

**Cyclone Aila in West Bengal: A Report by Jamsetji Tata Centre for  
Disaster Management, TISS**



**Report prepared by**

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## Executive Summary

A visit to Cyclone Aila affected regions of West Bengal was carried out by a three member team of Jamsetji Tata Centre for Disaster Management, Tata Institute of Social Sciences, Mumbai between 15<sup>th</sup> and 21<sup>st</sup> June 2009. The team visited the two most affected blocks of North and South Parganas namely Higalganj and Gosaba extensively. In the course of the field visit the team relied on the three methods to document the situation: Visit and Interaction with communities directly affected by the cyclone and its aftermath, interaction with Non-Governmental Organizations and Community Based Organizations involved in relief distribution and mitigation and. observations of conditions in the field situation. The findings and observations made by the pilot visit cluster around the following categories: Quantity and Quality of Relief Material Distributed by Governmental and Non-Governmental Agencies as well as Processes of Distribution; Water, Sanitation, Hygiene and Health in formal and informal settlements; Livelihood and migration; Education; Challenges faced by NGOs and CBOs in the relief process; and, the Provision of Early Warning. However, based on our observations major recommendations can be given.

i) A majority of the respondents felt that a proper enumeration and survey of households must be conducted in areas where relief is about to be distributed. The management of information becomes a crucial variable in such a situation and it was observed that some degree of community participation in the generation of needs assessments is required.

ii) As agencies were following different schedules in transportation of supplies both along the waterways and inland there was no way for affected families to know whether or not or at what approximate time supplies were to be expected. Ensuring a degree of psychological certainty and predictability is needed if communities are to feel a degree of ownership in the relief process and this can only occur if they are involved in the actual conduct and planning of distribution and needs assessment.

iii) Absence of information was also visible as to the type of services NGOs were providing or the type of compensation schemes they were eligible for from the government.

iv) It is found that local CBOs or NGOs have better knowledge about the actual situation. Therefore coordinating with local organizations can actually help distributing relief in a more systematic way.

v) The coordination between Government and non-government organisation was visible at the state level where as the same was not present at the block level. It was also noticed that though the Government had already started withdrawing from immediate relief and response phase stating the situation is back to normal, actual situation was far from normal. A lack of information flow was clearly visible at every level. This has resulted in duplication of relief materials provided and uneven distribution of relief.

vi) It is observed that presence of government response at block level varies depending upon the individuals engaged in response work. While presence of government initiative was minimal in Gosaba in South 24 Parganas, Hingaljanj of North 24 Parganas manifested significant measures taken by the government. Therefore, it is suggested that measures should be taken to have a well coordinated approach in disaster situation that rely on systems rather than individuals competence.

vi) Reopening of all primary and secondary schools in the affected areas is of absolute necessity to ensure minimum drop outs of children

vii) There is serious need for continued health services in all the affected areas as the cases of water-borne diseases are increasing day by day

viii) Since most of the people have lost their primary source of livelihood that is agriculture, measures should be taken to generate alternative livelihood options in the area.

ix) Since family disorganization is a defining feature in the current situation due to large scale migration, it is an ideal time for human traffickers to spread their net and lure women and children to migrate with them out of the State. Preventive strategies need to be implemented at the earliest to avoid escalation of human trafficking in post-disaster situation.

## 1. Introduction:

Cyclone "Aila" is one of the most serious natural disasters to occur in the Sunderbans Region of West Bengal. According to the recent estimates nearly 200 people have been killed by the Cyclone in both Bangladesh and India. According to a recent report the following description<sup>1</sup> was given:

*The cyclone that also affected more than 400,000 people has begun to weaken and move off. Twenty-two people have died due to heavy landslides in Darjeeling, while in North 24 Parganas, 16 were killed in the storms. Fifteen deaths were reported from South 24 Parganas and nine in Kolkata. Seven people lost their lives in Howrah, five in Hooghly, three in Murshidabad, two in Birbhum and one each in Malda, East Midnapore and Bakura.*

According to the following report the situation in the affected region is extremely serious:

*In West Bengal, India, the heavy rainfall, high tides and tidal surges have breached river and flood embankments inundating large parts of the six Blocks of South 24 Parganas district. Thousands are without sufficient food and shelter. Hundreds of rural houses have been destroyed or damaged; families have lost their essential household items; crops have been destroyed. The displaced population have taken shelter in school buildings and other safer locations. Many others are in villages still cut-off from the mainland. While the weather has today calmed, the full extent of the impact is still being clarified, and ACT members in India are continuing to closely monitor the cyclone in case it should intensify again while mobilizing an immediate relief response.*

