# Cyclone Shelter Management Guideline For Shelter Management Committee

## Developed and Published by

Bangladesh Disaster Preparedness Centre (BDPC)

### In Cooperation with

United Nations Centre for Regional Development (UNCRD) Swiss Agency for Development and Cooperation (SDC)



### Author

Moloy Chaki

### **Editor**

Muhammad Saidur Rahman Dilruba Haider

### Advisor

Yoko Saito

### **Assistant Developers**

Sareka Jahan Abul Fazal Md. Sadekin Md. Hamidul Huq Harun Ur Rashid Syed A. K. Shifat Ahmed Zakia Aktar Chiharu Takei

### Illustration

Biplob Dutta

### **Layout and Graphics Design**

Manik Sarkar

### Published on

July 2010

### Developed and Published by

Bangladesh Disaster Preparedness Centre (BDPC)

### In Cooperation with

United Nations Centre for Regional Development (UNCRD) Swiss Agency for Development and Cooperation (SDC)

### **Table of Contents**

Preamble	4
Background	5
Aim and Objective	6
Jsers and their Needs	6
Content of the Guideline	6
Process of Guideline Development	7
instructions for the Users	8
. Cyclone Risk and Climate Change Vulnerability in Bangladesh	10
2. Cyclone Shelter for Risk Reduction and the Importance of Shelter Management	12
3. State of the Cyclone Shelters in Bangladesh	14
4. Problems Faced in the Shelters During Cyclone	16
5. Difficulties Faced by Women, Children, Old and People with Disabilities in Cyclone Shelter	18
5. Forming Cyclone Shelter Management Committee and the Method Followed	20
7. Constitution of the Shelter Management Committee	22
B. Pre-cyclone Measures to be Taken by the Management Committee in Order to Ensure Effective Use of Cyclone Shelter	£ 24
<ol> <li>During Cyclone, Responsibilities of the Cyclone Shelter Management Committee for Ensuring Proper Use of the Cyclone Shelter</li> </ol>	34
0. Post Cyclone Responsibilities to Ensure Proper Use of the Cyclone Shelter	40
1. Government-approved New Warning Signal System	41
2. Necessary Tools and Materials for Emergency Period	43
3 Conclusion	45





### **Preamble**

Bangladesh's coastal area, stretching from Satkhira to Cox's Bazar covers an area of approximately 710 kilometers. Due to geophysical positioning and high humidity, Bangladesh is highly prone to cyclone and storm surge. The coastal area spreading over 19 districts is the home for 25 percent of the country's population. The lives and properties of most of the people living in these coastal areas are under high risks because of cyclones and storm surges. In the last five decades around 20 catastrophic cyclones have plagued the country and the slithering climatic disturbances are adding frightening layers to our already existing struggle with the myriads of natural disasters.

Natural disasters can never be prevented. However, their risks can be minimized through infrastructural developments. Due to poor socio-economic condition, most of the people living in these vulnerable coastal areas cannot afford to have strong houses for themselves which would be capable of withstanding the ghastly winds of cyclone. To make the situation even grimmer, the government does not have sufficient resources to build adequate number of shelters in the vulnerable areas.

At present there are about 3000 cyclone shelters in the country, most of which were built with foreign aids post 1991 cyclone. A recent study reveals that due to lack of proper maintenance, 10 percent of these shelters have become unsuitable for use. This number will only increase if steps are not taken immediately to protect the remaining cyclone shelters. The shelters have dilapidated very quickly despite the huge investments that went in during their constructions because of the negligence of the local community in maintaining the shelters and also because there were no proper guidelines on how to manage these cyclone shelters effectively.

In view of these dire realities, this guideline has been developed with the aim of invoking the community at risk in their spontaneous participation to ensure proper management of the cyclone shelters. The main objective of this guideline is to assist the members of the shelter management committee with the proper instructions needed for effective shelter management. The members of the shelter management committee, consisting of vulnerable people would be the users of this guideline. This guideline is divided into 13 chapters. These chapters emphasize on issues such as risks due to cyclones and storm surges, importance of cyclone shelters in disaster reduction, the present condition of the cyclone shelters, and the measures that need to be taken by the members of the cyclone shelter management committee for ensuring proper utilization of these shelters in pre, during and post disaster phases.

We believe that this guideline, if properly implemented, will prove effective in ensuring maximum utilization of the cyclone shelters and thereby contribute in reducing the impacts of cyclones and storm surges.

### **Background**

Bangladesh is extremely vulnerable to cyclones and storm surges because of its geographical positioning. This includes the 19 districts lying on the coastal belt of the country. Almost a quarter of the population dwells in the coastal areas. In the past 50 years around 20 dreadful cyclones have devastated the country among which includes the 1970 and 1991 cyclone which left almost 500,000 and 138,000 people dead respectively. Due to the recent worsening in the climate change scenario the intensity and severity of these disasters are on rise. For example from 2007 to 2009, the country's coastal belt experienced severe cyclones: Sidr, Nargis, Bijli and Aila.

Natural disasters like cyclone can never be averted. However, strong infrastructure can minimize loss and damage to human lives and assets. But people living in the coastal region of the country are poor and cannot afford to build strong houses which can resist the terrible winds of cyclones. To make the matter worse the country is not capable of providing the people with adequate number of shelters due to limited availability of resources. 10 percent of the shelters built with donor support are dilapidated to the extent of being completely unusable. Besides, during the time of Aila and Sidr, it was seen that in many cases people had to enter the shelters by breaking the locks of the doors as the keys were missing. The main reasons behind these mismanagements are lack of community participation and absence of proper guidelines for shelter management. Considering this scenario, United Nations Centre for Regional Development (UNCRD) Hyogo office and Bangladesh Disaster Preparedness Centre (BDPC) have jointly taken the initiative to empower the vulnerable population by developing a research based guideline on effective cyclone shelter management.

