

BANGLADESH against climate risks

Chapter 1: Introduction

Long time ago, the princes of Bengal had set up their palace at the edge of a peaceful nurturing and protective river. Strange and large flow of the *Jamuna* to the *Meghna*, the *Buriganga* was the heart of the city and maritime-river route trade ensured Dhaka with the wealth and expansion.

In this way, at the beginning of 17th Century, Dhaka was the small modest village of fishermen until it became the new Capital of Mughal Empire. In the left side of the Buriganga River, the Businessmen and the Artisans created a frugal life in a dynamic manner, ancestral expression of a wild and lush Bengal, known since antiquity for the wealth of its nature.

But in the recent years, Dhaka has started destroying its main mother rivers. Today it continues to swallow, to stifle its waste, contaminating the residue with its domestic and industrial wastes and even suffocating by the smokes of Industries. What a strange gratitude or price of success!

Land filling continues on the different dead branches of the river to build/construct over it. As Dhaka is expanding, the construction is a continuous process without a stop by occupying wetlands. Sometimes, even at night, the construction sites do not stop for a while!

Each year, the Capital of Bangladesh account at least 200, 000 new populations. Today, with over 16 million of population, Dhaka is the megacity that witnessed the highest urban growth rate among the most densely populated countries in the world. In 1905, the East Bengal under the British Administration witnessed a population of 29 million, 44 million in 1971 during the war of Independence, 81 millions in 1981; Bangladesh has today 165 million of population among which one third is bellow 18 years.

Thus, sharing lanes became delicate between traditional vehicles, CNG and over 80,000 rickshaws mainly driven by slum dwellers.

Because regularly, the climatic disasters of north or south displace entire families who crowd into the interstices or the suburbs of the capital, extending or creating new slums. Migrants coming from the north where floods or droughts have destroyed their lands, Migrants also coming from the South, fleeing the fury of cyclones and the perverse effects of salinity of water and land. For over 40 years Climate Change and rapid growth of population has created this phenomena.

Coming to Bangladesh, just after the closing of COP 21 in Paris, I had some questions in mind. How come such a young and relatively smallest country can be so densely populated? And despite its recent past that is deeply exposed to political and climatic events particularly dramatic.

Bangladesh is considered as one of the most exposed country to the negative consequences of global warming. How the most effected people had survived and surviving this risk every day? What are the social consequences? What should be our points of view about it and what commitments we can make once the clarification is available?

Dhaka slums- of which some are located in the old historic area, in the heart of the town and even in the diplomatic area, some major players of Bangladeshi delegations to the COP 21 gave me some firsthand indications.

Interviews

I asked the question about the responsibility of the Bangladeshi Government to save its victims.

Chapter 2: Geography and History

But for better understanding of the Bangladeshi scenario, it is necessary to put in place it's Geographic and Historic perspectives.

What has attracted me up to Bangladesh is firstly its incredible hydrographic network. Unification of the three major Himalayans Rivers-the Ganga or the Padma, the Bramhapoutra and the Jamuna and the Meghna, constitute that the out-flow of water from Bangladesh is the second highest in the world following the *Amazon River* systems. In the south, lots of final dispersions of delta divide the attractive region of Sunderbans. The brilliant Bangladeshi writer Amitav Gosh writes:

“The islands (in the Sunderban) are alike the vain in the tissues of the country, the fringe of her sari, half soaked by the sea.”

At the same time, Bangladesh is a young and ancestral country, eternal regions with rich potential known and travelled from Antic period for its legendary abundant soil.

At the same time, one of the youngest countries of the modern world, created firstly through an administrative partition by the English, especially in 1905, than Indo-Pakistani Independence in 1947. This Independence is not that wanted by *Mohatma (the sacred soul) Gandhi* who dreamt of a Greater and multicultural country where all the communities would live together in harmony.

Because finally Independence of Indo-Pakistan was realized on the basis of geographic partition on the pretext of religious majority and pushed India towards “Hinduism” separating from Oriental Pakistan and oriental “Muslims”. Millions of refugees from one and another side, 2 million of persons killed during the communal riots, the unforgettable result indeed!

To the east, known as East Pakistan-1,600 kilometers from the capital Karachi, on the other side of India, the Bengali Language movement gains the gradual support

and became more and more determined towards the idea of Independence. On 12 November, 1970, Cyclone strikes in the south towards the district of Bohla, killing nearly 500,000 people, including 100,000 on the half-submerged Island. It caused the displacement of tens of thousands of migrants.

Faced with this tragedy, the delays and weakness of Pakistani Government's relief work accelerated the independence movement.