In the current situation, the Government of West Bengal has tried to grapple with the scale and intensity of the natural disaster.<sup>2</sup> It is estimated that while 1.5 million

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<sup>1</sup> <http://timesofindia.indiatimes.com/Cyclone-Aila-death-toll-reaches-82-rescue-on/articleshow/4579233.cms>

<sup>2</sup> Acting upon the request of West Bengal Government, the Ministry of Defence has dispatched 20 medical teams of Armed Forces personnel to the Aila affected areas of North and South 24 Parganas districts of the State. These teams have provided medical aid to more than 1000 persons in the Aila affected areas. So far 5000 kgs of relief stores were distributed in the flood affected areas which include clothing, food items and tentage. Divers from Indian Navy and Army personnel have rescued 450 marooned persons and evacuated them to safer areas [http://www.reliefweb.int/rw/rwb.nsf/db900SID/SODA-7SPM36?OpenDocument&rc=3&emid=TC-2009-000105-BGD]

people have been directly affected by the disaster another 400,000 people are still marooned and do not have access to relief aid.<sup>3</sup>

## **2. Objectives of Pilot Visit**

The objectives of the Pilot Visit conducted by faculty of JTCDM are put forward in this section. The tasks were divided into three distinct categories.

- ❖ To identify and reach the worst affected areas, especially where relief and aid material has not reached. To generate a Situational Analysis and Needs Assessment of the situation in the following sectors: Relief Procurement and Distribution, State Response to the Disaster, Public Health (especially vulnerability to epidemics), Psychosocial Care, NGO-Coordination, and Livelihood Reconstruction.
- ❖ To cooperate with the State Government and NGOs in conducting preliminary assessments in Relief Camps.
- ❖ To identify possible areas for short-term and long-term intervention by Tata Institute of Social Sciences. In addition the pilot visit team will identify specific tasks that can be carried out JTCDM (and other departments') student volunteers as well as set up a preliminary logistical framework to facilitate the intervention. Indeed, it was found that the placement of volunteers could either be a stand alone one or in cooperation with other organizations operating in the affected areas.

While a long-term or short-term response to Cyclone Aila will be greatly dependant on contextual factors, that will be examined by the Pilot Study, it is imperative to point out that the experience will help JTCDM build upon the Bihar Flood Response and the

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<sup>3</sup> <http://www.act-intl.org/alerts.php?uid=87>

report generated by the visit will also help other agencies (both governmental and non-governmental) who are involved in relief and rehabilitation work in the affected region.

### **3. Methodology of Pilot Visit**

On arrival in Kolkata on the 15th of June 2009, it was decided that the team would visit and interact with officials from the Disaster Management Department (Government of West Bengal) and the District Disaster Relief Department (for South 24 Paraganas). The main purpose of this preliminary visit was to seek letters of permission to access government district level damage assessments and block level damage assessments reports. In the course of the field visit<sup>4</sup> the team relied on the three following methods to document the situation:

- Visit and Interaction with communities directly affected by the cyclone and its aftermath.
- Interaction with Non-Governmental Organizations and Community Based Organizations involved in distribution of relief material and in mitigating the aftermath of the disaster.
- Interaction with government officials involved in relief and rehabilitation.
- Observations of Conditions in the Field Situation.
- Data Collection through an Interview Schedule and Group Discussions.
- Data Collection through sourcing of government situational reports (including maps) at the block and gram panchayet level.

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<sup>4</sup> It is crucial to point out that the field visit was conducted under two major constraints. The first, was the geographical vastness of the affected region and the blocks that the team visited. The second was the problem of connectivity between the field sites. While portions of the affected region have good road networks (which can be traversed by motorcycle), a major part of the traveling was done through inland waterways on relief boats and ferries.