The objective of this guideline is to ensure effective utilization of the cyclone shelters by vulnerable communities and thereby help reduce the impacts of cyclones and storm surges. This guideline therefore has been developed as a handbook for the Shelter Management Committee, which is to be formed by the disaster vulnerable people.





### **Aim and Objective**

The objective of this guideline is to ensure cyclone and storm surge risk reduction through active participation of the vulnerable people in cyclone shelter management activities, and the aim is to guide the members of the shelter management committee with proper instructions for ensuring effective shelter management.

### Users and their Needs

Members of the shelter management committees will be the users of this guideline. This guideline can also be used for shelter management related work by any local people or disaster management committees residing in the coastal belt of the country.

### **Content of the Guideline**

The guideline has 13 chapters. These chapters emphasize on issues such as risks arising from recent cyclones and storm surges in Bangladesh, importance of cyclone shelters in risk reduction, the present condition of the cyclone shelters and the measures that need to be taken by members of the cyclone shelter management committee in ensuring proper utilization of the shelters in pre, during and post disaster phases.

### **Process of Guideline Development**

In the inception stage, materials and publications relevant to this guideline were collected from various national and international sources, studied and analyzed. Besides, the matter was also discussed with the representatives of the vulnerable community and members of shelter management committee of Nishanbaria and Khawlia union of Morrelganj upazila in the district of Bagerhat for their valuable comments and suggestions. Then a draft version of the guideline was developed using the key and relevant information obtained from local and foreign publications as well as on the basis of experiences and ideas of field level people and shelter management committee. The field testing of the draft guideline was done through conduction of two training sessions for the shelter management committee members at the field level. The draft guideline was also distributed among experts for their feedback. Based on the expected outcomes of the field tests and the recommendations of the experts, the guideline was finalized. Finally in the validation meeting held at Morrelganj, representatives of the vulnerable community, shelter management committee, Union Disaster Management Committee (UDMC) and Upazila Disaster Management Committee (UzDMC) validated the use of this guideline.

Extensive study of local and international publications
Collecting information from the shelter management committee members
Development of the draft version
Field testing of the draft guideline and obtaining expert's views
Finalization of the guideline
Guideline validation and approval
Guideline printing and publication

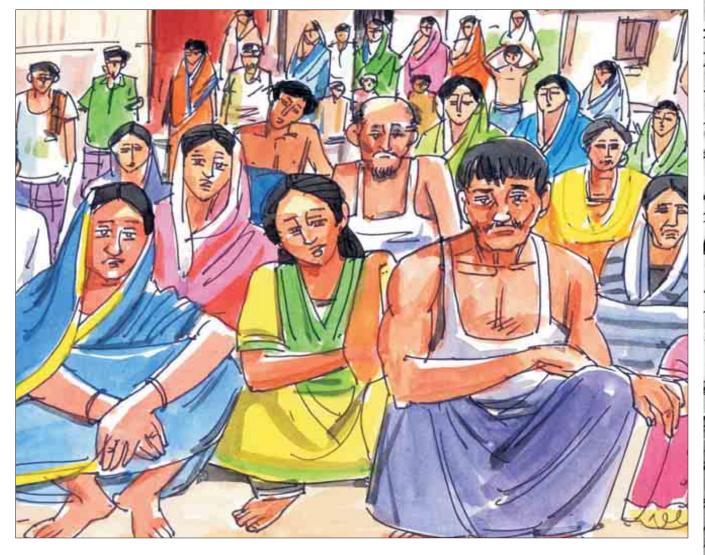




### **Instructions for the Users**

### Follow the guidelines mentioned below

- Form a shelter management committee using the instructions mentioned in the guideline;
- All the members of the shelter management committee should read the guideline meticulously;
- Be flexible and consider the current situation while using the guideline;
- If you feel that any particular chapter needs to be altered, modified or supplemented, then at first organize a meeting and take everyone's opinion before making any amendment;
- Women, children, aged and people with disabilities should follow the guideline in taking effective measures to reduce risks from cyclone and storm surge;
- Implement the pre-disasters measures as outlined in the guideline;
- Implement the measures as outlined in the guideline during the time of disaster;
- During the post-cyclone period, evaluate the conducted activities and take measures if you feel the standard of the guideline needs to be improved even further; and
- Take effective steps in liaison with the disaster management committee at the union and upazila levels as outlined in the guideline.





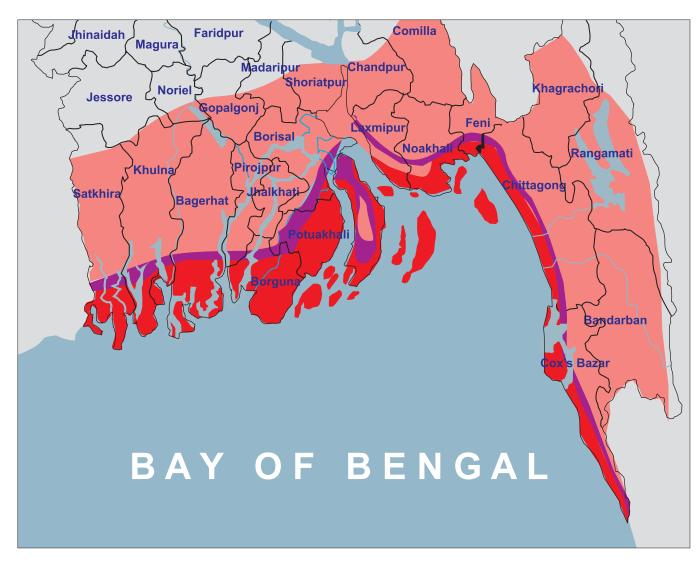


### Cyclone Risk and Climate Change Vulnerability in Bangladesh

It is known that Bangladesh is a disaster prone country because of its geo-physical location. Along the Bay of Bengal lie 19 districts forming the coastal belt of Bangladesh. Almost 25 percent of the population lives in the coastal region of the country. This region is very vulnerable to cyclone and storm surge and in the last five decades almost 20 cyclones have hit the country. Among these are the cyclones that derailed the country on 12 November 1970 and 29 April 1991 claiming 500,000 and 138,000 lives respectively. The main reasons why cyclone strikes Bangladesh-

