (1909).

⁶⁰⁷ F.O. 368/274(1909): telegram by Mr. Cheetham of December 31st, 1908; F.O.368/274, Letter by the British Consul, Pará, October 24th, 1908.

⁶⁰⁸ Ibid.

⁶⁰⁹ F.O. 368/274 (1909), letter by one English export house of November 20th, 1908.

They considered their private interests as if they were the interests of British industry and of British citizens in general, repeatedly trying to convince the Foreign Office to bring the matter into the British Parliament as a means of putting pressure on the Brazilian Federal Government. Frustrated because the proposal passed in the Pará and in the Brazilian National Congress, they became coercive and threatening, concentrating their pressure on the President of Brazil. In November 1908 they sent a letter to the Minister of Finance at Rio de Janeiro, stating that:

'(...) unless steps are taken at once to restore the rubber trade to its old basis great difficulties might arise, strong protests having already been made from Washington, Paris and Berlin, and also by the British Foreign Office. We trust Your Excellency and the President of the Republic will recognise at once the necessity of remedying a state of affairs in Pará which might create great difficulties for the Federal Government and would be of little advantage to Pará itself.⁶¹⁰

They also threatened that a non- positive response to their demands would lead to wild speculation in rubber trade, since they controlled half of the 38,000 tons of rubber exported from Amazonia.⁶¹¹ Finally, they initiated actions to exert pressure in Paris connection with the S. Paulo loan,⁶¹² which was an important factor in the policy of the valuation of coffee.

The Chamber of Commerce refused to consider the English rubber dealers' protest on the ground that the matter it referred to had been already voted on and remitted to the senate, and that the measure was not unconstitutional.⁶¹³ Soon after, rubber dealers gave up, expecting that Brazilians would not have enough capital to implement such a measure.

The incident illustrates the way the Gentlemanly capitalists interfered in internal political affairs: they acted on high level guidance with a range of manipulative strategies, from simple ideological manipulation to coercive threats, and with a

⁶¹⁰ F.O. 368/274 (1909), letter by English rubber dealers of November 12th, 1908.

⁶¹¹ Ibid. letter of November 3rd, 1908.

simplistic look at the internal political and economic processes in Brazil, imagining that the President could simply manipulate or, as they said, 'seduce' the congress and everybody else in order to get what they wanted. They asked the Foreign Office for a personal and direct appeal to be made to the President of the United States of Brazil himself, because

'(...) we feel sure that if he could be induced to order the immediate cancellation of the law at Pará, such an order would have great effect upon the politicians there, who, no doubt, fear the intervention of the president(...).'⁶¹⁴

After 1912, *Seringalistas* and merchant-*seringalistas* expressed their counter reaction to the principle of liberalism and a self-regulated market and to Spencer's theory directly. An article by the *Revista da ACA* in 1912⁶¹⁵ criticised the stigmatisation of nature intrinsic to the Spencerian theory, stating that regarding animals and plants, both big animals and trees are reproduced together with little and apparently unimportant animals and plants.⁶¹⁶ Moreover, they argued that this theory was history and had no support either in facts or in the development of agriculture and industry, concluding on the need for interventionism by the federal government.

The over production of rubber after 1918 brought about problems already faced by coffee planters. Yet, *seringalistas* and merchant-*seringalistas* were strongly against the policy of valuation of coffee for there was concern about the destruction of the product as a means of creating equilibrium pricing.⁶¹⁷ Rubber economy had specificity. Monocultural rubber had affected the production of inferior species of gums directly, particularly in distant areas where the high cost of transport had a major effect on the cost of production. As a result, their strategy was to concentrate on the production of the Fina Hard Para, as previously mentioned. However, over

⁶¹² F.O. 368/173, letter by British Minister in Petropolis of November 24th, 1908.

⁶¹³ F.O.368/274, Letter by Mr. Casement of October 28th, 1908.

⁶¹⁴ F.O. 368/274 (1909), Letter by English rubber dealers of November 12th, 1908.

⁶¹⁵ *Revista da ACA, Pela Borracha I*, Manaus, Setembro 1912, 51, p. 5.

⁶¹⁶ *Ibid.*

production pressed home the urgency of reducing the cost of production. Accordingly, although maintaining demands regarding financing and market, at this time they emphasised interventionism in taxation and in the sphere of production itself.

Their demands were justified on the grounds of the importance of rubber in the Brazilian economy as a whole. In the period 1889-1897, rubber represented 11.8% of the Brazilian exports, reaching 25.7% in 1898-1910, 20% in 1911-13 and 12% in 1914-18.⁶¹⁸ Accordingly, the rubber crisis affected not just the local States' revenue but also that of the federal government. The Pará State revenue dropped from 20,255 *contos de reis* in 1910 to 8,887 in 1915. That of the Amazonas States fell from 18.068 *contos de reis* in 1910 to 5,888 in 1920 while that of the federal territory of Acre dropped from 19,868 in 1910 to 5,620 in 1915.⁶¹⁹ That is, the federal revenue from the Acre territory alone dropped by 28%. Furthermore, there was a high level of bankruptcies. According to Santos, bankruptcies in Belém reached the amount of 100,000,000 francs or 59,524 *contos de reis*, around 20% of this amount being debts with the Banco do Brasil.⁶²⁰

The Seringalistas' Project of Economic-Political Changes and the Central Governments' Pattern of Response

The material presented shows that *seringalistas/merchant-seringalistas* were concerned with problems such as the control of markets and financing, taxation, the offer of labour, poor transport conditions and the influence of high freight in the cost of rubber and of foodstuffs to *seringais*. These were the subjects of *their* demands for protection and interventionism.

⁶¹⁷ Revista da ACA, Pela Borracha II, Manaus, Outubro 1912, 52, pp. 6-7.

⁶¹⁸ Villela, V. e Suzigan, W. 1975, p. 50 – quoted from Martinello op.cit. p. 48-49.

⁶¹⁹ Santos, R. op.cit. p. 388.

⁶²⁰ Ibid. pp. 237-238.

These results raise questions on the stress placed on large-scale monocultural rubber as a model of civilisation and progress to be followed, as Dean⁶²¹ suggests. In Amazonia, large-scale agricultural rubber was proposed by agronomists, economists or other scientists, and by a small clutch of *seringalistas/merchant seringalistas*. However, it was conceived of as a practice restricted to areas with special ecological features⁶²² and not as a model of development. The majority of *seringalistas/merchant-seringalistas*, however, had strong criticisms of the modern technology of large-scale monocultural rubber as is discussed more fully in chapter six.

The *seringalistas* and merchant-*seringalistas*' project of economic-political changes was frustrated due to the central government's indifference or partial response to their demands.

First, their nationalism was frustrated on the Acre question. From 1867 to 1903-04, Acre State was a litigious area, as mentioned in chapter two. *Seringalistas* and merchant-*seringalistas* claimed the integration of Acre in the Brazilian territory as a federate State in which they would share power with the central government. The central government's attitude to this was characterised by indifference or a partial response which, according to Calixto,⁶²³ resulted both from (a) poor knowledge on the area by both the Bolivian and the Brazilian governments; and (b) the Brazilian government's attempts to get the support, or at least the indifference, of the Bolivian government in the face of the Paraguay war. This attitude changed only as control of the area by an English-North American consortium became imminent as discussed in chapter two. However, the local capitalists and provisory governments had no voice in the decisions. Acre was integrated into Brazil neither as part of the Amazonas State, as this State wished, nor as a Federation, as the *seringalistas* proposed.

⁶²¹ Dean op.cit.

⁶²² Costa, J. 1913.

Rather, it became a Federal territory administrated by the federal government located in Rio de Janeiro.

Partial response constituted the pattern of action by the 'group of oligarchy' in power in 1898-1920, whose reasoning, according to Calixto,⁶²⁴ was Brazilian internal political affairs. The government strategy was to leave regional affairs to regional politicians, who should respond to local demands so as not to challenge or disturb the priority given to national policy, aimed at moulding the national economy to the model of civilisation and progress defended by their allies - the international financial bourgeoisie.

This explains, in part, the clash of this policy with the economic-financial measures demanded by the Amazonian agrarian-extractivist bourgeoisie. In 1889-1902, when local capitalists were trying to counteract the manipulation of prices by foreign rubber dealers, measures adopted by the central government affected the rubber economy directly. Elevation of the exchange rate led to a great number of bankruptcies.⁶²⁵ In this context, two Brazilian banks went bankrupt (the Banco de Belém do Pará and the Banco do Norte do Brasil), and the three others suffered reduced capital due to losses (Banco de Credito Popular's capital was reduced from 4,123 *contos* to just 1,000 *contos* while Banco Comercial do Pará's capital was reduced from 19,000 *contos* to 4,000 and the Banco do Pará's was reduced from 19,500 to 5,000 *contos*). At the same time, four insurance companies and *casas aviadoras* went bankrupt. The numbers of bankruptcies reached 240 and the economic-financial losses in Belém reached between 70,000 and 140,000 *contos*. In the period 1890 to 1910, the governments of Pará and Amazonas States had an income of 84,965 *contos* to cover expenditure of 104,413 *contos*. Yet, the interplay between the Federal government's receipt of taxes and expenditure in Amazonia presented gains. They collected

⁶²³ Calixto op.cit, p. 157.

⁶²⁴ Ibid.

124,107 *contos* and expended just 21,955 *contos* in the region. That is, the central government gained a net 102,292 *contos* from Amazonia.⁶²⁶

The devaluation of the Brazilian currency meant that imports cost more while exports cost less, therefore adversely affecting rubber production. As can be seen from Chart 6, rubber prices fell sharply in 1901, which coincided with the shortage of money resulting from the burning of paper money by the central government. As a result, investment in the rubber harvest of 1902 was reduced, manifesting in a decrease in production of around 2,085,476 kilos in 1902. This, in turn, resulted in a reduction in the level of local government taxes collected.⁶²⁷

However, developments around the Plan of Defence of Rubber of 1912 (the Law 2.543A of 05.01.1912, which was regularised by the Decree 9.521 of 17.04.1912),⁶²⁸ reveal the subterraneous issue governing the central government pattern of response: the view of the rubber economy permeated by the Western notion of civilisation and progress,⁶²⁹ which clashed with the *seringalistas* and merchant-*seringalistas'* geomercantile way of appropriating and using natural resources.

The plan of the defence of rubber resulted from negotiations between the governments of Pará and Amazonas, Acre Territory and the Federal government. As a result, it expresses not just *seringalistas'* and local governments' demands and views on the matter, but also the central government's own conception of the rubber economy and its singular way of responding to the issues it considered central to the matter.

⁶²⁵ Cordeiro op.cit.; Santos, R. op.cit. pp. 210-11, quoted from Calixto op.cit.

⁶²⁶ Calixto op.cit. pp. 159-160.

⁶²⁷ Goncalves, L. 1904, p. 9, quoted from Calixto op.cit. p. 159-160.

⁶²⁸ ACA, A Crise da Borracha na Amazonia. In: Revista da ACA, Manaus, 65, novembro de 1913; ACP, Relatórios Anuais do período 1910-1914.

⁶²⁹ This is clear in articles on the matter such as ACA, artigo 'O Desenvolvimento do Vale do Amazonas'. In: Revista da ACA, 63, Manaus, setembro de 1913, and in Dean's (op.cit.) reference to 'Brasilian efforts', which is an expression of the view on the matter by the central government and political figures in Rio de Janeiro, some of them exerting political influence in the Amazonas State.

This plan contains measures to reduce the cost of producing rubber and to encourage the diversification of economic activities and production for the internal market, by reducing taxation on rubber export duty and freight in national navigation, enlarging banking operations and reducing taxes on subsistence products.⁶³⁰

However, this policy encouraged the adoption of the modern technology of large-scale monocultural rubber and of methods of manufacturing the latex, which were strongly criticised by *seringalistas* and merchant-*seringalistas* for ecological reasons which originated in their geomercantile way of viewing and using natural resources as discussed in the next chapter.

This policy clashed with their view on nature in other aspects too. *Seringalistas* from Acre and Manaus criticised the construction of a stretch of railway, linking the Rio Branco region to the Madeira Mamoré railway. They argued that the original proposal, which considered the physical and ecological conditions of the areas affected, was completely modified. These modifications resulted from the technical-bureaucratic staff's own perspective rather than from considerations of local physical and ecological conditions.⁶³¹

The plan was also criticised regionally for other reasons. Merchants of Belém protested against the way the plan of defence of rubber was implemented by the commission working in Rio de Janeiro and in Amazonia.⁶³² They argued that, as had happened with the local branch of the Bank of Brazil years before, public money was being spent without due care, and that the way decisions were being made and tasks were implemented was strongly influenced by practices of patronage and personal links, distorting the purpose of the policy.

⁶³⁰ ACP, Relatório Annual de 1913, pp. 22-27; ACA, Defesa e Amparo da Borracha. In: Revista da ACA, Manaus, 49, Julho de 1912, pp. 4-5.

⁶³¹ Revista da ACA, Manaus, Julho 1912, 49, pp. 2-3.

⁶³² ACP, Relatório Annual de 1913, p. 132.

Finally, a few merchant-*seringalistas* and agronomists criticised this policy because they evaluated that the priority at this time, as previously, should be the regulation of the rubber market, stabilising prices, combined with encouragement of agricultural rubber in areas around the Bragantina railway, which combined proper soils and climate with good location and transport conditions. They defended a policy of attraction of international investments in a plan of stabilisation of rubber prices in the local market.

From this point of view they expressed the complexity of the relationship between *seringalistas/merchant-seringalistas* and international capitalists, involving convergence of class interests and clashes which originated in the double movement of the liberalism/Spencerism/imperialistic mentality versus social protection/struggles against colonial inequalities/nationalism. These merchant-*seringalistas* had formed commercial partnerships with capitalists from Liverpool or from the USA around 1909, lasting for some years.⁶³³ Moreover, they made efforts to attract international capital investments, which involved negotiations in industrial and financial centres in England, the USA and Canada. This resulted in the offer of partnerships in a regulator market. However, this was conditional on the charge of 400 *réis* over every kilo of rubber exported by the Brazilian government, which should be destined to support this investment. *Seringalistas* were dealing with capitalists who were used to receiving heavy support from their home governments in the form of infrastructure of transport, protective tariffs, land and labour policies as well as propaganda in the case of policies regarding rubber plantations in British colonies. On the other hand, it was this same capital that was threatening and putting pressure on the Brazilian government, as previously mentioned.

⁶³³ See Comments by one of these merchant-*seringalistas*. In: Jornal Folha do Norte, A Crise by J.S. da Costa, Belém, 2a. feira, 16 de junho de 1913.

However, they were not unaware of the international rubber dealers' strategies against the local rubber economy, including manipulation of prices and the creation of legal obstacles for the commercialisation of Amazonian rubber in their home market. On the contrary, they criticised international capital's dubious standards on the matter. As soon as capitalists of Canada and the USA heard about the federal government's policy of encouraging the adoption of mechanical processes of coagulating latex as was done on rubber plantations (this is discussed in the next chapter) they started to discuss the payment of import taxes on this product, arguing that it would be a manufactured product while rubber from plantations was not classified in this way.

They pursued direct relations with industrialists, trying to solve the problem of the absence of a proper commercial-banking system, eliminating the margin of manipulation of prices by rubber dealers.

Their attempts expressed the contradictions posited by the character of the Brazilian export economy, contrasting with their principle of social protection and their struggles against colonial inequalities. This also indicate that the Brazilian governments' apparent indifference to the rubber economy involved more complex elements. The Brazilian economy was exposed to the dangers of export products' heavy dependency such as sugar, cotton, coffee and rubber. Sugar and cotton economies were the most heavily affected by the general crisis of the export economy from 1909-1910s.⁶³⁴ the Coffee economy had been facing a long-term crisis but was strongly supported by the federal government by means of the policy of valuation of coffee.

The reasons for the priority given to the coffee economy are complex. Besides the strong economic-political position of coffee planters in the national context, the support required by the local agricultural-extractivist bourgeoisie contrasted with

central government policy, as already mentioned. Moreover, even the central government project of economic-political changes to the rubber economy required heavy public investment in infrastructure, in financing, technical support to the process of production and labour policy. Could the Brazilian State afford this in Amazonia at the same time as it was done in S. Paulo?

Furthermore, aspects linked to international competition have to be considered. First, the English State and capitalists were unsuccessful in their attempts to invest in coffee plantations in Malaysia, as previously mentioned, but they were successful in doing so with rubber. This means that from the perspective of the Western notion of civilisation and progress, Brazilians had a relative advantage in international competition in the coffee economy. Second, coffee was produced for both international markets and the national market, while rubber had no internal market. It depended entirely on international markets until 1936, when the pneumatic industry was inaugurated in the country. Third, the policy of valuation of coffee included an experimental policy of improving the Brazilian currency, which could benefit the whole of the Brazilian economy.⁶³⁵

Despite the alliance with the international financial elite, the 'group of oligarchy' had their own nationalism. They increasingly assumed the so-called '*Pan-americanismo*'⁶³⁶ strengthening of relations with the USA at the same time as diversifying commercial relations by establishing relations with different countries and by strengthening relations with others, for instance, Germany.⁶³⁷ These were strategies aimed at getting rid of the Spencerian way of doing business by the English gentlemanly capitalists, who diverted their attention to Argentina.⁶³⁸

⁶³⁴ Teixeira, C. op.cit.

⁶³⁵ Montenegro op.cit.

⁶³⁶ Calixto op.cit. p. 38.

⁶³⁷ See record of F.O. in the Bibliography, manuscripts and reports and journals of the ACP and ACA.

⁶³⁸ Ibid.

All these elements explain the relative indifference or inconsistent attitude of the central government towards the local rubber economy. One of the fundamental proposals of interventionism in 1908 was met partially. Branches of the Banco do Brasil were established in Belém and in Manaus but a regulator market and a bulwark was not established under the shelter of which national trade could find protection and defence at times of crisis. Moreover, the Banco do Brasil was established as a normal bank, while they had demanded it be a business formed by sharing capital among Pará and Amazonas State and the Federal State, which should offer alternative means of credit to those offered by exporting houses, and foreign and Brazilian private banks, freeing *seringalistas* from the credit attached to the future delivery of rubber. However, the reduction of export duties to syndicates of *seringalistas* was approved by Pará State though, the same demand by *seringalistas* from Acre, in spite of being approved by the federal congress, was not implemented as intended. One of the reasons for this was that these syndicates depended on heavy economic and institutional support by the federal government in order to be effective, which was never offered.⁶³⁹ The wisdom of *seringalistas*' demands could be visualised after 1922, when the British State implemented a policy for rubber characterised by heavy intervention in the market by means of market regulation policies. Moreover, the establishment of a regulator market was one of the central measures of North American policy towards natural rubber during the Second World War.

Finally, the plan of defence of rubber disappeared one year later, in December 1913, when the national budget did not include the resources necessary for the continuation of services which had just started to be implemented,⁶⁴⁰ confirming the pattern of partial response to the *seringalistas*' demands.

⁶³⁹ This was mentioned by Knorr op.cit. pp. 88-89.

⁶⁴⁰ Martinelo p. 57.

The material presented raises questions over Martinelo's statement that the *seringalistas* '(..) ignoring that the prices were manipulated by the English, intended to valorise the production of rubber in Amazonia by holding the product, trying to force increasing prices' (our translation).⁶⁴¹ Indeed many *seringalistas* did so in 1913-14. However, this does not indicate lack of knowledge or of the right political proposals. The problem was that they were capitalists and capitalist interests were successful, from the *capitalistas*' point of view, when under the heavy economic, institutional and political support of States, like for instance, the coffee economy supported by the Brazilian State and the rubber plantations supported by the British State. *Seringalistas* had no such level of politico-institutional uphold.

