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Simulating a Natural Disaster in Bangladesh

**a Model of a Training Exercise for those Involved in
Responding to Disasters**

by

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and
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**PACT/PRIP in collaboration with BDPC
and
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A

PREFACE

We have both felt, for many years, the need for a simulation in disaster management as a training tool in Bangladesh, but were not sure how to go about doing it. Some generic examples exist in the disaster literature, but there was nothing, in our experience, relevant and specific enough to be used in Bangladesh.

This simulation draws on our exposure to Col. Ritchie's "ATLANTIS" and the other simulations used in the courses at the Asia Disaster Preparedness Centre in AIT, Bangkok. It also owes much to Eysan and Davis simulation "Hurricane Gloria" which was prepared for the Disaster Management Training Program (DMTP) of the International Decade for Natural Disaster Reduction (IDNDR).

The immediate cause of our producing this simulation was the decision by UNDP and GOB to hold a major workshop in 1994 "The First National Workshop on Disaster Management Coordination". UNDP asked the Asian Disaster Preparedness Centre of AIT Bangkok to manage this workshop and ADPC asked us to prepare a day and a half simulation to be part of this workshop. We constructed this simulation based on our experience of the 1991 and 1994 Cyclones in Bangladesh.

Our thanks to Sonny Jegillos of ADPC, and Sylvia Islam of UNDP Dhaka who commissioned this simulation, and allowed us to make it available to a larger public.

Richard Holloway
Saidur Rahman

INTRODUCTION

Bangladesh has frequent natural disasters - cyclone, tidal surge, land erosion by rivers, flood, drought. Frequently these natural disasters are national disasters - in which the effects disrupt the whole country and in which the whole country is mobilized to respond. Frequently too international assistance from outside Bangladesh is both solicited and provided to help mitigate the effects of these national natural disasters.

In the major national natural disasters the following institutions come forward to offer immediate help to those affected, or to help them re-build their lives:

- The civil administration of the Government of Bangladesh (GOB)
- The Armed Forces of the GOB
- The Foreign Aid Organisations of Donor Countries
- International Non-Government Organisations (INGOs) in Bangladesh
- Bangladesh NGOs
- NGOs from Donor Countries outside Bangladesh

These institutions seek to supplement the much larger efforts of:

- the people in the affected area
- the citizens of Bangladesh

All these 8 institutions need to work together to coordinate their efforts. Only by doing this will Bangladesh be able to optimize its response to national natural disasters.

Making hasty plans for coordination once the cyclone has struck, or looking at standing orders which have not been examined since the last disaster, is not the way to go. All concerned agree that planning and training need to be done regularly and systematically in the periods between disasters.

One way for the different institutions to improve their performance and their coordination is by working through a realistic simulated disaster. This will help them to get used to the likely demands each will make on the other, and to get practise in the systems and structures that are used.

The simulation which is the subject of this book is an attempt to show how this can be done.

A SIMULATION is an attempt to act out a planned scenario with a high degree of realism in order to expose those involved to what is likely to happen in the future. They are a tool frequently used by the Armed Services and Civil Aviation for their own purposes.

This particular simulation deals with the coordination and collaboration between the GOB, The Armed Forces, the Donors, the Donor Country NGOs, and the Bangladeshi NGOs in response to 5 days before, during, and after a major cyclone on the South Coast of Bangladesh.

The particular purpose of this simulation is to improve the skills of those concerned, and to improve their coordination one with another. It was first tested and applied at the "First National Workshop on Disaster Management Coordination" organised by UNDP/GOB at Cox Bazar 20-25 August 1994. It was very well received there, and the participants encouraged its further use as a training tool.

This simulation is specific to a cyclone, and to the national level activities of the 5 institutions mentioned above. It is hoped, however, that with this model in front of them, interested people would be able to adapt this simulation to their own needs - possibly flood, river erosion etc: possibly at divisional, district or thana level: possibly involving other actors.

There is no copyright on this simulation. Please feel free to use it, adapt it, modify it and remake it for your own purposes. Indeed you will have to modify it since it will lose its value if all participants have read it in advance! A simulation needs novelty, surprise and the unexpected.

As our experience in the Cox Bazar Workshop showed, simulations are a powerful learning experience - engaging, interesting, stimulating and enjoyable. With forethought and planning, they can be constructed for many situations. Not many people have, however, been exposed to their use. I hope this book helps to remedy this situation.

OVERVIEW

General

This simulation deals with the activities of :

Government of Bangladesh
Armed Forces of Bangladesh
Bilateral and UN Donors
Bangladesh based NGOs (both national and international)

over a period of 5 days before, during, and after a major cyclone and storm surge on the island of Hatia on the South Coast of Bangladesh. It is based on the systems and structures in place in August 1994 and draws its content from activities in the April 1991 and May 1994 cyclones.

The simulation is for 40 people and will take one and a half days. It requires 2 directing staff, 3 observers, 2 radio operators drawn from CPP staff, as well as the 40 participants.

The exercise will simulate the activities of three national level groupings who will deal with warning, preparations, rescue and relief in response to the cyclone and storm surge. It is assumed that the Prime Minister is out of the country, and the Minister of Disaster Management and Relief is asked to coordinate the response.

The simulation is activated by three features:

- a. a variety of documents which are provided to the groups and which both suggest and influence their actions.
- b. discussions and actions that come from communication between the groups
- c. communication by radio with the simulated disaster affected area.

The three groupings are:

- The Inter-Ministerial Standing Committee on Disasters.
This comprises the civilian and the armed forces administration. It is chaired by the Secretary, Ministry of Disaster Management and Relief
- The Donors
This group is chaired by the resident Representative of the UNDP
- The NGOs
This group is chaired by the Director of ADAB

In this simulation the great majority of the participants play their own characters in real life, and behave within the boundaries of the roles they have in real life. In some cases

people are asked to take on the characters of others. Playing yourself emphasises the use of the simulation as a practice for building skills and coordination.

It is possible to run the simulation differently - by asking people to take on the characters of others. Playing others emphasises the need to understand their situation and the constraints within which they work.

The Timing

The 5 day simulation takes place over one and a half days in real time, and is followed by half a day of de-briefing and reflection.

This is the scenario:

1. The Evening of the First Day
 - a. Introduction to Simulations
 - b. Introduction to this Simulation
 - c. Ground Rules for this Simulation
 - d. Distribution of materials for D-Day (=Disaster Day) Minus Two
 - e. Participants dismissed to prepare themselves for the next day.

Following this the directors and observers set up the logistics and equipment for the following days' simulation

2. The Second Day

D-Day Minus One, D-Day, D-Day Plus One, D-Day Plus Two are experienced as four consecutive two hour "days" within a real day that lasts from 0800 to 1600. Material is distributed to simulate the information that is available to these groups in real life at different times during the disaster. The groups are required to prepare themselves, to act and to coordinate their actions.

The simulation closes at 1600 and the directors collect and analyze the material produced to prepare for the debriefing the next day. The Observers work on their observations to present the next day.

3. The Third Day

The Directors and Observers lead the participants through a debriefing on the simulation pointing out the actions which were simulated the previous day.

The Directors simply point out from the records who did what to whom in response to what signals and asks the participants to reflect whether this was the most efficient and effective thing to have done at that time - or to consider alternatives.

The Observers have clearer Terms of Reference in their briefing documents (which see). They provide their observations on the processes they saw taking place.

Locations

The simulations requires six locations:

- a. A room (or part of a room) for the 16-20 member Government/Armed Forces Group
- b. A room (or part of a room) for the 7-10 member Donor Group
- c. A room (or part of a room) for the 7-10 member NGO group
- d. A room or part of a room for the Emergency Operations Centre (EOC). This will be situated next to the GOB location and will be manned by one CPP radio operator
- e. A radio room connected by radio to the EOC. The location of this room should not be divulged to the participants since it represents the disaster struck location, but can, in fact, be in the same building, or same town. This is manned by one CPP (Cyclone Preparedness Program) radio operator with personal knowledge of the area chosen to be the disaster struck area so that he/she can answer questions about the area.
- f. The Simulation Secretariat
This will be used by the Directors and Observers.

Each room needs to be equipped with flip-chart easels, flip-chart paper and pens.

MANAGEMENT OF THE SIMULATION

(This is also provided in schematic form in Appendix 1)

1. First Day Evening

The Simulation Director (SD) will have identified the three people who will be the Chairs of the three groups and provided them with special briefing instructions on their role before he or she addresses the larger group of participants.

The SD will also have briefed the Press and the Observers on their roles before addressing the main meeting.

Briefing for Chair - GOB - D-Day Minus One	BC 1.1.
Briefing for Chair - Donors - D-Day Minus One	BC 1.2.
Briefing for Chair - NGOs - D-Day Minus One	BC 1.3.
Observer Briefing	OB
Press Briefing	PB

The SD then explains the idea of a simulation to the whole group, informs the participants of the six locations, informs them who will be in which group, and produces badges to identify the organisation that each belongs to.