- Geographical Location: Geo-physically, Bangladesh is situated in comparatively warmer region of the planet. In the south of the country lies the vast Bay of Bengal.
- Cyclone means huge rush of air and water; and air tries to flow through any available space. The coastal region of the country is funnel-shaped. This funnel shaped structure provides those empty spaces, which sucks the air through it causing cyclone to flow over Bangladesh. Therefore, most of the cyclones rush towards the land of Bangladesh.

Due to climate change, the earth's humidity is increasing which is causing cyclone to become even more intense and severe. In fact between 2007 and 2009, three powerful cyclones – Sidr, Nargis, and Aila have devastated the country's coastal region.







### **Cyclone Shelter for Risk Reduction and the Importance of Shelter Management**

Helpless people during cyclone are forced to take shelter in high embankment, concrete building and weak structured household. High and strong infrastructures reduce the impacts of cyclones and storm surges. Unfortunately most of the people in Bangladesh are poor and they do not have the capacity to build such high rise and strong houses. Thus there is no alternative to cyclone shelters for these poor people. On the other hand due to limited resources, the government cannot build adequate numbers of shelters. Most of the cyclone shelters have been constructed with assistance from development partners.

If we have a look at the points mentioned below we can have an idea on the importance of cyclone shelters -

- Because of its geographical positioning, Bangladesh is highly prone to cyclone and storm surge.
- Due to climate change cyclone is becoming more intense.
- Since most of the people living in the coastal areas of the country are poor, they cannot afford to build houses which are strong enough to resist the powerful winds of cyclone.
- Therefore the best available way to guard the vulnerable places is by providing them with cyclone shelters.
- There is insufficient numbers of cyclone shelters in the country due to resource constraints.
- Due to poor maintenance and inefficient management, 10 percent of the cyclone shelters in the country have become unusable.
- During the past cyclones, it was seen that doors of the shelters had to be broken to let the people in as the keys were missing.
- During the cyclone, the people taking shelter had to face many problems in meeting their daily needs like getting water, food, health care, security, sanitation and etc.
- During the disaster phase it is actually the women, children, aged, ill and people with disabilities who suffer most.

Having cyclone shelter alone is not enough, its proper management is also very important in reducing cyclone and storm surge risks.







### State of the Cyclone Shelters in Bangladesh

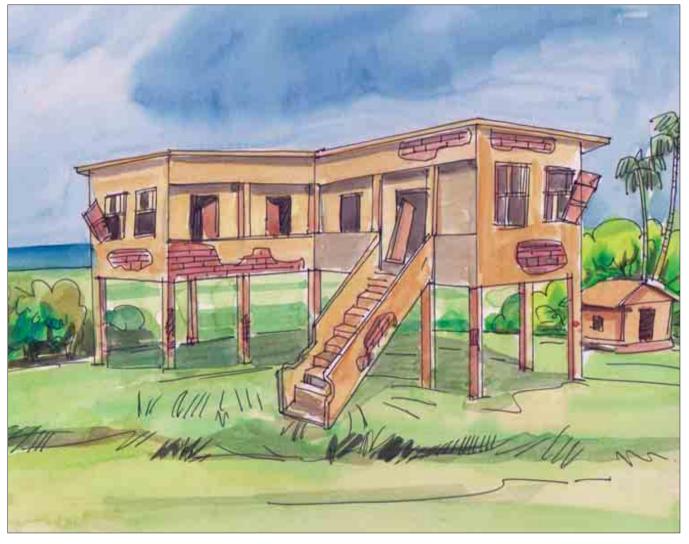
There is no alternative to cyclone shelters for reducing losses from cyclones and storm surges. But according to a recent survey, 10 percent of the cyclone shelters have become unsuitable for use.

If appropriate measures are not taken immediately then there would be more cyclone shelters becoming completely unusable. The present condition of the cyclone shelters are as follows-

- Lack of proper maintenance has left most of the cyclone shelters in uninhabitable conditions.
- It is seen that the cyclone shelters are often used by the influential people of the locality and their families for personal endeavors.
- Those cyclone shelters which during normal times are used as education centers are comparatively in better condition due to better maintenance.
- The buildings are in fragile condition due to inadequate maintenance.
- For the physically challenged people there is no slope or ramp for easy entrance to the shelter.
- There is no sufficient water or electricity facility in many of the cyclone shelters.

### The main reasons behind the deterioration of the cyclone shelters are:

- Most of the cyclone shelters do not have shelter management committees at all or even if they do, they are inactive.
- There is almost no institutional or social initiative for repairing or maintaining these cyclone shelters.
- Lack of government and non-government monitoring.
- Lack of funds.
- Most of the cyclone shelters are not used except during the disaster period.
- There is no feeling of ownership for the cyclone shelters among the locals.
- There is no initiatives for using these shelters for other purposes.
- Lack of awareness among the people.