However, this does not mean that governments did not support the rubber economy at all with public services or that this economy did not contribute to improvements in social conditions. As was discussed in chapter two, local governments in Pará and in Amazonas State did have a policy of encouraging the privatisation of rubber fields, not solely with the aim of receiving taxes but also with the aim of preserving the Hevea rubber forest through a land law which included a conservation legislation. Moreover, transport in the region was greatly improved, even to the most distant *seringais*, while Belém and Manaus were served by export ports, similar to those in the most important ports of Brazil, meeting claims by local capitalists.⁶⁴² Furthermore, a postal service was implemented throughout the city-ports, and telegraphic communications were installed linking Amazonia to the main commercial centres in Brazil and abroad. Questions of frontier were solved, including the Acre question with Bolivia, adding 214,000 square Kilometres to the Brazilian territory. The economic improvements of the Amazonas State, having its own port and means of national and international communications, led to its separation from

⁶⁴¹ Ibid. pp. 55-56.

⁶⁴² Reports and Journals of the ACP.

Pará, improving the conditions of administration in the region. Finally, the rubber economy engendered the creation of new towns, some of them of continuous development, as well as giving rise to urban reforms in Belém and Manaus. The rubber economy also engendered an increase in the local population in the long term, despite the conjunctural decrease in population during the deepest crisis of rubber in 1913-15 and 1918-22, when many rubber tappers returned to their homes.

Conclusion

The results presented indicate that large-scale monocultural rubber was never defended in Amazonia as a project of civilisation and progress. Agricultural rubber as an *agro-ecology* was an old practice and the few agronomists, economists and *seringalistas/merchant-seringalistas* who proposed agricultural rubber wanted it as an activity restricted to an area presenting proper ecological and transport conditions.

Most importantly, large-scale monocultural rubber was not part of the project of economic and political changes by the majority of *seringalistas/merchant-seringalistas*. They were concerned with issues affecting the local rubber economy directly and with eliminating circumstances that gave margin to the foreign rubber dealers' manipulations of rubber prices. As a result, after frustrated attempts to break the monopoly of export services by foreign rubber dealers, after the 1900s-10s *seringalistas* demanded interventionism by the central government. Their demands reveal their concerns over (a) the control of the market and financing; (b) taxation; (c) availability of labour; (c) poor transport conditions and the influence of high freight cost in the overall cost of rubber and of foodstuffs in *seringais*.

The central government's policy (a) gave priority to national policy, aimed at moulding the national economy to the model of civilisation and progress defended by its allies – the international financial bourgeoisie; (b) centred on the policy of

valuation of the coffee economy, giving secondary importance to the rubber economy; (c) its view of the rubber economy accorded with the Western notion of civilisation and progress in which modern technology played the central role clashed with the *seringalistas'* demand for interventionism and the implementation of their project of economic-political changes. This resulted in partial and, to a certain extent, opposing political interference by the central government in the rubber economy. This left the *seringalistas* carrying on the rubber economy practically on their own, although it cannot be said that governments did not support the rubber economy at all or that this economy did not contribute to improvements in previous social conditions.

Chapter 6:

Nature, Technology, Re-investments and Changes in Rubber States

The material presented contributes important points to the discussion about profitability and the way *seringalistas* re-invested their profit, implementing changes in *seringais*. Firstly, the *seringalistas*' project of economic and political changes was concerned with the control of market and banking, improvements in transport facilities, taxation, labour cost etc. and not with large-scale monocultural rubber. Secondly, their demands regarding these issues were frustrated by the central government's partial response and intervention guided by the Western notion of civilisation and progress, trying to adapt rubber production to the plantation technology, clashing with their geomercantile view on the use of natural resources.

Once left practically to themselves the *seringalistas*' response to deep oscillations in prices and other obstacles to profitable rubber production, was guided by their own evaluation of the rubber economy and views on technology. Actually, in the sphere of production, they had to make decisions in the light not only of how to increase productivity having a relatively reduced labour offer and non-industrial technology of production but also considering the geomercantile way of using natural resources and how to re-invest profits in the historical circumstances they were dealing with. These concerns moulded the main changes in *seringais* such as: (a) changes in the way labourers were engaged and performed their job in order to increase productivity and face the instability of prices; (b) improvements in the technology of production and diversification of economic activities, shifting to production for the expanding internal market, particularly in the 1900s-1910s. These changes guaranteed profitability and capital expansion.

While (a) was discussed in chapter 4, (b) will be discussed in this chapter as follows: (a) Nature and Technological Changes in *Seringais*; (b) the way *seringalistas* re-invested the profit they got in rubber production.

The Geomercantile View on Nature and Technological Changes in *Seringais*

As previously discussed, the adaptation of the First Nations' methods of making rubber to entrepreneurial commodity production challenged the capitalist logic. These methods involved a special interaction between man and nature, and were invented in a society in which production did not pursue profit but auto-consumption, so that they did not aim at more than small-scale production. The adaptation of these methods to entrepreneurial commodity production for profit posited difficulties and challenges such as: how to achieve a level of productivity sufficient to cover costs of production and generate profit in a context of non-gregarious distribution of trees and relatively rudimentary methods of extracting and manufacturing latex.

The British State dealt with this by promoting large-scale monocultural rubber production which could permit a higher level of profitability per hectare. Yet, it was governed by an opposing interaction with nature. Preservation did not play a great role in the scientific debate and in entrepreneurial decisions regarding rubber plantations. As a result, a vast expanse of native forest was cleared to plant *Hevea Brasiliensis* in British colonies. McHale⁶⁴³ states that from 1905-15, approximately 3 million acres in South and Southeast Asia were cleared of native forest or other crops. According to Barlow,⁶⁴⁴ in the late 19th century and beginning of the 20th century much of what is today the cultivated area of Peninsular Malaysia was untouched forest. Large-scale monocultural rubber production brought about a sense of easy replacement of trees and of destruction of vast native forest as a necessary pre-condition to progress, or as a simple technical-scientific matter. At the same

⁶⁴³ McHale, T. op.cit. p. 20.

time, the development of the tyre industry to supply the automobile industry, which is strictly connected to scientific improvements in the First Nations' methods of manufacturing latex, brought about the massive daily and permanent destruction of nature, in the form of air, as the intrinsic characteristic of industrial cities. Therefore, the scientific and industrial improvements in the original methods of producing rubber and manufacturing became powerful instruments of destruction of nature in the forms of forest and of air. At the same time, the scientific notion that human beings could control nature and everything else by means of science, shaped a simplistic view of the consequences of the massive destruction of nature.

In these circumstances, plant pests, which were the result of large-scale monoculture, were conceived as a technical matter to be solved by science rather than as an ecological issue. Wright⁶⁴⁵ emphasised that native trees were more resistant to pests and according to agronomists from the Brazilian Ministry of Agriculture,⁶⁴⁶ the percentage of loss of trees owing to pests in British colonies reached 12 trees per hectare around 1912, which meant a loss of 40% of the plantation. Dean⁶⁴⁷ attributes no importance to this report, arguing that it was semi-official. However, he can not deny that plant pests did exist in rubber plantations, although not at such a level to prevent this activity as happened with the attempts to plant coffee in Malaysia, as previously mentioned. In native *seringais* there were no plant pests. This is a phenomenon brought about by large scale monocultural production.

What matters, however, is the way plant pests were conceived. Planters did not stop implementing large-scale monocultural rubber since plant pests did not prevent them from profit, they received economic, scientific, political and institutional support by the British State and, most importantly, they interacted nature guided by the

⁶⁴⁴ Barlow 1978, p. 22.

⁶⁴⁵ Wright 1907.

⁶⁴⁶ Revista da ACA, Borracha do Brasil, Manaus, 10, novembro 1912, no.53, pp. 3-5.

⁶⁴⁷ Dean op.cit.

Western notion of civilisation and the Spencerian perspective. So, the notion that dominated nature would be a necessary pre-condition of progress and the idea that plant pests were a simple technical matter to be solved by science was crucial.

However, *seringalistas* had a different conception of the matter. In the previously mentioned report by agronomists from the Brazilian Ministry of Agriculture, information on plant pests in British colonies was used to warn investors in rubber in Brazil to develop their own clones in order to prevent the importation of plant pests. This report was commented on by the Revista da ACA, well known among rubber producers in Amazonia. Moreover, Neves,⁶⁴⁸ who was an agronomist and the entrepreneur of the Seringal ITU after the death of his father, had since 1938 contested the idea that plant pests prevented local producers from adopting large-scale agricultural rubber, which is Dean's main argument.⁶⁴⁹ He became particularly vocal on the matter in the 1980s when he said:

'The supposition that cultivated *seringueira* in Amazonia is not productive is a serious mistake. It is enough to mention just the example of the Henry Ford Company in Fordlandia and Belterra, in Pará, to demonstrate that. In this project, rubber trees are productive even after 60 years. The loss of trees resulted from the process of putting down the forest to plant grass in Fordlandia, and in Belterra part of the area was abandoned or some trees were damaged by fire. The surviving trees are producing latex profitably so far, being exploited by the Estabelecimento Rural do Tapajós –ERT'.

What is clear in the publications by Das Neves is that in his professional and entrepreneurial experience, there was no expansion of monocultural rubber before the 1950s. The reasons for this were (a) the lack of sufficient systematic investigation to develop native resistant clones because imported clones were unsuitable for the local environment, (b) insufficient capital and (c) the lack of a proper credit system. He does not argue that there was no scientific investigation, but that the investments

⁶⁴⁸ See for instance: Neves, C. A Cultura da Seringueira nos Seringais Nativos. Rio Branco, Federação das Associações Rurais do Território do Acre, 1958; Neves, Vamos Plantar Seringueira. In: Jornal O Acre of 12/01/1958; Ibid. O Desenvolvimento Cultural da Seringueira no Estado da Bahia. In: Jornal O Acre of 4/4/1959; Ibid Borracha: Programa Principal do Novo Titular do Departamento de Produção. In: Jornal O Acre of 12/6/1958, Ibid. A Seringueira. In: Jornal O Acre of 19/07/ and 29/12/1958.

⁶⁴⁹ Dean, 1989.

⁶⁵⁰ Neves, C. A Amazônia e a Hevea. In: Jornal O Rio Branco, segundo caderno, Rio Branco, 14/12/1985.

were not sufficient, considering that the British State invested around 90 million pounds in scientific investigations for solving the problem of pests in its colonies, and it took around 50 years of systematic experiments for the simple minimisation of it.⁶⁵¹ At the same time, he uses the history of his plantation of rubber in an area of around 200 hectares in the 1950s as an example of the problem of lack of capital and a proper credit system.⁶⁵²

Most importantly, the non-adoption of large-scale monocultural rubber does not result from these problems. The author emphasises that *seringalistas* did not invest in this activity because they were not keen to do so. Indeed, *seringalistas* were not very keen on large-scale monocultural rubber.

This is the fact interpreted by Martinelo⁶⁵³ as a lack of entrepreneurial vision. However, this interpretation ignores the role of the *seringalistas'* geomercantile view on natural resources. They did not propose large-scale monocultural rubber as previously mentioned, and the reasons for that were neither plant pests nor lack of entrepreneurial vision, but their conception of the use of natural resources. *Seringalistas* absorbed the original methods of extracting and manufacturing latex without neglecting the converging interaction of man and nature. On the contrary, this element was preserved and re-dimensioned in their geomercantile notion of nature and technology, which shaped the ways they privatised rubber fields (chapter 2), organised space within rubber estates (chapter 4) and improved the methods for making rubber.

The best known alterations in the methods of extracting latex and transforming it into raw material are those by Coutinho and Amandio Mendes,⁶⁵⁴ described in appendixes 5. Coutinho had several patents granted by USA, Germany, England, Belgium and Brazil. The advantage of the Amandio Mendes system over that of

⁶⁵¹ Neves, C. A Amazônia e a Hevea. In: Jornal O Rio Branco, Segundo Caderno, Rio Branco, 14/12/1985.

⁶⁵² Neves, C. A Borracha Brasileira. In: Jornal O Rio Branco, Rio Branco, 20/04/1975

⁶⁵³ Martinelo op.cit. pp. 52-53.

Coutinho was that it resulted in drier rubber, making it more elastic and waterproof, with no conservation problems. In addition, the method not only allowed for greater control over the weight of the raw material but the latex could be extracted and transformed into rubber on the same day, without any residues. The presence of residues was one of the main justifications by the quality control services in Belém and in Manaus for the classification of the type Hard Fina Para as *entremina*. Besides the two mechanical methods mentioned, there was also the Cerqueira Pinto method which was a chemical process to improve the production of rubber.⁶⁵⁵

Thus, *seringalistas* in Amazonia absorbed and made technical alterations to the First Nations' original method, aiming to increase productivity as researchers in British colonies had done. Nevertheless, *seringalistas'* pursuit was to maximise productivity without destroying nature. As discussed in chapter two, agriculture had been practised in Amazonia since very old times. The First Nations were the first to do so followed by the Portuguese after 1616 and, then, Brazilians. The cultivation of rubber in association with other crops had been practised since the first half of the 19th century by means of *agro-ecological* methods.⁶⁵⁶ Thus, *seringalistas/merchant-seringalistas* were not reacting to agriculture but to the method of large-scale monocultural rubber.

The question that needs to be addressed is why they reacted to this and the answer were in their geomercantile notion of nature and their criticisms of modern technology of producing rubber. The most explicit evidence of this can be found in the report by the representative of the *Associação Commercial do Amazonas* on the first international exposition of rubber in London in 1908 in which he stated that the

⁶⁵⁴ Chaves pp. 50-1.

⁶⁵⁵ Ibid. p. 53.

⁶⁵⁶ The term *agro-ecological* methods has been used to express the idea of agriculture based on the association of different cultures (such as various types of cereals with different types of fruits etc) and preserving the native forest as much as possible, which is a traditional way of practising agriculture in Amazonia, in opposition to large-scale monocultural rubber. Rubber was usually associated with cocoa and other cultures (Bentes Feb/1992, Appendix 1). See brief reference to this in Wallace op.cit. p. 92; Bates op.cit. See also Dean 1989 pp. 77-78.

method used on rubber plantations required land to be cleared up completely. This was justified as a measure for increasing profitability. Scientists found out that young plants grew very slowly in the virgin forest and so native forest was destroyed simply to reduce production time. In reporting this, the author re-inforced the old *agro-ecological* method, advising the cultivation of rubber in Amazonia close to the forest, without destroying it.⁶⁵⁷

Moreover, in the 1910s, *seringalistas* and merchant-*seringalistas* increasingly discussed the need to implement agriculture on rubber estates and this was stressed particularly during the meeting they had in Manaus in 1910.⁶⁵⁸ Yet, they were talking about *agro-ecological* methods, rather than large-scale monocultural methods. In this meeting they decided to recommend experiments with agricultural rubber by clearing up small plots of the forest but only at the early stage of planting. In doing so, they aimed to increase productivity, without destroying the forest, believing that clearing up the forest entirely was completely unnecessary.⁶⁵⁹

When their arguments are analysed, it is apparent that preserving the forest had an economic-ecological meaning. The large-scale monocultural method in use on rubber plantations presupposed clearance of the forest. Yet, the *Hevea* forest in Amazonia meant land or the means of production in itself. Native trees had survived exploitation for 70 years,⁶⁶⁰ while cultivated trees at that moment could be exploited by modern methods for only around 25 years.⁶⁶¹ Furthermore, while the latex from *Hevea Brasiliensis*, when coagulated using the smoking method, produced the best rubber, these trees developed only if kept altogether, with the forest surrounding the trees, as mentioned by Dean.⁶⁶² Furthermore, according to Das Neves⁶⁶³ large-scale

⁶⁵⁷ Revista da ACA, A borracha do Amazonas na Exposição de Londres, Manaus, novembro 1908, 5, p. 2.

⁶⁵⁸ Miranda, B. (Org), 1990.

⁶⁵⁹ Ibid. p. 104.

⁶⁶⁰ Jornal Folha do Norte, Debate sobre o Problema da Borracha, Belém, Sabado, 16/04/1913, p. 1.

⁶⁶¹ Dean op.cit.

⁶⁶² Dean op.cit.

⁶⁶³ See bibliography mentioned in footnote 374.

monocultural rubber production required high level of capital investment in technical measures to prevent pests and other hazards that could hinder the development of the trees. Yet even with this care, pests not yet completely controlled by agronomists could still thrive in the trees.

This reveals that the view that it was the *seringalistas*' lack of entrepreneurial vision that prevented the adoption of large-scale monocultural rubber in their *seringais* does not stand up. On the contrary, it was a conscious entrepreneurial decision on their part. To destroy native productive trees in order to achieve large-scale monocultural rubber was too risky.

Moreover, *seringalistas* were unanimous in criticising the way the trees were cut on rubber plantations, stating that '*the cut is too long and the trees suffer with it, particularly in the higher parts of the trunk in which there is no too high humidity*'.⁶⁶⁴ The accounts on the First International Exposition of Rubber in London, already mentioned, report that:

'(...) by the half herring-bore system adopted on rubber plantations the tree cut reached 60 inches. By the system used in Amazonia the cut reached the maximum of 2 inches. Even so, there is no skilled rubber taper in Amazonia who would disagree that even the trees most carefully cut have their production reduced over time (...).⁶⁶⁵ (our translation)

The aim of preserving nature is apparent as an important element of the process of production itself. Chaves,⁶⁶⁶ who was a *seringalista* in Acre, justified his preference for the so-called 'simple method' of cutting trees in Amazonia because it was more productive and less harmful to the trees. The quality of being less harmful was stressed as an advantage over the highly profitable rubber plantation's technology. Da Costa,⁶⁶⁷ who had proposed large-scale agricultural rubber production along the Bragantina railways in Pará, argued in a speech to the Club of Engineers in Rio de Janeiro in 1912, that the modern method of cutting the trees was not suitable for

⁶⁶⁴ Revista da ACA, 5, op.cit.

⁶⁶⁵ Ibid. p. 3.

⁶⁶⁶ Chaves op.cit pg. 37-40.

⁶⁶⁷ Costa, J. 1913, p. 22.

native trees. Preserving rubber trees had a profound economic meaning since it would take many years to replace them. *Seringalistas* did not subscribe to the notion that trees could easily be replaced and that the destruction of the native forest surrounding the rubber plants would be just a simple technical and scientific matter. Rather, these were notions brought about by the historical process regarding modern technology for large-scale monoculture. Consequently, pests and other ecological issues, which emerged along with this technology, were seen not as simple technical matters to be sorted out by science. On the contrary, they were seen from different points of view such as (a) the destruction of profitable natural resources which were the means of rubber production; (b) the ecological consequences of destroying the native forest; (c) a cultural meaning expressed in the use of verbs which expresses feelings, as for instance, when it is said that trees suffer⁶⁶⁸ with long cuts or when it is recommended that young rubber plants should be treated with affection⁶⁶⁹ etc. This cultural meaning requires an investigation in its own right which is not the task here.

What has to be stressed, however, is that preservation, as an intrinsic part of the process of production, constitutes a specificity in relation to the view of nature intrinsic to the Western notion of civilisation and progress and to the debate on nature in Western Europe in the 19th century and beginning of the 20th century. This debate was marked by the dilemma between preserving or not preserving nature.⁶⁷⁰ Yet, destroying nature was accepted as a necessary part of modern technology which was conceived as a symbol of civilisation and progress. It was regarded as the sign of superior development or superiority facing other peoples. The dilemma, then, stems from the wish to preserve, at the same time, acceptance of the model of economic development incorporated in the notion of progress as being positive or at least necessary. The result was the transformation of preservation into an issue

⁶⁶⁸ Revista da ACA, 5, op.cit.

⁶⁶⁹ Miranda op.cit. p. 102.

⁶⁷⁰ Bowler 1992, chapters 8, 9 and 10.

external to the process of production, being synonymous with gardens, parks and so on – that is, the making of nature, not spontaneously growing nature.