The SD explains the Ground Rules, and urges participants to use the simulation to try out new ideas and systems. (Please see Appendix 2 for Simulation Ground Rules)

The SD then informs them that the simulation has started, and the SD gives out the package of information which sets the scene for the simulation. These are :

D-Day Minus Two

First Cyclone Weather Report	CR 1
Invitation to Govt. meeting	IM 1
Invitation to UNDP Meeting	IM 2
Invitation to ADAB meeting	IM 3
Briefing Documents for each participant	BD 1-30

The SD requests the participants to study their papers and strategize on what they will do - perhaps discussing joint actions with others. They break for supper.

After supper the participants should be shown some videos, films or slides of disasters to get them in the mood.

2. Second Day

The SD should distribute the next weather report to the rooms in which the participants are sleeping by 0600 so that they get it first thing in the morning to increase the sense of urgency.

Second Cyclone Weather Report	CR 2
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Participants assemble in their designated rooms.

D-Day Minus One

starts at 0800 and runs until 1000.
The SD gives out another Weather Report

Third Cyclone Weather Report CR 3

At the end of D-Day Minus One the SD copies the Action Sheet from each group
(See Simulation Ground Rules)

D-Day

starts at 1000 and runs until 1200
At the start of the simulated day the SD gives out new briefing information
to the Chairs of the GOB and the NGOs

Briefing of Chair - GOB (D-Day) BC 1.2.
Briefing of Chair - NGOs (D-Day) BC 3.2.

The SD also gives out the first of radio messages from the affected area,
and another Weather Report

First Situation Report SR 1
Fourth Cyclone Weather Report CR 4

Half way through the simulated day the SD gives out a fifth Weather report and a
second Radio Message

Fifth Cyclone Weather Report CW 5
Second Situation Report SR 2

and just before the end of the day the SD gives out the third situation report
which announces that the cyclone has crossed the coast of Hatia. The radio
then goes out of action until the end of D-Day Plus One

Third Situation Report SR 3

At the end of D-Day the SD copies the Action Sheet from each group

D-Day Plus One

runs from 1200 to 1400

At the start of the simulated day the SD gives out new briefing information
to the Chairs of the GOB and the NGOs

Briefing of Chair - GOB (D-Day Plus One) BC 1.3.
Briefing of Chair - Donors (D-Day Plus One) BC 2.2.
Briefing of Chair - NGOs (D-Day plus One) BC 3.3.

The SD also gives out the sixth Weather report and the fourth Situation Report

Sixth Cyclone Weather Report	CW 6
Fourth Situation Report	SR 4

A quarter of the way through the simulated day the SD gives out background material on Hatia

Hatia Background	HB 1
Hatia map	HM 1

Half way through the simulated day the SD gives out the last Weather Report, and the Fifth Situation Report

Seventh Cyclone Weather Report	CW 7
Situation Report 5	SR 5

Three quarters of the way through the simulated day the SD gives out the sixth Situation Report.

Sixth Situation Report	SR 6
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At the end of D-Day Plus One the SD copies the Action Sheet from each group.

D-Day Plus Two

runs from 1400 to 1600

At the start of this simulated day the SD gives out the last set of briefing materials for Chairs

Fourth Briefing for Govt Chair (D-Day plus Two)	BC 1.4
Fourth briefing for NGO Chair (D-Day plus Two)	BC 3.4.

and the last Situation Report

Seventh Situation Report	SR 7
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Half way through the simulated day a special message is circulated from the GOB chair (who has previously been briefed) that the Prime Minister is returning three quarters of the way through D-Day Plus Two and all participants must meet her and report on what they have done.

Message from the PM	PM 1
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The second hour of the simulated day for all participants is spend in preparing a presentation to the P.M. and the last half hour is spent having the three different groups (now assembled in plenary) provide a 10 minute overview of what they have done in front of the (imaginary) P.M.

3. Third Day

Debriefing

The debriefing is one of the most important parts of a simulation. During the simulation itself excitement and emotion is high ; the debriefing is the time when people look back at what they did and consider whether what they did was best in the circumstances. From this reflection comes the possibility of learning and making changes in behavior or in operational guidelines. The Debriefing should not be left out, nor should it be shortened.

At the end of the second day, after the simulation is finished, the Simulation Director should collect and examine the Action Sheets that each group produced at the end of each day, together with message logs. Overnight the SD should systematize the Actions Taken and his should be the first presentation to plenary the next day.

1. Simulation Director reports back to the group what each group did, and should point out problems that are revealed by this analysis
2. This should be followed by plenary discussion. It is likely to generate controversy, as people will try to change or re-interpret what happened the previous day. The SD must be able to show from the Action Sheets publicly displayed what actually happened.
3. The Observers report to the plenary on what they observed as process. They will need to comment on what they saw in the groups - meeting skills, chairing skills, the nature of the discussions. The observers will tread a delicate line giving their (sometimes critical) observations, but trying to salvage lessons to be learnt.
4. This should be followed by a general discussion on this in plenary which will need very strong chairing as many people will try and justify themselves.
5. Finally the Simulation Director should lead a discussion on what lessons have been learnt from the Simulation, and what changes should be made to present practice which will make both performance and coordination in the next disaster more effective.

BRIEFING MATERIALS

These briefing materials are prepared on the basis of our experience of 1991 and 1994 cyclones.

They are prepared to give guidelines to participants on the tasks they must accomplish and the context in which they will be working.

They have in many cases been exaggerated in order to produce more interest, excitement and tension in the simulation. From interest and involvement comes the learning in a simulation.

The briefing materials go only to the person to whom they are addressed. They should not be shown to anyone else.

1. OB Briefing for Observers
Distribution: Observers - first evening 1700

There will be three observers - one for each of the groups. They will have copies of all the briefing notes for all the participants in their meeting. They will sit in on all the meetings, and observe, but their main work will be in the de-briefing at the end.

They must be prepared to comment on :

Organisational skills

What was revealed in the meeting? Was there:

- cooperative teamwork?
- an overall desire to coordinate?
- listening?
- problem analysis?
- rapid synthesis?
- assertiveness?
- being flexible while maintaining direction?

Chairmanship Skills

- how did the Chair organise the seats?
- did he/she display impartiality?
- did she/he encourage participation by all present?
- How did she/he quiet the over-talkative members whilst drawing out the reserved participants?
- were the aims of the meeting spelt out?
- were flip chart used? how?
- did the chair resolve conflicts and form consensus?
- how far did the meeting go towards achieving its aims?

Emergency management issues

- How were they handled in the meetings?
- How much substantive discussion was there on?
 - * assessment of needs and damage?
 - * co-ordination problems?
 - * attention to priority needs of the surviving population?
 - * long term consequences of emergency decisions?

Meeting Strategy

- were people introduced and aims of the meeting stated?
- were situation reports of everyone asked for?
- what was driving the meeting - politics, compassion, desire for aid, international standing etc etc.?
- were meetings summarized at the end?

- were minutes written up - did they summarize the decisions properly?

The responsibility of the Observers is great since they have the task of re-inforcing issues and drawing attention to gaps that they perceive in the handling of the exercise. Even when roles in the meeting were poorly performed, key issues were missed, and chairmanship was weak, it is possible for a perceptive observer to salvage a rich set of lessons for mutual benefit.

Observers need to be tactful, supportive people, noting never, in any circumstance, to criticize a participant in negative terms without finding something positive to say about his/her performance.

BC 1.1 Briefing for Government Chair
Distribution: Chair of GOB Group - Evening of First Day 1700
(to cover D-Day Minus Two and D-Day Minus One)

Questions for the Groups to ask.

- a. What are the probable effects and likely consequences of this cyclone?
- b. What regular on-going activities are taking place in the likely affected area, and what effect is the cyclone likely to have on them?
- c. What existing capacities are there in the affected area?
- d. What existing vulnerabilities?
- e. What are our own capabilities?
- f. What can be done between now and tomorrow?
- g. What more information is necessary? How can we get it?

Outputs

Government Group: Written Radio and TV messages
 Written miking messages
 Instructions to:
 Red Crescent
 Ministry of Health
 DPHE
 BWDB
 Armed Forces

Meetings between the groups can take place during this day

Write short notes on Actions taken on flip-charts at the end of each day.

BC 1.2 Briefing for Government Chair
Distribution: Chair of GOB Group - 1000 Second Day
(to cover D-Day)

Once the cyclone has struck

Questions for the groups to ask

1. Who has what function? What is the chain of command?
2. What are the immediate tasks to be done? What are the divisions of responsibility?
3. How is the information going to be gathered and distributed?
4. How are we going to coordinate with the other groups?
5. Who is doing what in the affected area?

Outputs

Government Group: Damage lists
 Needs list
 Instructions to different organisations
 Resources available to be deployed

Meetings between the groups should take place during this day

Write short notes on actions taken on the flip-charts at the end of this day.