#### **4. Gram Panchayets Visited:**

##### **District South 24 Paraganas [Block Gosaba] 16<sup>th</sup> – 18<sup>th</sup> June**

- i) Gosaba
- ii) Rangabelia
- iii) Pathankhali
- iv) Kochuakhali
- v) Lahiripur
- vi) Satjellia

##### **District North 24 Paraganas [Block Hingalganj] 18<sup>th</sup> – 20<sup>th</sup> June**

- i) Hingalganj
- ii) Sandelir bil
- iii) Dulduli
- iv) Sahebkhalli
- v) Jogeshganj
- vi) Kalitala
- vii) Gobindakati,



## 5. Significant Findings of the Field Visit<sup>5</sup>

The findings and observations made by the pilot visit cluster around the following categories: Quantity and Quality of Relief Material Distributed by Governmental and Non-Governmental Agencies as well as Processes of Distribution; Water, Sanitation, Hygiene and Health in formal and informal settlements; Livelihood and migration; Education; Challenges faced by NGOs and CBOs in the relief process; and, the Provision of Early Warning. In the course of the visit the team observed an entire spectrum of actors involved in managing the post-emergency stage. Included in our observations were relief distribution and medical camps conducted by local NGOs, international organizations, local business organizations, community based organizations from Kolkata, and religious groups. Indeed, certain innovations in distribution and management of humanitarian logistics were observed and will be briefly addressed in the subsequent sections. The following sections provide a rapid summary of some of the significant findings and observations of the visit.

### 5.1. Quantity and Quality of Relief Material Distributed by Governmental and Non Governmental Agencies:

In terms of the quantity and quality of distribution processes the team did not observe any cases of structural inequities impacting upon the distribution of relief material by either governmental or non-governmental organizations. Unlike the findings by the TISS team that visited Bihar<sup>6</sup> in 2008, which observed the impact of social inequities and caste hierarchies on relief distribution, we did not see or hear reports of

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<sup>5</sup> Group discussions and interviews were conducted in the following locations: Bawan Bheri [Sandheshkhalli-1, n=12], Imlibadi, Satjellia No.2 [Gosaba Block, n= 8], Ghoshpara [Satjellia No.2, Gosaba, n=8], No. 8 Parasmuni, Purbapada, Lahripur G.P [Gosaba, n=24], Sahibkhalli No.5 [Hingalganj, n=11], Shamsheernagar Gram-2 [Kalitola G.P., Hingalganj, n=10]. In addition interviews were conducted of members from Gosaba Babshai Samiti [Committee of Gosaba Businessmen], PRISM [Professional Institute for Development and Socio-Environmental Management], UNICEF [at Jogeshganj, Hingalganj], Jan Kalyan Sangha [at Jogeshganj], Jan Kalyan Samiti [at Jogeshganj], Ramkrishna Mission Belurmath [at Gobindahati Shikha Niketan and Haridas Ghati], B.D.O Hingalganj. Note: n=number of respondents.

<sup>6</sup> See < <http://tiss.edu/Report%20on%20Bihar%20Disaster.pdf>>

individuals not receiving aid because they belonged to a particular caste, gender or religion. This is not to state that there were no problems in access to relief aid.

The first and foremost problem we encountered (across all locations) was the divisiveness being created between displaced individuals living in temporary shelters on or near the embankments along waterways and those displaced to temporary shelters inland. The extensive damage to embankments has meant that regions that have rarely been flooded and are far away from the embankments are now inundated with saline water. Because of logistical constraints it was found that relief agencies have focused their efforts on transporting and distributing relief by boats and ferries along the embankments via the waterways, and are unable to ensure that relief material reaches areas that are much further inland. This is not to say that relief does not reach inland. Rather, distributions are more sporadic and infrequent. As a result of this there was a clear sense among individuals living inland that in order to accumulate relief material they must move towards the embankments. Secondly, most people we interviewed voiced concerns regarding the distribution of relief aid at the panchayet level. More often than not, it was encountered that the panchayet as an institution forms one of the most crucial links in the humanitarian chain, yet in both Blocks it was seen that a combination of political alignments and a lack of monitoring of relief distribution by senior officials led to major discrepancies.

Another major problem arising out of the differential impact of the event is the problem of appropriateness in the relief supplies. For instance in several inland locations, the water which has inundated agriculture lands and fresh ponds is currently stagnating. As a consequence, people complained of a serious problem of mosquito infestation and voiced the needs for mosquito nets. In addition in most locations the provision of uncooked food was a major source of complaint. As individual families were receiving food items such as cheera, gur, rice and dal they were not able to source means for cooking the received items (Sandheshkhalli-1). In addition, most affected regions (especially in Gosaba block) received bottled in the aid packages to overcome the drinking water shortage. However, very few efforts at ensuring regular drinking water supply or systematic desalination of inland fresh water pools was observed. There is no

doubt that the scale of the disaster makes it very difficult for agencies to address some of the issues that are mentioned.