In Amazonia, on the contrary, preservation was profoundly connected to the process of production itself. The property right in Pará and Amazonas foresaw the preservation of natural resources as one of the conditions for the privatisation of land since the 1890s, which was incorporated by the legislation regarding the Acre Federal Territory after 1912, as was mentioned in chapter two. Moreover, there were regulations to prevent destruction of or damage to extractive forest.⁶⁷¹ At the same time, the geomercantile relations with nature meant that *seringalistas* considered preservation as a condition for the reproduction of the rubber economy. This is clearly expressed in lawsuits against English capitalists who rented *seringais* in the 1910s. In 1901-04, the owner of two *seringais* in Pará went to court, claiming that two English capitalists who had rented his *seringais*, in using a harmful method to cut the trees, had performed multiple and profound cuts, damaging some trees and killing others.⁶⁷² They won the case and the two renters had to pay compensation, based on *Regulamento no. 737* mentioned earlier. Moreover, in 1913, several foreign companies paid an English man (Sr. Arkers) to teach rubber tapers in Amazonia to cut the trees according to the modern method.⁶⁷³ This was justified as a technical improvement to increase productivity. The majority of *seringalistas* were strongly against it,⁶⁷⁴ however, arguing that rubber plants in Amazonia could be exploited using the local methods for 70 years, while the modern methods damaged or destroyed the trees far more quickly.⁶⁷⁵ Even those who recommended agricultural rubber to the government

⁶⁷¹ See the *Regulamento no. 737* of 25/11/1850.

⁶⁷² T JE, Autos Cíveis anos 1900 a 1905, Belém, Outubro/1994 (1904 –Juizo do 2o. District – Autos Cíveis de Carta Testemunhal).

⁶⁷³ Jornal Forlha do Norte, Debate sobre o Problema da Borracha, Belém, Sabado, 26/4/1913, p.1.

⁶⁷⁴ Chaves op.cit. p. 34.

⁶⁷⁵ Ibid.

were against this because they thought that the modern methods of cutting trees were not suitable for native trees.⁶⁷⁶

Finally, preservation as an intrinsic element of the process of production itself meant a shift from the previous colonial economy in which the Portuguese produced extractive commodities by destroying natural resources, as was found out in my previous research. This also meant that the Amazon forest was preserved⁶⁷⁷ not because people did not use it but because the inhabitants gradually learned to use natural resources without destroying them massively, which to a great extent, was a result of the absorption of the way the First Nations and remaining nations used natural resources.

The Way Seringalists Re-Invested the Profit they Gained from Rubber Production

The material presented indicates that the geomercantile view of nature and technology, to a great extent, influenced the *seringalistas*' decision not to adopt in their *seringais* the model of development and progress represented by large-scale monocultural rubber production. However, this technology clearly yielded a higher pattern of profitability per hectare,⁶⁷⁸ challenging the production of less important species of gum in Amazonia. At the same time, the higher supply of rubber did influence the tendency to decreasing prices after 1913-18. *Seringalistas* and merchant-*seringalistas* were affected and responded to these issues in different ways. Indeed, several *seringalistas* lost their estates because in the conjuncture of the deepest crisis of rubber in 1913-15, as previously mentioned, many indebted *seringalistas* had to give their estates to *casas aviadoras* as a mortgage guarantee. At the same time, *casas aviadoras* were greatly affected by the successive crises of

⁶⁷⁶ Costa, J. op.cit. p. 22.

⁶⁷⁷ The Amazonian rainforest is far the biggest preserved rainforest on earth, with 362 million hectares of preserved rain forest (Moran, 1981, p. 3).

⁶⁷⁸ It was well discussed by Santos, R. op.cit. and Martinelo op.cit.

the rubber economy. That bankruptcies were quite frequent is indicated by the TJE records, by reports and Journals of the ACP and of the ACA and is discussed by several authors.⁶⁷⁹ Many of them changed partnership, investing in different businesses. Revistas da ACP and title deeds in CC's records show increase investments in plantations of oily seeds, encouraged by local government after 1912, as well as cotton, rice and other cereals, the manufacture of rubber, food industries and other industries such as shoes, leather etc. The resulting production supplied both the internal and international markets.

In Acre Territory agricultural and pastoral production were increasingly outside the densest rubber fields. The census of 1920⁶⁸⁰ shows that of 1,047 rural enterprises analysed, 62% implemented agriculture in association with a pastoral economy, 24% agriculture only and 10% pastoral activity only. This production was essentially for an expanding internal market as a result of the increase in population mentioned in chapter three.

Moreover, in Acre, *seringalistas* increasingly rented their *seringais*, particularly in less important rubber fields. The number of renters increased from 16% in 1920 to 46% in 1940.⁶⁸¹

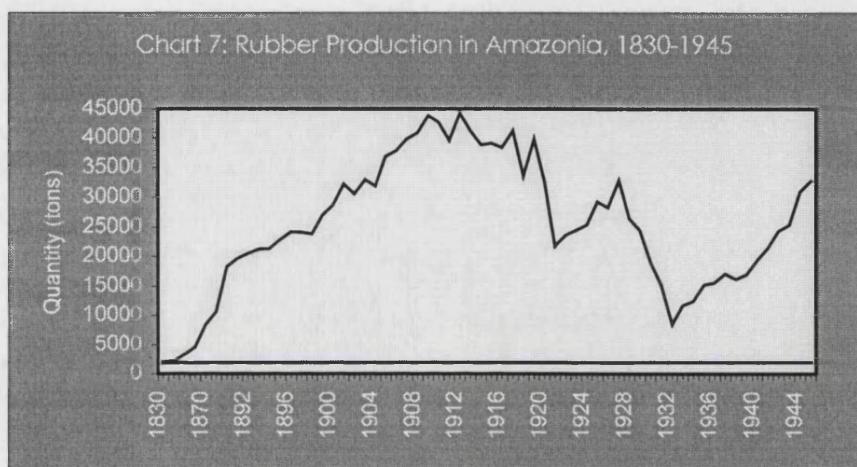
However, despite bankruptcies and the abandonment of some less important distant rubber yields, rubber production survived the successive crises. Chart 7 shows that the production of rubber in Amazonia reached its highest point in 1912. Thereafter, it dropped deeply until 1920 when it started to increase again reaching the maximum point in 1925-26, then dropping to reach a trough in 1932-33. However, from 1934-41 rubber production again increased owing to the emergence of an internal market resulting from the installation of the pneumatic industry in Brazil. The so-called deals of Washington, signed in 1942, initiating the so-called 'battle of

⁶⁷⁹ As for instance, Mandes op.cit.; Santos, R. op.cit.; Westein op.cit.; Martinelo op.cit.

⁶⁸⁰ IBGE. Recenseamento Geral do Brasil em 1/9/1920, Serie Nacional, vol. III, Censos Econômicos, Rio de Janeiro, Serviço Gráfico do IBGE, 1950, p. 44.

⁶⁸¹ Ibid.

'rubber' to supply the extra demand created by the Second World War, augmented production by 36% in the period between 1941-45, which means that despite the big fuss surrounding the matter, these deals did not provoke an increase in production at the expected level.⁶⁸²



Source: Ministério da Indústria e do Comércio – Superintendência da Borracha. Anais da Primeira Conferência Nacional da Borracha, realizada no Rio de Janeiro, de 22 de julho a 9 de agosto de 1946, Rio de Janeiro, s/d, Tomo I, p. 38

Within the rubber estates, economic adjustments were widespread. The effects of the constant deep oscillations of rubber prices, and particularly of the crisis of 1913-15, were stronger in areas with less density of the best species of gum, which were directly affected by the competition from monocultural rubber production, as mentioned in the previous chapter. Consequently, the production of inferior species was reduced or even stopped in the most distant areas. In Pará, a phenomenon of the deepest crisis of the rubber economy was the ghost cities and villages, which emerged as a consequence of their dependence on the rubber economy, having their populations composed mostly of *seringalistas* and *seringueiros*, who went away during this crisis.⁶⁸³ In this conjuncture, prosperous cities and municipalities were those based on diversified economies, such as Alemquer, Obidos and Maraba, which

⁶⁸² Ministério da Indústria e do Comércio – Superintendência da Borracha, s/d, Tomo I, p. 38.

besides having agricultural, pastoral and primary manufacturing economies, had an ascending production of Brazil nuts.⁶⁸⁴ Several authors noted the increase in agricultural and pastoral activities in Pará⁶⁸⁵ and in Acre,⁶⁸⁶ which characterised the periods during and after the deepest crises of the rubber economy.

The diversification of economic activity is confirmed by the analysis of the INCRA-lawsuits concerned with the 105 large early rubber estates in the main area of rubber production in Acre. Table 20 shows that until the 1920s, around 67% of them produced rubber only, while the rest had diversified economic activities. The estates producing rubber only had the highest density of the best species of gum. In several of them, rubber was cultivated on a small-scale, as *agro-ecology*, increasing the density of trees per hectare or simply replacing old trees. The 35% that diversified their economic activities shown in the Table above, consisted of 10% producing rubber combined with cattle and agriculture and 10% performing these activities plus Brazil nuts and small factory of sugar cane rum in which Seringal ITU was included, as mentioned in previous chapters.

Diversification of economic activities was a strategy for facing the successive crises of rubber. Das Neves⁶⁸⁷ states that his father faced the constant crises of the rubber economy by diversifying economic activities, producing for the internal market. In 1904, a small cattle farm was established in a specific area within the Seringal ITU to supply the city of Rio Branco, the capital of Acre Territory, with meat, milk and cheese. This information was confirmed by an analysis of the accountant documentation of Seringal ITU. Moreover, after 1912, this estate started to combine the production of rubber with the production of Brazil nuts. This was a complementary activity whose harvest occurs in the rainy season when it is not possible to get proper latex. As a result, Brazil nuts eliminated an important economic issue in rubber

⁶⁸³ Jornal Folha do Norte, Cidades Mortas, Belem, 4a-feira, 1 de janeiro de 1930.

⁶⁸⁴ Ibid.

⁶⁸⁵ See, for instance, Cordeiro op.cit.; Barata op.cit; Leite op.cit.

⁶⁸⁶ See, for example, Pinto de Oliveira op.cit.; De Paula, op.cit.

production: the idleness of labour for around 4 or 5 months of the year, as a result of the seasonal nature of rubber production in a context in which a considerable proportion of commercial transactions within the estate was made by exchange of goods, generating both debts and the need for labour permanence on the estate as a warranty for settlement of debts. The combination of these two activities minimised the generation of debts and increased labour rotation on the estate, as discussed in chapter four.

Table 20: Economic Activities on Rubber Estates, Acre District 1890s-1910s

Activities	Quantity of Estates	Percentage
Rubber only	65	67%
Rubber, cattle and agriculture	10	10%
Rubber, Brazil nuts, agriculture, cattle and rum	6	6%

Source: INCRA-Acre lawsuits

Moreover, analysing registers of firms in the Junta Commercial do Acre, I came across the fact that the great majority of *seringalistas* and merchant-*seringalistas* always ran their business by organising partnerships as a strategy for facing the high risk of the rubber business, which was sharply affected by the instability of prices. Seringal ITU, once again followed this pattern. As can be seen Table 21 from the 1870s until 1961, this estate was run mostly in partnership. Only for short periods such as from 1925-7 and 1932-45 was it run by an individual firm.

This tendency was also expressed in the reduction of the proportion of individual property after the deepest drop in prices in 1913. In 1920, 96% of the total number of properties in Acre were individually owned, which was reduced to 44% in 1940, while

⁶⁸⁷ Neves, 1981.

other sorts of private property, including partnerships and familial, increased from 4% in 1920 to 19% in 1940.⁶⁸⁸

Another important change in the economy of the Seringal ITU was the establishment of financial transactions with banks as mentioned in the previous chapter. Increasingly, the performance of transactions was mediated by cash on the estate, eliminating the credit attached to the future delivery of rubber.

These changes guaranteed the economic reproduction of the estate as a capitalist enterprise. As can be seen in Table 21, the rubber enterprise within Seringal ITU presented constant capital in the period from 1904 to 1925. The analysis of the accounting document of this estate for the years 1910 and 1913 shows that the owner's investments were driven to a cattle farm and sugar cane rum mostly. At the same time, the owner invested in a second *seringal*, which was sold years later. In 1913, the balance was negative due to the stock of rubber held awaiting better prices. The reduction of capital in 1925-27, illustrated in Table 21, resulted from a split in the partnership in which the leaving partner received his 50% capital in the business. However, capital expanded in the rubber enterprise for 1927-32. Thus, the rubber enterprise was profitable and this profit was re-invested, thereby expanding capital, which means that there was capital accumulation in seringal ITU.

⁶⁸⁸ IBGE op.cit.

Table 21

Managers of Seringal ITU's Rubber Enterprise, 1870s-1961

	Juridical Form	associate	Contract Date	duration	capital share	total capital
J.C.Lima and his heirs				until 1902		
H.Alves & Cia	partnership	H.A.Neves and J.H.A.Neves	junho/1904	1904-1920	H.A.Neves: 150.000\$000 and J.H.A.Neves: 150.000\$000	300.000\$000
Honorio Alves & Irmão	partnership	the same	01/09/20	1920-25	Ibid	Ibid
Honorio Alves das Neves	individual Firm	H.A.Neves	23/09/25	1925-1927		150.000\$000 reis
Honório Alves	individual Firm	Honorio Alves	14/08/25	1925-27		
Honório Alves & Cia	partnership	H.A.Neves and his wife Q.C.Neves	29/08/27	1927-1932	H.A.Neves: 200.000\$000 reis and Q.A.Neves 100.000\$000 reis	300.000\$000 reis
Honorio Alves das Neves	individual Firm	H.A.Neves	24/02/32	1932-1945		50.000\$000 reis
Alves das Neves, Pereira & Cia	partnership	H.A.Neves, C.A.Neves and E.T.Pereira		1945-1948		Q\$150.000,00
Neves & Pereira	partnership	the above contract was modified due to the exit of H.A.Neves	05/09/45		C.A.Neves: Cr\$25.000,00 and E.T.Pereira: Cr\$25.000,00	Q\$150.000,00
Neves & Pereira	partnership	Contract of changing capital	Janeiro/1954		C.A.Neves: Cr\$300.000,00 and E.T.Pereira: Cr\$300.000,00	Q\$300.000,00
Neves & Pereira	partnership	the same	Janeiro/1956		C.A.Neves: Cr\$800.000,00 and E.T.Pereira: Cr\$800.000,00	Q\$ 1.600.000,00
Neves & Pereira	partnership	the same	Setembro/1957		C.A.Neves: Cr\$1.500.000,00 and E.T.Pereira Cr\$1.500.000,00	Q\$ 3.000.000,00

Source: Junta Comercial do Acre, Registro de Firmas

Conclusion

The *seringalistas'* geomercantile view of nature and use of natural resources, to a great extent, influenced the way they improved the methods of making rubber and the non-adaptation of *seringais* to the pattern of progress and technology represented by rubber plantations. However, this technology clearly resulted in a higher level of

profitability per hectare and an increasing supply of rubber, influencing the tendency to decreasing rubber prices after 1913, particularly after 1918 when over-production was a reality. *Seringalistas* were inevitably affected and responded to these issues in different ways. Some indebted *seringalistas* lost their estates, giving them as a mortgage guarantee to *casas aviadoras*. At the same time, *casas aviadoras* were also greatly affected by these issues, as indicated by the high level of bankruptcies in 1913-15. Another phenomenon brought about by the crises in the rubber economy was the increasing rent of *seringais*, particularly in less important rubber fields.

However, the rubber economy did survive the successive crises, especially by means of concentrating production in the Fina Hard Para, by changing work relations and by diversifying the *seringais*' economic activities. In Acre River District, until 1920, around 67% of *seringais* survived producing rubber only because they had the densest best species of gum and because they practised *agro-ecological* methods in order to replace old trees or increase the density of Hevea forest. The rest survived the crises by diversifying their economic activities, producing for both the internal and international markets.

In these ways, early rubber estates in Acre River District guaranteed profitability and capital expansion.

Conclusion

The history of *seringais* in the 19th and beginning of 20th century represents one of the most interesting forms of capitalist relations of production which took shape in post- colonial Amazonia. It certainly was raw material production for one of the most important industries in the world after the 1870s-1890s - the pneumatic industry - as largely discussed by the literature. What has been neglected by the prevailing literature, however, is that *seringal* represents the incorporation of natural resources and of labour into the entrepreneurial production of a commodity, organised and commanded by capitalists according to their aim to profit, in order to ensure capital accumulation. Thus, it was a capitalist social relation of production. It has been the purpose of this study to analyse the specific features of this experience in the area that produced the best quality and the highest quantity of rubber in Amazonia – the Acre River District in Acre State – in the period which witnessed the first significant steps towards effective and permanent entrepreneurial production of rubber with systematic accumulation in extractive rubber.

One of the main points debated when considering rubber production in Amazonia has been the supposition of non-permanent appropriation of land and non-systematic entrepreneurial production. On the one hand, it has been argued that it was a temporary encampment or mercantile undertaking. On the other hand, it has been stated that the existence of free land would have shaped pre- or non-capitalist relations of production by means of either familial autonomous producers or compulsory forms of labour.

The argument of free land shaping supposedly pre-capitalist familial producers in Amazonia has been contested by my previous historical research in which it was demonstrated that peasantry in Amazonia was neither a new nor a pre-capitalist phenomenon and, most importantly, it was not a direct result of 'free land', as has been suggested by the prevailing literature. On the contrary, it emerged in the region

from the middle of the 18th century onwards, linked to processes compounding the specific form the historical processes of capitalism took in the region. Peasantry here was not a pre-capitalist phenomenon as feudal-peasantry was in Western Europe. Moreover, commercial relations and permanent occupation of land were not new phenomena either. On the contrary, they were intrinsic elements of historical processes in the region from the 1615-16. Thus, the investigation contributed to the analysis of entrepreneurial rubber production in important respects, particularly in revealing that the approaches that view the region as 'free land' sweep aside the entire historical process of capitalism in Amazonia.

Given this background of former debates, I have tried to question the prevailing interpretations of entrepreneurial production of rubber in Amazonia by means of a historical perspective. Thus, I have chosen to analyse the way in which capitalist social relations of production took shape in the area that became the most important producer of rubber in the region - the Acre River District in Acre Territory. Moreover, I have concentrated on certain aspects of this experience – those which, in my opinion, lie at the core of capitalist social relations of production in the shape it took in rubber production in Amazonia in the second half of the 19th and beginning of the 20th century.

The period from 1848 to 1914-15 witnessed the emergence and expansion of *seringal* in the sense of large estates. I have described the main features of the private appropriation of the basic natural resources – the rubber fields (chapter 2). I have argued the specificity of this process through the notion of a geomercantile privatisation of land based on a highly selective view of natural resources. While this was a characteristic of the privatisation of land in Amazonia since 1615-16, the geomercantile privatisation of rubber fields was specific insofar as the Hevea forest itself was turned into land so that the selectivity was given by location and by the density of the best species of gum. The land to be privatised was the land-forest rather than the land-soil as in agricultural production or the land-natural grass as in

the pastoral economy in the region. This is a privatisation/use of natural resources governed by the converging relation of men with nature, contrasting with the opposing view of nature expressed in the idea of 'mastering'/dominating nature which governs the Western notion of civilisation and progress, centred on modern technology.

This contrast was interpreted in a particular way by the promoters of the modern technology of rubber plantations in British colonies in 1906-08. That is, the Western notion of civilisation and progress, which was strongly influenced by the Spencerian notion of 'the survival of the fittest', governed the argument of the incompatibility of preserved Hevea forest with civilisation/modern property, associating rubber production in Amazonia with the absence of land property. These are the subterraneous ideas in the literature post- the 1950s-60s referring to *seringais* as temporary encampments. Finally, the western notion of civilisation and progress also influenced the thesis of *seringal* as non- or pre-capitalist relations of production since it results from the a-critical acceptance of Marx's reference to 'colonies' as 'free land', the conception of non-industrial societies as 'primitive' or remnants of the past and the concept of capitalist relations of production centred on wage labour and on the specific shape it took in industry in England.

Given these findings, I have discussed three points: (a) the Western notion of civilisation and progress centred on the idea of 'mastering'/dominating nature by means of modern technology and its consequent biased view of peoples using natural resources with methods based on a converging interaction with nature, associating them with 'wildness', incivility and of being unfit; (b) the way this biased view was expressed in the Marxian view of non-industrial societies as 'primitive' or 'tribes' which is linked to his reference to 'colonies' as 'free land', ignoring the entire specific historical process in which capitalist social relations of production were forged in those areas; (c) the questions the investigation into social relations of

production in *seringais* raise to this and to Marx's concept of capitalist relations of production.