BC 1.4 Briefing for Government Chair
Distribution: Chair of GOB Group - 1400 Second day
(to cover D-Day Plus Two)

Questions for the groups to ask

1. What is the size of the problem? What is the size/scope of the resources available?
2. What gaps need to be plugged? Where are the resources to do this?
3. Does Bangladesh make a national appeal?
4. What new problems have arrived?
5. Do we have good information about what is happening on the ground in Hatia?

Outputs

Group 1 Government International appeal

Meetings between the groups should take place during this day

Write short notes on actions taken on the flip-charts at the end of this day.

NB. 1330

All other groups come to the Government Group Area for a report to the Prime Minister.

BC 1.5 Debriefing (Morning of the Third Day)

Be Prepared to:

- Display all the flip charts in sequence
- Go through the actions in sequence
- Revisit the individual objectives
- Ask for feedback on the simulation, and what has been learnt from it

Is there anything which you would change about standard operating procedures in the light of the simulation?

BC 2.1 **Briefing for Chair of Donors**
Distribution: **Chair of Donors - evening of First Day 1700**
 (to cover D-Day Minus Two)

Questions for the Group to ask:

- a. What are the probable effects and likely consequences of this cyclone?
- b. What regular on-going activities are taking place in the affected area, and what effect is the cyclone likely to have on them?
- c. What existing capacities are there in the affected area?
- d. What existing vulnerabilities?
- e. What are our own capabilities?
- f. What can be done between now and tomorrow?
- g. What more information is necessary? How can we get it?

Outputs

Donors Group: First message to HQs of donors

Meetings between the groups can take place during this day

Write short notes on actions taken on the flip-charts at the end of this day.

BC 2.2 Briefing for Chair of Donors
Distribution: Chair of Donors - Morning of Second day 1000
(to cover D-Day)

The cyclone has struck

Questions for the groups to ask

1. Who has what function? What is the chain of command?
2. What are the immediate tasks to be done? What are the divisions of responsibility?
3. How is the information going to be gathered and distributed?
4. How are we going to coordinate with the other groups?
5. Who is doing what in Hatia?

Outputs

Donors Group Resources available
 Report to Donor HQs

Meetings between the groups should take place during this day

Write short notes on actions taken on the flip-charts at the end of this day.

BC 2.3 Briefing for Chair of Donors
Distribution: Chair of Donors - afternoon of Second Day 1200
(to cover D-Day Plus One)

Questions for the groups to ask :

1. What new information do we have now?
2. What are the priorities?
3. Who is most at risk? What kind of risks?
4. What are the most important facilities and systems that are needed right now?
5. Who is doing what in Hatia?
6. Who is planning to do what?

Outputs

Donors Group Report on actions to date by donors Minutes

Meetings between the groups should take place during this day. Meals should be eaten while working.

Write short notes on actions taken on the flip-charts at the end of this day.

BC 2.4 **Briefing for Chair of Donors**
Distribution: **Chair of Donors - afternoon of Second day - 1400**
 (to cover D-Day Plus Two)

Questions for the groups to ask

1. What is the size of the problem? What is the size/scope of the resources available?
2. What gaps need to be plugged? Where are the resources to do this?
3. Does Bangladesh make a national appeal?
4. What new problems have arrived?
5. Do we have good information about what is happening on the ground in the affected area.

Outputs

Donors Group

Proposals to the HQs

Write short notes on actions taken on the flip-charts at the end of this day.

N.B. 1330

All other groups come to the Government Group Area for a report to the Prime Minister.

BC 2.5 Debriefing (Morning of the Third Day)

Be Prepared to :

- Display all the flip charts in sequence
- Go through the actions in sequence
- Revisit the individual objectives
- Ask for feedback on the simulation, and what has been learnt from it

Is there anything which you would change about standard operating procedures in the light of the simulation?

BC 3.1
Distribution

Briefing for the NGOs chair
Chair of NGOs : Evening of First Day - 1700
(to cover D-Day Minus Two)

Questions for the Groups to ask.

- a. What are the probable effects and likely consequences of this cyclone?
- b. What regular on-going activities are taking place in the affected area, and what effect is the cyclone likely to have on them?
- c. What existing capacities are there in the affected area?
- d. What existing vulnerabilities?
- e. What are our own capabilities?
- f. What can be done between now and tomorrow?
- g. What more information is necessary? How can we get it?

Outputs

NGOs Group Plan for action by all concerned

Meetings between the groups can take place during this day

Write short notes on actions taken on the flip-charts at the end of this day.

BC 3.2 **Briefing for the NGOs chair**
Distribution **Chair of NGOs : Morning of Second Day - 1000**
 (to cover D-Day)

The cyclone has struck

Questions for the groups to ask

1. Who has what function? What is the chain of command?
2. What are the immediate tasks to be done? What are the divisions of responsibility?
3. How is the information going to be gathered and distributed?
4. How are we going to coordinate with the other groups?
5. Who is doing what in Hatia?

Outputs

NGOs Group	Damage list
	Needs list
	Resources available to be deployed

Meetings between the groups should take place during this day

Write short notes on actions taken on the flip-charts at the end of this day.

BC 3.3 **Briefing for the NGOs chair**
Distribution **Chair of NGOs : Morning of Second Day - 1200**
 (to cover D-Day Plus One)

Questions for the groups to ask.

1. What new information do we have now?
2. What are the priorities?
3. Who is most at risk? What kind of risks?
4. What are the most important facilities and systems that are needed right now?
5. Who is doing what in Hatia?
6. Who is planning to do what?

Outputs

NGOs Group	Problems being faced
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Meetings between the groups should take place during this day. Meals should be eaten while working.

Write short notes on actions taken on the flip-charts at the end of this day.

BC 3.4
Distribution

Briefing for the NGOs chair
Chair of NGOs : Afternoon of Second day - 1400
(to cover D-Day Plus Two)

Questions for the groups to ask

1. What is the size of the problem? What is the size/scope of the resources available?
2. What gaps need to be plugged? Where are the resources to do this?
3. Does Bangladesh make a national appeal?
4. What new problems have arrived?
5. Do we have good information about what is happening on the ground in Hatia ?.

Outputs

NGOs Group

Proposals to the NGO HQs

Meetings between the groups should take place during this day

Write short notes on actions taken on the flip-charts at the end of this day.

N.B. 1330

All other groups come to the Government Group Area for a report to the Prime Minister.

BC 3.5 Debriefing (Morning of the Third Day)

Be Prepared to :

- Display all the flip charts in sequence
- Go through the actions in sequence
- Revisit the individual objectives
- Ask for feedback on the simulation, and what has been learnt from it

Is there anything which you would change about standard operating procedures in the light of the simulation?

IM 1 Invitation from PM to GoB meeting

Distribution: Government Officials, Armed Forces and Red Crescent, CPP

Time Evening of First day (D-Day Minus Two) - 1800

TO: Armed Forces
Ministry of Disaster Management and Relief
Disaster management Bureau
DC Noakhali
Ministry of Health
Directorate of Public Health Engineering
Bangladesh Water Development Board
Dept of Meteorology
NGO Affairs Bureau
Red Crescent
Cyclone Preparedness Programme
Cabinet Division
Local Government and Rural Development
Ministry of Water Transport
Ministry of Communications - Railway
Ministry of Posts and Telecommunications
SPARRO

FROM: Prime Ministers Office

RE: **MEETING ABOUT IMPENDING CYCLONE**

As you have no doubt heard there is an impending cyclone likely to hit the Southern coast of Bangladesh in 18 hours time, probably in the vicinity of Chittagong and very probably hitting Noakhali first.

As you know the PM is in the UK. In her absence I am inviting you all to a meeting in the office of the Ministry of Disaster Management and Relief office tomorrow at 0800 to plan what we can do to prepare ourselves for the cyclone, allocate responsibilities, try and minimize the destruction that it will cause, and restore things to normal as soon as possible. By chance the DC of Noakhali is in Dhaka, and he will be in attendance.

Please be present in the MDMR office at 0800 tomorrow.

IM 1 Invitation from UNDP to all Donors

Distribution: Donors

Time Evening of First day (D-Day Minus Two) - 1800

TO: ODA
 USAID
 UNICEF
 WFP
 UNDHA
 LRCS
 WHO

FROM: UNDP

RE: **MEETING ABOUT IMPENDING CYCLONE**

DATE: 22 August 94

Dear Colleagues,

As you have no doubt heard, a cyclone is threatening to strike Bangladesh in the area of Chittagong within 18 hours. I would like to invite you to a meeting at 0900 on 23rd August at UNDP to share information, discuss the possible response of the donor community, and consider how we can monitor the work of the newly formed focal point at DMB which we are all supporting.

Please be present at UNDP at 0900 on 23 August 94 in the UNDP conference room.