People have also expressed their dissatisfaction with the way the relief was distributed. NGOs in most cases distributed relief in a very unsystematic manner where children and old people are being left out from the process. Throwing of relief material from moving vehicle was also reported by several individuals in different locations.

However, based on our observations major recommendations can be given:

- ❖ First, a majority of the respondents felt that a proper enumeration and survey of households must be conducted in areas where relief is about to be distributed. The management of information becomes a crucial variable in such a situation and it was observed that some degree of community participation in the generation of needs assessments is required.
- ❖ Second, because agencies were following different schedules in transportation of supplies both along the waterways and inland there was no way for affected families to know whether or not or at what approximate time supplies were to be expected. Ensuring a degree of psychological certainty and predictability is needed if communities are to feel a degree of ownership in the relief process and this can only occur if they are involved in the actual conduct and planning of distribution and needs assessment.
- ❖ Third, an absence of information was also visible as to the type of services NGOs were providing (for example at what time a health camp in a certain place was to take place) or the type of compensation schemes they were eligible for from the government.
- ❖ Fourth, it is found that local CBOs or NGOs have better knowledge about the actual situation. So coordinating with local organizations can actually help distributing relief in a more systematic way.
- ❖ Fifth, the coordination between Government and non-government organisation was visible at the state level where as the same was not present at the block

level. It was also noticed that though the Government had already started withdrawing from immediate relief and response phase stating the situation is back to normal, actual situation was far from normal. A lack of information flow was clearly visible at every level. This has resulted in duplication of relief materials provided and uneven distribution of relief.

- ❖ Sixth, it is observed that presence of government response at block level varies depending upon the individuals engaged in response work. While presence of government initiative was minimal in Gosaba in South 24 Parganas, Hingalganj of North 24 Parganas manifested significant measures taken by the government. Therefore, it is suggested that measures should be taken to have a well coordinated approach in disaster situation that rely on system itself rather than individuals competence.

## 5.2 Water, Health and Sanitation

It is important to note that basic health and hygiene materials like soap, detergents, oil etc were not been provided by any govt or non-government agencies. The local panchayet distributed bleaching powder and lime to disinfect the fresh water pond but it was observed that the quantity was mostly inadequate. Since most of the sweet water pond are still filled up with saline water there is rising case of water contamination in the areas.



Provision of pure drinking water is the major problem across the region while Gosaba GP is the worst affected area. Even after three weeks of the disaster people are still relying on NGOs or local administration for pure drinking water as a major component of relief material.



The temporary shelters and relief camps for flood victims have serious issues of sanitation and hygiene and clean drinking water. This is threatening the lives of thousands of women, men and children. Hundred of cases of diarrhea are already being reported from the camps as also from several parts of the flood affected area. Majority of them are children. Most patients complain of vomiting, loose motion and stomach ache, the main symptoms of diarrhea. Lack of access to clean drinking water is a major cause of the spread of diarrhea as people are forced to consume water from contaminated sources for survival. The threat of epidemic is looming large and cases of gastro-intestinal disorders, high fevers, cough and cold are reported from everywhere. The need for comprehensive medical services is being stated by all but in the relief camps and also in several other places where people are staying in makeshift arrangements, such services are not available. It was reported that private nursing

homes are charging huge amount of money to treat diarrhea patients and people are borrowing money from the local money-lenders or selling off their livestock to arrange for the money. It has been observed that government run medical camps are in real short supply all across the districts.



It was also found that people preferred to live under open sky than in the relief camps as they found the latter very dirty, overcrowded and unhealthy. The health camps visited by the team had no separate female wards. There were cases of skin diseases caused by using polluted water but it was found that little or no care is being taken to fix the rising cases of skin. In some areas people have got ointment or powder but that was not enough to deal with the problem.

It was observed by the team that in most of the cases people are unaware of the basic health and hygiene practices. Moreover, the agencies providing packets of ORS or other medicines to keep a check on the diarrhea have not communicated properly the way the medicines should be taken.