The first step in this direction was a quick reference to my previous historical investigation and to the literature to point out that the First Nations in South America and in Amazonia were not 'primitive' 'tribes' but societies having political, economic, cultural organisations and sophisticated knowledge in many fields. Moreover, I have argued that in Amazonia there was not a colonisation of empty territories after 1615-16, but a process of geomercantile privatisation of land which presupposed the freeing of land from the First Nations.

Throughout this thesis I have argued the influence of the geomercantile privatisation of land and the use of natural resources in the pattern of capitalist social relations of production in *seringais*. First, it involved a relation of property in which land was appropriated as individual ownership. Second, in this social relation of property, access to the best lands was socially unequal since the best lands tended to be privatised by entrepreneurs, who, besides privatising the best lands, created strategies to prevent direct producers from doing the same, so constituting one of the most important processes influencing the emergence and consolidation of a free labour market (chapter 3).

In this social relation of property direct producers had access to lower quality lands mostly, reducing the extent to which they could survive as autonomous producers. Regarding rubber fields, although a reasonable parcel of peasants had properties in such areas, the best Hevea forest was majority owned or even monopolised (as, for instance, the stretch with the densest rubber fields in Acre) by entrepreneurs. Consequently, the direct producers of rubber, in general, could perform their job in the densest rubber fields only under the command of the *seringalistas*. Moreover, even peasants were attracted to work in *seringais* as subordinate labour, particularly in the conjuncture of far higher rubber prices in comparison to cereals prices,

revealing the engagement of peasant-workers (peasants in the hybrid condition of peasant and temporary labour).

These findings raise questions to Marx's idea of 'free land' favouring the flourishing of peasantry and putting obstacles in the path of capitalist relations of production. When rubber fields started to be appropriated and were effectively incorporated in capitalist production of rubber in the period 1848-1870s, there was already an internal free labour market from which labour could be drawn, despite the existence of non-privatised lands in Amazonia.

Most importantly, the emergence and consolidation of this labour market was not a mechanical result of social relations of the property of the means of production. The historical process in which the direct producer of rubber was turned into the social condition of subordinate labour, while *seringalistas* emerged as owners/commanders of the process of rubber production, was varying, multi-faceted and dynamic. Apart from the strong influence of the social relations of land property, this process was influenced by unequal access to the property of the means of transport and to the system of credit, by the high rubber prices and low cereals prices, by difficulties in the official immigrant peasants' settlements and by spontaneous immigration. The expansion/increase in production of raw material to meet the steadily increasing industrial demand, particularly after the 1870s-1990s, revealed the insufficiency of this internal labour market, especially to meet the demand by distant rubber estates in Acre. This was tackled by increasing the recruitment of immigrant labour in other regions of Brazil. Actually, this process led to the creation of an internal free labour market even in the Acre Territory, which was already apparent in the 1910s.

Third, the geomercantile privatisation/use of rubber fields represents the shape that the converging relations with nature (intrinsic to the First Nations' methods of making rubber) took when adapted to capitalist production. This meant that in the pattern of capitalist social relations of production in *seringais* the search for profit did not necessarily imply 'mastering' or 'dominating'/destroying nature. This was

manifested in the selective privatisation of land-forest based on the search for great density of the best species of gum (chapter 2), in technological changes and decisions of re-investments based on criticisms of the modern technology of large-scale monocultural rubber (chapter 7) and on the organisation and rationalisation of space/nature to reduce the time for production and to define potential labour productivity (chapter 4).

The geomercantile use of natural resources played an important role in the way work was organised. *Seringueiros* were engaged as labour paid by results instead of as wage labour and they paid rent for the exploitation of rubber paths. Most importantly, the administrative procedures of control/discipline of their labour and of quality control were also measures taken to preserve the Hevea forest.

The setting up of a complex system of commercial relations within the estate was necessary complement to the productive structures located far away from markets. This same condition of distance of markets, reducing the frequency and velocity of commercial transactions, reduced the volume of money mediating those transactions physically, and shaped a great proportion of commercial transactions based on buying on account, through current accounts, in which money acted as an ideal measure. The existence of a commercial house within many estates and the fact that *casas aviadoras* used to contract managers to run their *seringais*, particularly after the 1870s-1880s, and *seringalistas* did the same when they had more than one *seringal*, have been used to argue that *seringalistas* personalised commercial-usury capitalists not very keen on investing in production. Consequently, *seringal* is classified as a mercantile undertaking.

I have demonstrated that these particular commercial relations constituted circumstances, which were gradually eliminated as a local market emerged and expanded.

Most importantly, I have argued that the *seringalistas*' rule as commanders of productive activities was deeper than their supposed absenteeism suggests. There is

plentiful evidence of *seringalistas* exerting direct command over the process of rubber production. And what has to be pointed out is that they did not need to be in direct command of production to be considered productive capitalists since even when they contracted managers at the apex, they still retained overall control.

The circumstance of distance of productive structures of rubber production also imposed on *seringais* the engagement of indebted immigrant labourers until around 1912, in Acre River District. This has been used to define the work relations that existed as non- capitalist or compulsory forms of labour. Instead, I argue that the engagement of indebted immigrant labour was a circumstance gradually surpassed by the gradual emergence and consolidation of an internal labour market as there was an increase in the settled population and the local system of transport was improved. Moreover, the evidence points to the command of the process of production by capitalists and the labourers' class condition of subordinate forms of labour. In *seringais* as in any other capitalist enterprises, the capitalists' will and command over the process of production assumed the form of administrative rule and bureaucratic procedures of direct and indirect means of retaining, controlling and disciplining labour, including inspection, control of credit/debt, different strategies of motivation and ways of retaining labour, for instance, by incentives and rewards in the form of bonuses, gratification or discounts.

These were the circumstances under which labourers identified issues and built responses, influencing the course of class relations within the estate. *Seringal* was an enterprise based on the work of different categories of labour such as wage, salaried and labour paid by results. The direct producers of rubber were engaged and performed their jobs under the condition of *seringueiros* - a form of individual subordinate labour, specialised and exclusive producers of rubber, paid by results. In spite of paying rent and being said to be partners in the business by the propagandistic discourse of labour recruitment, they were subdued by capitalists' will and objectives both directly and indirectly. Their subordination was manifested in both

the work process and the commercialisation of rubber. Their labour was the object of retention, control and discipline by means of administrative measures, and they had an obligation to deliver the rubber they produced to the owner and they had to sell it according to internal work conditions. As a result, their remuneration was defined not just by the quantity and quality of rubber produced, but also by the conditions under which they commercialised it – under pre-determined rules.

Under such circumstances, the *seringueiros*' bargaining powers were manifested in different manners such as: (a) in different forms of resistance to the use or role of debt as a form of retention such as collective forms of resistance and mutual aid by means of lending cash/credit to each other, assuming debt of colleagues willing to leave the estate, negotiating debts with the boss etc; (b) by performing temporary wage labour within the estate; (c) by selling as much rubber as possible by consignation.

This social relation of production does not fit the Marxian concept of capitalist relations of production - centred on wage labour and in the specific shape it took in industry in England. Actually, the social relations of production in *seringais* raises questions about this concept. Thus, I have discussed the controversies around this concept and systematised a concept of capitalist relations of production defined not just by wage labour. On the contrary, it is defined by the private property of the means of production in which the owner commanded the process of production, subordinating labourers to his/her objective of profit in order to ensure capital accumulation. In this definition, class is not an impersonal category of analysis but a social condition built historically involving different social relations. This and other circumstances - such as the geomercantile use of natural resources, the fact that production was greatly affected by the cycle of harvesting defining labour idleness during approximately four months of the year, specific conditions of access and life in distant *seringais* - defined a pattern of work relations based not just on wage labour

but on different categories of labour in which accumulation was sustained by the extraction of surplus, rent and profit.

This definition is implied in the discussion not just of work relations but also of profitability and capital accumulation. The literature has neglected this matter by viewing *seringais* from the perspective of the Western notion of civilisation and progress, so, automatically attributing a character of 'failure' to the non-adaptation of these enterprises to the pattern of development and progress represented by the modern technology of large-scale monocultural rubber. Actually, the subject requires an investigation in its own right. I have undertaken a subsidiary discussion on certain aspects of this matter – those which in my opinion are central to enforcing the thesis of capitalist relations of production and which reveal the weaknesses of the prevailing interpretations on the subject. Considering that the main problem in this literature is the over emphasis on the previously mentioned pattern of progress, neglecting the local capitalists' own project of economic and political changes and actually ignoring the way they invested the profit they got in rubber production, I have explored this issue by trying to understand the *seringalistas'* own project of economic and political changes and their geomercantile relations with nature, governing their political demands and decisions on re-investments and changes in their estates.

This was done by focusing on both the double movement English rubber dealers versus *seringalistas* (chapter 5) and on re-investments and changes in rubber estates, particularly in one middle sized *seringal* located in the Acre River District (chapter 6).

The attempt to understand their project of economic and political changes by discussing the double movement is due to the fact that this project was not readily achieved, but was built and changed over time according to the way they conceived and responded to obstacles to profitability and capital accumulation imposed by the historical circumstances in which they were making decisions. One of the main obstacles was the way they were related to foreign rubber dealers, particularly the

English rubber dealers, who in partnership with Germans and Portuguese controlled part of the credit available for rubber production and around half of the rubber exported from Amazonia, using this position to impose low prices on local producers and in fact used it to provoke constant oscillations in rubber prices in Belém (chapter 5).

There are controversies over the interpretation of the relationship between local-foreign capitalists. I have given a quick account of these controversies in order to make precise my argument. The main weakness of the prevailing interpretations on the subject – this is the Marxist notion of imperialism, and the nation-state approaches of imperialism - has been the Eurocentristic explanations of the world, confusing different matters. The Westerners' movement towards different economies all over the world has been focused on not just as an explanation for the metropolis economy or for the character and purpose of their presence abroad. It has been applied as a general explanatory model for exploitative relations as an intrinsic element of capitalism all over the world. Consequently, the form capitalist exploitative relations took, as for instance, in rubber production in Amazonia, has been neglected, the local capitalists/workers have not been recognised as historical actors, while their views and ways of interacting with particular historical circumstances, including foreign investments, have been focused on by means of biased presuppositions. Ironically, even the nation-state approaches of imperialism ignore the fact that foreign rubber dealers were entering into a constituted nation. Consequently, the relationship between local-foreign capitalists was necessarily shaped by the dynamics governing the Brazilian State allowance and intervention. Finally, the Western capitalists' movement towards the rubber economy in Amazonia has not been distinguished from their home States' own movement towards this economy.

These views shadow the fundamental character of the relationship between *seringalistas*/merchant-*seringalistas* and foreign rubber dealers: that of being an inter-class relationship. The plentiful evidence on this drove my attention to Polany's notion of double movement, which was re-thought particularly by incorporating

specific features of the relationship between *seringalistas*/merchant-*seringalistas* and foreign rubber dealers. Thus, I used a notion of double movement which recognises the importance of the indirect influence of foreign rubber dealers insofar as *seringalistas* built their project of economic-political changes and decisions of re-investments, to a great extent acting-reacting to their movements towards the rubber economy. Yet, the emphasis is on the crucial role played by local investors at the same time that the historical circumstances they were dealing with were considered.

The results revealed that although they had converging class interests, they had specific interests, these originated in their different economic condition of landed/productive capitalists versus commercial-financial capitalists and in their different nationalities, and diverse ideologies, provoking clashes. Even the ideology of liberalism and the self- regulated market took a specific form when defended by local landed/productive capitalists. Actually, they resisted the meaning this ideology took when defended by foreign rubber dealers, particularly the English rubber dealers/British State, whose principles of liberalism and the self-regulated market were strongly mixed with the Spencerian principle of the 'survival of the fittest' and imperialistic mentality, implementing actions to sweep aside local financial/commercial capital and rubber production itself, especially in 1906-08. Moreover, *seringalistas*' geomercantile interaction/use of natural resources shaped a critical view of the technology of large-scale monocultural rubber. This, to a great extent, influenced the way they improved the methods of making rubber and the non-adaptation by *seringais* of the pattern of progress and technology represented by rubber plantations.

Therefore, the difficulties faced by their enterprises as a result of the foreign rubber dealers' movement towards the rubber economy and of the emergence of this technology were responded to in different ways. Firstly, the *seringalistas*' project of economic and political changes was concerned with the control of markets and banking, improvements in transport facilities, taxation, labour cost etc and not with

large-scale monocultural rubber. Their demands regarding this project were frustrated by the central government's partial response and intervention guided by the Western notion of civilisation and progress, trying to adapt rubber production to the plantation technology, clashing with their geomercantile view on the use of natural resources.

Secondly, once left practically to themselves, the *seringalistas'* response to obstacles to profitable rubber production, was guided by their own evaluation of the rubber economy and views on technology. In the deep crisis of the 1910s, some *seringais* in less important rubber fields went bankrupt as well as there being some *casas aviadoras*, and the rent of *seringais* increased gradually after that, something that became apparent after 1920. However, rubber production did survive these difficulties. In the Acre River District, *seringalistas* concentrated production on Fina Hard Para, implemented some changes in work relations and diversified economic activities, producing both for the external and the internal market. In these ways they guaranteed profitability and capital expansion.

This evidence points to the need to revise two other suppositions surrounding the idea of non- or pre-capitalist relations of production in Amazonia. Firstly, it raised questions about the notion that there was an extensive expansion of productive activities only by means of investments in new lands. Rather, production was intensified by investing in technological improvements and in the diversification of economic activities within the same estate as well as by intensifying the level of labour exploitation in times of crisis in rubber prices by means of increasing the number of rubber plants\compounding paths and reducing the number of labourers.

The second assumption questioned by the findings is that of labour immobilisation. I have noted that changes such as the diversification of economic activities within the estate and in the *seringueiros'* condition as exclusive producer of rubber provoked a concomitant gradual increase in the engagement of both wage labour and labourers paid by results, which were accompanied by increasing levels of labour rotation.

This research focused on the process of accumulation in rubber production in a necessarily incomplete manner. I have made only side references to certain very important aspects of the process of diversification of economic activity and to the shift from the mediation of *casas aviadoras/casas exportadoras* in the credit system to the direct transactions with banks after the middle of the 1910s, and particularly in and after the 1920s. Moreover, I have limited the analysis to one rubber estate situated in Acre River District, leaving aside the rest of the estates in this area and the rubber production and economy as a whole. Finally, I have not referred to how surplus/profit/rent was generated and accumulated in the sector as a whole, and how distribution affected those directly involved in it.

This constitutes a subject of research in its own right and the time-consuming and very expensive conditions in which the historical investigation was carried out made it clear that to focus on such aspects would require much more time and financial support than I actually had.

Appendix 1

Form for the Records 'Seringais Register of Deeds' in ITERPA (Instituto de Terras do Pará)

Municipality : _____

Date of Register : _____

Property Denomination : _____

Extension : _____

Boundaries : _____

Benfeitorias: _____

Economic Activities (and the number of rubber paths): _____

In what way was the property acquired? (squats, heritage, sale, donation, etc.)

When was the land acquired?

OBS: _____

Appendix 2

Form for Acre-INCRA Lawsuits Records – *Seringais* in Acre River District

Municipality: _____

Property Denomination: _____

Owner: _____

Date of acquisition _____

Extension _____

Boundaries: _____

Number of *Colocações*: _____

Number of Rubber Paths _____

Benfeitorias: _____

Is the estate carrying out any other activity in conjunction with rubber production?

() Yes () No

If yes, which economic activities? _____

Is there any information on work relations? What is it? _____

Domain Net:

1. Transmission by heritage (date, people): _____
2. Transmission by sale (date, people) _____
3. Transmission by donation (date, people) _____

OBS: In the case of firms or companies, please, specify

Appendix 3:

Seringais in Acre: Purus and Acre Rivers, 1906-07

<i>Property denomination</i>	<i>Owner</i>	<i>Location</i>	<i>Annual Rubber Production</i>
1. Sebastopol	A.O.Cezar	left bank of Purus river	
2. Cachoeira	Commendaro Hilario	left bank of Purus river	
3. Realeza	Colonel A.E.Fayal	both banks of Purus river	80 tons
4. Luiz de Mamoria	Colonel J.Luiz	right bank of Purus river	
5. Serury	P.V.Nascimento	right bank of Purus river	12 tons
6. Entre Rios	Colonel M.F.Maciel	right bank of Purus river	15 tons
7. Campinas	J.B. Silva(businessman from Para)	left bank of Purus river	15 tons
8. Porto Central	S.F.Mello(businessman from Manaus)	left bank of Purus river	150 tons
9. Novo Axioma	Captain R.C.Falcao	right bank of Purus river	from 100 to 130 tons
10. Central Putiary	Captain R.C.Falcao		
11. S.Jose	Captain R.C.Falcao	Inland	
12. Foz do Acre	Major A.O.Lima	right bank of Acre River	from 130 to 150 tons
13. Boa Vista	M.M.Hall	right bank of Acre River	from 25 to 30 tons
14. S. Francisco	Captain M.Cunha	right bank of Acre River	from 80 to 100 tons
15. Novo Encanto	Captain M.A.Bezerra	right bank of Acre River	from 40 to 50 tons
16. Mundo Novo	Nogueira & Irmaos	left bank of Acre River	80 tons
17. Granada	J.I. Dos Santos	right bank of Acre River	70 tons
18. Macapa	Marques N.& Cia.	right bank of Acre River	from 180 to 200 tons
19. Caqueta	Colonel J.Victor		from 25 to 30 tons
20. Andira	Anna U. Pontes	left bank of Acre River	50 tons
21. Lua Nova	Anna U. Pontes	left bank of Acre River	30 tons
22. Redempcao	Cor.F.P.Franco(shopkeeper in Manaus)		from 30 to 35 tons
23. Floresta	G.A. Miranda(Commercial House from Belem)		40 tons
24. Gloria	G.A. Miranda(Commercial House from Belem)		from 10 to 15 tons
25. Bom Destino	Colonel. J.V. da Silva	right bank of Acre River	from 120 to 150 tons
26. Carupaty	Captain A.L.Barbosa	left bank of Acre River	80 tons
27. Huaytha	Captain A.L.Barbosa	right bank of Acre River	25 tons
28. Boa Uniao	heirs of J.F. Silva	left bank of Acre River	20 to 25 tons
29. Transwaal	Moreira & Irmao	right bank of Acre River	40 tons
30. Baixa Verde	L.de Mendonca & Cia	right bank of Acre River	from 40 to 50 tons
31. Non-denomination	L.de Mendonca & Cia	inland	
32. Nova Olinda	Captain P.da P.Sa	right bank of Acre River	from 120 to 150 tons
33. Vista Alegre	D.M.R.Azevedo	right bank of Acre River	from 35 to 40 tons
34. Catuaba	S.F.Mello(businessman from Manaus)	right bank of Acre River	from 150 to 200 tons
35. Alto Alegre	M.P. Vianna	inland	15 tons
36. Panorama	Alves Braga & Cia (from Belem)	left bank of Acre River	from 25 to 30 tons
37. Nova Empreza	Alves Braga & Cia		40 tons
38. Recreio	Alves Braga & Cia		
39. Esmeralda	Alves Braga & Cia	Acre River	
40. Empreza	Lopes Brito & Cia (from Para)	left bank of Acre River	from 80 to 100 tons

41. Forte de Veneza	Colonel A.J.Silva	left bank of Acre River	from 40 to 50 tons
42. Bage	Colonel P.E.Ferreira	left bank of Acre River	100 tons
43. Riosinho I	Colonel Dias & Cia	left bank of Acre River	100 tons
44. Riosinho II	heirs of F.A. Santos	right bank of Acre River	30 tons
45. Bemfica	Pedro Braga & Cia	right bank of Acre River	100 tons
46. F.C. Mourao	F.C. Mourao	left bank of Acre River	from 30 to 40 tons
47. ITU	Honorio Alves & Cia	right bank of Acre River	from 100 to 120 tons
48. Remanso	A.F. Mesquita	both banks of Acre River	from 120 to 130 tons
49. Santa Severina	A.F. Mesquita	both banks of Acre River	
50. S. Luiz	F.A. Sombra	right bank of Acre River	50 tons
51. S. Gabriel	Major A.F.S.Jacanna	right bank of Acre River	60 tons
52. Nova Floresta	Soares & Hermanos	right bank of Acre River	from 15 to 20 tons
53. Santa Flora	Colonel J.S. Monte	left bank of Acre River	from 35 to 40 tons
54. Perseveranca	Coronel A.A.Alencar	right bank of Acre River	50 tons
55. S.Francisco de Iracema	F.A. Brito	left bank of Acre River	from 90 to 100 tons
56. Joao de Iracema	F.A Brito	left bank of Acre River	from 30 to 50 tons
57. Iracema	Coronel R.V. Lima	left bank of Acre River	100 tons
58. Liberdade	Coronel R.V. Lima		
59. Independencia	P.J. de Araujo	both banks of Acre River	from 45 to 50 tons
60. Pao Mary	J.R. da Cunha	right bank of Acre River	20 tons
61. Paris	A.P. Mesquita	both banks of Acre River	from 30 to 40 tons
62. Carao	Fiuzas & Cia (from Para)	right bank of Acre River	from 50 to 60 tons
63. Mucuripe	Fiuzas & Cia	right bank of Acre River	200 tons
64. Aquidabam	Fiuzas & Cia	right bank of Acre River	100 tons
65. Soledade	Souza & Cia	left bank of Acre River	from 180 to 200 tons
66. Equador	Colonel C. Silva	right bank of Acre River	from 20 to 25 tons
67. Vista Alegre	Pio & Irmao	right bank of Acre River	10 tons
68. Boa Vista	Pimenteira & Fernandes	left bank of Acre River	from 70 to 80 tons
69. Esperanca		left bank of Acre River	
70. Siberia	J.Soares & Sobrinho	left bank of Acre River	from 30 to 35 tons
71. Porto Manso	Colonel Maia		230 tons
72. Tupa	Colonel Maia		
73. S. Pedro	Colonel Maia		
74. Pindamanhangaba	Colonel Maia		
75. Riosinho	Colonel Maia		
76. S. Cristovao	Colonel Maia		
77. Primavera	Colonel Maia		
78. Floresta	Sa, Dutra & Cia		from 100 to 120 tons
79. Santa Anna	Sa, Dutra & Cia		
80. Villa Nova	Sa, Dutra & Cia		

Source: Falcao, E. Album do Rio Acre, 1906-07, Para.

