

# Klimazeugen Indien

Climate Witness: Anil Krishna Mistry, India



Anil Krishna Mistry

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**I come from a small island called Bali, Gosaba Block in Sundarbans Islands situated in 24 (South) Parganas District, located south of Calcutta in the Indian state of West Bengal.**

The Sundarbans consist of 102 islands, of which 48 are inhabited. It covers a total area of 9630 sq km. Approximately 4 million people live in Sundarbans. Most of the villagers are migrant settlers for the last 60-120 years. We are fully dependent on the forest resources. Villagers in the Sundarbans are mainly involved in four areas of work: agriculture, fishery, wood collection, and honey collection.

## **Changing Conditions**

Over the years we have witnessed changes in climatic conditions of the Sundarbans. The summer season is getting longer and winters are getting shorter. We are braving intense cyclones. Rainfall has considerably increased over the years. Also the number of cloudy and humid summer days has increased.

We face the constant threat of flooding due to heavy rains and sea level rise. With the increase in water levels during high tide (Bhara Kotal), salt water flood our fields rendering it unfit for irrigation.

## **Losing Food Source**

We are losing our main food source due to sea level rise and the intrusion of salt water into the ground water. Huge tracts of land get washed away into the river. Soil erosion is taking place at a rapid pace. Many of the villagers have lost their land due to permanent flooding and erosion. Some are surviving by doing menial jobs of which there are very few in the remote islands.

Salt water enters into the agriculture land and destroys our crops, resulting in loss of yields. This phenomenon is posing a greater risk to the food security and self-sufficiency of the inhabitants. People are fully dependent on weather for irrigation and drinking water needs. As we have no electricity supply in the villages, we cannot pump ground water for cultivation; and there is no fresh water source available for portable drinking water. We are surrounded by water but not a single drop to drink. We have to walk 5km to get drinking water.

## **Changing Monsoon Patterns**

The changes in monsoon pattern are leading to more unpredictable weather and causing severe stress on agriculture and livelihood of the inhabitants of Sundarbans Islands. Many people are living on the edge with no other place to go. Some have left in search of settlements on higher land.

The increase in the length of summers means increasing insect attacks on crops. The delayed winters hamper the cultivation of "Ravi Crop" (the winter crop). Moving the farming time in anticipation of the changing of the monsoon season is currently an issue as this has a bearing on our produce and income for day to day living. This compels the farmers to grow only one crop.

The lack of alternative livelihoods is pushing many people to live below the poverty line. Sundarbans is under severe stress and the community is quite vulnerable. We are battling with nature for survival. With virtually no safeguards to brave these changes, people of Sundarbans are unsure about their future.

## Climate Witness: Hamid Bander, India



Hamid Bander, Climate Witness, India

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**My name is Hamid Bander. I am 58 years old and have lived on Mousuni Island since birth. I completed secondary level education but was not able to continue higher studies due to financial constraint.**

My father had six hectares of agricultural land but almost five hectares have been washed away by the sea. We are 11 brothers and sisters and had to share one hectare land among us. Unfortunately my share was recently washed away and now I am rendered landless and compelled to live over my brother's share of land. At the age of 17, I ran away from home to work in Kolkata city. I worked there for the next five years. Later, I had to return to the island as my father wanted me at home. At the age of 22, I started fishing in coastal waters. In 1960, when I was 10 years old, my house was around two kilometres away from the coast. We had 45 households in our neighbourhood. The coast had good vegetative cover.

### **Increase of severe weather events**

Almost three decades back we seldom witnessed such fury of nature and devastation in terms of tidal surges, breach of embankment and low pressure. Cyclones and storms were of shorter duration, wind speed was low and hence the embankment height was also maintained lower (five to six feet). However, for last 15-20 years we are witnessing natural disasters of various magnitudes almost every year. We have already lost three houses. The height of the embankment is almost 25 feet but still the tidal water manages to gush into the communities. Every day we are fighting with nature and this is how we have managed to survive until now. We are compelled to build a new embankment after five embankments are washed away by tidal water. Large expanse of vegetative cover as well as agricultural land has been lost to the sea.

The number of family members is increasing but the land area is decreasing which is creating socioeconomic problems for us. My homestead is over 0.06 hectare land area which I had bought from my brother. These days I go deep sea fishing for four months and the rest of the time I work as a labourer on farms and this is how I manage to earn my livelihood.

I have two sons who work in Oil and Natural Gas Corporation (ONGC). I am living my life in extreme hardship. We live in darkness as there is no electricity. Whatever little solar energy is available is only limited to a select few households. We have become used to complete darkness and roaring tides at nights.

## Climate Witness: Sheikh Kalimuddin, India



Sheikh Kalimuddin, Climate Witness, India

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**I am Sheikh Kalimuddin and I am 45 years old. I had been living in Gangapalli mouza of Mousuni Island in the Sundarbans Delta of West Bengal, India since I was born. My father was born in Kanthi in the East Midnapore district. He originally moved to this island because of the easy availability of cultivatable land, but much has changed since then.**

I have a wife, two son and three daughters. I am primarily dependent on agriculture and I farm 0.3 hectares of land. I also work as a labourer.

I grew up under extreme hardship. My parents died when I was only one year old. Still I managed to complete primary level education. During childhood, I was supported by my brother's family. Later, we had differences and got separated and I settled near the river. In early days, I earned my livelihood repairing the embankment.