Thus, in the following year, in 1971, during 9 long months, a terrible war of "liberation" freed Bangladesh from the oppression of the Pakistanis and its criminal army. It left behind the horrors of genocide that ceased with the final intervention of India, 1 to 3 million of deaths, 200,000 women raped, 8 to 10 million refugees and the crime against humanity; the assassination of 250 intellectuals in the heart of Dhaka.

Even today, Bangladesh settles its accounts with some Pakistani collaborators (*Bangladeshi origin known as Rajakar*) in prison and executed at the Dhaka Central jail.

Sheikh Mujibur Rahman, a charismatic leader became the father of the newly emerged nation known as *Bangabandu* (friend of Bengal) - the country of Bengal-Bangladesh founded on 16 December, 1971.

Following the mismanagement of catastrophic floods in 1974, the famine was evident; his (*Sheikh Mujibur Rahman*) assassination in 1975 marked the beginning of a chaotic political period perpetrated by several coups.

Thus, Bangladesh born amidst suffering and trauma.

Today, the People's Republic is progressing with lucidity and courage. It is facing its past and present while projecting itself towards a future where climate and politics are still and always in the heart of its concerns, its problems and perhaps its paradox solutions too.

Because as everywhere else, everyone defends his own vision of social justice, it is precisely in Bangladesh where *Dr. Muhammad Yunus* invented microcredit, effective for the villagers in particular. But today, the priority of Bangladesh is to

emphasis on the concept and mechanisms of a future of global climate justice. I met Hafijul Khan who is one the initiators of the systems of compensation for losses and damages due to climatic disasters.

Chapter 3: Slum of Dhaka: The Refugees from the North

But in Dhaka, there is urgency because, never than ever, climatic migrations and overpopulation pushed Bangladesh and its Capital face to a routine problem. More than 500,000 people live in the slums of which 50,000 around the railway route.

In this coastal country with around 700 rivers-fishes and other products of the river and sea, more and more fish farm coming up that is the principal foods of the Bangladeshi along with various types of lentils, rice, flavored spices.

Dhaka is a city of water, laid on an intersecting hydrographic network and still omnipresent with the residues of wetlands, lakes and canals issued from rivers more or less filled up.

In addition to the permanent inhabitants, many seasonal workers come to work every year in Dhaka during the period of slow agricultural activities and then return to their village or family. Like everywhere in Dhaka and in the big cities of the country, the lives of slum dwellers depend very much on the quality of the water points and the daily work they find such as: brick breakers, porters, households, textile workers and rickshaw puller.

Chapter 4: Chars

Leaving Dhaka towards the North, is because, firstly to understand the air pollution in the Capital. One can see all around dozens of gray-black plumes of innumerable chimneys of bricks-major material of construction sector.

In the north of Dhaka, the Jamuna River contains the characteristics of a great river. Several kilometers wide, multiple islands that is measured by kilometers to

determine its width and length. Its water descends from the Himalayan height of Tibet in zigzag, passing through India and Bhutan for some tributaries. The son of Brahma becomes Jamuna in its ending segment that is almost rectilinear from north to south towards the double confluence and the Gulf of Bengal. Jamuna, the sacred river, inhabited and nourishing river, the only master of life, fears and sometimes dramatic upheavals.

Because, like all the rivers, the majestic islands here called “Char”, constituting by the powerful rivers that is rich but unstable. More than anywhere else and before, the chars are like flesh of sand and clay that Jamuna lays down extends, besieging tears sometimes. In Bangladesh, more than 5 million people live on these islands.

In Sariakandi, a few minutes from Bogra and its urban hectic center of few traces of the historic compound of Mahastangarh-the oldest fortified city of the country, finally I reached to the “char”. The nearest one and than two other which are more isolated, to meet people whose life and destiny are dictated by the river with its fertile lands suitable for cultivation of crops and livestock for the good and for the worse- when Jamuna decide to rearrange its sediments in an another order.

GADZARIA ISLAND:

How do we live on “erasable” sites for its livelihood and agricultural products even with a small exceptional flood? Is Yesterday’s exception became or will become more familiar, more acceptable and parable?

These areas are entirely devoted to the agriculture; I meet the inhabitants who tell spontaneously about the invasive and erosive floods that they face almost every year.

No direct financial aid but medical assistance like the floating hospital of the NGO “Friendship”-created by a French man (*Yves Marre*). These two women have been benefited from this intervention.

We say goodbye to the Godzaria Island to visit an Island a little more eccentric, probably a little more exposed too.