Appendix 4

According to Chaves¹, the method of extracting latex involved the following steps:

1. It started in the middle of April with the task called *sangria*, which consisted of cutting the rubber tree bark, exciting the flux of latex and directing it to the point where the cuts were made. This was done with a small axe that had to be very sharp in order to prevent damage to the tree. The cuts needed to be as bright as possible. The owner prevented unskilled labourer from doing *sangria* because of possible damage to the tree. Thus, newcomers were taught this method by skilled rubber tapers before extracting latex themselves.
2. After the *sangria*, the rubber trees were left for 3 to 4 days for resting. Then, the extraction of latex and making of rubber began.
3. The *seringueiro* began working very early in the morning starting with the called *reacções*, which were cuts ordering the flux of latex according to the methods chosen.
4. After doing the *reacções* the rubber tapers adjusted the *tigelinha* or small balls to the right position for receiving the latex dropping from the *reacções*. This task was carried out for each of the 200 trees, compounding two paths.
5. Then, when the *seringueiro* finished this task he returned to his house to have lunch.
6. Next, he returned to the rubber paths in order to collect the latex from each *tigelinha*.

The *seringueiro* finished these jobs around 11 or 12 o'clock, when he started to perform the task of smoking the latex and making rubber.

The methods of making rubber²

The smoker was a small hut with a straw roof in which there was an opening from where the process of smoking was done. The tools used for this job were two wood fork serving as supports to a thick wood pole. Above this pole rested the *cavador*, which was the small wooden pole over which the rubber ball or *pelle*, which was an oversized rugby football of rubber, was made. The *cavador* had one extremity attached to the roof by means of a rope which allowed the rotation of the *cavador*. The *cavador* was placed above the clay container producing steam for smoking the latex.

The *seringueiro*'s labour consisted of the following tasks:

1. Seated on a trunk, the *seringueiro* had the basin with the latex on his right. With his right hand using a ladle made of *cabaça* he took the latex from the basin and irrigated the *cavador* with it right over the steam coming from the container, and with his left hand he rotated the *cavador*, allowing the steam to reach all over the *cavador*'s surface. Then, the steam coagulated and smoked the first layer of latex. After that he took another small quantity of latex and prepared another layer of smoked latex above the first one and so on, until he had made the so-called *pelle*. In four or five days the *seringueiro* could smoke one container of latex with 45 to 50 kilos.
2. When he finished the last layer of latex, he brought the hot ball to the plank, pressing the ball against the plank in order to mould the ball into plain surfaces. This process also eliminated residues of water that could remain in the rubber and prevent the formation of opening troughs through which air could penetrate the rubber, damaging it.

¹ Chaves 1913 p. 47.

² Ibid. pp. 47-49.

Appendix 5:

The Coutinho's method of making rubber was as follows:

Tolls:

1. A hollow roller was used with a rotating movement, a shaft in the middle and a circular opening on both extremities with 3/5 of the diameter, being the total diameter of the roller of around 1/2 of its length;
2. The roller was supported by crossed legs with vertical equal angles;
3. A hung cone with grill and conductor tube ending in a squashed cone which was inserted into the roller with the base turned up;
4. A horizontal shaft having fixed pulleys;
5. Moving guiding pulleys with the legs in the shape of fixed rollers;

The way this system operated was the following:

1. The *seringueiro* put the latex into the roller and heated the cone grill by opening the conductor tube above the cone, removing it from above the grill;
2. After made the fire he put the cone full of firewood or on other fuel on the grill;
3. When the combustion started, the *seringueiro* would observe the proper smoke thickness and temperature for starting the process of smoking the latex, adjusting the conductor tube to the superior part of the cone so that the other extremity of the tube was inserted into the roller in which a slow rotation started;
4. Due to the type of rotation movement and also the great viscous quality of the latex it followed the roller in its movement at the same time as receiving the smoke on the superior face of the roller, and while the latex received the smoke it adhered to the roller according to layers of rubber, due to the device of the cone at the extremity of the conductor tube already being inside the roller with the base up. So, the latex would pour into the roller adhering gradually in layers wrapped up and put on top of the previous ones.

When the roller chilled, the rubber was removed easily. It had homogeneous thickness proportional to the latex poured into the roller, and with elasticity and other qualities equivalent to that prepared by the original method. There were special forms of controlling the degree of smoking by this device. Moreover, this device could be used on consecutive days, until it filled the roller completely, and the latex could be removed at any time it was necessary. The rubber produced by this method received a high price in Belém in 1913.

The Amandio Mendes' method consisted of a range of improvements to the First Nations' methods, consisting of the substitution of the *cavador* by a hollow roller. The latex was poured into the roller that received the smoke while the operator gave movement to it, and this movement led to the formation of layers put successively one on top of the other.

Appendix 6:

	Exchange Rates (Pence/Mil Reis)				
	1910	1913	1930	1911	1914
January	15,14	16,26	5,62	16,12	16,06
February	15,08	16,22	5,64	16,01	16,05
March	15,06	16,14	5,79		
April	15,48	16,08	5,87		
May	15,84	16,09	5,88		
June	16,34	16,05	5,71		
July	16,65	16,06	5,40		
August	17,06	16,08	5,05		
September	17,81	16,08	5,14		
October	17,37	16,08	5,29		
November	17,22	16,08	5,23		
December	16,16	16,08	5,46		

Source: Fundação Instituto Brasileiro e Estatística – IBGE. (1990). Estatísticas Históricas do Brasil – Séries Econômicas Demográficas e Sociais de 1550 a 1988, Rio de Janeiro, IBGE, pp. 591-598.

OBS: All the data in pounds are based on such exchange rates and when there was missing information on the month in which the commercial transaction was performed the annual average was considered.

BIBLIOGRAPHY

Primary Sources

Manuscripts

Arquivo Histórico do Itamaraty(AHI). Ofícios expedidos pelo Brazilian General Consulate of Liverpool para o governo brasileiro referentes aos períodos: 1843 a 1932.

_____. Ofícios expedidos pelo Consulado de Londres, anos 1927-28, volume 255/1/5.

_____. Adido Comercial em Londres - Ofícios 1919-1922, maço 270/2/4; janeiro/1927 a novembro/1928, volume 270/2/5; janeiro/1929 a dezembro/1930, volume 270/2/6.

_____. Ofícios recebidos pelo Brazilian General Consulate of Liverpool de janeiro a junho/1926, volume 254/1/7.

_____. Telegramas expedidos. 1901-1930, livro 254/2/7.

_____. Guias de Correspondências expedidas, março/1920 a dezembro/1930, Cod. 254/2/9.

_____. Missões Especiais no Estrangeiro - Grã-Bretanha 1843, correspondências expedidas pelo Visconde do Rio Grande, Chefe da Missão, volume 271/4/6.

_____. Firmas Comerciais - Ofícios e Telegramas Expedidos no períodos: 1914-16, maço 314/4/9; 1917-18 maço 314/4/10; 1919-20 maço 314/4/11; 1921-26, maço 314/4/12; 1927-28, maço 314/4/13; 1929-30, maço 314/4/14.

_____. Cias de Navegação - Ofícios Recebidos, período 1842-1970 maço 313/3/23; 1871-1899, maço 313/3/24; 1900-1915, maço 313/3/25; 1910-15, maço 313/4/3.

_____. Associações Comerciais - Ofícios expedidos 1861-1920, volume 313/2/5.

Arquivo Nacional do Rio de Janeiro, SDA 001, Código 988, Vols. 3-5, Documentos referente ao Território do Acre.

Arquivo Público do Pará(APP). Consules (correspondências entre os Governos do Pará e o Consulado Britânico em Belém). Pará, anos 1925-26, livro no. 673.

_____. Fonte: Secretaria da Presidência da Província. Ofícios dos Consules (séries 13. Ofícios), anos: 1851-59, caixa no. 162; 1860-68, caixa no. 241; 1870-79, caixa no. 317; 1880-87, caixa no. 374.

_____. Fonte: Secretaria do Governo. Consules (Legação dos Estados Unidos do Brasil), Ofícios referentes aos anos 1889-1899, 1900-1906.

_____. Fonte: Consules, Livro 673, correspondências referente aos anos de 1814 a 1826.

Associação Comercial do Pará (ACP). Livro de Atas de Assembléias Gerais relativas ao período de 13/2/1864 a 9/1/1877.

_____. Livros de Atas de Sessões Ordinárias referente ao período de 3/10/1870 a 17/6/1881.

_____. Livros de Atas de Sessões Ordinárias e Extraordinárias referente ao período de 1/7/1881 a 23/3/1888.

_____. Livros de Atas de Sessões Ordinárias e Extraordinárias referente ao período de 5/5/1888 a 19/4/1893.

_____. Livros de Atas de Sessões Ordinárias e Extraordinárias referente ao período de 2/8/1893 a 1/9/1911.

_____. Livro de Atas de Assembléias Gerais referente ao período de 13/9/1911 a 5/8/1914.

_____. Livro de Atas de Assembléias Gerais de 25/10/1911 a 5/3/1934.

_____. Livro de Atas referente ao período de 4/11/1911 a 27/1/1914.

_____. Livro de Atas referente ao período de 11/11/1915 a 22/11/1917.

_____. Livro de Atas referente ao período de 29/11/1917 a 8/4/1921.

_____. Livro de Atas referente ao período de 28/4/1921 a 25/1/1917.

Associação Comercial do Pará (ACP). Pasta de Correspondências Recebidas de 3/1/1870 a 20/12/1870.

_____. Pasta de Correspondências Recebidas de 5/1/1872 a 26/12/1872.

_____. Pasta de Correspondências Recebidas de 23/1/1874 a 30/12/1874.

_____. Pasta de Correspondências Recebidas de 2/1/1877 a 27/12/1877.

_____. Registro de Correspondências de 5/5/1881 a 20/4/1895.

_____. Pasta de Correspondências referente ao ano 1916.

Cartório Chermont(CC), Índice de Escrituração 1812-1975, Livros de Escrituras Publicas referente aos anos de de 1812 a 1932.

Junta Comercial do Acre (JCA) Registro de Firmas.

Junta Comercial do Pará (JUCEPA), Registro de Firmas.

Seringal ITU, Diário da Casa Comercial de Honório Alves das Neves & Companhia, instalada no Seringal Itu, referente ao período de 6/Fev./ a 31/dez./1930, 200 paginas.

Seringal ITU, Diário e Balanço da Firma Commercial de Honório Alves Companhia, referente ao período de 01 de Fevereiro de 1910 a 02 de Janeiro de 1911, 230 páginas.

Seringal ITU, Diário e Livro de Balanço de Conta-Corrente do Seringal "ITU", de Honório Alves das Neves, referente ao período de 1/Março/1913 a 30/Junho/1916, 500 paginas.

The Public Record Office, Kew, London: Consular reports and correspondências recorded as F.O. 13 (1824-1905); F.O. 97 (1850-1860); F.O. 368 (1906-1919); F.O. 369 (1906-1944); F.O. 371 (1906-1921).

Tribunal de Justiça do Estado (TJE), Autos Civis (Juiz Seccional do Estado do Pará. Supremo Tribunal Federal. Autos Civis de Peças Ordinárias), period 1877-1921.

Official Publications

F.O. Accounts and Papers, Brazil (1872). Commercial Reports: Commercial and General Interests for the Year 1871, London, Harrison & Sons, vol. LIX.

_____. (1877). Report for the year 1877, London, Harrison & Sons, vol. LXXXI.

_____. (1885). Report for the year 1885, London, Harrison & Sons, vol. LXXVI.

_____. (1888). Reports for the years 1888, London, Harrison & Sons, vol. C.

_____. (1889). Reports for the years 1889, London, Harrison & Sons, vol. LXXVIII.

F.O. Accounts and Papers (1876). Commercial – Report on the Trade and Commerce of Pará for the Year 1876, Vol. LXXIII, session 17 Jan-16 Aug.

_____. (1880). Report on the Trade e Commerce of Pará for the Years 1877 and 1878, vol. LXXIII.

_____. (1884). Report on the Trade e Commerce of Pará for the Years 1879-82, London, vol. LXXIX, session 5 Feb-14 Aug.

F.O. (1871). Commercial Reports – Pará – Report for the Years 1869-70, London, Harrison and Sons.

F.O. (1899). Diplomatic and Consular Reports. Brazil - Report on the Finances of Brazil for the Year 1898, London, Harrison & Sons (no. 2200 Annual Series).

_____. (1890). Reports on Trade and Finance of Brazil for the years 1888-89-90, London, Harrison & Sons (no. 807 Annual Series).

_____. (1890a). Report for the year 1889-90 on the finances of Brazil, London, Harrison & Sons (no. 715 Annual Series).

_____. (1892). Report for the years 1889-92 on the trade of Brazil, London, Harrison & Sons, (no. 1136 Annual Series).

_____. (1894). Report for the years 1890-93 on the trade and finances of Brazil, London, Harrison & Sons, January (no. 1321 Annual Series).

F.O. and The Board of Trade (1897). Diplomatic and Consular Reports –Brazil- Trade of Pará and District, report for the year 1896, London, Harrison & Sons.

_____. (1901). Diplomatic and Consular Reports –Brazil- Trade of Pará and District, report for the year 1900, London, Harrison & Sons.

_____. (1902). Diplomatic and Consular Reports –Brazil- Trade of Pará and District, report for the year 1901, London, Harrison & Sons.

_____. (1903). Diplomatic and Consular Reports –Brazil- Trade of Pará and District, report for the year 1902, London, Harrison & Sons.

_____. (1905). Diplomatic and Consular Reports –Brazil- Trade of Pará and District, report for the year 1903-04, London, Harrison & Sons.

_____. (1908). Diplomatic and Consular Reports –Brazil- Trade of the Consular District of Pará, report for the year 1907, London, Harrison & Sons.

_____. (1914). Diplomatic and Consular Reports –Brazil- Trade of the Consular District of Pará, report for the years 1910-12 and part of 1913, London, Harrison & Sons.

_____. (1914a). Diplomatic and Consular Reports –Brazil- Trade of the Consular District of Pará, report for the year 1913, London, Harrison & Sons.

_____. (1915). Diplomatic and Consular Reports –Brazil- Trade of the Consular District of Pará, report for the year 1914, London, Harrison & Sons.

GOVERNO DO PARÁ. (1887) Desembargador Joaquim da Costa Barradas. Falla de 20 de novembro de 1886, Belém, Tipografia do Diário de Notícias.

PARÁ. Governador do Estado (Augusto Montenegro) (1907). Mensagem em 07 de setembro de 1907, Belém, Imprensa Official do Estado do Pará.

PARÁ. Governador do Estado (Dionísio Ausier Bentes). Mensagem em 07 de Setembro de 1995, Belém, s/d.

PARÁ. Presidente da Província (1838). Discurso em 02 de março de 1838, Belém, Tipografia Santos & Filho, s/d.

_____. (1845). (joão Diogo Maria de Moraes), Discurso em 15 de agosto de 1845, Belém, Tipografia Santos & Filhos.

PARÁ. Presidente da Província, (1848). (Jerônimo Coelho). Falla em 01 de Outubro de 1848, Belém, Tipografia Santos & Filhos.

_____. (1848). Falla em 15 de junho de 1848, Belém, tipografia Santos & Filho.

_____. (1849). Falla em 01 de Outubro de 1849, Belém, Tipografia. Santos & Filho.

_____. (1849a) (João M, de Moraes). Discurso de 15 de agosto de 1847, Belém, Tipografia Santos & Filhos.

_____. (1850). Relatório em 01 de agosto de 1850, Belém, Tipografia. Santos & Filhos.

_____. (1851) (Fausto A. d'Aguiar). Relatório de 15 de agosto de 1851, Belém, Tipografia Santos & Filhos.

_____. (dezembro/1858) (Ambrósio Leitão da Cunha). Relatório de 08 Dezembro de 1858, Belém, Tipografia Comercial de A.J.P. Guimarães.

_____. (agosto/1858) (Ambrosio Leitao da Cunha), Relatório, Pará, tipografia de Santos & Filho.

PARÁ. Presidente da Província (1859) (Ten. Cor. Manoel de Frias e Visconde). Falla em 01 de Outubro de 1859, Belém, Tipografia J.R. Guimarães.

_____. (1861) (Angelo Thomas do Amaral). Relatório de 04 de maio de 1861, Belém, Tipografia de Santos & irmãos.

_____. (1862) (F.C.A. Brusque). Relatório de 1/9/1862, Pará, Tipografia de Frederico Carlos Rhossard.

_____. (1862a) (F.C.A. Brusque). Relatório de 01/12/1862, Pará, Tipografia de Frederico Carlos Rhossard.

_____. (1863) (Francisco Carlos de Araújo Brusque). Relatório de 01 de Novembro de 1863, Belém, Tipografia Francisco Rhossard.

_____. (1867) Relatório em 15 de agosto de 1867, Belém, Tipografia Frederico Rhossard.

_____. (1870a) (Oliveira,J.A.C). Relatório, Belém, Tipografia Diário Gram-Pará.

_____. (1870b) (Abel Graça). Relatório, Pará, Tipografia Diário Gram-Pará.

_____. (1871) (Abel Graça). Relatório, Belém, Tipografia Diário Gram-Pará.

_____. (1872) (Abel Graça). Relatório, Tipografia Diário Gram-Pará.

_____. (1875) (Pedro V. de Azevedo). Relatório de 17 de Janeiro de 1875, Pará, Tipografia Diário do Gram-Pará.

_____. (1875) (Francisco Ma. Correa de Sá e Benevides). Relatório de 15 de fevereiro de 1875, Pará, Tipografia do Diário do Pará.