Some recommendations:

- ❖ There is a serious need for continued health services in all the affected areas as the cases of water-borne diseases are increasing day by day.
- ❖ There is especially need for mobile health camps and veterinary doctors in the affected areas.
- ❖ There is urgent need of mosquito nets and mosquito repellents to prevent malaria in the affected areas.

### **5.3 Education**

It is found that in most of the places the primary or secondary schools are being converted into relief camps or health centers. For example in Jogeshganj, Jogeshganj High School is currently working as health centre to treat the diarrhea patients of the adjoining locality. In very few places schools have started operating. Places like Satjelia GP in Gosaba or Samshernagar in Hingalganj which are still under water have no schools running currently. The men and women in almost every community expressed their concern over reopening schools, need for school books etc.

However based on our observations, some recommendations could be:

- ❖ Reopening of schools as soon as possible as it would bring back the sense of normalcy in the community.

- ❖ To keep a track on the drop out rates as we often see numbers of drop out from the schools increases after a disaster
- ❖ To ensure that mid-day meals are also being provided to maintain the nutrition level of the children

#### 5.4. Livelihood and Migration:

It has been noticed that the region is facing serious problem in terms of livelihood options. The agricultural lands are all got inundated by saline water which can not be cultivated in next three to five years. It is found by the team that generally it is the male members of the families who go out to other states in search of living as most of the lands are single-crop land in the region. But now even the women are preparing to migrate to nearby cities for livelihood as they are left with no other options.



This would eventually mean a break down in social structures as they have no clear idea how they would sustain in a completely new environment. This would also mean that in such disaster situations, there is a threat that women and children may get trafficked from the

region by traffickers and vested interests. Since family disorganization is a defining feature in the current situation, it is an ideal time for such elements to spread their net and lure women and children to migrate with them out of the State. The team has come across to many families who have already started sending their children to their relatives' place.



The only way to prevent such incidents is to create awareness among community leaders and the youth of the area to remain vigilant to this issue. There is a need to alert both the State machinery and the police in destination districts to the possibility of increase in trafficking activities. Such trafficking may take place primarily towards commercial sexual exploitation and child labour.

#### **5.5. Challenges to Organizations working in the region:**

The major challenges to organizations stem from coordinating relief distributions over vast distances and ensuring that the supplies reach affected families in all remote locations. A major obstacle to relief distribution has been the challenge to ensure that a systematic enumeration is done prior to distribution. In addition, it has been challenging for organizations to distribute appropriate relief material to the affected families. Given the situation different organizations have relied on different techniques to overcome such problems. For instance the Janakalyan Sangha is operating in Gobinkhati, Jogesjang, Sahebkhali, Kalitala, and Dulduli. In the first phase, the Sangha collected booth list (voter booth) as well as *pada* (hamlet) list to get an idea of the affected people. Affected *padas* had been selected on the basis of affected people and level of destruction and the organization relied on their own network of Self Help Groups (SHGs) and volunteers to offset political conflicts arising at the panchayet level. In other cases another organization mediated political pressures by bringing together individuals with conflicting political interests to take forward the relief work. The following cases highlight some significant learnings in conducting relief work.



### Case Study 1: Good Practices in Disaster Management



In the course of the visit the team made contact with the **Gosaba Babsayee Samiti** (which was a conglomeration of local businessmen) on the 17<sup>th</sup> of June who were conducting relief distribution via boats in multiple locations in Satjellia, Kachukhalli, Kangmari Ashram, Lahiripur and a night distribution in Patharpara. Although the samiti was a network of businessmen and not a relief agency, we observed several practices that provided important lessons for disaster management. Unlike organizations that carry out distributions along the embankment, the samiti was able to take advantage of their strong local network of bazaar samitis in the different locations

where they were about to conduct distribution. As a majority of the samiti members were wholesalers they were able to make contact with smaller shop owners and relied on them to distribute coupons for distribution. Four major practices emerge out of the observations made of the manner of doing their work:

- ❖ The organization had already pre-positioned their contact persons who distributed coupons the previous day.
- ❖ The organization followed a well defined schedule of distribution along the embankments. In addition the organization coordinated and conducted a distribution inland.
- ❖ At the time of the distribution, strict instructions were given to the members that no old clothes would be given and no supplies would be thrown. Rather all distributions would be done by hand through personal contact. In addition, a major effort was made to ensure that children, women and the elderly receive the aid allotted to them.
- ❖ In addition, they kept a stock of coupons in reserve, which they would use in case of contingency or to distribute to individual hamlets that they had excluded in their original schedule.