Milbari Island

During the course of conversations, dates came up: 1966, 1974, 1987, 1988, 1998, 2004, 2007 and 2014. The nights of fear of Cyclone attacking the walls of houses with sand cliffs.

“We live like birds” said an inhabitant of the Island. Shifting of houses is just a matter of time. The houses are regularly pushed away from the actual place and high land far from the bank (sometime with the help of NGOs), to lessen the risk of falling from the cliff into the mist of Brahma or into the braids of his daughter Jamuna.

But despite the precautions, "It often happens to a rich farmer, breeder and landowner fallen asleep at night and wake up homeless." The oldest still remember the visits of the English and Pakistanis collectors who come to harvest the products in these rich and productive lands but subjected to the absolute risks. And yet, on this day of January, 2016, these islands appear to me as of peacefulness and a paradisiacal agricultural potential. In a sense, I am reassured for them and I clearly understood that for nothing in the world, they will never go for the idea of leaving their islands, homes, world and their freedom; even after facing the most risky natural calamity. Only the river can make them leave their land, if it decides to take it and perhaps to take them with! Especially not in Dhaka! They have never been there and will never go. Whatever the situation is, it is clear that in recent years with global warming, Himalayan glaciers are melting. The floods of the Jamuna and the other Bangladeshi rivers are thus more frequent and more intense and during the devastating floods, more than half of the country is flooded. And according to IPCC models, this trend will intensify in the decades to come.

Chapter 5: Khulna, Barisal and the Refugees of the South:

Going to the south is to see the other side of Bangladesh, the other entry of climatic risk.

On this part, we could have cited many earthquakes sometimes associated with floods.

And moreover on the surface, the irregular rainfall and the water withdraw by India particularly consistent and further diminishing the superficial and underground resources during the years of low precipitation. With consequently in Bangladesh, the inadequacy of water to live and entry of the salt tide in the interior.

Salinity increases and drinking water becomes a serious daily problem. In 1957, an agreement was signed to share water between India and East Pakistan. Many tensions culminating after the construction of the *Farakka* dam from 1961, which retains and diverts water of the Ganges towards the Indian Sunderbans and Calcutta. Despite the improvement of the relations between the two neighboring countries, water problems persist in Khulna and in the South West, always affected by the Indian diversions and withdrawal of water.

Khulna Slum:

Khulna, Capital of the south. So the journey continues to Khulna or towards Barisal, the other main city of the south, they come to these two cities when they lose everything. Here the deadlines are not those of Chars, nor the droughts of the north. In this zone the danger comes in a wide ranges and unpredictable and still partly unstoppable.

Since ancient time, every century has witnessed its chronicle of storms, cyclones or typhoons, named in bangla. In 1665, 1737, 1877, the most violent of all known cyclones had happened. In 1930, 1970 with 500,000 dead and missing and millions of homeless, in 1988, 1998 and 2007 the terrible *Sidr*, *Aila* in 2009. Now the meteorologists give them name, pretty names for demons of *Dokkin Rai or Gaia*.

In the interstices of the heart of Khulna or in the outskirts, the refugees created neighborhoods.

On 15 November 2007, Cyclone *Sidr* was the most violent since 1877, with wind speed up to 260 km/hour.

The exceptional intensity of Cyclone *Sidr* was underestimated by the forecasts.

Slums also have their deans. In this district of Khulna among the climate refugees, I met this man too. His entourage says he is 121 years old. He says he is the first inhabitant of the neighborhood installed there following a flood, perhaps the cyclone of 1930 or before. But the years have erased this "detail" from his memory. He only remembers that he was young, maybe 20 years or 30 years old, when he worked for the English. He nostalgically evokes his collaboration in building the church with English sisters. He has a good memory of the English period, the age of his youth...

After this journey back in time, back to the heart of the city of Khulna and Barisal-pleasant and dynamic port cities, Bangladeshi culture expresses itself deeply there.

I leave Khulna for the terrible and fascinating Sunderban meaning literally "the beautiful forest" to learn more stories on water and cyclones, in the great south, land of tides, nature, legends and tiger.

Chapter 6: Sunderban

Mongla, a peaceful small town, gateway to the Sunderban....

The cold damp and calm of January; is it misleading? Because, in the Sunderban, obviously, it seems difficult to find the way, the authorization and security. This natural mangrove area, unique in the world is filled with lures, potential dangers and hidden treats. Difficult to infiltrate its multiple branches, confluences, effluents and famous "mohonas" (crossings of several channels) that serve as landmarks to the river dolphins.