_____. (1876). Relatório de 15 de fevereiro de 1876, Belém, s/d, D. Gram-Pará, 1876.

_____. (1878a) (João Capistrano Bandeira de Melo Filho). Relatório de 9 de março de 1878, Pará, Typ Gutterberg.

_____. (1878b) (José Joaquim do Carmo). Falla de 22 de abril de 1878, Belém, typ. da Província do Pará.

_____. (1880)(Gama e Abreu,J.C.). Relatório 15 de fevereiro de 1880, Belém, Typ.da Província do Pará.

_____. (1882a) (Manoel Pinto de Souza Dantas Filho). Relatório de 04 de janeiro de 1882, Belém, typ. do O Liberal do Pará.

_____. (1882b) (Justino Ferreira Carneiro). Relatório de 25 de agosto de 1882, Belém, Tipografia. Commércio do Pará.

_____. (1882c)(João J. Pedroso). Falla de 23 de abril de 1882, Belém, tipografia F.Costa Jr.

_____. (1883)(Barão de Maracajú). Falla de 15/2/1883, Belém, tipografia do Jornal da Tarde.

_____. (1884)(Gen.Visconde de Maracujá). Falla de 07 de janeiro de 1884, Belém, Tipografia.Diário de Notícias.

_____. (1885) (João Silveira de Souza). Falla de 18 de abril de 1885, Belém, Tipografia. Grazeta de Notícias.

_____. (1885a) (Tristão Alencar Araripe). Falla de 05 de novembro de 1885, Belém, Tipografia. do Diário de Notícias, 1886.

_____. (1886). Falla de 25 de março de 1886, Belém, Typ. do Diário de Notícias, 1886.

PARÁ. Presidente da Província (1889) (Antonio José Ferreira Braga). Relatório de 18 de setembro de 1889, Belém, Tipografia A. Fructuoso da Costa.

_____. (1893) (Sodre, L.). Mensagem em 1/2/1893, Belém, tipografia do Diário Oficial.

_____. (1897) (Carvalho, J.P.) Mensagem, Belém, tipografia do Diário Oficial.

PARÁ. Inspector do Thesouro. (1898). Relatórios de 30 de novembro de 1897 e 03 e janeiro de 1898, Belém, Tipografia do Diário Official.

PARÁ. Secretário do Governo (1875) (Manoel Baena). Relatório de fevereiro de 1895, Belém, Tipografia do Diário Official, 1875.

PARÁ. Thesouro Provincial (1858). Relatório apresentado pelo inspector José Coelho da Mota, Belém, Tipografia de Santos & Filhos.

PARÁ. Vice-presidente da Província do Pará (1846). Discurso em 15 de agosto de 1846, Belém, Tipografia Santos & Filho.

Reports and Journals Published by Private Institutions

Associação Comercial do Amazonas (ACA), Revista da Associação Comercial do Amazonas, 4, Manaus, outubro de 1908.

_____. Revista da Associação Comercial do Amazonas, 5, Manaus, novembro de 1908.

_____. Revista da Associação Comercial do Amazonas, 7, Manaus, janeiro de 1909.

_____. Revista da Associação Comercial do Amazonas, 8, Manaus, fevereiro de 1909.

_____. Revista da Associação Comercial do Amazonas, 9, Manaus, março de 1909.

_____. Revista da Associação Comercial do Amazonas, 13, julho de 1909.

_____. Revista da Associação Comercial do Amazonas, 14, Manaus, agosto de 1909.

_____. Revista da Associação Comercial do Amazonas, 15, Manaus, setembro de 1909.

_____. Revista da Associação Comercial do Amazonas, 19, Manaus, janeiro de 1910.

_____. Revista da Associação Comercial do Amazonas, 49, Manaus, julho de 1912.

_____. Revista da Associação Comercial do Amazonas, 51, Manaus, setembro de 1912.

_____. Revista da Associação Comercial do Amazonas, 52, Manaus, outubro de 1912.

_____. Revista da Associação Comercial do Amazonas, 53, Manaus, novembro de 1912.

_____. Revista da Associação Comercial do Amazonas, 54, Manaus, dezembro de 1912.

_____. Revista da Associação Comercial do Amazonas, 55, Manaus, janeiro de 1913.

_____. Revista da Associação Comercial do Amazonas, 56 e 57, fevereiro-março de 1913.

_____. Revista da Associação Comercial do Amazonas, 58, Manaus, abril de 1913.

_____. Revista da Associação Comercial do Amazonas, 60, Manaus, junho de 1913.

_____. Revista da Associação Comercial do Amazonas, 61, Manaus, julho de 1913.

- _____ . Revista da Associação Comercial do Amazonas, 63, Manaus, setembro de 1913.
- _____ . Revista da Associação Comercial do Amazonas, 64, Manaus, outubro de 1913.
- _____ . Revista da Associação Comercial do Amazonas, 65, Manaus, novembro de 1913.
- _____ . Revista da Associação Comercial do Amazonas, 67, Manaus, janeiro de 1914.
- _____ . Revista da Associação Comercial do Amazonas, 68 e 69, Manaus, março de 1914.
- _____ . Revista da Associação Comercial do Amazonas, 72, Manaus, junho de 1914.
- _____ . Revista da Associação Comercial do Amazonas, 73, Manaus, julho de 1914.

Associação Comercial do Pará (ACP), Annual Reports of the period from 1867 to 1915.

- _____ . Pastas de Correspondências referente aos anos de 1915 a 1934.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, no.1, janeiro de 1919.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 3, junho de 1919.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 4, julho de 1919.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 5, agosto de 1919.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 6, setembro de 1919.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 1, janeiro de 1920.
- _____ . Revista Comercial, Industrial e Agrícola do Pará do Pará, 3, março de 1920.
- _____ . Revista Comercial, Industrial e Agrícola do Pará do Pará, 6, junho de 1920.
- _____ . Revista Comercial, Industrial e Agrícola do Pará do Pará, 1 e 2, jan/fev. 1923.
- _____ . Revista Comercial, Industrial e Agrícola do Pará do Pará, 21, março de 1923.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 22 e 23, abril e maio de 1923.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 24, junho de 1923.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 25 e 26, julho e agosto de 1923.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 27 e 28, set/out. de 1923.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 29 e 30, nov/dez. de 1923.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 1 e 2, janeiro e fevereiro de 1924.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 3 e 4, março e abril de 1924.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 5 e 6, maio e junho de 1924.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 7 e 8, julho e agosto de 1924.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 9 e 10, setembro e outubro de 1924.

- _____ . Revista Comercial, Industrial e Agrícola do Pará, 11 e 12, nov/dez. de 1924.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 1 e 2, janeiro e fevereiro de 1927.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 3 e 4, março e abril de 1927.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 5 e 6, maio e junho de 1927.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 7 e 8, julho e agosto de 1927.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 9 e 10, set/out. de 1927.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 11 e 12, nov/dez. de 1927.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 25, 2o semestre de 1927 e 1o. semestre de 1928.
- _____ . Revista Comercial, Industrial e Agrícola do Pará, 26, 2o. semestre de 1928.

Newspapers

Diário de Belém, Belém do Pará, referente aos anos de 1868 a 1892.

Diário do Commércio, Belém do Pará, referente aos anos de 1854 a 1859.

Jornal A Capital, Rio Branco Acre State, referente aos anos de 1921 a 1922.

Jornal Alto Acre, Rio Branco, Acre State, 29.06.1913.

Jornal Folha do Acre, Rio Branco Acre State, referente aos período de 05.01.1922 a 30.05.1923. Jornal Folha do Norte, Belém do Pará, referente ao mes de abril de 1909 e aos anos de 1910 a 1913 e de 1920 a 1930.

Jornal Folha do Norte, Belém do Pará, referente ao mes de abril de 1909 e aos anos de 1910 a 1913 e de 1920 a 1930.

Memoirs and Novels

Cabral, A.L. (1949). Dez Anos no Amazonas, 1897-1907, Paraíba, Escola Industrial.

Ferreira e Castro (1955). A Selva, Lisboa, Guimarães Editores Ltda, 37th edition (First Publication 1930).

Neves, C. (1981). Memórias de Um Pioneiro, Rio de Janeiro, mimeo.

Secondary Sources

Contemporary Literature

Araujo Lima, J. (1943). A Exploração Amazonica, Revista Brasileira de Geografia, Rio de Janeiro, IBGE, Jun/Set.

Arkers, C. (1914) The Rubber Industry in Brazil and the Orient, London, Methuen and Co.Ltd.

Audrin, J. (1963) Os Sertanejos que eu Conheci, Rio de Janeiro, Livraria José Olímpio Ed. (Documentos Brasileiros) (First Publication 1947).

Baena, A. (1839) Ensaio Corográfico Sobre a Província do Pará, Belém

Barata, M. (1915). A antiga Produção e exportação do Pará - estudo histórico-económico, Belém, Tipografia da Livraria Gillet (Torres & Cia.).

Bates, R. (1979) Um Naturalista no Rio Amazonas, S. Paulo, Imprensa Nacional (First Publication in English: Naturalist on the River Amazon, 2 vols, London, 1863).

Bonfin, S. (1954). Um Esboço da Vida Amazônica. In: Brasil. Presidência da República. Valorização Económica da Amazônia, Subsídios para o seu Planejamento, Rio de Janeiro, Departamento de Imprensa Nacional, pp.14-47.

Chaves, A. (1913). Exploração da Hevea no Território Federal do Acre, Rio de Janeiro (monografia apresentada na Exposição Nacional da Borracha como representante dos Departamentos do Alto-Acre e Alto-Purús).

Collins, J. (1869) On India-Rubber, Its History, Commerce, And Supply, Journal of the Society of Arts, 18, 17 dezember, pp. 81-93.

Cordeiro, L. (1920). O Estado do Pará, seu comércio e indústrias de 1717 a 1920, Belém, Tavares Cardoso & Cia.

Costa, J. (1913) O Futuro da Borracha no Brasil do Ponto de Vista Agricola, Rio de Janeiro, Tipografia do Jornal do Commercio.

D'Azevedo, J. (1900) Os Jesuitas no Grao-Pará, Lisboa, Livraria Ed. Tavares Cardoso e Irmãos.

Departamento de Imprensa Nacional (1954) Valorização Económica da Amazônia, Rio de Janeiro, DIN (Coletânea de diversos autores).

Edwards, W. (1847). A Voyage up the River Amazon, Philadelphia.

Estado do Pará (1906). Collecção das Leis Estaduais do Pará dos anos 1901 a 1905, Belém, imprensa Oficial.

Euclides da Cunha (1946). À Margem da Historia, Lisboa, Livraria Lollo & Irmão Editores, 6a. edição (First Publication 1909).

_____. (1986) Um Paraíso Perdido, Rio de Janeiro, Jose Olympio Editora (Ensaios e pronunciamentos sobre a Amazonia feitos no inicio do Seculo XX em diferentes datas).

Falcão, E. Album do Rio Acre, 1906-07, Pará, Brasil.

Faria, A. (1913). Das Fellências, Rio de Janeiro, Ed. Jacintho Ribeiro dos Santos.

Ferreira, W. (1925). Sociedade por Quotas, S. Paulo, Cia. Graphico Ed. Monteiro Lobato

Fowler, J. (1922). Plantation Rubber in the Netherlands East Indies and British Malaya, Washington, DC.

Gonçalves, L. (1904) O Amazonas, Esboço Histórico Chorográfico e Estatístico até ao Ano de 1902, Nova York, Hugo J. Hanf.

Guedes, M. (1920) Os Seringais, Rio de Janeiro, Jacintho Ribeiro dos Santos.

Hancock, T. (1857). Personal Narrative of the Origin and Progress of the Caoutchouc or Indian Rubber Manufacture in England, London, Longmans, Brown, Green, Longmans and Roberts.

Knorr, K. (1945). World Rubber and its regulation, Stanford, Stanford University Press, (First Publication 1934).

Labre, A. (1887). Itinerário da Exploração do Purus ao Beni, Pará.

Labroy, O. & Cayla, V. (1913). A Borracha no Brasil, Relatorio Apresentado ao Exmo. Snr. Dr. Pedro de Toledo, Rio de Janeiro.

Lacerda, P. (1901). Estudos Sobre o Contrato de Conta-Corrente, S. Paulo, typ a Yapor Hennes Irmãos.

Larue, C. (1926). The Hevea Rubber Tree in the Amazon Valley, U.S. Department of Agriculture Bulletin, number 1422, Washington, DC., pp.44-46.

Lawrence, J. (1931). The World's Struggle with Rubber, 1905-1931, New York/London, Harper & Brothers.

Lessa, P. (1909). Direito Civil e Commercial. In: LESSA, P. 1909. Dissertações e Polêmicas (Estudos Jurídicos). Rio de Janeiro, Livraria Francisco Alves.

Malheiro, A. (1867). A escravidão no Brasil, Rio de Janeiro, Tipografia Nacional.

Manchester, A.K. (1964). British preeminence in Brazil, its rise and decline: a study in European expansion, New York, Octagon Books (First Publication 1933).

Mendes, J. (1908). A Crise Amazônica e a Borracha, Belém, Tipografia do Instituto Lauro Sodré.

_____. (1910). Extração e Futuro da Borracha no Valle do Amazonas, Pará, Imprensa Libanio da Silva.

Ministério da Agricultura, Indústria e Comércio (1913). Relatório sobre as Condições Médico-Sanitárias do Valle do Amazonas pelo Dr. Oswaldo Cruz, Rio de Janeiro, Tipografia Do Jornal do Comércio.

Miranda, B. (org.) (1990). Anais do Congresso Comercial, Industrial e Agrícola (22 a 27 de fevereiro de 1910), Manaus, ACA/Fundo Editorial.

Potyguara, J. (1942). Alma Acreana – A Selva e os Costumes na Selva dos Seringais, Rio de Janeiro.

Queiroz, P. (1927). XIII Conferência Parlamentar Internacional do Comércio - Os Accordos Industriais e Comerciais - A tese 'A Distribuição de Materiais Primais', Rio de Janeiro, Imprensa Nacional,

Raiol, D. (1900). Catequese de Índios no Pará. In: Annaes da Biblioteca e Arquivo Publico do Pará, Tomo II, pp.117-182.

Soares, J. (1930). Rubber – An Economic & Statistical Study, London, Constable & Co Ltd.

Sombar, W. (1915). The Quintessence of Capitalism: a Study of the History and Psychology of the Modern Businessman, London, Unwin.

Spengler, O. (1926) The Decline of the West, 2 vols., New York.

Tavares Bastos, A. (1938) Cartas de Um Solitário, S. Paulo, Cia. Ed. Nacional, (First Publication 1863).

_____.(1866) O Vale do Amazonas, Rio de Janeiro, Garnier.

Wallace, A. (1939). Viagens pelo Amazonas e Rio Negro, São Paulo, Cia. Ed. Nacional (First Publication in English: A Narrative of Travels on the Amazon and Rio Negro, London, 1853).

Whittlesey, C. (1931). Governmental Control of Crude Rubber – The Stevenson Plan, Princeton, Princeton University Press.

Wolf, H. & HALPH. (1936). Rubber, a story of glory and greed, Nova York.

Wright, H. (1907). Rubber Cultivation (with special reference to parts of the British Empire), Journal of the Royal Society of Arts 55, pp.614-43. Wolf, H. & HALPH. (1936). Rubber, a story of glory and greed, Nova York.

Academic Literature

Abramovay, R. (1992). Paradigmas do Capitalismo agrário em questão, S. Paulo/R. Janeiro/Campinas, ANPOCS/ED. UNICAMP.

Adelman, J. (1994). Frontier Development – Land, Labour and Capital on the Wheatlands of Argentina and Canada, 1890-1914, Oxford/New York, Oxford University Press.

Alden, D. (1974). O significado da produção de cacau na região amazonica, Belém, NAEA/FIPAM.

Amin, S. (1989). Eurocentrismo, London, Zed.

Anderson, B. (1990). Imagined Communities – Reflection on the Origin and Spread of Nationalism, London/New York, Verso.

Anderson, R. (1976). Following Curupira: Colonization and Migration in Pará, 1758-1930, Univ. of California, Davis.

Anderson, S. (1991). Engenhos na Varzea. In: LENA, P. and OLIVEIRA, A. (orgs.). AMAZÔNIA: a Fronteira Agrícola 20 anos Depois, Belém, Museu Paraense Emílio Goeldi, pp. 101-124.

Arnold, D. & Guha, R. (1997). Nature, Culture, Imperialism: Essays on the Environmental History of South Asia, Delhi/Oxford, Oxford University Press, (First Publication 1995).

Arquivo nacional (Brasil) (1985) Fiscais e Ribeirinhos: a Administração no Brasil Colonial, Rio de Janeiro, Nova Fronteira (Coordenação Graça Salgado).

Aspromourgos, T. (1995). On The Origins of Classical Economics - Distribution and Value from William Petty to Adam Smith, London and New York.

Aston, T.H. and Philpin, C.H. (1985). The Brenner Debate: Agrarian Class Structure and Economic Development in Pre-Industrial Europe, Cambridge University Press

Banaji, J. (1972) For a Theory of Colonial Modes of Production. In: Economic and Political Weekly, Bombay, VIII, 52, December.

_____. (1977). Modes of Production in a Material Conception of History. In: Capital and Class, 3, Autumn.

Barlow, C. (1978). The natural rubber industry, Kuala Lumpur, Oxford University Press.

Barlow, C. at alie (1994). The World Rubber Industry, London/New York, Routledge.

Barman, R. (1981) Business and Government in Imperial Brazil: the Experience of Viscount Mauá. In: Journal of Latin American Studies, 13(2) pp. 239-64.

Bastos, A. (1958). A Conquista Acreana, Rio de Janeiro, Ed. Conquista.

Bauer, P. (1948). The Rubber Industry, a Study in Competition an Monopoly, Cambridge.

Bello, J. (1972). Historia da Republica (1889-1954), vol. 67, 6a. Ed., S. Paulo, Companhia Editora National.

Belluzzo, L. (1980). Valor e Capitalismo - um Ensaio Sobre a Economia Política. São Paulo, Brasiliense.

Bentes, R. (February/1992). Fronteira e Campesinato na Amazônia: Para Além da Fronteira – Estudo Sobre a Formação de Campesinato, Belém, UFPa.

_____. (1992a). Perfil da Ocupação dos Castanhais. In: Revista Pará Agrário, Os Castanhais, Belém, IDESP, Edição Especial

_____. (1996). Apropriação Geomercantil da Terra - Bases históricas do sistema de dominação na Amazônia. In: LUSOTOPIE 1996. L'Oppression Paternalist au Brésil, Paris, KARTHALA, pp. 163-172.

Berki, R. (1988). The Genesis of Marxism, London, M.J. Dent & Sons Ltda.

Bernal, M. (1987). Black Athena. The Afroasiatic Roots of Classical Civilization, New Brunswick, Rutgers University Press.

Bethell, L. & Murilo de Carvalho, J. (1985). Brazil from Independence to the Middle of the Nineteenth Century. In: Bethell, L.(Editor). The Cambridge History of Latin America, vol.III From Independence to c. 1870, Cambrige University Press, pp. 679-745 (Reprinted in (1989). Part One Empire: 1822-1850. In: Bethell, L.(Editor). Brazil Empire and Republic 1822-1930, Cambridge University Press, pp. 45-213).

Bethell, L. (1970). The abolition of the Brazilian slave trade: Britain, Brazil and the slave question, 1807-1869. London, Cambridge University Press.

_____. (1989). The Independence of Brazil. In: Bethell, L.(Editor). Brazil - Empire and Republic 1822-1930, Cambridge University Press, pp. 3-44.

Bethell, L. & Carvalho, M. Bloch, M. (1964). Feudal Society, Chicago.