IM 1 **Invitation from ADAB to NGOs meeting**
Distribution: **NGOs**
Time **Evening of First day (D-Day Minus Two) - 1800**

TO: CPP
 BDRCS
 BRAC
 CARE
 OXFAM
 CARITAS
 PROSHIKA
 Local NGOs

FROM: ADAB

RE: **MEETING ABOUT IMPENDING CYCLONE**

DATE: 22 Aug 94

Dear Colleagues,

As you have no doubt heard a cyclone is threatening Barisal and Patuakhali and is likely to land within 24 hours.

Barisal and Patuakhali are more densely populated and flatter than Cox Bazar and so we suspect that the damage will be greater than in May 2 1994

Please come to a meeting in ADAB at 0800 on 23 Aug. to ascertain which NGOs are working there, what preparedness they have, what NGOs are interested in mounting a relief effort, and what requests we should make of the Government.

BD1 **Prime Minister's Office**

Distribution: **P.M.'s office**

Time **Evening of the First day - 1800**

Briefing document for the MoDMR

- The PM is in trade negotiations in the UK which will keep her away. She will be back in four days. Please conduct the necessary meetings to prepare for and respond to the expected cyclone disaster.
- Remember:
 - the last cyclone was very small and people may not take this warning sufficiently seriously. This cyclone may be a big one, and you should treat it as such until we learn one way or the other. Make sure that the storm signal is 10, and that the instructions to go to cyclone shelters are broadcast.
 - The last cyclone was an administrative confusion. We have set up the DMB as the focal point for disasters and it must be used as such, and be seen to be used as such during this cyclone. The donors are not very happy with the DMB that they are paying for. Make sure that all ministries and the Armed Forces understand this, and work through the DMB.
 - It is very important for Bangladesh's international credibility to be able to produce an accurate overview of the damage and the requirements quickly. Details may be filled in later, but in May 2 Cyclone we were not able to produce anything till Day 8, whereas the NGOs did it on Day 3. Get planes or helicopters with competent assessors on board in early.
 - Make sure all efforts are made to warn the people, and get people to Cyclone Shelters. Let us capitalise on our success in building cyclone shelters.
- It is suggested that you instruct the DCs of the affected areas to collaborate with the NGOs, but make sure that everything they do is approved by us.

BD 2 **Armed Forces**
Distribution: **Armed Forces**
Time **Evening of the First Day - 1800**

Briefing Document for the Armed Forces

The Armed forces have a fine record of being on the spot early at time of disaster, working effectively and efficiently, and having the support of the local population.

This is in contrast to the Government who you often see as inefficient, with no clear line of command, and liable (at the local level) to corruption and malpractice.

You are very interested in the Armed Forces doing a good job - if possible in liaison with the Government, but you are quite prepared to work alone if the Government is too slow, or too incompetent.

You have heard that the Government is trying to set up a command structure through DMB which will give you orders. You intend to resist this and preserve the independence of the Armed Forces response. You have now had many officers trained in Disaster Response - more than the Government.

You worked well with the NGOs in 1991 and consider them useful, but not a major player except in a big disaster.

BD 3 **Ministry of Disaster Management and Relief**
Distribution: **Ministry of Disaster Management and Relief**
Time **Evening of the First day - 1800**

Briefing Document for Ministry of Disaster and Relief

This is your opportunity to prove that your Ministry is competent, capable and efficient, and is the correct place for the Disaster Management Bureau to be situated.

You intend to be very well informed and organised and to make sure that all the pre-disaster and post-disaster work is co-ordinated through your Ministry. In particular you are worried that the Armed Force will work on their own without reference to you, and steal the PM's attention from you. Since the disaster is going to need boats for the off-shore islands, you want to try and get control of the large number of motor cargo boats donated by Japan and sitting in the river on the Aricha Road, unused.

You are also concerned that the information on the effect of the disaster be very accurate to avoid the accusations of local government inflating the figures in their area in order to get more aid.

You are aware that many donors will prefer to work through NGOs because of their unfortunate experiences with Government Departments in the past, and their recent distrust of the Red Crescent. You want to avoid too much publicity and glory going to NGOs.

You are interested in having high level visitors see your work in order for your Ministry to be praised.

BD/4 **Disaster Management Bureau**
Distribution: **DMB**
Time **Evening of the First day - 1800**

Briefing Materials for the Disaster Management Bureau

You are very conscious that your Bureau is going to be tested in this disaster, but that many government departments will be happy to ignore you and carry on with the same arrangements that they used in previous disasters.

You want to make sure that your agreed and recognized role as focal point and coordinator of Government efforts in this disaster is recognized and that the PM's office gives everyone clear instructions to that effect.

You want to make sure that your Ministry does not take your role away from you.

You want to show the donors who are supporting your Bureau that you can use their funding well, and that your Bureau is well setup, well trained and efficient.

You are happy to contact disaster experienced people outside your Bureau for advice as the disaster takes place.

In particular you want to gain and retain control of the Emergency Operations Centre so that you can be the organisation which is bringing the most up-to-date information to the PM's office. To do this you need to have good relations with the CPP.

You are worried about being shown up by the NGOs, and you are not sure which path to take - either to work very closely with the NGOs, and help them - so that they praise your work publicly, and with your donors: or to control them tightly so the Government is seen to be the most active organisation. You know that there are some senior civil servants who do not like NGOs at all.

BD/5 **DC Noakhali**
Distribution: **DC Noakhali**
Time **Evening of the First day - 1800**

Briefing Document for the DC Noakhali

You are by chance in Dhaka, but very much want to be in Noakhali before the cyclone strikes, both to protect your family, and to organise the response to the cyclone. You are unhappy that the PM's office has insisted that you stay in Dhaka for this briefing, and will push to be allowed to return as soon as possible.

You are very familiar with mainland Noakhali, but not so much so with Hatia, and even less with the new islands forming south of Hatia. You are aware that any work there will need helicopters and boats as soon as possible.

You are aware that you have a very good civil surgeon who will organise first aid, but you are not sure of the quality of the staff from BWDB and DPHE, and your own TNOs.

You know from the '91 cyclone that TNOs and Union Chairmen are not to be completely trusted - there was a lot of corruption, and a lot of "capturing" of relief and selective relief distribution done by the local political party officers in order to buy votes for the future.

You are also worried that the local people will not believe that this is a severe cyclone, and will not listen to the warnings to go to the cyclone shelters.

You are aware that every cyclone results in profiteering by merchants who create artificial shortages and raise prices. You want to try and stop this and want the PM's office assistance with this.

You are aware of good work being done by NGOs in Hatia, and are willing to work with them, but only with serious ones. You don't want NGOs from outside Hatia, and you want to make sure the NGOs are well coordinated with the GOB.

BD/6 **Department of Public Health Engineering**

Distribution: **DPHE**

Time **Evening of the First day - 1800**

Briefing Document for DPHE

You are well aware that if the cyclone is accompanied by a major storm surge, there will be a lot of tube wells put out of action, and a lot of ponds and tanks which will have to be pumped out and cleaned.

The most important thing from your perspective is transport to get your organisation's supplies to wherever they are needed. You are experienced from the 1991 cyclone, and do not want to spend a lot of time talking at planning meetings.

You are keen to get good maps down to the affected areas which have details of all the tube wells that have been bored. You would also like to train people to repair their own tube well head sets so they do not have to rely on your Ministry.

BD/7 **Bangladesh Water Development Board**

Distribution : **BWDB**

Time **Evening of the First day - 1800**

Briefing Document for BWDB

You are worried that a storm surge will break down the coastal embankment that was built up after 1991, and that the land will then be at the mercy of a high tide to be covered with salt water, and spoiled for agriculture.

If there is a need for re-building you are worried about getting the voluntary labour to do the re-building. In 1991 the local people became so keen to get paid, that they would not work on the embankment voluntarily, and this caused many problems.

If there is no storm surge then you have little to offer, except to urge tree planting on the embankments to stabilise them, and break up the force of the water.

BD/8 **Meteorological Office**
Distribution : **Meteorology**
Time **Evening of the First day - 1800**

Briefing for the Office of Meteorology

You are fed up that another disaster is about to happen, but still the outdated and confusing storm signal system has not been changed. You want to use your time in the PM's office committee to lobby for a change in the way of warning the local people about the disasters that are about to hit. You want to get a commitment from the Government that they will change this after this cyclone.

You note that the various ports are showing Danger level 8, but you know that people do not begin to move until No 10 is hoisted.

You want to make sure that accurate information expressed in ordinary language that everyone can understand is delivered as accurately as possible by the TV and Radio up until the very last moment.

BD/9 **NGO Affairs Bureau**
Distribution: **NGOAB**
Time **Evening of the First day - 1800**

Briefing Document for the NGO Bureau

You know that the controversy which surrounds NGOs, and particularly their involvement in religious controversies via Jamaat, is usually not a feature of disaster periods, when nearly always Bangladeshis think that NGOs do a good job. You will be keeping your ears open for anti-NGO slogans or demonstrations as the NGOs take on a high profile role in the disaster.