### **Problems Faced in the Shelters During Cyclone**

The cyclone shelters are meant for saving people's life. But the people taking shelter have confessed that they face numerous difficulties while staying in the cyclone shelter due to lack of proper management like-

- The keys for unlocking the shelter doors are not in place during the emergency times.
- The shelters are very much crowded.
- Chaotic situation prevails in the centers.
- Inadequate light and ventilation system.
- Lack of pure drinking water and dry foods.
- Lack of security.
- Tendency of the local influential people to occupy extra accommodation space.
- Lack of proper sanitation system.
- Lack of adequate security especially for the young girls.
- No arrangement for providing primary health care.
- No special arrangements for taking care of the pregnant or delivering mothers.
- No special arrangements for children, old and disabled people.
- No separate place for keeping domestic animals and poultry.
- No source of getting updated information on the weather condition.
- Tendency of the sheltered people to come with extra luggage.
- Lack of access roads to the cyclone shelters.
- Vulnerable community do not have adequate knowledge on how to use cyclone shelters effectively.
- Lack of effective shelter management activities during cyclone period.





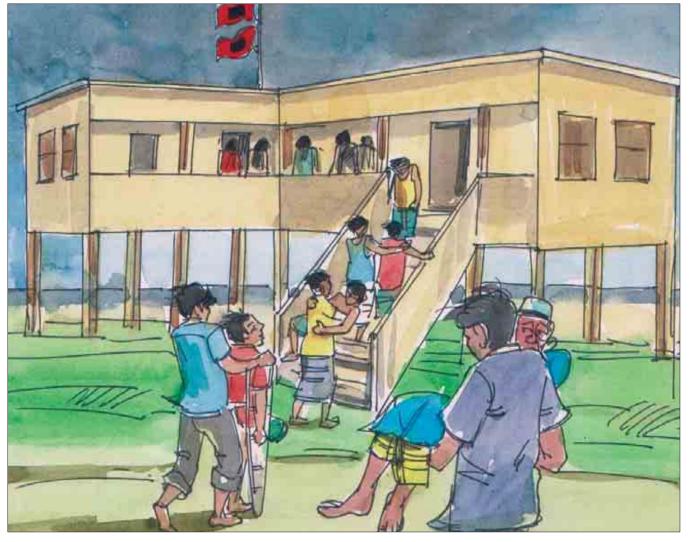


### Difficulties Faced by Women, Children, Old and People with Disabilities in Cyclone Shelter

During disasters it is observed that some people are more vulnerable than others based on their age, sex and health status. Usually it is seen that women, children, aged and people with disabilities are more at risk during crisis periods because of the following reasons-

- Most of the women, children, aged and people with disabilities do not receive cyclone warning signals.
- There are no special arrangements at community and institutional level for relocating women, children, aged and people with disabilities from risk areas to safer shelters.
- Most of the centers do not have a sloping ramp at the entrance, making it difficult for physically challenged people to move in.
- The toilets are not well-suited for physically challenged people.
- Sometimes due to too many people taking shelter, it becomes difficult to arrange separate places for men and women.
- Sometimes women face difficulties in maintaining their modesty.
- The young girls tend to be teased and harassed.
- Pregnant women face difficulties during delivery due to lack of necessary arrangements.
- Babies starve due to lack of baby food.
- Elderly people often suffocate due to lack of adequate ventilation and light inside the shelter and fall sick.

Although these groups could be vulnerable in times of disasters, they could also be potential change agents in the society. It is important to give equal opportunities to empower them.







### Forming Cyclone Shelter Management Committee and the Prosses Followed

Usually due to absence or in some cases inactivity of the cyclone shelter management committee, the cyclone shelter gets dilapidated quickly and becomes unsuitable for any sort of use. Therefore the presence and activities of cyclone shelter management committee is very important. Follow the guidelines mentioned below while forming the committee-

- Form 'Village Committee' in presence and consent of the representatives of the families living in the area where cyclone shelter is located.
- Each family will have one representative to the village committee.
- The eleven member executive committee of the village committee will be those who are accepted and respected by the people of that village and will have a Chairperson, General Secretary, Treasurer.
- The village committee must have representatives from extremely poor families, women and physically challenged groups.
- Form the cyclone shelter management committee in accordance to the views of the village committee.
- Only those who are respected and trusted by the people of that area will be in the working committee.
- 70% of the members of the committee will be from extremely poor families.
- The committee must have significant number of female and physically challenged groups.
- The number of members in the committee should be 10% of target community.
- The duration of the committee would be for minimum 2 years and maximum 3 years.
- The committee members should meet at regular interval; at least once in every three weeks.
- Evaluate the contribution made by each of the members of the committee, if found unsatisfactory then replace him/her with a new face but in consent of the other members.
- To conduct the activities of the management committee fairly, develop a constitution in consensus of all the members.







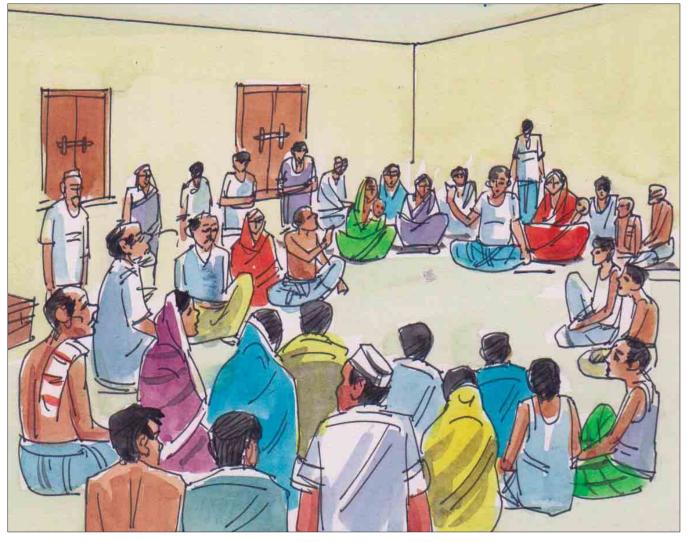
### **Constitution of the Shelter Management Committee**

Some rules and regulations are needed for an organization or institution to operate smoothly. A constitution is a set of guidelines which the organization must abide by to run efficiently and fairly.