Bonacich, E. (1976). Advanced Capitalism and Black/White Race Relations in US: A split labor market interpretation. In: American Sociological Review, 41, pp. 34-51.

Bowler, P. (1992). The Environmental Sciences, London, Fontana Press.

Braudel, F. (1972-74). The Mediterranean and the Mediterranean World in the Age of Philip II, 2 vols., New York.

Brenner, R. (1977). The Origins of Capitalist Development: a Critique of Neo-Smithian Marxism'. In: New Left Review, 104, July/August.

Brewer, A. (1990). Marxist Theories of Imperialism – A Critical Survey, London/New York, Routledge.

Brockway, L. (1979). Science and colonial expansion: the role of the British Royal Botanic Gardens, Nova York.

Bruit, H. (1982). Acumulação Capitalista na América Latina, S.Paulo, Brasiliense.

Buckley, R. (1992) Amazonia – An Ecological Crisis. In: Understanding Global Issues, 2.

Cain, P. and Hopkins, A.G. (1994) British Imperialism: Innovation and Expansion 1688-1914, vol. 2, London/New York, Longman.

Calixto, V. (1993) Aquiri (1898-1909): Os Patrões e a Construção da Ordem. S. Paulo, USP, (Tese de doutorado).

Câmara, M. (s/d). Exclusão Espacial nas Regiões e Fundações Coloniais, Salvador, UFBA, mimeo.

Campelo de Souza, M. (1973) O Processo Político-Partidário na Primeira República. In: Brasil em Perspectiva, S. Paulo, Difusão Européia do Livro.

Cano, W. (1981). Raízes da Concentração Industrial em São Paulo, São Paulo.

Cardoso, C. (1975). Los modos de producción coloniales. In: Estudios Sociales Centroamericanos, 4, p. 10 (Jan-Apr.).

_____. (1973). Sobre los modos de producción coloniales de América. In: Modos de producción en América Latina, a special issue, Cuadernos de Pasado y Presente, 40, Córdoba.

Cardoso, F. (1972). Empresario industrial e desenvolvimento econômico do Brasil, São Paulo.

_____. (1977). The consumption of Dependency Theory in the United States. In: Latin American Research Review 12, no. 3: 7-24.

Cardoso, F. and FALETTI, E. (1970). Dependencia e desenvolvimento na América Latina: Rio de Janeiro, Zahar.

Carlo, S. (1996) A Sustainability of the Yawanawá-Aveda Bixa Project in the Brazilian Amazon Region, Olympia, The Evergreen State College (masters thesis).

Carneiro da Conceição, Ma. de F. (1990). Políticas e colonos na Bragantina, Estado do Pará: um trem, a terra e a mandioca, Campinas UEC (dissertação de mestrado).

Carneiro da Cunha, M. e Farage, N. (1987) Carater da Tutela dos Índios: Origens e Metamorfoses. In: Carneiro da Cunha, M.(org.) Os Direitos do Índio, S. Paulo, Brasiliense, pp. 103-17.

Carneiro da Cunha, M. e Farage, N. (1987). Carater da Tutela dos Índios: Origens e Metamorfose, in: Carneiro da Cunha,M.(org.) Os Direitos do Índio, S. Paulo, Brasiliense, pp. 103-17.

Carneiro da Cunha, M. (1992). Introdução a uma História Indígena. In: Carneiro da Cunha, M.(Org.) História dos Índios do Brasil, FAPESP, pp. 9-24.

_____. (1992a). Política Indigenista no Sec. XIX. In: Carneiro da Cunha (Org.) História dos Índios do Brasil, S. Paulo, FADESP/SMC

Carone, E. (1988). A República Velha I. Instituições e Classes Sociais (1889-1930), Rio de Janeiro, Bertrand.

Carreira, A. (1988). A Companhia Geral do Grão Pará e Maranhão. S. Paulo, Nacional (2 vol.).

Castro, C. (1979). As empresas estrangeiras no Brasil, 1860-1913, Rio de Janeiro.

Carvalho, J. (1974). Elite and State Building in Imperial Brazil, Stanford University (PhD thesis).

_____. (1981) A Construção da Ordem – A Elite Política Imperial. In: Coleção Temas Brasileiros, vol. 4, Brasília, Ed. Universidade de Brasília.

Chandavarkar, R. (1997). The Making of the Working Class: E.P. Thompson and Indian History, Trinity College, University of Cambridge.

Clarence-Smith, G. (1985). The Third Portuguese Empire 1825-1975 – A Study in Economic Imperialism, USA/UK, Manchester University Press.

Clark, C. (Editor) (1995). Institutional Economics and the Theory of Social Value: Essays in Honor of Marc R. Tool, Boston/Dordrecht/London, Kluwer Academic Publishers.

Clark, C. (1995). From Natural Value to Social Value.In: Clark,C. (Editor), 1995, pp. 29-42.

Coates, A.(1987). The Commerce in Rubber: The first 250 years, Singapore, Oxford University Press.

Colson, F.(1981). On Expectations – Perspectives on the Crisis of 1889 in Brazil.In: Journal of Latin American Studies, 13, 2, pp. 265-92.

Coontz, S. and HENDERSON, P. (1986). Women's Work, Men's Property: The Origins of Gender and Class, London, Verso.

Correa, L. (1967). A Borracha da Amazônia e a II Guerra Mundial, Manaus, Edit. Governo do Estado do Amazonas.

Costa, C. (1974) A Conquista do Deserto Ocidental, S. Paulo, Cia. Editora Nacional.

Costa, J. (1979). Amazonia: Recursos Naturais, Technologia, e Desenvolvimento In: Da COSTA, JMM (Editor). Amazonia, Desenvolvimento e Ocupação: 37-88. Rio de Janeiro: IPEA/INPES.

Cruz, E. (1973). História do Pará. Belém, Governo do Pará.

Davis, H. (1977). Relations During the Time of Troubles, 1825-1860. In: Davis, H.E. et al. Latin American Diplomatic History, Baton Rouge and London, Louisiana State University Press, pp.65-105.

Dean, W. (1976). Rio Claro: a Brazilian Plantation System, 1820-1920, Stanford.

_____. (1986). The Brazilian Economy, 1870-1930. In: Bethell, L. (Org.) Cambridge, History of Latin America, Vol. V, Cambridge University Press.

_____. (1989). A luta pela borracha no Brasil - um estudo de história ecológica, São Paulo Nobel.

Denevan, M. (1976). The Aboriginal Population of Amazonia. In: Denevan, M. (Org.), The Native Population of The Americas in 1492, Madison, The University of Wisconsin Press, pp. 205-35.

Dias, M. (1970). Fomento e Mercantilismo - A Cia. Geral do Grão Pará e Maranhão (1755-1778), Belém, UFPa, 821 p., 2 vols.

Drabble, J. (1973). Rubber in Malaya 1876-1922 - The Genesis of the Industry, London, Kuala Lumpur.

Duarte, H. (1987). Conflitos pela Terra no Acre, Rio Branco, Casa Amazônia.

Eakin, M. (1986). British Enterprise in Brazil: the St. John Del Rey Mining Company and The Morro Velho Gold Mine, 1830-1960. In: Hispanic American Historical Review, 66 (4), pp. 697-741. (monography)

Edwards, P. and Flatley, J. (1996) The Capital Divided: Mapping Poverty and Social Exclusion in London, London Research Centre.

Eisenberg, P. (1974). The Sugar Industry in Pernambuco: Modernization Without Change 1840-1910, Berkeley.

_____. (1977). The Consequence of Modernization for Brazil's Sugar Plantations in The Nineteenth Century. In: DUNCAN, K. and RUTLEDGE, I. Land and Labour in Latin America, Cambridge University Press, pp. 301-321.

_____. (1990). A Mentalidade dos Fazendeiros no Congresso Agrícola de 1878, São Paulo.

Ekholm, K. & Friedman, J. (1996)'Capital' Imperialism and Exploitation in Ancient World Systems. In: Frank, A.G. & Gills, B.K. (Editors) The World System – Five Hundred Years or Five Thousand? London/New York, Routledge, pp.59-80.

Emmi, M. (1988). A Oligarquia do Tocantins e o Domínio dos Castanhais, Belém, CFCH/NAEA.

Engracia de Oliveira, A. (1983). Ocupação Humana. In: SALATI, Eneas et al. AMAZONIA: Desenvolvimento, Integração e Ecologia, S. Paulo, Brasiliense, CNPq, cap.V.

Evans, P. (1979). Dependent Development: the Alliance of Multinational, State and Local Capital in Brazil, Princeton.

Falcon, F. (1982). A Época Pombalina - Política Econômica e Monarquia Ilustrada, São Paulo, Ática (Ensaios, 83).

Figueiredo, V. (1978). Desenvolvimento Dependente Brasileiro - Industrialização, Classes Sociais e Estado, Rio de Janeiro, Zahar.

Font, M. A. (1990). Coffee, Contention and Change in the Making of Modern Brazil, Oxford
Basil Blackwell.

Franco, G. (1983). Reforma Monetária e Instabilidade durante a transição republicana, Rio
de Janeiro.

Frank, A. (1967). Capitalism and Underdevelopment in Latin America: Historical Studies of
Chile and Brazil, New York: Monthly Review Press.

_____. (1969) Latin America: Underdevelopment or Revolution, New York, Montly Review
Press.

_____. (1978). World Acummulation 1492-1789, New York, Monthly Review Press.

Frank, A. & Gills, B. (1996) The 5,000-Year World System. In: Frank.A.G. & Gills,B.K.
(Editors). The World System – Five hundred Years or Five Thousand? London/New York,
Routledge, pp. 3-55.

Freire, P. (1979). Pedagogy of the oppressed, London, Sheed and Ward (translation by
Ramos, M.B.)

Fritsch, W. (1988). External Constraints on Economic Policy in Brazil, 1889-1930, Basing
stoke.

Furtado, C. (1954). A Economia Brasileira: Uma Contribuição à Análise do seu
Desenvolvimento, Rio de Janeiro.

_____. (1959).Formação Econômica do Brasil, Rio de Janeiro, Fundo de Cultura (English
translation: (1968)The Economics Growth of Brazil, Berkeley/Los Angeles, University of
California Press).

_____. (1960) Perspectivas da Economia Brasileira, Rio de Janeiro, Rio de Janeiro.

Gallagher, j. & Robinson, R. (1953). The Imperialism of Free Trade. In: The Economic History
Review, Second Series, VI, 1. Republished in Louis, R. (Editors). Imperialism: the Robinson
and Gallagher controversy. New York/London, New Viewpoints, pp. 54-70.

Garcia Fr., A. (1990). O Sul: Caminho do Roçado: Estratégias de Reprodução Camponesa e
Transformação Social, S. Paulo/Brasilia, Marco Zero e Ed. Univ. de Brasilia.

Geffray, C. (1996). Le Modèle de l'exploitation paternaliste en Amazonie traditionnelle. In:
LUSOTOPIE. L'oppression paternaliste au Brésil, Paris/Talence, Éditions KARTHALA,
pp.153-159.

Gehlsen, C. (1940) World Rubber Production and Trade, 1935-1939, Rome, Villa Umberto 1.

Giddens, A. (1993) Sociology, Cambridge, Polity Press.

_____. (1997). Sociology – Introductory Readings, Cambridge, Polity Press.

Goulart, J. (1968). O Regatão - o Mascate Fluvial da Amazônia, Rio de Janeiro, Ed.
Conquista.

Graham, R. (1973).Gram-Bretanha e o Início da Modernização no Brazil, 1850-1914, S. Paulo,
Brasiliense, Coleção Estudos Brasileiros.

_____. (1969). Sepoys and Imperialist Techniques of British Power in Nineteenth Ceentury
Brazil. In: Inter-American Economic Affairs, 23, pp. 23-37.

_____. (1976). Robinson and Gallagher in Latin America: The Meaning of Informal Imperialism. In: Louis, R. (Editors). Imperialism: the Robinson and Gallagher controversy, New York/London, New Viewpoints, pp.217-221.

_____. (1985). Brazil from the Middle of the Nineteenth Century to the Paraguayan War. In: Bethell, L. (Editor), The Cambridge History of Latin America, Vol. III From Independence to c. 1870, Cambridge University Press, pp.747-794 (Reprinted in (1989). (Brazil) Empire (1822-1889): 1850-1870. In: Bethel, L. (Editor), Brazil Empire and Republic 1822-1930, Cambridge University Press, pp. 113-160).

_____. (1991). Brazil and the World System, Austin, University of Texas Press.

Green, D. (1995). From Artisans to Paupers: Economic Change and Poverty in London, 1790-1870, Aldershot, Hauts, England, Scholar Press.

Guillaud, Y. (1996). Paternalisme et échange 'marchand' dans l'extractivisme en Amazonie brésiliense. In: LUSOTPIE. L'oppression paternaliste au Brésil, Paris/Talence, Éditions KARTHALA, pp. 239-152.

Le Goff, J. (1980) Time, Work and Culture in the Middle Ages, Chicago.

Goldsmith, R. (1986). Brasil, 1850-1984: desenvolvimento financeiro sob um seculo de inflação. São Paulo.

Goodman, D.; Sorj, B. e Wilkinson, J. (1985). Agroindústria, Políticas Públicas e estruturas sociais rurais: análises recentes sobre a agroindústria brasileira. In: Revista de Economia Política, vol 5, 4, pp. 31-55.

Gorender, J. (1985). O Escravismo Colonial, São Paulo, Atica, 4a. edição, 625 pp.

Green, R. (1992). Classical Theories of Money, output and Inflation.

Hall, M. (1979) Italianos em S. Paulo, 1880-1920. In: Annais do Museu Paulista, Separata XXIX, S. Paulo.

_____. (1976) Reformadores de Classe Media no Imperio Brasileiro: A Sociedade Central de Imigração. In: Separata da Revista de Historia, 5, S. Paulo.

Hall, J. (1991). The Patrimonial Dynamic in Colonial Brazil. In: GRAHAM, R. Brazil and the World System, Austin, University of Texas Press, pp. 57-108.

Harris, J., Hunler, J. and Lewis, C. (editors) (1995). The New Institutional Economics and Third World Development, London, Routledge.

Hecht, S. (1988). The good the bad and the ugly: Amazonian extraction, colonist agriculture, and livestock in comparative perspective, Washington, mimeo.

Hemming, J. (1978). Red Gold - The Conquest of The Brazilian Indians. Cambridge, Massachusetts, Harvard University Press.

History Workshop (1978). Editorial: History and Theory. In: History Workshop, 6, Autumm.

Holmes, D. (1983). A Peasant-worker Model in a Northern Italian Context. In: American Ethnologist, 10 (4), November 1983, pp. 734-748.

Holloway, T. (1977). The Coffee Colonies of S. Paulo, Brazil: Migration and Mobility, 1880-1930. In: Duncan, K. and Rutledge, I. Land and Labour in Latin America, Cambridge, Cambridge University Press, pp. 301-321.

Holton, R. (1981). Marxist Theories of Social Change and the Transition from Feudalism to Capitalism. In: Theory and Society, 10, Netherlands, Elsevier Scientific Publishing Company, pp. 805-832.

Homma, A. (1989). A extração de recursos naturais renováveis: o caso do extrativismo vegetal na Amazônia, Viçosa, UFV.

Horvat, G. (1995). The Theory of Value, capital and interest: a new approach.

Iggers, G. (1997). Historiography in the Twentieth Century, Hanover/London, Wesleyan University Press.

Ianni, O. (1978). A luta pela terra: Petrópolis, Vozes.

Isaacman, A. & Roberts, R. (editors) (1995) Cotton, Colonialism, and Social History in Sub-Saharan Africa, USA, Heinemann.

Johnson, R. (1978) Thompson, Genovese and Socialist-Humanist History. In: History Workshop Journal, 6, pp. 79-100.

Jones, G. (1976). From Historical Sociology to Theoretical History. In: British Journal of Sociology, 27 (3), pp. 295-306.

Judt, T. (1979) A Clown in Regal Purple: Social History and the Historians. In: History Workshop Journal, 7, pp. 66-94.

Kaur, S., Lingayah, S. and Mayo, E. (1997) Financial Exclusion in London, London, New Economics Foundation.

Kay, G. (1977). Desenvolvimento e Subdesenvolvimento - uma Análise Marxista, Rio de Janeiro, Civilização Brasileira.

Kerr, C., Dunlop, J., Harbison, F. and Meyers, C. (1960) Industrialism and Industrial Man, London, Heinemann Educational Books Ltd.

Kirby, M. & Rose, M. (editors) (1994). Business enterprise in Modern Britain - from the eighteenth to the Twentieth century, London and N.York (13th articles by different authors).

Kerridge, E. (1988). Trade & Banking - in Early Modern England, Manchester University Press.

Kuhn, A. and Wolpa, A. (1978). Feminism and Materialism - Women and Modes of Production, London, Routledge and Kegan Paul.

Lamounier, M. (1993). Between Slavery and Free Labour: Experiments with Free Labour and Patterns of Slave Emancipation in Brazil and Cuba c.1830-1888, London, LSE (PhD thesis).

Lapa, J. (1973). Economia Colonial, São Paulo, Ed.Perspectiva.

Leite, S. (1943). História da Cia de Jesus no Brasil, Rio de Janeiro, Imprensa nacional.

Lewis, C. s/d. Historia Empresarial Brasileña, c.1850-1945: tendencias recientes en la Literatura, London, LSE, mimeo.

Levine, R. (1978). Pernambuco in the Brazilian Federation, 1889-1937, Stanford.

Levy, N. (1989). The Brazilian Public Debt - Domestic and Foreign - 1824-1913, mimeo.

Libby, D. (1984). Trabalho Escravo e Capital Estrangeiro no Brasil: o caso de Morro Velho. S. Paulo.

Lima, J. (1981). Café e industria em Minas Gerais, 1870-1920, Petropolis.

Lima, E. (1986). Produção de Alimentos e Extrativismo, 1850-1920, Rio de Janeiro, UFRJ (dissertação de mestrado).

Littler, C. (1982). The Development of the Labour Process in Capitalist Societies, London, Heinemann Educational Books.

Lobo, E. (1952). Administração Colonial Luso-Espanhola na Américas, Rio de Janeiro.

Louis, R.(editores). (1976). Imperialism: the Robinson and Gallagher Controversy, New York/London, New Viewpoints.

Love, J. (1982). A Locomotiva – S. Paulo na Federação Brasileira, 1889-1937, Coleção Estudos Brasileiros. Vol. 57, Rio de Janeiro, Paz e Terra, 1982 (English version: (1980). São Paulo in the Brazilian Federation, 1884-1937, Stanford, California)

_____. (1996). Crafting the third world - Theorizing underdevelopment in Rumania and Brazil, Satanford, Stanford University Press.

LUSOTOPIE (1996). L'Oppression Paternalist au Brésil, Paris, KARTHALA

MacPherson, C. (1978). Property - mainstream and critical positions, Oxford, Basil Blackwell.

Magalhães, J. (1977). A Discriminação de Terras na Amazônia (O Acre), Brasília.

Malagodi, E. (1993). O Pensamento Econômico Clássico e a Agricultura Camponesa, mimeog.

_____. s/d. Marx e a Questão Agrária, mimeog., no prelo.

_____. (1995). Renda Fundiária e Campesinato - um Estudo de Smith, Ricardo e Marx, Editora da UFPB/Ed. Brasiliense.

Mandel, E. (1978). Late Capitalism, London, Verso

Marchant, A. (1942). From Barter to Slavery - The Economic Relations of Portuguese and Indian in the Settlement of Brazil, 1500-1580, Baltimore, The Johns Hopkins Press.

Marcilio, M. (1984). The Population of Colonial Brazil. In: Bethell, L. (1984). The Cambridge History of Latin America, Vol II, Colonial Latin America, Cambridge University Press, pp. 37-66.

Marin, R. (1985). Du Travail Esclave au Travail Libre: Le Pará(Brésil) Sous le Régime Colonial et Sous L'Empire (XVIIe-XIXe Siècles), Paris, EHESS (thèse de doctorat).