Your position is that the NGOs can be very useful for the Government, if the Government thinks of them as complementary. You are urging the Government to make overtures to the NGOs so that there is joint planning and joint programming. You are aware that there are important NGOs in Noakhali (both mainland and Hatia) who are all doing a good job.

You are unclear about the role of the Red Crescent which is constitutionally an NGO, but never comes to the NGO Bureau for any registration, budget approval etc.

You will urge the Government to have joint meetings with the NGOs as soon as possible, and to deal with ADAB as the focal point

You know that donors will be coming to see you about NGO proposals, and you want to have a copy of the DPIS data base as soon as you can.

BD/10 **Ministry of Health**
Distribution : **Ministry of Health**
Time **Evening of the First day - 1800**

Briefing Document for Ministry of Health

You are most concerned with first aid in the hours following the disaster, and want to repeat the successes of your work in the May 1994 cyclone where you fielded medical teams very quickly and very efficiently.

You want to know where exactly the Cyclone will strike so that you can get your medical teams in place as soon as possible. You want to be allowed to use portable radios for your first aid teams, and to have helicopter back up to pick up severely injured cases for medical evacuation, and will ask for this at the PM's meeting.

Following the emergency medical aid period, you will be most interested in avoiding epidemics, and will want to liaise closely with the DPHE for repair of tube wells. You also want to have a lot of ORS and WP tablets available and will want to liaise with UNICEF about this.

BD/11 Bangladesh Red Crescent Society

Distribution: Red Crescent (BDRCS)

Time Evening of the First day - 1800

Briefing document for Red Crescent

The Red Crescent has been responding to Cyclones and doing relief for 20 years, and is very practised at doing it. It is not happy with taking orders from the Government about which areas it shall work in, and whom it shall help, as it had to in the May 94 cyclone. It is still less happy at the idea of taking orders from a new Government organisation, the DMB, which is what you have heard is likely to be the case.

At this point in a cyclone warning you do not want to spend a long time in meetings - you want to be out in the field, organising logistics.

In the meeting you will not be particularly helpful because you feel that most of the other people in the meeting are amateurs, and too concerned with politics.

Basically you want to work alone, and feel that coordination with the Armed Forces, the Government and the NGOs is not very important.

What you want from the Armed Forces is protection while making relief distribution.

BD/12 Cyclone Preparedness Program

Distribution: CPP

Time Evening of the First day - 1800

Briefing Document for the Cyclone Preparedness Programme

You do not want to be at this meeting because you want to be on the radio talking to your CPP organisers in the field. You have your system well practised and you do not think you will gain anything, but a waste of time by attending Government meetings at this time.

You are very dissatisfied with the Warning System which confuses people in the villages, and you argue hard in the meeting for a better warning system designed for people and not boats, and for announcements to be made in easy to understand Bangla or Local Dialects.

You would like to work more closely with NGOs, but you have been asked to the Government meeting at the same time as the NGO meeting, and politically you have to go to the Government meeting.

BD/13

UNDP

Distribution:

UNDP

Time

Evening of the First day - 1800

Briefing Document for UNDP

You are concerned that the system that you have helped set up at DMB will be subverted by the Ministry of Disaster Management and Relief, as happened in the May 94 cyclone. You want to use all your influence with the Government to make sure that they give DMB a chance to do what it was planned to do.

You were amazed at the time that it took the Government to give you an official assessment of damage and needs in May 94 (8 days), and very much want to improve this - and so will encourage all other donors to persuade the Government to make an aerial assessment with a trained observer as soon as possible.

You appreciate that if this is a big cyclone, you will be the coordinator of the international relief, and want to make sure that Bangladesh is not invaded and swamped by useless relief goods and people. For this reason you want to have a very clear idea of what is needed and what is not needed, and hope that WFP can give you a clear idea of food stocks.

You are not in favour of a US military assistance package if the Americans offer that, because it will take away the responsibility of the DMB to coordinate things as they were set up to do.

You are caught in a dilemma of wanting to be as helpful to the Government as possible, and being worried that the Government is not up to the job, and many poor peoples lives are at stake. For this reason you will try and cultivate the NGOs as a source of information about what is going on, and try and develop personal links to the DC from Noakhali.

You have little patience with Government bureaucracy at a time of crisis, and will strongly urge Government officials to act on their own initiative.

You will ask for a joint meeting with the Government and the NGOs as soon as possible, under the chair of the DMB.

You will urge the use of portable radios for Hatia to keep in touch with Dhaka particularly in the early days.

You have the option of calling in UNDHA who, if they are called on D-Day Minus Two or D-Day Minus One, can be on the ground in Dhaka on D-Day.

BD/14 **UNICEF**
Distribution: **UNICEF**
Time **Evening of the First day - 1800**

Briefing Document for UNICEF

You are interested in helping DMB do their work efficiently in this cyclone, but you are also interested in making sure that UNICEF plays a strong and helpful operational role itself. You will make sure that UNICEF supplies of relief materials and supplies are sent to the affected area as soon as possible, and will be using your close links to the Ministry of Health to make sure this happens.

You are also very interested in getting a clear picture of what is going on and so you will dispatch a film team as early as possible with a journalist, and use your UNICEF offices to inform you of the situation as soon as possible. You also are interested in the use of portable radios

You will send one of your staff down to the affected area for a reconnaissance and to return and give you a first hand assessment, as soon as possible because you do not trust the information which you will be receiving from the Government.

You will be ready to place the considerable logistical services of UNICEF at the disposal of the Government.

You will argue in Donor meetings, and in meetings with the Government that the Government develop a smooth working relationship with NGOs as early as possible so that both Government and NGOs resources are coordinated.

BD/15

USAID

Distribution:

USAID

Time

Evening of the First day - 1800

Briefing Document for USAID

Following the success of the marines in Operation Sea Angel, you will be looking to see if there is an opportunity for the American military to be useful again in this cyclone.

You are also interested in checking how the DMB will do since you are investing heavily in this organisation.

You are also interested to see how the new CARE system of training pre-selected NGOs to operate at the time of the cyclone

There happens to be a USAAF aircraft in Bangladesh on a training mission, and you are ready to offer this to the Government for a reconnaissance as you did in May 94 cyclone.

You are very interested to get good coordination between the Government and the NGOs established from the outset, and will want to get a common position on this with the other donors early on.

You do not think that there is very much money available from OFDA because of recent massive aid to Central Europe and Africa so you are more keen in getting the US military to help, particularly since you have had a lot of close liaison with the Bangladesh military since 1991. You want to get the military on one side and talk to them separately.

BD/16

WFP

Distribution:

WFP

Time

Evening of the First day - 1800

Briefing Document for World Food Programme

You will be a main source of information for the donors about the food supplies that are in the country, and how they can be accessed. You will be most interested in getting food out to the affected areas as soon as possible, but you will also be very interested in the donors meeting to make sure that food used up for this emergency will be replaced by other stocks from other friendly Governments as soon as possible. You do not want to jeopardise the ongoing development work, because of this cyclone.

BD/17

ODA

Distribution:

ODA

Time

Evening of the First day - 1800

Briefing Document for UK ODA

You are very worried that the Government machinery will not be up to the mark in this cyclone, and are torn between leaving it to the DMB, in which you have a large stake - and bringing in some other actors (US Military, British Military) to back up the Government.

One alternative is for you to help the NGOs as much as possible. You want to find common cause with the other donors in coordinating arrangements for the NGOs with the Government. You are also strongly urging the Government to appoint someone very senior as an interim Coordinator of the Government's response (like Mokammel Haque in 1991).

You want to make sure that whatever is happening on the ground is well documented, and will urge the donor to push for a trained observer and assessor to be on an early overflight of the area.

You are concerned about the middle ground between a small disaster manageable by the Government as 1991, and a huge full scale national emergency with all the confusion and time wasting that that involves. You would like to get donor agreement on a limited scale declaration of National emergency and request for outside help so that donor are requested to act. but not to bring in the full confusion of international responses, as in 1991.

BD/18 **UN Department of Humanitarian Assistance**

Distribution: **UNDHA**

Time **Evening of the First day - 1800**

Briefing for UNDHA

You will have to wait and see whether UNDP calls you in. If they do, you will be on the ground in Dhaka on D-Day and will offer the services of your trained observers and organisation.

BD/19 **ADAB**
Distribution: **ADAB**
Time **Evening of the First day - 1800**

Briefing Document for ADAB

ADAB's role in this is to encourage competent NGOs to get involved, and to try and get clear Government directions to the DC about coordinating the roles of NGOs with the Government and the Red Crescent, and to make sure that Donors are well briefed on the work of NGOs.