## Case Study 2: Good Practices in Disaster Management

On the 19<sup>th</sup> of June the team observed the relief team from the **Ramkrisha Mission at Bellurmath** working in the area of Haridaskati and Pargumti in Hingalganj block. The Mission has a history of engaging in frontline work during emergencies and have a well developed system of disaster response. The relief centre we observed was located at Gobindkati and it was responsible for providing supplies to the various health and food camps being carried out by the Mission in different locations. To give a rough scale of the support being extended to affected people the person in charge of supervising the preparation of cooked



food stated that on the 18<sup>th</sup> of June the Mission sourced 2 quintals of rice and estimated that a daily ration 200gms per head was able to support 5000 individuals. In addition on an average the Mission was procuring 1-3 quintals a day of both dal and rice to support the affected population in that area. Some of the important practices observed at a distribution site in Haridaskati include the following:

- ❖ The Mission first brought in senior functionaries to supervise relief work and had drawn upon individuals who had already worked in relief distribution in other disasters. The individual we interviewed had already worked in the Uttarkashi Earthquake and the Orissa Cyclone. In addition the Mission relied on local affiliated organizations and volunteers to conduct preliminary needs assessment.
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- ❖ The functionaries made a significant effort at reaching interior locations and followed a regular schedule for distribution. In addition they established very good crowd management practices and ensured food was distributed in a systematic way. In addition a great deal of attention was paid to the cleanliness of the cooking and distribution areas.
  - ❖ Most significantly, the Mission sought to provide affected families with cooked food and also distributed packets of nutritional supplements for infants and children.

## 5.6. Early Warning Systems

The last cluster around which the findings are being presented is the role of Early Warning Systems prior to the onset of the cyclone. As mentioned in the earlier section on relief distribution, the strategic management of information is a critical variable in all the stages of the disaster response process. Whereas the affected areas were familiar with the consequences of heavy rains and winds or with some degree of flooding, there were two unique findings when it came to the preparedness of communities for the cyclone (n=100%). The first is that both inland communities and those living closer to waterways have not experienced a cyclone induced tidal surge with such an intensity or scale in the last two decades or in most cases in living memory. Second, preparedness was hampered by the fact that it could not be predicted that the embankments would suffer such extensive damage.

An efficient Early Warning System in the case of this disaster would have had an extremely important impact on preparedness and response. First, communities and individuals would have been able to bring about some systematic order in the evacuation process. Second, a degree of psychological preparedness for the onset could have been induced that would have reduced the degree of trauma that was experienced. Third, a reduction in the loss of lives and capital would have been a direct consequence of an efficient Early Morning System.

In conducting the interviews it was found that the nature of the warning given over the radio (due to lack of electrification in remote areas many communities find it difficult to get access to television) was inadequate for the following reasons. While the warning informed people that they were going to experience heavy rain and strong winds, they did not specify or explain the basic issues of what exactly is a cyclone, where landfall will occur. Second, the nature of the warning was in such general terms that individuals who were already habituated to experiencing severe weather conditions did not feel the need to evacuate. What we see is that on experiencing cyclonic conditions combined with extensive flooding and waves (as a consequence of the breaking of embankments) communities were not able to organize or systematically evacuate to safer locations.

Five major experiences emerge from the time individual communities began experiencing the disaster.

First, only 10-15 minutes of reaction time was available to people to evacuate to higher ground, gather children and the elderly as well as pack away essential belongings. Second, and most importantly, a majority of the respondents interviewed explicitly stated that their major concern was to get to safety by either locating to higher ground or to concrete structures nearby. Thirdly, the time of occurrence did play a crucial role in the entire evacuation process. Since the cyclone occurred during day time people could actually move to safer places ensuring minor damage to human lives. Had it occurred in the night the damage to human life would have been more. Fourthly, a majority of the respondents interviewed unequivocally stated that they did not want to evacuate leaving their belongings back home. Lastly, as a consequence of the rapidity of the onset and the lack of preparedness time individuals have suffered from three major losses which will be detrimental to the post-disaster reconstruction stage: the loss of all forms of documentation (ration-cards, Below Poverty Line Certificates, NREGA work cards, birth and death certificates, proofs of school enrollment and other documentation); the loss of all livestock (cattle and poultry); and, the entire loss of accumulated money and food grain reserves (both for consumption and for selling in the market).