Marin, R. s/d. Espaço para a Atividade fabril na recuperação pós-cabanagem. In: XVI Encontro Nacional de Economia: ANPEC (Associação Nacional de Centros Pós-Graduação em Economia) ANAIS vol. pp. 247-263.

Marin, R. & Castro, M. (1993). Negros do Trombetas: Guardians de Matas e Rios, Belém, CEJUP.

Matta, R. & Laraia, R.B. (1978). Índios e Castanheiros, Rio de Janeiro, Paz e Terra (Coleção Estudos Brasileiros no. 35).

Martinetto, P. (1988). A 'Batalha da Borracha' na Segunda Guerra Mundial e Suas Consequencias para o Vale Amazonico, Rio Branco, Estudos e Pesquisas,1, Universidade Federal do Acre.

Martins, J. (1979) O Cativeiro da Terra, S. Paulo, Ciências Humanas.

Marx, K. (1974). O Capital, S.Paulo, Civilização Brasileira, Livro 3, Vol. 5.

_____. (1978). El Capital, Mexico, Fundo de Cultura Economica, Tomo I e III

_____. (1989). O Capital, Rio de Janeiro, Ed. Bertand Brasil, Livro 1o., vol.I (Trad. Reginaldo Santana).

_____. (1982). O Capital, S. Paulo DIFEL, Livro 1o. vol. II e III (Trad. Reginaldo Sant'Anna), cap.XXV.

_____. (1973). Grundisse: Foundations of the Critique of Political Economy, translated with a foreword by Martin Nicolaus, England, Penguin.

Maurini, R. (1973). Tres ensayos sobre America Latina, Barcelona, Cuadernos Anagrama.

McFadyean, A. (1944). The History of Rubber Regulation, 1934-1943, London, George Allen & Unwin Ltd.

McHale,T. (1967). Rubber and the Malaysia Economy, Singapore, M.P.H. Printers Sendirian Berhard.

McLeish, J. (1991). Number - From Cave People to Computers, a Revolutionary View of Ourselves, London, Bloomsbury.

Meggers, B. (1977). Amazonia: a ilusão de um paraíso, R. de Janeiro, Civilização Brasileira.

Meillassoux, C. (1977). Mujeres, Graneros Y Capitales, Mexico, Siglo XXI.

Meira, M. (1996) O Tempo dos Patrões: extrativismo, comerciantes e história indígena no Noroeste da Amazônia. In: LUSOTOPIE. L'oppression paternaliste au Brésil, Paris/Talence, Éditions KARTHALA, pp.173-187.

Mello, J. (1987). O capitalismo tardio, São Paulo, Brasiliense.

_____. (1991). São Paulo, 1845-1895: metamorfoses da riqueza, São Paulo.

Menezes, M. (1985). Peasant-Migrant Workers: Identity and Migration Course, Manchester, March/1995, mimeog.

Miles, R. (1989). Racism, London/New York, Routledge.

_____. (1993). Racism after 'Race reations', London/New York, Routledge.

Miller, S. (1990). Mexican Junkers and Capitalist Haciendas, 1810-1910: The Arable Estate and the Transition to Capitalism between the Insurgency and the Revolution. In: Journal Latin American Studies, 22, pp. 229-263.

Ministério da Agricultura, Indústria e Comércio/Superintendência da Borracha, Anais da Primeira Conferência Nacional da Borracha de 22/7 a 9/8 de 1946, Rio de Janeiro, s/d, Tomo I.

Moraes, R. (1984). Transformações Demográficas numa Economia Extrativista: Pará, 1872-1920, Curitiba, UFPr, 1984 (dissertação de mestrado).

Moran, E. (1981). Developing the Amazon, Bloomington, Indiana University Press.

Moreira Neto, C. (1988). Indios da Amazônia, de Maioria a Minoria (1750-1850), Petrópolis, Vozes.

Mourão, L. (1989). Memória da Indústria Paraense, Belém, FIEPA.

Muszynski, A. (1996). Cheap Wage Labour – Race and Gender in the Fisheries of British Colombia, Montreal & Kingston/London/Buffalo, Macgill-Queen's University Press.

Nascimento, C. & Homma, A. (1984). Amazonia: Meio Ambiente e Technologia Agrícola, Belém, EMBRAPA-CEPATU (EMBRAPA-CEPATU documento 27).

Nascimento, M. (1983). Acumulação Capitalista e Opressão Camponesa, Belém, NAEA/UFPa.

Nonini, D. (1992). British Colonial Rule and the Resistance of the Malay Peasantry, 1900-1957, Yale University Southeast Asia Studies, New Haven, Connecticut.

Novais, F. (1974). Estrutura e dinâmica do Antigo Sistema Colonial (Seculos XVI-XVIII), São Paulo, Brasiliense.

_____. (1989). Portugal e Brasil na crise do antigo sistema colonial (1777-1808), São Paulo. HUCITEC, 5a. edição, c1979.

Nugent, S. (1991). From 'Green Hell' to 'Green hell': Amazonia and the Sustainability Thesis, London, University of London, Goldsmiths College and Institute of Latin American Studies (Published with the same title in 1993 in: Amazonia Paper, 3, University of Glasgow. Centre for Amazonian Studies).

_____. (1991a). Bungle in the Jungle: Sustainability versus Social Reproduction in Amazonia, London, University of London, Goldsmiths College and Institute of Latin American Studies.

_____. (1991b) The Limitations of Environmental 'Management': Forest Utilisation in the Lower Amazon. In: Goodman and Radclift, Environment and Development in Latin America, Manchester, Manchester University Press, Chapter 7.

Oliveira, F. (1977). Elegia para uma re(l)gião - SUDENE, Nordeste, Planejamento e Conflito de classes. Rio de Janeiro, Paz e Terra.

Pachedo de Oliveira Filho, J. (1979). O Caboclo e o Brabo. In: Revista da Civilização Brasileira, 11, Rio, pp.101-140.

Pack, S. (1985). Reconstructing marxian economics - Marx Based Upon a Sraffian Commodity Theory of Value, New York, Praeger Publishers.

Palacios, M. (1980) Coffee in Colombia, 1850-1970, London/New York, Cambridge University Press.

Paula, J. (1980). Notas Sobre a Economia da Borracha no Brasil, Belo Horizonte, Cedeplar-UFMG.

_____. (1981). O Velho e o Novo: um ensaio sobre a economia da borracha no Brasil, Belo Horizonte, Cedeplar-UFMG.

Pelaez, C. & Suzigan W. (1976). História Monetária do Brasil. Brasília.

Penteado, A. (1967). Problemas de Colonização e de Uso da Terra na Região Bragantina do Estado do Pará, Belém, UFPa, 2 vol. (vol.I 197 pp.; vol. II 487 pp.).

Parmer, J. (1960). Colonial Labour Policy and Administration: A history of labour in the rubber Plantation industry in Malaya, c. 1920-1941, J.J. Augustin.

Phelps, D. (1957). Rubber Developments in Latin American, Ann Arbor/Michigan, University of Michigan

Picard, J. (1996) La formation de clientèles chez les petits agriculteurs de la région de Marabá (Amazonie brésilienne). In: LUSOTOPIE. L'oppression paternaliste au Brésil, Paris/Talence, Éditions KARTHALA, pp. 229-241.

Pilkington, A. (1984). Race Relations in Britain, Bath, The Pitman Press.

Pinheiro, G. (organizador)(1994). História em Novos Cenários, Manaus, Universidade do Amazonas/Museu Amazônico (Amazônia em Cadernos no. 2/3).

Pinto de Oliveira, L. (1985). O Sertanejo, o Brabo e o Posseiro, Belo Horizonte/Rio Branco, UFAC.

Platt, C. (1968) The Imperialism of Free Trade: Some Reservations, Economic History Review, XXI, 2, August, republished in: Louis, R. (Editor) (1976). Imperialism: the Robinson and Gallagher Controversy, New York/London, New Viewpoints, pp. 153-161.

_____. (1973). Further Objections to an 'Imperialism of Free Trade, 1830-60". In: Economic History Review, Second Series, XXVI, 1, February. Republished in Louis, R (Editors) op.cit.

Polany, K. (1975). The Great Transformation, New York, Octagon Books, c1944.

Posada-Carbó, E. (1996). The Colombian Caribbean – A Regional History, 1870-1950, Oxford University Press

Potier, J. (1991). Piero Sraffa - Unorthodox Economist (1898-1983) - A Biographical Essay, London/New York, Routledge.

Prado Junior, C. (1956). História Económica do Brasil, São Paulo, Brasiliense.

Queiroz, M. (1982). O Coronelismo Numa Interpretação Sociológica. In: H.G.C.B. O Brasil Republicano, Vol. 1, tomo III, S. Paulo, Difel.

Queiroz, S. (1984). Os Radicais da República, S. Paulo, Brasiliense.

Quigley, C. (1961). The Evolution of Civilisations. An Introduction to Historical Analysis, New York, Macmillan.

Quintiliano, A. (1963). Grão Pará - Resenha Histórica (1616/1963), Belém, Imprensa Universitária do Pará.

Randall, J. (1940). The Making of the Modern Mind, London, George Allen & Unwin Ltd.

Redclift, M. (1984) Development and the Environmental Crisis: Red or Green Alternatives? London, Methuen.

_____. (1987) Sustainable Development – Exploiting Contradictions, London/New York, Methuen.

Reis, A. C. F. (1953). O Seringal e o Seringueiro, Documentário da Vida Rural, 5, Rio de Janeiro, Serviço de Informação Agrícola.

_____. (1940). A Política de Portugal no Valle Amazônico, Belém.

_____. (1942). Roteiro Histórico das Fortificações no Amazonas. In: Revista do Serviço do Patrimônio Histórico e Artístico Nacional, no. 6, Rio de Janeiro, pp.119 e seguintes.

_____. (1944). O Processo Histórico da Economia Amazonense, Rio de Janeiro, pp. 77-78.

_____. (1966). Desenvolvimento Econômico da Amazonia. In: Coleção Amazonica, Serie Augusto Montenegro, UFPa.

Reis, J. (1977). From banguê to usina: social aspects of growth and modernisation in the sugar industry of Pernambuco, Brazil, 1850-1920. In: DUNCAN, K. and RUTLEDGE, I. Land and Labour in Latin America, Cambridge, Cambridge University Press, pp. 369-396.

Rex, J. and Mason, D. (1986). Theories of Race and Ethnic Relations, Cambridge/London/new York, Cambridge University Press.

Rey, P. (1971) Colonialism, Neo-Colonialisme et Transition au Capitalism, Paris, Maspero

_____. (1975) The lineage Mode of Production. In: Critique of Anthropology, 3, Spring

Ricardo, D. (1962). The Principles of Political Economy and Taxation, London, London J.M. Dent & Sons Ltd.

Rocha, A. (1952). Introdução à Economia Amazônica, Manaus, Oficina Gráfica da Escola Técnica.

Russel, A. (1991). The Growth of Occupational Welfare in Britain, Aldershot/Brookfield USA/Hong Kong/Singapore/Sydney, Gower Publishing Company Limited.

Ryan, A. (1987). Property, Milton Keynes, Open University Press.

Sabato, H. (1990) Agrarian Capitalism and the World Market, Bureaus Airies in the Pastoral Age 1840-1890, Albuquerque, University of New Mexico Press.

Saes, F. (1986). A Grande Empresa de Serviços Públicos na Economia Cafetera, São Paulo.

Saes, D. (1985). A Formação do Estado Burgoês no Brasil (1888-1891), Rio de Janeiro, Paz e Terra.

Salles, V. (1971). O Negro no Pará, sob regime da escravidão, Rio de Janeiro, Fundação Getúlio Vargas/UFPa (Coleção Amazonia, Série José Veríssimo).

Sallum Junior, B. (1982). Capitalismo e Cafeicultura: Oeste Paulista, 1888-1930, São Paulo: Duas Cidades.

Santos, R. (1980). Histórica Económica da Amazonia (1800-1920), São Paulo, T.A. Queiroz.

Santos, T. (1973). La crisis de la teoría del desarrollo y las relaciones de dependencia en América Latina. In: Ferrer et al. (Editor) La dependencia político-económica de la América Latina, Mexico: Siglo XXI.

Schmidt, A. (1971). The concept of Nature in Marx. London, NLB.

Segatto, J. (1987) A Formação da Classe Operária no Brasil, Porto Alegre, Mercado Aberto.

Silva, S. (1981). Valor e Renda da Terra, S. Paulo, Polis.

_____. (1979). Formas de Acumulação e Desenvolvimento do Capitalismo no Campo. In: SINGER, Paul at. al. Capital e Trabalho no Campo, São Paulo, 1979 pp. 7-24.

Silva, L. (1962). A Luta pela Amazônia, S. Paulo, Fulgor.

Silva, A. (1982) Raízes da Ocupação Recente das Terras do Acre, Belo Horizonte, Cedeplar-UFMG.

Simonsen, R. (1957). História Econômica do Brasil, São Paulo, Nacional.

Singer, P. (1982) O Brasil no Contexto do Capitalismo Internacional, 1899-1930. In: H.G.C.B., III, O Brasil Republicano, S. Paulo Difel.

Skowronski, M. (1961) La Politique Brésilienne du Café, Rio de Janeiro, Gráfica Récord Editôra Itda.

Soares, L. (1991). From Slavery to Dependence: A Historiographical Perspective. In: GRAHAM, R. Brazil and the World System. Austin, University of Texas Press, pp. 89-117 (Translated by R. Graham and H. Philips).

Soares, L. (1963). Amazonia, Rio de Janeiro, Conselho Nacional de Geografia.

Sozan, M. (1976) Sociocultural Transformation in East Central Europe: the Case of the Hungarian Peasant-Worker in Burgenland. In: East Central Europe, III. 2, pp.195-209.

Stein, S. (1957). The Brazilian Cotton Manufacture: Textile Enterprise in an Underdeveloped Area, 1850-1950, Cambridge.

Stein, S. Vassouras - A Brazilian Coffee County, 1850-1900, Cambridge, Massachusetts.

Stocpol, T. (1979). States and Social Revolutions, Cambridge, Cambridge University Press.

Stolcke, V. and Hall, M. (1983) The Introduction of Free Labour on S. Paulo Coffee Plantations. In: Journal of Peasant Studies, 10 (2), pp. 170-200.

Stolcke, V. (1988). Coffee Planters, Workers and Wives - Class Conflict and Gender Relations on São Paulo Plantations, 1850-1980, Hounds-mill, Basingstoke, Hampshire and London, Macmillan Press and St. Antony's College Oxford.

Suzigan, W. (Editor) (1978). Indústria: política, instituições e desenvolvimento, Rio de Janeiro IPEA/INPES.

_____. (1986). Industria Brasileira: origem e desenvolvimento, São Paulo.

Sweigart, J. (1987). Coffee Factorage and the Emergence of a Brazilian Capital Market, 1858-1888, London.

Tannuri, L. (1981) O Encilhamento, S. Paulo, HUCITEC e Campinas, Fundação de Desenvolvimento da Unicamp.

Taylor, A. (1976). The Meaning of Imperialism. In: Louis, R. (Editor). Imperialism: the Robinson and Gallagher Controversy, New York/London, New Viewpoints, op.cit. pp. 197-199.

Teixeira, C. (1980). O Aviamento e o Barracão na Sociedade do Seringal, São Paulo, USP, 1980 (Dissertação de Mestrado).

Thomas, K. (1983) Man and the Natural World, London, Penguin Books Ltd.

Thompson, E. (1967). Time, Work-Discipline and Industrial Capitalism. In: Past and Present 38, pp. 56-97.

_____. (1978). Eighteenth-century English Society: Class Struggle Without Class? Social History, 3, May, pp. 133-65.

Tocantins, L. (1970). A Amazônia – natureza, homem e tempo, Rio de Janeiro, Conquista.

_____. (1978). Formação Histórica do Acre, Rio de Janeiro/Brasília, Civilização Brasileira/Instituto Nacional do Livro. C1973

_____. (1977). O Rio Comanda a Vida, Rio de Janeiro, Biblioteca do Exército Edit.

Topik, S. (1979) 'The Evolution of the Economic Role of the Brazilian State, 1889-1930. In: Journal Latin American Studies, II, 2, pp. 325-342.

_____. (1980) 'State Interventionism in a Liberal Regime: Brazil, 1889-1930. In: Hispanic American Historical Review, 60, 4, pp. 593-616.

_____. (1985). 'The State's Contribution to the Development of Brazil's Internal Economy, 1850-1930. In: Hispanic American Historical Review, 65, 2, pp. 203-228.

_____. (1987). The Political Economy of the Brazilian State, 1889-1930, Austin.

Torres, H. (1990). A Perspective de Produção de Castanha do Pará em Seringais do Acre e o Trabalho da Mulher, mimeo.

Toynbee, A. (1946). A Study of History (Somervell abridgement), Oxford, Orford University Press

Vaz, A. (1990). Cia. Cedro e Cachoeira: historia de una empresa familiar, 1883-1987, Belo Horizonte.

Veblen, T. (1904) The Theory of Business Enterprise, New York, Scribner.

Velho, O. (1983). Sete Teses Equivocadas Sobre a Amazônia. Religião e Sociedade 10, Rio, nov., pp. 31-36.

Versiani, F. (1980). Industrial Investment in an "Export" economy: the Brazilian experience before 1914, London, University of London, Institute of Latin America Studies.

Villella, V. & Suzigan, W. (1975) Política do governo e crescimento da economia brasileira, 1889-1945, Rio de Janeiro.

Viotti da Costa, E. (1977). Da Monarquia a Republica: Momentos Decisivos, S. Paulo, Grijalbo

_____. (1982). Da Senzala à Colônia, S. Paulo, Liv. Ed. Ciencias Humanas.

_____. (1989). (Brazil) Empire (1822-1889): 1870-1889. In: Bethell, L. (Editor) Brazil Empire and Republic 1822-1930, Cambridge University Press, pp. 161-213.

Wallerstein, I. (1974). The Modern World-System: Capitalist Agriculture and Origins of the European World-Economy in the Sixteenth-century, New York, Academic Press.

_____. (1993) The Capitalist World-economy, USA, Cambridge University Press.

Weber, M. (1927) General Economic History, London, George Allen & Unwin Ltd.

_____. (1974) Economy and Society, Berkeley, University of California Press.

Weffort, F. (1978). O Populismo na Política Brasileira, Rio de Janeiro, Paz e Terra.

Weffort, C. (Org.) (1991) Os Clássicos da Política, S. Paulo, Ática.

Weinstein, B. (1983). The Amazon Rubber Boom, 1850-1920, Stanford/California, Stanford University Press.

_____. (1984). The Persistence of Pre-Capitalist Relations of Production in a Tropical Export Economy. In: HANAGAN, M. & STEPHENSON, C. (Org.) Workers and Industrialisation: Comparative Studies of Class Formation and Worker Militancy, Westport, CT,

Werneck Sodré, N. (1976). História da Burguesia Brasileira, Civilisacao Brasileira, Rio de Janeiro, c1944.

_____. (1979). Formação Histórica do Brasil, Rio de Janeiro, Civilização Brasileira.

White, A. (1960). A History of the Warfare of Science and Theology in Christendom, Dover, 2 vols.

Whitehead, A. (1920). The Concept of Nature, Cambridge, Cambridge University Press.

Wikoff, H. (1875) The Four Civilisations of the World, London, Sampson Low, marston, Low & Searly.

Wilkinson, D. (1987) Central Civilization. In: Comparative Civilizations Review, 17 (Fall), pp. 31-59.

Wolf, A. (1962). A History of Science, Technology and Philosophy in 16th and 17th centuries, London, Allen and Unwin, 1962.

Woodruff, W. (1958). The Rise of British Rubber Industry during the 19th century, Liverpool, Liverpool University Press.

Woortmann, K. (1990) Com Parente não se negocia: O Campesinato Como Ordem Moral. In: Anuário Antropológico, 87, ps.11/72.

Young, J.T. (1978). Classical Theories of Value: From Smith to Sraffa, Bouler, Colorado, Westview Press.