“India needs to drastically cut the amount of water used in agriculture without compromising food production” – Biksham Gujja

At the LSE India Summit 2017 ***Biksham Gujja*** *emphasised the need for taking measures for improving India’s agricultural productivity while reducing its water footprint. After the panel,* ***Sonali Campion*** *asked him to elaborate on India’s success in producing food to date and why new approaches to agriculture are now urgently needed.*

You said on the panel that India has done well in terms of water management since independence. What did you mean by that?

Consider all the odds when India became independent. Every expert at that time said it would not be possible to produce enough food to feed all 250 million people, especially as the rate of population growth was much higher than today.

However, using the soil, water and the internal technologies, and with meagre financial resources, India has done a remarkable job of producing food. It is now able to support 1.2-3 billion people and export a surplus. This has not been achieved without costs, to ecosystems and forests and so on. However, if India had not achieved this level of food production the consequences would have been much worse for the country, and indeed the world.

With hindsight one could have done things differently to protect the environment and create more sustainable agriculture, but at that time experts were advocating approaches which relied on using more water, fertilisers and pesticides. These practices were not invented in India but the farmers followed the path. Now we are coming to the conclusion that this path is not going to work but the problem is people are still investing in these approaches. That’s what we need to discuss, and where we need to reorient the country’s priorities and policies.

What can be done if India wants to use water more efficiently in agriculture, and how is your company AgSri helping with that?

India does not have the resources to support its current approach to agriculture and it needs to adjust its planning accordingly. It can’t supply more water to irrigation, or even to the most crucial domestic uses. It has more or less reached the limit of its renewable water resources and therefore has to use water much more productively.

Date originally posted: 2017-07-12

Permalink: http://blogs.lse.ac.uk/southasia/2017/07/12/india-needs-to-drastically-cut-the-amount-of-water-used-in-agriculture-without-compromising-food-production-biksham-gujja/

Blog homepage: http://blogs.lse.ac.uk/southasia/

Image: Levelled field being irrigated in eastern Uttar Pradesh, India. Credit: IFPRI CC BY-NC-ND 2.0

It is possible to drastically cut the amount of water used in agriculture without compromising food production or the productivity of the land. AgSri specialises in this, bringing grassroots research experiences and scales agricultural innovations with the aim of making farming more profitable and sustainable.

Paddy, sugar cane, wheat and a few other crops together constitute more that 90 per cent of the total volume of water allocated to agriculture. AgSri has done some pretty amazing things around cultivation, particularly of paddy. Using rice intensification, we have developed a system where you could basically cut the water required by 20-25 per cent. It is still possible produce the same quantity of rice, and even use the same varieties, with simple soil, water, and planting techniques. These methods also help to make agriculture more climate resilient.

However, these alternative approaches require significant investment in training, soft skill development and so on, and they are not getting the financial support they need. That is why India is not able to focus on climate-friendly agriculture. They are still trying to increase productivity by throwing more resources at farming, but it is not working.

You’ve also worked on establishing dialogues around water conflicts in India. How do you bridge the tensions around major infrastructure projects, and how do you promote better water sharing?

India is investing heavily in massive infrastructure projects, such as interlinking rivers, damming the remaining rivers wherever possible, or pumping water from the rivers and transporting it long distances to where it is needed. These are not only expensive propositions; they also have serious consequences for the people living nearby and their livelihoods. For example, building a dam requires large swathes of private land, so the government is confiscating the land for this so-called ‘public purpose’. Similarly, canals require a lot of private land.

We establish dialogues around these major projects, for example the Polavaram and Mullaperiyar dams and the Babhli reservoir. We look at who loses, who wins and the different ways of doing things to minimise the damage or avoid the projects. We are providing a tool for dialogue, rather than creating confrontation or allowing the land to simply be confiscated using the law. To some extent we have succeeded but it is an ongoing process.

Watch the India @ 70: LSE India Summit Water Security Panel here or read an overview on the blog here.

About the Author

***Biksham Gujja** is the founder of AgSri Agricultural Services, a social enterprise that works to improve income and profits to farmers’ and industries while reducing the footprint of present agricultural practices on the environment. He holds a PhD from Jawaharlal Nehru University, and from 1993 to 2010 worked with WWF-International, where he started and headed the Freshwater Programme. He was also involved in establishing projects related to high-altitude wetlands and lakes in Himalayas, river dolphins, thirsty crops, developing appropriate responses for adaptation and mitigation of climate change, and traditional water management.*

***Sonali Campion** is Communications and Events Officer at the South Asia Centre. She holds a BA (Hons) in History from the University of Oxford and an MSc in Comparative Politics from LSE. She tweets @sonalijcampion.*

Date originally posted: 2017-07-12

Permalink: http://blogs.lse.ac.uk/southasia/2017/07/12/india-needs-to-drastically-cut-the-amount-of-water-used-in-agriculture-without-compromising-food-production-biksham-gujja/

Blog homepage: http://blogs.lse.ac.uk/southasia/