You will be asking the PM's office for an early meeting with the NGOs as in May 94 cyclone, and you will be asking the PM's office to deal with the problem of price hiking which was not dealt with in May 94.

You will also want to make sure that an NGO representative is on the first overflight so that he/she can come back and report the situation to the NGOs.

You will want to get a clear idea at the start of what NGOs are working where, and get a clear idea of who has got medical teams to send in first.

As soon as possible you want to set up a control room at ADAB, and ask everyone considering working in the cyclone to make sure they keep ADAB informed using the DRTS forms.

You want to get a combined NGO position the use of radios, and lobby for their use with the Government.

You want to make sure that all NGOs who get involved are competent and practised. You are worried about "guerilla" NGOs coming in and spoiling the name of the NGOs.

You are concerned with improving the image of the NGOs vis-a-vis the religious extremists.

BD/20

BRAC

Distribution :

BRAC

Time

Evening of the First day - 1800

Briefing Document for BRAC

You are prepared to mount a big campaign providing the Disaster is a serious one - you do not want to disrupt your development work for a minor disaster that can be helped by others.

You also want to make sure that you will be able to work in the areas where you are already doing development work: if you are instructed to work in new areas, you are not interested.

You are worried about the need for quick decisions in the immediate aftermath of the cyclone, and want to establish a joint NGO working group in the affected area as soon as possible so that the NGOs coordinate amongst themselves about what to do.

BD/21 CARE

Distribution : CARE

Time Evening of the First day - 1800

Briefing Document for CARE

You are faced with a dilemma about the size of the disaster. Is it big enough to warrant CARE taking an operational role - or is it one in which CARE should assist its pre-qualified NGOs? and if the latter, does CARE have any pre-qualified NGOs in the area? Or should it consider inviting some in from outside the Cyclone area?

You need to keep close liaison with USAID who will be funding your work.

You will be urging the use of mobile radios in this cyclone for the NGOs, and clear, early coordinating mechanisms between Government and NGOs.

BD/22

OXFAM

Distribution:

OXFAM

Time

Evening of the First day - 1800

Briefing Document for OXFAM

You are willing as always to be first in, and mount an operation if the disaster is big enough, otherwise you will be happy to work through local organisations in the area.

You are concerned that:

- a. there is an NGO representative on one of the first flights who can report back to the NGOs
- b. there is clear coordination rules established early on with the Government which will help NGO to make a useful response. These are mostly to do with decisions of areas in which to work, and allowing NGOs to assess who is needy and who should receive food.
- c. that NGOs who are prepared for a two week relief effort, and donors who are prepared to fund this, commit themselves as early as possible
- d. that NGOs consider the use of money rather than assistance in kind as a better way of working
- e. there is a meeting with Government as early as possible to get clarity on some of these points

BD/23 **CARITAS**
Distribution: **CARITAS**
Time **Evening of the First day - 1800**

Briefing Document for CARITAS

As usual CARITAS is quick off the mark, and is ready to mount a serious relief operation quickly. You have the same concerns as the other NGOs:

You are concerned that:

- a. there is an NGO representative on one of the first flights who can report back to the NGOs
- b. there is clear coordination rules established early on with the Government which will help NGO to make a useful response. These are mostly to do with decisions of areas in which to work , and allowing NGOs to assess who is needy and who should receive food.
- c. that NGOs who are prepared for a two week relief effort, and donors who are prepared to fund this commit themselves as early as possible.
- d. that NGOs consider the use of money rather than assistance in kind as a better way of working.
- e. there is a meeting with Government as early as possible to get clarity on some of these points.

BD/24 Proshika

Distribution : Proshika

Time Evening of the First day - 1800

Briefing Document for Proshika

You are prepared to mount a big campaign providing the Disaster is a serious one - you do not want to disrupt your development work for a minor disaster that can be helped by others.

You also want to make sure that you will be able to work in the areas where you are already doing development work: if you are instructed to work in new areas, you are not interested.

If you do decide to work in this cyclone, you have some worries:

You are concerned that:

- a. there is an NGO representative on one of the first flights who can report back to the NGOs
- b. there is clear coordination rules established early on with the Government which will help NGO to make a useful response. These are mostly to do with decisions of areas in which to work , and allowing NGOs to assess who is needy and who should receive food.
- c. that NGOs who are prepared for a two week relief effort, and donors who are prepared to fund this commit themselves as early as possible.
- d. that NGOs consider the use of money rather than assistance in kind as a better way of working.
- e. there is a meeting with Government as early as possible to get clarity on some of these points.

BD/25 **Press**
Distribution: **Representatives of two newspapers**
Time **Evening of the First day - 1700**

Briefing for the Press

You should try and meet anyone you can at any time that you can in order to write stories that will appear during the length of time of the simulation. You should try and sit in on some of the meetings. You should write major headlines, sub headlines and short articles which will be circulated during the day only.

A document from the Prime Minister will be leaked to you, and other documents will be leaked during the course of the exercise.

You will want to get down to the affected area as soon as possible, and will ask for a seat on any plane.

You particularly want to concentrate on two stories:

- a. Is the Government being efficient under its new DMB system?
- b. Is the Government doing anything about the merchants' price hikes and profiteering?

You will try and bring out a single sheet mock newspaper with your stories in it during the simulation . These will be distributed through the Secretariat.

BD 26 Telegraphs and Telecommunications Board

Distribution: T&T Board

Time Evening of the First day - 1800

Briefing Document for T&T Board

Your function is to make sure that phone connections with the disaster area are restored as soon as possible.

As soon as the cyclone strikes the phone lines to the disaster area will be broken. You must inform the meeting.

(The radio may or may not also be working)

You will restore the lines on D-Day Plus Two and should so inform the meeting.

BD 27 Local Government and Rural Development

Distribution: LGRD

Time Evening of the First day - 1800

Briefing for LGRD

You should be able to offer the meeting the maps of the affected Thanas and the use of the LGED GIS

You should also be able to offer the meeting information about locations and standard of cyclone shelters

You will offer the services of your Ministry to the DC and Thana officials of the affected district, and will contact the DC directly outside the meeting to find out his needs.

You will offer to restore broken roads as soon as possible

BD 28

SPARRSO

Distribution:

SPARRSO

Time

Evening of the First day - 1800

Briefing Document for SPARRSO

Your primary function is in the pre-disaster period in making sure that information is passed to the Meteorological Office as quickly as possible.

You will be interested to observe and comment on how quickly your information is used, and how quickly it is broadcast to the people.

BD 28 **Cabinet Division**

Distribution: **Cabinet Division**

Time **Evening of the First day - 1800**

Briefing Document for the Cabinet Division

Your principal interest is in the political and international context of the disaster:

- Firstly you will want to know how serious the disaster is, and whether you need to make an international appeal
- Secondly you will be interested to know which nations are likely to help if an international appeal is made, and if Bangladesh can benefit politically from such an appeal
- Thirdly you will be interested to ask if there is any political unrest caused by the disaster or whether the Government has the peoples' confidence.

Situation Reports

These messages have come from different sources and are distributed to different people.

**Wireless Message
Relief Control Room
Ministry of Disaster Management and Relief**

SR/1

Date: 24/08/1994

From: D.C., Noakhali
To : Ministry of Relief

Message No. Hat/241

Weather is bad in all Thanas from yesterday. As announced by Radio/TV, Signal No. 7 is hoisted. I have directed all the TNOs to take preventive measures. TNOs also asked to form and convene coordination committee meeting. People from low lying areas have been advised to come within embankment. I am keeping regular touch with all TNOs.

My fund and stock of wheat of my district is very limited.

Name of Sender : Biplob Kumar
Designation : Wireless Operator
Time: 0600 hrs.
Date : 24/08/1994

Name of Receiver: Abdul Halim
Designation: Wireless Operator
Date : 24/08/1994

Wireless Message
Relief Control Room
Ministry of Disaster Management and Relief

SR/2

Date: 24/08/994

From: TNO, Hatiya via: D.C., Noakhali
To : Ministry of Relief
Time: 1200 hrs.

Message No. Hat/242

Sky is very cloudy. Little rain now and then all over the Island. I convened a meeting of coordination committee at 11:00 a.m. in my office and reviewed the preparatory arrangements. All the Union Council Chairmen and Members have been directed to warn the people about the great danger signal no.10. They will use Ansar, VDP and others. Red Crescent volunteers are very active. All the people have been warned to go to the nearest shelter.

Weather is very very bad. I think, there will be a serious cyclone in Hatiya. In our local LSD, we have only 24 MTs of wheat. I have no cash, no relief goods.

Name of Sender : Biplob Kumar
Designation : Wireless Operator
Time: 0600 hrs.
Date : 24/08/1994

Name of Receiver: Abdul Halim
Designation: Wireless Operator
Date : 24/08/1994

SR/3

Date: 24/08/994

From: Rafiqul Islam, DUS, Hatiya

To : OXFAM/ADAB

Time: 6:00 P.M.