### **Impact of flooding**

I have witnessed many incidences of natural disasters due to flooding, and two of them in 2000 and 2005 were major.

Embankments were breached and salt water gushed into Mousuni Island, which caused a lot of damage. In the 2005, a 900 metre stretch of embankment was broken and many houses as well as standing crops were damaged.

Farmers mostly suffer due to the after-effect of flooding as salt water flooded land remains fallow for the next two to three years. Minor incidences of flooding are quite frequent these days. It mostly happens through overflow or breach of embankment. We somehow manage to survive under these circumstances.

During natural disasters, which are mostly in the form of flooding, we take refuge in Baliara Kishore High School. Mousuni Island has four administrative divisions (Baliara, Kushumtala, Bagdanga and Mousuni). Baliara is the most vulnerable division as it is situated near the confluence of Bottala river and the Bay of Bengal. The situation is deteriorating as sea level seems to be rising.

Sometimes incidences of minor flooding happen but I am fortunate enough not to lose my house so far. But when I get information regarding incoming cyclones and storms from the radio I get worried as I live dangerously close to the river.

### **Shift in farming practices**

The agricultural pattern is changing due to the erratic behaviour of monsoons. More stress is on cultivation of hybrid and high yielding varieties of crops. Traditional and indigenous crop varieties are mostly marginalised. We are now using more chemical fertilisers and pesticides as the productivity is falling and also due to increased risk of crop disease outbreaks. Our rivers don't have enough fish to catch these days.

I cultivate paddy rice (also known as rough rice) twice a year. This year the winter paddy rice crop fetched me 800 kgs of paddy rice from 0.13 hectare of land. However, lack of rain and an extremely hot summer damaged my chilly crop. Subsequent disease outbreaks killed chilly plants. Paddy rice and vegetable cultivation, poultry and cattle rearing provide me with a livelihood. I have 4 cows and 10 chickens.

There is also a sharp contrast between the present and past biodiversity level on this island. I don't see dolphins or the same variety of birds and fishes any more.

We are aware that different organisations are coming ahead to help us and I request them to think of an alternative for us which will be of great help.

## Climate Witness: Jyotsna Giri, India



Jyotsna Giri, Climate Witness, India

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**I am 55 years old and married. My five daughters are married and my three sons live with me in the same house. Presently I have six family members.**

I studied until fifth grade and then got married at the age of twelve. My husband had a house at Lohachara Island and that's where we settled after marriage. In fact my husband's ancestral house was in the mainland but he shifted to this Island as there was plenty of productive agricultural land.

Lohachara had three more adjoining islands: Sagar, Ghoramara and Suparibhanga. Lohachara and Suparibhanga Islands don't exist anymore, while Ghoramara is almost on the verge of extinction due to accelerated coastal erosion. Suparibhanga Island was densely forested and never had any human habitation. However, Ghoramara and Suparibhanga had a significant number of households in the past before these islands got wiped out fully or partly.

During the 1960s Lohachara Island was divided into 5 administrative zones and the total population was almost five or six thousand. Agriculture and fishing were our primary source of livelihood during those days. We also owned three hectares of agricultural land on this Island. We use to cultivate paddy [rice] as well as variety of vegetables on these lands. Land was extremely fertile and we had a bountiful harvest every season without using fertiliser. Soil was very soft, fertile and sandy. Even the embankments near the river were used for growing vegetables. Coastal waters were stashed with fishes and crabs and that provided us with a good catch.

Lohachara Island did not have any source of drinking water. The only tube well we had was eroded away by the river and the government never installed another one. So, we use to cross the river and fetch drinking water from a nearby island.

High sand content in the soil made this island prone to coastal erosion during regular tidal action. The river was slowly eating away the entire island and later we were only left with our homestead land and some domestic animals. We had 20 cows, 150 sheep, 35 goats and some poultry.

### **I still remember that fateful day, when I lost everything.**

I was on the neighbouring island to fetch some drinking water. My husband was not present that day and so I locked the house and took my son with me. While coming back, I found that the only ferry service available was cancelled for the day due to some kind of engine snag. So, I decided to stay back at my parent's house for that night. The ferry service started the very next day and I boarded the morning ferryboat. When we approached Lohachara Island, I suddenly noticed that my sheep were all drifting in the river.

I started to panic and rushed to rescue them. I was about to jump in the river when some fellow passengers stopped me from doing so. I felt helpless and started crying. After landing at Lohachara Island I found that half of my house was washed away by the river. Slowly the entire island got submerged.

We were rescued and went to Gangasagar Island refugee colony which is on the south of that island. We stayed there for a few days and then shifted to northern parts of the island where we constructed a new house. We have been living here for the last 15 years. We don't have any agricultural land and have to work as labourers. My son has grown up and now he works on a ship.

### **Unpredictable weather patterns and fast deteriorating environmental conditions are making our life miserable.**

I am not even able to grow enough vegetables in my kitchen garden as there are no rains for the last couple of months. Soil fertility as well as productivity is gradually declining. Earlier we used to follow the broadcast method for paddy [rice] cultivation. Now farmers have to invest a lot in terms of hiring labour, purchasing fertiliser and continuous monitoring. Similarly, fishing has been badly affected as we don't even get much fishes in the river to catch.

I feel that the natural regeneration rate has declined. We have already lost much of our natural resources in this region and which may be attributed to erratic weather patterns and changing temperature. It seems that monsoons are delayed while summers are extended these days.

Quelle: WWF

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