Given the situation, the most notable feature of the narratives was the absence of any role played by office-holders at the panchayet level in organizing or implementing a systematic evacuation plan or in pre-positioning relief shelters, food supplies, medical aid, or organizing health-workers to cope with the disaster. While such experiences occur at the micro-level, it is their replication and aggregation across multitudes, which result in the vastness of the destitution caused by the disaster.

While it is recognized that economic and geographic conditions in the region hamper the formal institutionalization of an efficient early warning system, one of the lessons that arise are

- First the nature and timing of the warning are a crucial variable in aiding the recovery stage.

- Second, there is need for agencies involved in prediction to ensure that warning percolates down to the micro-level through panchayets even in situations where individuals do not have access to either radio or television.
- Thirdly, it is also important to see that the community is convinced with the warning system and responds to the situation in terms of evacuation.

### RELIEF MATERIALS RECEIVED FROM DISTRICT

ITEM/ DATE	26.05.09	27.05.09	28.05.09	29.05.09	30.05.09	31.05.09	01.06.09	02.06.09	03.06.09	04.06.09	05.06.09	06.06.09	07.06.09	TOTAL
Tarpauline	0	2382	2463	12483	17381	0	0	5730	1553	0	0	0	0	41992
Rice	0	1175	0	1032	2100	400	1080	3600	0	0	0	200	200	9787
Chira	0	1230	0	0	0	0	640	0	0	0	0	199	0	2069
Gur	8	54	0	0	20	0	39	0	0	12	0	0	0	125
Pulse	0	0	0	200	200	0	100	100	100	100	100	0	0	900
Cash GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dhoti	0	0	0	0	1900	0	0	1144	0	0	0	0	0	3044
Saree	0	0	0	0	1500	0	0	1199	0	0	0	0	0	2699
Lungi	0	0	0	0	2500	0	0	0	0	0	0	0	0	2500
C. Garments	0	0	0	0	5000	0	0	0	0	0	0	0	0	5000
Blanket	0	0	0	0	135	0	0	0	0	0	0	0	0	135
Lime	0	0	0	0	380	560	983	660	195	680	996	0	283	4737
Bleaching	0	0	0	0	0	0	191	101	0	0	0	0	0	292
Baby Food	0	0	0	0	0	0	0	466	0	0	0	0	0	466
Soyabin	0	0	0	0	0	0	0	100	0	0	0	0	0	100
Mustered Oil	0	0	0	0	0	0	0	12	0	0	0	0	0	12
Patatose	0	0	0	0	0	0	0	12	0	0	0	0	0	12
LPG Cylinder	0	0	0	100	300	0	0	0	0	0	0	0	0	400
Gas Oven	0	0	0	50	41	0	0	0	0	0	0	0	0	91
Candle Sticks	0	0	0	0	0	0	0	200	0	0	0	0	0	200
Match Box	0	0	0	0	0	0	0	200	0	0	0	0	0	200
Relief Contingency	0	0	1100000	0	0	0	0	0	0	0	0	0	0	1100000
ORS	0	0	0	0	0	0	0	15676	0	0	0	0	0	15676
Clorine Tablet	0	0	0	0	0	0	0	10	0	0	0	0	0	10
K. Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water	0	0	1070	25000	25000	15000	10000	10000	5000	5000	5000	0	0	101070
Water Purifier	0	0	0	0	73	0	0	0	0	0	0	0	0	73