Without a constitution, an organization or institution can never be authenticated or accredited as a valid organization. The rules and regulations outlined in the constitutions of cyclone shelter management committees can be different from place to place depending on the circumstances that prevail in different areas. However, in any constitution the issues that should typically be addressed are:

- Guideline for having monthly meetings at regular intervals within a certain span of time.
- Guideline for holding meeting during crisis period.
- Documentation and record keeping of meeting activities.
- Process of decision making and approval.
- Process for membership approval and cancellation.
- Bank account opening and account maintenance guideline.
- Directives for income and expenditure.
- Policy for multi purpose use of the shelter.
- Code of conduct for the members.
- Methodology for forming new committees and abolishing existing ones.
- Mechanism for coordination with the Union and Upazila Disaster Management Committee and other government and non-government organizations.
- Methodology for addition and deletion of norms in the constitution.

Develop the constitution of the shelter management committee in participation of all the members of the committee during the normal period when there is no imminent threat of disaster.







Pre-cyclone Measures to be Taken by the Management Committee in Order to Ensure Effective Use of the Cyclone Shelter

### Ensure multiple use of the cyclone shelter

- For social functions like marriage, circumcision, milad, etc.
- As social resource centre like library, consultation centre, etc.
- For government provided services like vaccination centre, health care centre, veterinary centre, centre for providing agriculture related information, etc.
- For non-government activities meeting, seminars, trainings, etc.
- For primary and mass education.

The cyclone shelter cannot be used for any activities that the law and society prohibits

### **Fund Raising**

The members can raise funds through donations and also by renting the shelter for government and private uses. But they have to keep in mind that the shelter cannot be used for purposes that that the law and society prohibit.

### **Shelter Maintenance**

During the normal period, the structural flaws of the shelter should be identified and effective steps should be taken to amend it. To carry out the maintenance cost, contact the relevant government and non-government offices through the Union Parishad. If required, the committee can use its own fund for this purpose. A sub-committee with 3 to 5 members from the members of shelter management committee can be formed for shelter maintenance task, which will be made defunct after the job is done. Next time it will be reformed with the same or other members to do the next maintenance work.













### Forming warning dissemination groups and its capacity building

Identify the local volunteers and form cyclone warning dissemination groups. The members of this group will be 7 to 10. Imam of local mosque and primary school teachers can be member of this group. Arrange training programmes for capacity building of the warning dissemination groups. Seek assistance of the local Cyclone Preparedness Programme (CPP) or non-government organizations if required.

### Rescue and evacuation team and its capacity building

Form rescue and evacuation team for rescuing and relocating the people at risk from vulnerable areas to shelter centers and also for helping women, aged and people with disabilities taking shelter during the time of cyclone. The age limit of this roup must be 18 to 35 years. The group must be formed with the minimum 8 and maximum 15 members according to the number of local population. Train them for enhancing their skills. Seek assistance from government and non-government organizations in this matter.

### Health-care and primary treatment providing team and its capacity building

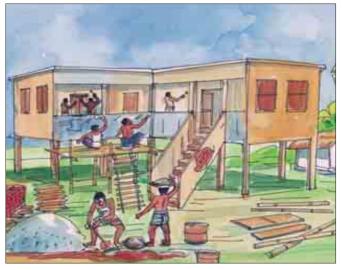
Form health-care and primary treatment providing team to provide treatment to the sick and injured people during and after the cyclone. The members of this team will be young boys and girls, local village doctors, trainedattendant for pregnant women and field activists from government and non-government organizations. Arrange special training programmes during usual time for enhancing the skills of these group members on health-care and first-aid treatment in collaboration with government and non-government organizations.

### Preparing the list of probable families who would be taking shelter

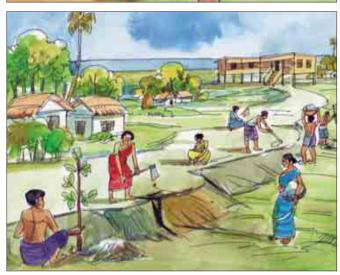
Before the cyclone strikes prepare a list of the families who would be in need of shelter during cyclone. Therefore, shelter management committee can easily understand during disaster period how many people have taken shelter and how many could not.

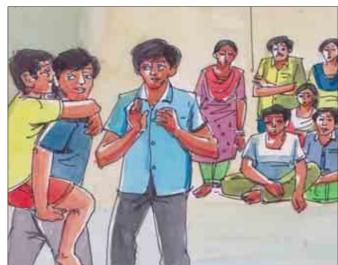
### Identifying the people who are most vulnerable

Considering the social susceptibility, the people who are most vulnerable like the pregnant women, children, aged and people with disabilities need to be identified first. In this regard seek assistance from local government and non-government field activists. this task must be done during normal time so that it will be













possible to help this vulnerable group during cyclone. This list will be reviewed every year.

### Maintaining the access road to the cyclone shelter

The access roads of the cyclone shelters need to be well-maintained and if required new roads should be constructed to facilitate people's easy movement during cyclone. In this respect seek cooperation from concerned government and non government organizations through Union Parishad.