All the hydrological flow are to be re-written for this Bangladesh- country of mixtures of the fresh waters of the 3 major rivers and the salt water of the Indian Ocean.

Country of oscillating water level along with tides of 3 to 6 meters and monsoon floods.

Country of Sundari trees, master of fluid earth, mud detritus and constructive of the rafts and shield Islands during the storms.

Country of sudden storms and violence unimaginable even a few seconds before.

Country of fearsome and revered wildlife.

Country of predators, specially its famous Royal Bengal Tiger with its brilliant black and gold stripes, and generally we can see only once in lifetime.

Country of obscure and illicit trade and transactions.

Country of legends, especially that of the ancestral fight between the King of tigers Dokhin Raj, king of the nature in collaboration with his demons against “Bon Bibi”-the protector of men. The legend says that both of them shared the sunderban through a transversal line. The north is for the men and the south towards ocean for the tiger.

But, as a matter of fact, due to climatic phenomena and migration of population, as well as the rise of salt water changed the dividing line between men and nature and each one sacrificed to cross the border. As writes Amitav Gosh “*Never ever, the human beings had any doubts about the total hostility of the land towards them.*” Each year, several dozens of people are victims of tiger attack. Here, the situation of men is that of the prey.

So in the village of Dhanbari, where I stopped, a tiger came in at night two years back and sneaked inside a house. Our boatman (*Dholu*) tells us.

In schools, children are sensitized to their environment and preservation, including that of the Tiger of Bengal, of which only about 300 individuals remain.

In this region, fishing is obviously is one of the major activities and resources.

Fishermen of Sunderban

The inhabitants of the Sunderban can see their living environment becoming more and more fragile. Thus, the strongest and tallest tides attack even more the dykes and the lowlands. But too often it is the dangerous wind of the devastating cyclone, the wave-building three meters above the top of the tallest trees, throwing salt on the land far beyond the border. So how to protect one from the unstoppable events? To improvise with open eye as much as possible for those who are on the water, to protect from itself, but better still to anticipate with the setting up of 2 fundamental: Alert and Protection. In Dhanbari, I met local people and an elected official to understand better the risks and consequences of hurricanes and other natural disasters. On the facade of the school, which is like many other schools also serves as a cyclone center, all instructions in case of alert are drawn and written very precisely on the wall. The alerts are classified according to the assumed intensity of the winds and the level of risk thus generated. Taking shelter in cyclone centers is required from level 6 warning system and food must be protected by burying it. During storms and cyclones, those on the water are obviously the most endangered. In the bank of the river, within reach of all the many passing boats, there is the "red-light zone", in other words the barracks of prostitutes and where alcohol is sold. I met the patron of this special area, particularly exposed to the risks of submersion and erosion. The village of Dhanbari consists of Hindus, Muslims and some Christians; their quarters are juxtaposed. Maintenance in the riverfront district populated mainly by Muslims, many of whom have been settled there for only a few years. There were no casualties in Dhanbari during Cyclone Sidr in 2007 due to shelters and other protections, but this woman witnesses the tragedies that the waves have revealed to them. The inhabitants of the Sunderban are obviously aware of the risks. But open eye, dignity and confidence building in their surroundings carries them into their daily lives.

Chapter 7: Conclusion

I came back from this trip with a mixed feeling. On the one hand, an open and lucid country, with a deep national feeling and high-level intellectual elite, including Sallemul Huq, director of the International Center on Climate Change and Development and leader of the Bangladeshi delegation at the COP 21 in Paris.

On contrary, there is a multitude of risks and threats. Internal risks with the unhealed wounds of the past, ongoing trials and acute political tensions against a background of regularly violent Islamism guilty of attacks and murders. A wilderness or the tiger, master of the south, remains a dreaded predator but itself threatened with extinction. Uncontrolled demography and highly concentrated air and water pollution. A country located on a major seismic zone with destructive earthquakes. Risks from outside, in the north, upstream of rivers with violent floods and droughts, in the south, from the ocean with sudden and stunning cyclones. Still paradoxically because of all this, the Bangladeshis are optimistic. Far from fatalism, they confront their past, present and future with an astonishing moral force. What will Bangladesh be like in 5 years, 10 years, 20 or 50 years? Perhaps stronger, perhaps weaker, perhaps more reduced. And where will the Bangladeshi youth of today be? Will they have stabilized their country or will some of them have migrated by will or by force of destiny, economy or powerful nature? In any case, the advancement of Bangladesh in this 21st will be an indicator and a revealer of the social, political, economic global system and of course climate state of our shared planet. The world is concentrating in a defined sense.