Source: BDO Office, Gosaba, South 24 Parganas

## DAMAGED REPORT OF HINGAL GANJ DEVELOPMENT BLOCK DUE TO CYCLONE AYLA

S. No.	Name of GP	River Embankment		Earthen Road		Single BP Road		Double BP Road		Bituminous Road		IAY Building		SSK		MSK	
		Approx. Length (in Km.)	Approx. Amount (Rs. In Lakh)	Approx. Length (in Km.)	Approx. Amount (Rs. In Lakh)	Approx. Length (in Km.)	Approx. Amount (Rs. In Lakh)	Approx. Length (in Km.)	Approx. Amount (Rs. In Lakh)	Approx. Length (in Km.)	Approx. Amount (Rs. In Lakh)	Approx. Nos.	Approx. Amount (Rs. In Lakh)	Approx. Nos.	Approx. Amount (Rs. In Lakh)	Approx. Nos.	Approx. Amount (Rs. In Lakh)
1	<b>Kalitala</b>	8.5	42.50	17.5	5.5125	22.5	11.925	47.5	34.675	7.5	11.25	475	71.25	8	9.60	1	2.50
2	<b>Gobindakati</b>	9.2	46.00	16.5	5.1975	26	13.78	52.5	38.325	7	10.5	495	74.25	5	6.00	1	2.50
3	<b>Jogeshganj</b>	9.85	49.25	16	5.04	27.5	14.575	54	39.42	16	24	560	84.00	3	3.60	0	0.00
4	<b>Sahebkhali</b>	7.5	37.50	15.5	4.8825	26.5	14.045	47.5	34.675	6	9	480	72.00	5	6.00	0	0.00
5	<b>Dulduli</b>	6.5	32.50	16.5	5.1975	25	13.25	51.5	37.595	8	12	535	80.25	4	4.80	0	0.00
6	<b>Sanderlerbill</b>	3.1	15.50	5.5	1.7325	17.5	9.275	36	26.28	2	3	310	46.50	5	6.00	1	2.50
7	<b>Hingalganj</b>	1.2	6.00	2	0.63	3.5	1.855	3	2.19	0	0	120	18.00	2	2.40	0	0.00
8	<b>Bishpur</b>	4.8	24.00	4.5	1.4175	2.5	1.325	2.5	1.825	1	1.5	125	18.75	2	2.40	1	2.50
9	<b>Rupamari</b>	6.5	32.50	7.5	2.3625	11	5.83	11	8.03	0	0	210	31.50	2	2.40	0	0.00
Total		57.15	285.75	101.5	31.9725	162	85.86	305.5	223.015	47.5	71.25	3310	496.5	36	43.20	4	10.00

Source: BDO Office, Hingalganj, North 24 Parganas

**DAMAGED REPORT OF HINGALGANJ DEVELOPMENT BLOCK DUE TO CYCLONE AYL**

Name of GP	ICDS		Pry. School		High School		GP Office		PHC/ GP/ HQ. Sub-Centre/ Non GP Sub Centre		Other Govt. Bldg		Cattle		Agriculture Land	
	Approx. No	Approx. Amount (Rs. In Lakh)	Approx. No.	Approx. Amount (Rs. In Lakh)	Approx. Nos.	Approx. Amount (Rs. In Lakh)	Approx. Nos.	Approx. Amount (Rs. In Lakh)	Approx. Nos.	Approx. Amount (Rs. In Lakh)	Approx. Nos.	Approx. Amount (Rs. In Lakh)	Approx. Nos.	Approx. Amount (Rs. In Lakh)	Approx. Nos.	Approx. Amount (Rs. In Lakh)
<b>Kalitala</b>	7	5.60	11	12.10	3	6.75	1	2.00	1	4.00	2	7.00	910	36.40	30	6.56
<b>Gobindakati</b>	6	4.80	12	13.20	3	6.75	1	2.00	1	4.00	2	7.00	950	38.00	33	8.16
<b>Jogeshganj</b>	8	6.40	13	14.30	3	6.75	1	2.00	3	12.00	3	10.50	1250	50.00	29	6.50
<b>Sahebkhali</b>	6	4.80	12	13.20	3	6.75	1	2.00	2	8.00	1	3.50	1070	42.80	35	7.83
<b>Dulduli</b>	5	4.00	15	16.50	4	9.00	1	2.00	3	12.00	2	7.00	830	33.20	35	7.83
<b>Sanderlerbill</b>	2	1.60	10	11.00	1	2.25	0	0	0	0.00	1	3.50	470	18.80	72	16.61
<b>Hingalganj</b>	0	0.00	2	2.20	0	0.00	0	0	0	0.00	0	0.00	50	2.00	94	20.41
<b>Bishpur</b>	2	1.60	4	4.40	1	2.25	0	0	0	0.00	0	0.00	120	4.80	105	24.41
<b>Rupamari</b>	0	0.00	5	5.50	1	2.25	0	0	0	0.00	0	0.00	350	14.00	91	21.01
Total	36	28.80	84	92.40	19	42.75	5	10.00	10	40.00	11	38.50	6000	240.00	524	119.32

Source: BDO Office, Hingalganj, North 24 Parganas