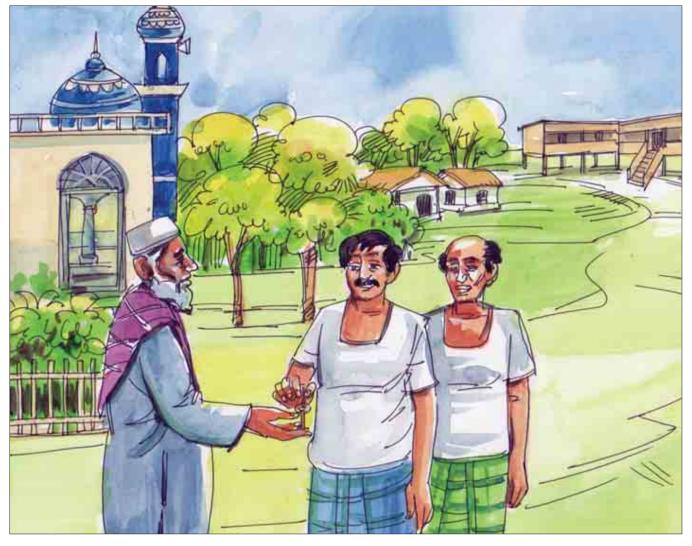
### Safe keeping the keys of the cyclone shelter in proper place

The members of the committee will chose two or three people who will be in charge of keeping the keys safely. Those selected should be-

- Accepted and respected by all in the village.
- Resident of an area proximate to the cyclone shelter.
- Women representative who lives near the cyclone shelter.
- Imam of a nearby mosque.
- An important member of the shelter management committee.
- Member of local union disaster management committee.

### Coordination with Union Disaster Management Committee (UDMC) and Upazila Disaster Management Committee (UzDMC)

- In accordance with Union Disaster Management Committee (UDMC), take initiatives for having a representative of the shelter management committee in UDMC.
- Take help from UDMC in shelter management works.
- In local shelter management activities, link UDMC also.
- To integrate the activities of the shelter management committee with the local development planning programmes, contact different government offices, Cyclone Preparedness Program (CPP) and non-government organizations.
- Keep the members of UDMC and UzDMC informed on the activities of the shelter management team.







### **Development of emergency response planning**

The emergency response plan should be produced at normal time, in a participatory way involving all the people in the catchment area. This plan should detail out when the meeting of this cyclone shelter management committee should be called; what would be the responsibilities of the early warning dissemination group: who, when and how, will the cyclone warning signals be disseminated; who will be responsible for rescuing and relocating the vulnerable people to safe shelter; who will provide health care; and who will be there to help the distressed people in the cyclone shelter. All these issues should be discussed and incorporated in the Emergency Response Plan. If required for providing effective emergency services, divide the village in a number of small groups and assign to each group a member of the shelter management committee who will be in charge of providing emergency services to that group. During the normal times, when there is no imminent threat of cyclone, mock drills should be conducted involving all the players of the shelter management team for exercising the various aspects of the emergency response system.

### Raising public awareness on proper implementation of cyclone shelter

To aware the locals on the proper use of cyclone shelter we should-

- Arrange courtyard meetings at family level.
- Discuss the issues at religious institutions.
- Discuss the issues at education institutions.
- Discuss it among small groups formed by the NGOs.
- Aware them through cultural activities.
- Arrange mock drills.

### Things that need to be told to every family for ensuring proper use of the cyclone shelter

- They must keep an eye on the weather condition as soon as they get the warning signals or see a warning flag.
- They must get ready to leave for cyclone shelters as soon as they get danger signals or see two flags.
- The most vulnerable members of the family children, pregnant and new mothers, sick and people with disabilities need to be sent immediately to the cyclone shelter as soon as warning signals are issued and two flags are raised.



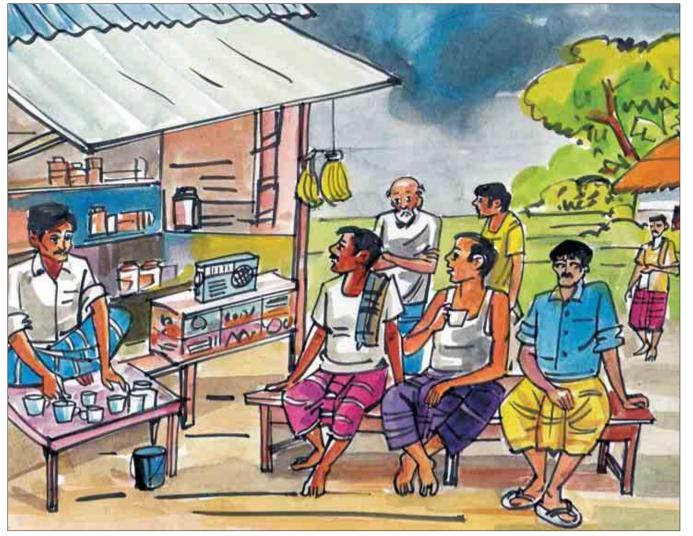




- The whole family should move to the cyclone shelter when great danger signal is issued and three flags are raised.
- While leaving for cyclone shelters leave your domestic animals like cows, buffaloes, goats in a safe or high-rise place. If the shelter has special arrangement for keeping the animals then take them also to the shelter. If you cannot manage any shelter place immediately then open the knot of the animals and release them.
- Every family should take with themselves dry food, pure water, baby food (if there is any baby child in the family), necessary winter garments, torchlight, important papers (deed) and vital materials (money, jewelry)
- O Do not take any thing in the cyclone shelter that consumes lots of space.