Message No. Hat/243

Message sent through CPP wireless

Situation is very very bad. DUS and other NGO workers, CPP volunteers, Ansars, VDP all warning signal no. 10. The wind is very strong. It is now very difficult for the people to go to the cyclone shelters. By now, approx. 10,000 people have already taken shelter to 25 cyclone shelters, schools and other buildings.

I am very worried about the people who lost their houses from the north of Hatiya due to erosion of river bank. They live in the newly accreted land, south of Jahajmara and Burirchar Unions outside the embankment. Also very worried about 4000 people living in Nizhum Dwip.

Today, we have purchased chira, muri, gur for the people taken shelter in the cyclone shelters with our own fund. We have formed five medical teams and kept them ready with emergency medicine to go to the field if the cyclone strikes.

As you know, we have Tk. 6,50,000 as disaster fund contributed by the group members. In the event of disaster to meet emergency, this fund will be utilised. I hope you will reimburse the same if utilized.

Name of Sender : Biplob Kumar
Designation : Wireless Operator
Time: 0600 hrs.
Date : 24/08/1994

Name of Receiver: Abdul Halim
Designation: Wireless Operator
Date : 24/08/1994

12

**Wireless Message
Relief Control Room
Ministry of Disaster Management and Relief**

SR/4

Date: 24/08/994

From: TNO, Hatiya

To : DC, Noakhali

Time: 19:30 hrs.

Message No. Hat/244

Verbal Message:

Cyclone is striking Hatiya now. Heavy storm and heavy rain over the Island. Trees are falling. Thatched houses and CI sheet roofs are flying. Wind speed is more than 200 KM per hour.

I think, the damage will be very very severe. I have no fund available for any relief work. Please sanction Tk. 50,000 to purchase emergency food immediately. Also, send 500 tons of wheat and other relief goods. I can't talk any more. Doors, windows are breaking in my building.

Name of Sender : Biplob Kumar
Designation : Wireless Operator
Time: 19:30 hrs.
Date : 24/08/1994

Name of Receiver: Abdul Halim
Designation: Wireless Operator
Date : 24/08/1994

SR/5

CYCLONE DISASTER—AUGUST 24, 1994

**A FIRST HAND AERIAL SURVEY REPORT
AND
RECOMMENDATION FOR EMERGENCY INTERVENTION**

Bangladesh Disaster Preparedness Centre (BDPC)

August 25, 1994

65

1. INTRODUCTION:

A severe cyclonic storm with hurricane intensity hit the coastal belt of Bangladesh. The eye of the cyclone crossed over the off shore island of Hatiya at 8:00 p.m. Bangladesh time on August 24, 1994.

I had an opportunity of using a Bangladesh Air Force Helicopter to make an aerial survey of the affected areas in the morning of August 25, 1994.

It is my pleasure to present a brief report on the damage caused and an outline of emergency relief plan for immediate intervention by organisations concerned with disaster management.

This report should not be considered as final and complete on Rather it should be used as a basis for immediate Intervention into the situation to alleviate the sufferings of the people affected by the the cyclone.

2. AFFECTED AREAS:

Areas affected by the cyclone could be categorized as follows:

Category A: Severely affected areas

Thana	Unions
Hatiya	Char Ishwar Burir Char Sonadia Jahajmara

Category B: Moderately Affected Areas Unions

Thana	Union
Hatiya	Horni Chanandi Sukhchar Nalchira Charking Tamaruddi

See attached map of Hatiya from Small Area Atlas

3. NUMBER OF DISTRESSED PEOPLE: Appx. 60,000

66

4. TYPES OF DAMAGE:

Houses Damaged: Approximately 40% of the thatched houses in Category A area is **totally** damaged. Total number is estimated at 8,000.

Approximately 50% of the thatched houses in Category B is **partially** damaged. Total number would be approximately 12,000.

Human Deaths and Injuries: High impact disasters like cyclones cause deaths due to drowning and injury to the people due to collapse of house or flying parts of housing materials or branches of trees etc. The number of people killed and injured cannot be ascertained by aerial survey. From the dead bodies seen from the helicopter in areas outside the embankment and in Nijhum deep, it is estimated that the number of human lives lost will be appx. 1500.

Crop Damaged: Approximately 80% of the standing crop damaged. Cash crop namely betel leaves, banana plants are damaged 100% in Category A area.

Loss to Fishing Industry: Appx 10% of the population of Hatiya live on fishing in the river and bay. Aleast 80% of their boats and nets have been daraged.

Institution Damaged: Corrugated Iron Sheet roofing of some educational institutions have been blown away.

5. EMERGENCY RELIEF PROGRAM RECOMMENDED:

First Aid: Immediately 10 medical teams should be sent to all the 9 unions of Hatiya to provide First Aid services to the injured (In 1991 a number of deaths were reported caused due to secondary infection.)

Food: Dry food ration for 2 weeks per family of 6 members is recommended immediately.

Daily ration per person should be as follows:

- | | |
|---------------|--------|
| a) Rice | 400 gm |
| b) Lentil/Dal | 50 gm |
| c) Edible Oil | 20 gm |
| d) Salt | 5 gm |

This daily ration will provide 1880 kilo calories of energy and 50 gm of protein and will cost Tk. 9 per person per day.

Warning: No gruel kitchen should be started. Distribution of cooked food is not recommended. We have seen people cooking even in their dilapidated houses. Distribution of dry food ration will help return life to normalcy.

Housing: Construction of one room of the size 18'x12' with the following materials would cost approximately Tk. 8,000/-.

- a) Borak bamboo for pillars
- b) Muli bamboo for walling and roof structure
- c) Thatch for roofing
- d) Wire, jute rope etc.

Construction of houses is recommended in areas under Category A.

Repair of houses: In areas under Category B houses have been partly damaged. Provision of house building materials e.g. bamboo, thatch, rope etc for value of average Tk. 1,200 will help repair/reconstruction of the houses.

Credit: Credit/Economic support could be provided to Fishermen, petty traders and people affected due to loss of betel leaves cultivation at a rate of Taka 10,000 per family.

5. ADVICE TO THE NGOS AND DONORS:

Cyclone has damaged a very small area. Dozens of NGOs should be involved in this small scale relief and rehabilitation operation. Only those NGOs having ongoing development program in Noakhali and Hatiya areas should be involved in the operation. NGOs are advised to follow the specimen formats and instructions contained in "Disaster Management Handbook For Bangladesh" produced by BDPC and for assessment of damage, survey of the need, purchase & distribution of relief goods, reporting, accounting, record keeping etc. They should ensure local people's participation and

make maximum use of the volunteers of Cyclone Preparedness Program.

Donors should assess the request from the NGOs carefully and ensure effective monitoring and supervision through their staff or consultants.

Fruitful and effective coordination must be ensured between operating NGOs and Government machineries at all levels.

6. ESTIMATED TOTAL BUDGET:

Items	Taka	US \$
a. First Aid - 10 teams x 6 people x 15 days x Tk 500	450,000	11,250
b. Food - Tk.9 x 60,000 x 14 days	7,560,000	189,000
c. House:		
i) Construction Tk. 8,000 x 8000	64,000,000	1,600,000
ii) Repair Tk1,200 x 12000	14,400,000	360,000
d. Credit Support Tk10,000 x 2000 families	20,000,000	500,000
	Total	
e. Overhead/Contingency	10,641,000	266,025
	Grand Total	
	117,051,000	2,926,275

MAUZA GEO-CODE MAP

36-HATIYA UPAZILA

65-NOAKHALI DISTRICT

87-SUDHARAM (NOAKHALI SADAR)

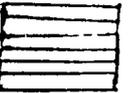
73-RANGATI

HATIYA RIVER

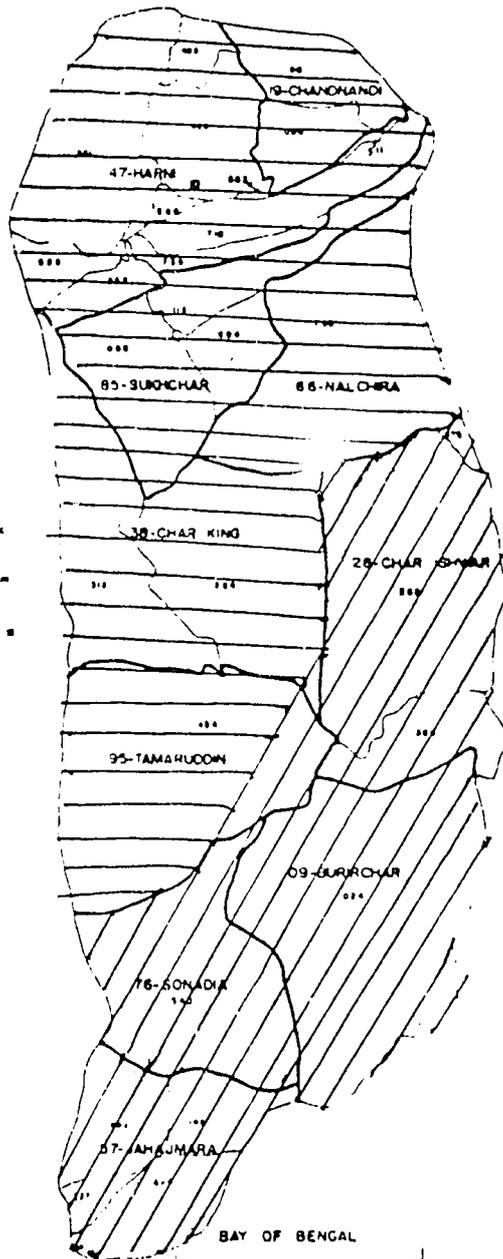
SEVERELY →



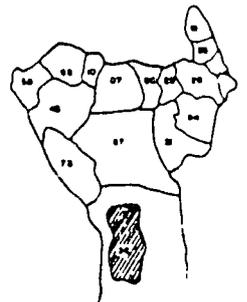
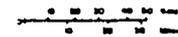
MODERATELY →



05-BARISAL



65-NOAKHALI DISTRICT.



