



Earth in crisis: environmental policy in an international context

Climate Change in Bangladesh

Commentary

For people living in the village of Paik Gacha in southern Bangladesh, having to adapt to climate change is not a future possibility but a present reality. Community adaptation is happening in different ways; bricks produced in nearby wood-fired kilns are being used to raise and strengthen the roads that criss-cross the waterlogged fields. While there's a tradition of shrimp farming in the south of Bangladesh, communities further from the coast who have cultivated crops for generations can no longer do so. They are now farming shrimp as a means of adapting to their changed environment. But people here believe that the water is now becoming so saline that it may not be possible to farm shrimp for much longer. The Dhali family have lived in the village of Paik Gacha for generations, but in recent years they've had to make major changes in order to survive.

Shaymol Dhali (subtitled)

We used to grow crops here before and the yield used to be good. Eighteen years ago we started saltwater shrimp production. I myself have been shrimp farming for four years. Initially it was good, but it has been getting gradually worse. We cannot get rice crops now at all. Salt is killing it and shrimp production is also declining. There have been viruses and other problems like storms and the weather. Because of this, shrimp are dying. Facing all these problems, we can't carry on shrimp farming any more. We've had to look for alternatives, and I've chosen pig farming. Before 1988, even in the rainy season, this was dry land. Children, boys and girls, would come and play here, they used to fly kites here. In the afternoon, they'd bring their animals, like cows and buffaloes, and let them graze. Everybody was happy and could walk about here.

Commentary

The increasingly frequent storms in this area are contributing to the rise in salinisation in the south. Strong winds blow salt water off the now saline rivers onto the land, further reducing the quality of the soil. Northern and central parts of Bangladesh are also being affected by the change in climate.

Dr. Rahman

The glaciers of the Himalayas are melting more rapidly and progressively more rapidly than ever before and that water will be coming in and is already coming in, into the flood plain. And the last impact, the drought in the north-west, and we have all models and all experiments to show that this area is getting drier. So we have got virtually the total food security of Bangladesh is under threat.

Commentary

The Government of Bangladesh has drawn up a National Adaptation Programme of Action which outlines a series of recommendations for how Bangladesh needs to adapt to the changing climate. Adaptation methods vary by region. In areas prone to freshwater flooding, local communities are planting floating gardens so that their crops can survive extreme floods. In areas affected by drought, communities are using rainwater harvesting systems. One of the most urgent tasks is to try to protect sources of drinking water. In the south, freshwater ponds, which collect rainwater, have become salinated. Salt water has also permeated into supplies of underground fresh water. Women in the village of Paik Gacha are now having to walk further and further to find fresh drinking water. Bibi Jan has to make a three-hour journey every morning.

Bibi Jan (subtitled)

I used to get water from a different pond

Interviewer

Is that pond nearer?

Bibi Jan (subtitled)

Yes, on the other side of the bridge.

After the floods the pond became salty so we can't drink from it any more.

Jobair Bin Alum

The salinity region has been coming in inside, intruding in the mainland areas. And because of this intrusion of salinity has been affecting every sphere of life. Water supply in the coastal area, infrastructure in the coastal area, coastal production of crops and other things – everything has been affected by this. We have assessed that how the impact of salinity will change from year to year. Like by 2005 these areas are actually most affected, the red ones and that will be the most affected. You see, the red ... red portions increases by the year 2030, almost 30 percent of the whole area is going to be affected.

Ferdarzur Rahman

We are trying to develop plans to turn saline water into safe drinking water. The system is called 'reverse osmosis system' through which we can remove saline, silts and other bacteria from the water and it will be pure drinking water. The cost of the plant which you can produce 8,000 to 10,000 litres of water per day is around 700,000 taka which is less than £7,000 sterling.

Commentary

Some families in the village of Paik Gacha are also trying to adapt to the salinisation of the soil by cultivating saline-tolerant crops.

Nirapad Byne (Subtitled)

This is okra.

This is beans.

This is spinach.

This is aubergine.

We've been farming for a long time but now we need to farm crops which can survive the salt. The climate has changed completely so we can't farm the crops we've grown all our lives any more. We are trying to grow some vegetables, those which grow in salt water. Vegetables grown in salt water and fresh water don't taste the same.

Interviewer

Which tastes better?

Nirapad Byne (Subtitled)

Fresh water. If the salinity keeps increasing we won't be able to carry on farming, because the soil is not normal any more. The soil is losing its ability to yield crops.

Commentary

Climate change presents a serious threat to food production in Bangladesh. As many Bangladeshis are subsistence farmers any further loss of food sources could have severe implications.

M Reazuddin

Climate change is posing several problems. It is threatening our development. It is threatening our human security. It is threatening our health security. It is threatening our... to reach our poverty reduction targets.