To implement the awareness raising activities, seek cooperation from local volunteers, teachers, Imams, different government and non-government organizations, their field workers and Cyclone Preparedness Programme (CPP)









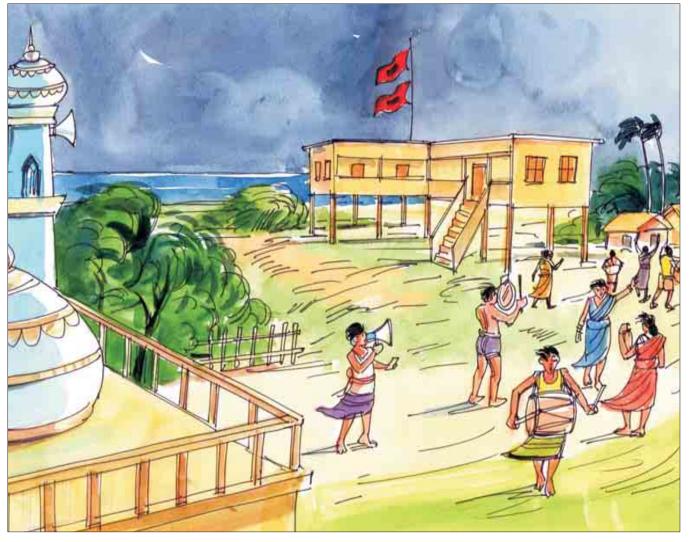
### **During Cyclone, Responsibilities of the Cyclone Shelter Management Committee for Ensuring Proper Use of the Cyclone Shelter**

### **Arranging emergency meeting**

- As per the new signaling system, if the warning signal issued is between level 1 to 3 i.e. if one flag is raised then call for an emergency meeting of the cyclone shelter management committee.
- Take steps to arrange meetings for other emergency response teams also.
- Inspect the preparatory measures of every emergency response team.
- Instruct the warning dissemination groups to get active as soon as the signal reaches level 4 and 6 i.e. when 2 flags are raised.
- Instruct the concerned people to open the cyclone shelters when danger signal is issued.
- Check whether the cyclone shelter is in usable condition or not. For e.g. see whether the toilets are in good condition or not, remove if any unnecessary materials or goods are occupying the space, check the facilities for use of water etc.
- Ask everyone to keep an eye on the weather condition and to be prepared to face the cyclone.

### Dissemination of cyclone warning signals

- As soon as the warning signal reaches level 6, the warning dissemination groups should start disseminating the warning messages among the vulnerable people.
- Open the cyclone shelters when danger signal is issued, that is when signal reaches level 6.
- Monitor whether the warning messages are being disseminated properly or not.
- In order of vulnerability, inform the women, children, aged and people with disabilities of the warning signals in advance.
- Instruct every family to take effective steps in reducing the losses.
- Disseminate the warning signals in collaboration with government and non-government offices, their field staffs and the volunteers of the Cyclone Preparedness Program (CPP).
- Inform Union Disaster Management Committee of the steps taken for cyclone warning dissemination.







### **Rescue and evacuation**

- As soon as the warning signal reaches it peak (8, 9, 10) instruct the emergency response teams to rescue and relocate the people from threatened areas to safer shelters.
- Take steps to monitor the rescue and migration works.
- Keep the UDMC and UzDMC informed of the number of people who have been rescued and shifted from vulnerable areas to safer places.
- Conduct the rescue and evacuation works in coordination with UDMC and UzDMC.

### Give priority to pregnant women, children, aged and people with disabilities during their movement to and stay in cyclone shelter

Give priority to pregnant women, children, aged and people with disabilities on their way to and during their stay in cyclone shelter. Instruct the rescue team to bring these already identified people to the cyclone shelter first.

### Check the attendance of the enlisted families

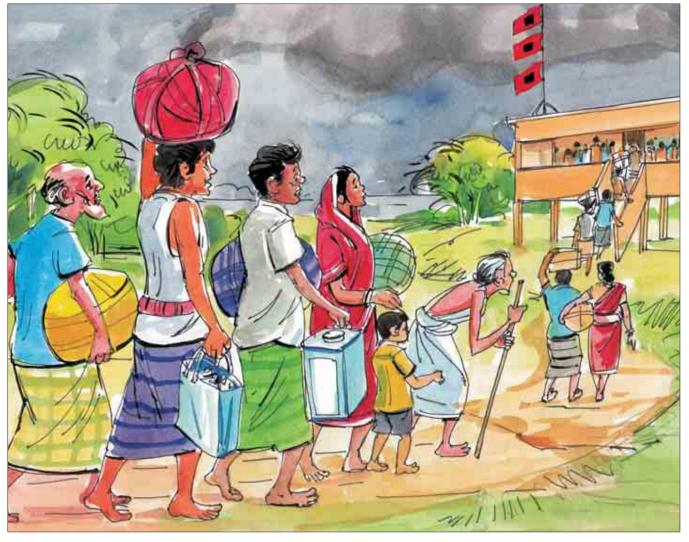
Check the list which was prepared before to see whether all the families enlisted have been shifted safely to cyclone shelter or not. If any family is missing then take proper initiatives to ensure that they are brought to the centre quickly.

### **Enforcing security**

Proper security should be ensured so that no property is lost and no women, adolescent girls, and children are harassed. Instruct the responsible members and the volunteers to remain vigilant on this issue. Incorporate local young people entrusted by the community for this task.

### Ensure dry food, pure water and proper sanitation

- Ensure safe drinking water and food for the people in the shelter.
- Request everyone to keep the toilets clean.







• If needed arrange dry food for the sheltered people and baby food for the young, take help from government and non-government organizations in this regard.

### Ensure health care and first-aid treatment

- Make sure that if anyone gets injured while coming to the shelter or falls sick while staying in the shelter, then they are properly attended.
- Monitor the activities of the health care and primary treatment providing team.
- Make special arrangements for ensuring safety of pregnant mothers and also guarantee the presence of well-trained birth attendant and important equipments which will be required during child delivery.

### Livestock management

Take the following initiatives in centers where there are available facilities for livestock management-

- Arrange separate dwelling places for cows, goats and sheep.
- Prepare a list of the owners of the animals coming in to the cyclone shelter.
- Arrange adequate water and fodder.
- Take measures in ensuring adequate treatment to these animals through assistance of the local veterinarians.

### Maintaining decorum in the cyclone shelter

- Take effective measures in ensuring that no extra space is allotted to anyone unnecessarily.
- Ask every one in the shelter to be polite and friendly to each other.
- Arrange separate living space for men and women.
- Request everyone to be helpful to pregnant women, children, aged and people with disabilities.
- Arrange separate place for keeping the domestic animals and poultry.
- Inform the UDMC and UzDMC on the number of families and people taking shelter.
- 1 hour after the cyclone is over, request everyone to go back to their homes.







### **Post Cyclone Responsibilities to Ensure Proper Use of the Cyclone Shelter**

### Evaluate the activities of the management committee and identify their limitations

- After the participants leave, clean the shelter for future use.
- When normal state is restored, organize a meeting of the shelter management committee.
- At the meeting in presence of all the members, assess the performance of the shelter management committee.
- Through evaluation, figure out the limitations of the management.

### Initiate a new work plan to tackle the limitations

- Prepare a new workplan to resurrect the limitations pointed out in the post-cyclone meetings.
- As per the new requirements, revise your workplan or re-design it before implementing it.



### **Government-approved New Warning Signal System**

### Cyclone warning and its structure

- According to the revised warning system, there are 8 warning signal units but the signal still ranges from number 1 to 10.
- Previously there were 10 warning signal numbers instead of 8 as in the revised system.
- In the revised one, warning signals 5 and 7 have been dropped. This means according to the previous system, 5, 6 and 7 were danger signals but now only number 6 is used as danger signal for that level.
- Like before signal numbers 8, 9 and 10 signifies great danger.
- This means after number 4, number 6 will be the only danger signal (number 5 is not used), and then will come number 8 (number 7 is not used) from where great danger signals start and will subsequently end at number 10 depending on wind velocity.

### Signal flags and its explanation

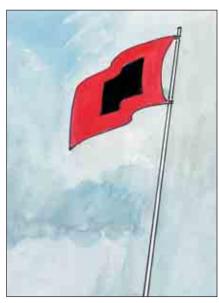
- Like before, one flag means caution. In the revised system, one flag is hoisted for signals 1, 2 and 3. Previously one flag used to be raised for signals 1, 2, 3 and 4.
- Like before two flags mean danger. But in present case only for signal 4 and 6, two flags are hoisted. Previously 2 flags used to be raised for signals 5, 6 and 7.
- Like before three flags mean great danger. In the revised system also three flags are hoisted for signals 8,9 and 10.





### Duties depending on the number of flags raised

- One flag means caution. Therefore during such time we should carefully observe the weather changes and listen to weather bulletins regularly.
- Two flags signify danger. During such times we should inform others of the likely threat and take preparations for going to the cyclone shelter.
- Three flags signify great danger. This is when we should move to the cyclone shelters and encourage others to move to safer places. While moving to cyclone shelter give priority to women, children, aged and people with disabilities.



1,2 & 3 Number Signal



4 & 6 Number Signal



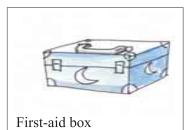
8,9 & 10 Number Signal

### **Necessary Tools and Materials for Emergency Period**

To ensure proper management of the cyclone shelter during cyclone and emergency period, every cyclone shelter should have the following tools and materials with them-



To get updated information on the weather conditions



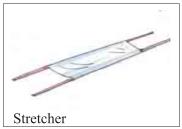
It is required for giving primary treatment to people who hurt themselves while moving in to the shelter



It is required for comforting the people especially children, aged and ailing as they usually enter the shelter drenched in rain



Ensure easy relocation and movement of physically challenged people



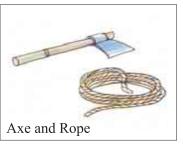
Essential while shifting sick people



For ensuring safety from fire



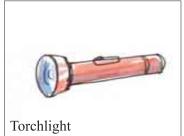




To clear the access roads leading to the cyclone shelter from fallen trees and branches



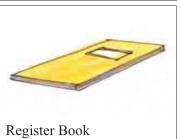
Helps in disseminating instructions on maintaining decorum in the shelter



Helps in dark gloomy conditions



Useful in keeping the kids engaged and happy



To enlist the names of the families taking shelter

### Conclusion

Due to deterioration in climate change scenario we need to adopt new measures and prepare ourselves better to tackle the next cyclone. We have learnt that although we might suffer from poverty and lack of resources, but through collective effort and active participation we can significantly reduce the risks of cyclone.

So let's take the following steps for reducing the risks of cyclone –

- Form local shelter management committee through spontaneous participation of all.
- Take effective steps for ensuring proper utilization of the cyclone shelter.
- Integrate the activities of the shelter management in local developmental planning programs.
- Seek assistance from different social institutions, government sectors, non-government organizations and Cyclone Preparedness Program (CPP).
- Inform the UDMC and UzDMC on the activities of the shelter management committee.
- Aware the locals on the proper use of the cyclone shelters.
- Give priority to women, children, aged and people with disabilities in the use of shelter facilities.
- Evaluate the performance of the shelter management committee after the cyclone is over, identify the limitations, take steps to correct those limitations and if necessary take new initiatives in developing and amending the shelter management activities.

Let's follow this guideline and ensure effective use of cyclone shelter as well as save ourselves from the damages of cyclone and storm surge.