DUPLEXED BUREAU OF STATISTICS-69

LEGEND

MAUZA BOUNDARY	—————
UPAZILA BOUNDARY	—————
DISTRICT BOUNDARY	—————
UPAZILA NO	05
DISTRICT NO	05 184 170

**Wireless Message
Relief Control Room
Ministry of Disaster Management and Relief**

SR/6

Date: 25/08/994

From: TNO, Hatiya
To : DC, Noakhali and
Secretary, Ministry of Disaster Mgmt. & Relief
Time: 12 Noon

Message No. Hat/245

A severe cyclone has destroyed Hatiya completely. The wind speed was over 250 KM per hour. The cyclone had water surge with the wave of 16 ft. Everything is damaged. The telephone communication with the Unions totally destroyed. Electric lines destroyed. All telephone and electric poles damaged.

I have sent messengers to all the Unions to report me with the D-Form. So far, the first information about damage coming from different areas are as follows:

Human Lives Lost	:	Approx. 20000
Cattle Heads Lost	:	Over 50000
Crop Damaged	:	100%
House Damaged	:	Completely: 100% Kutcha houses 80% strong houses

Hatiya has many fishermen. They have lost all their boats and nets.

No information received from Nizhum Dwip. Possibly, their VHF set is destroyed. All our communication facilities destroyed totally excepting the T&T Wireless and CPB Wireless.

Situation is very very bad. People have no food, no shelter, no medicine. I have no money, no relief goods excepting 20 M.Tons of wheat in the LSD. That too is wet now. Please sanction immediately the following:

Cash	:	Tk. 20,00,000
G.R. Wheat	:	5,000 M.Tons
CI Sheet	:	10,000 bundles
House Bldg. Grant	:	Tk. 12,00,000
Shari	:	1,00,000 pcs.
Lungi	:	1,00,000 pcs.
Children Garments	:	1,00,000 pcs.
Drinking Water	:	50000 Jerricans
Water Purification Tab	:	10 Million pcs.

Also, please send 50 medical teams.

The wife and 4 years son of my Magistrate Aminul Haque are also dead. Most of the officers seriously affected and have become very weak mentally and physically.

Name of Sender : Biplob Kumar
Designation : Wireless Operator
Time: 12 Noon
Date : 25/08/1994

Name of Receiver: Abdul Halim
Designation: Wireless Operator
Date : 25/08/1994

Background on Hatia

HB

BACKGROUND INFORMATION ON HATIYA

Distribution to : All Participants
Directing Staff

General Information

Hatiya, a Thana under the district of Noakhali, is located 28 miles south of Maijdi, the district HQ, and 200 miles south of the Capital City of Dhaka.

The Thana is composed of two Islands, Hatiya and Nijhum Dwip. Both are located in the bay of Bengal and separated by a span of 12 miles of bay water which can be negotiated by motorised boat only when the sea is calm. Hatiya has an area of 380 sq km and Nijham Dwip 35 sq km. The history of human habitation in the newly formed island of Nijhum Dwip is fairly recent for 25 years only.

The total population of the Thana is 285,000 of which only 4000 live in Nijhum Dwip. The average family size in Hatiya is 6.5. Women constitutes 54% of population and the children under 15 years 42%. While 26% of the people have transistor radios, only 5% have access to T.V.

Economy: Agriculture is the mainstay of economy followed by fishing. 72% of the working force are employed as wage earners in these two sectors. There is no industry in the islands.

Housing: While 66% of the houses are made of bamboo and thatches, 29% have corrugated iron sheet roofing. Only 5% of the houses are made of bricks with reinforced cement concrete roof.

Utilities: Only the island of Hatiya has the supply of electricity produced by diesel generator installed in the island and transmitted by overhead electric lines. These installations

have been proved to be very vulnerable to previous cyclones. There is no supply of piped water in Hatiya and Nijhum Dwip. Inadequate number of deep tubewells (1000 feet and above) are the only source of pure water. These too are destroyed by strong wind and water surge in a cyclone situation.

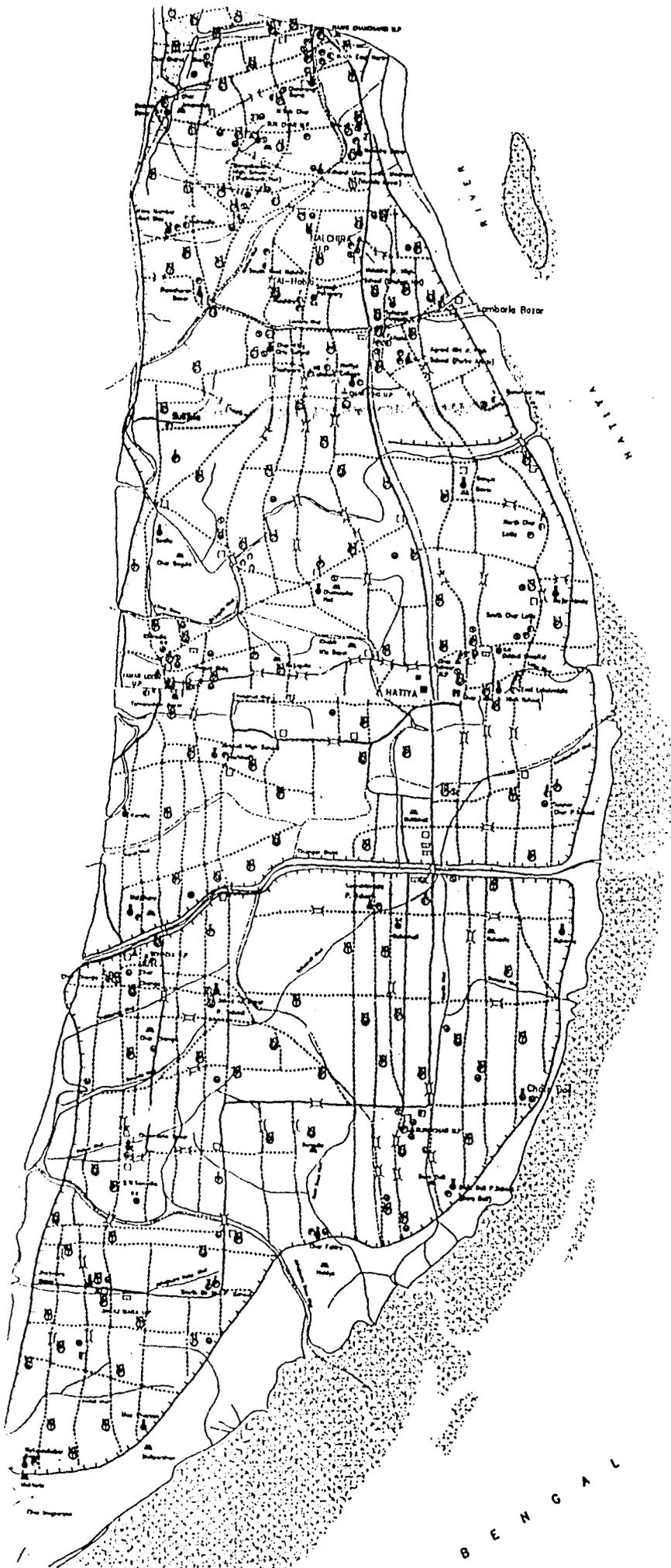
Transport: From Dhaka there is road communication 190 kms to Char Bata (under Noakhali) where from one has to avail the only Sea Truck to reach Hatiya. Sea Truck plies only once a day leaving Char Bata at 8 A.M arriving Hatiya at 11-30 A.M. Inside Hatiya there is only one brick soaling road stretching from north to south. There is no road communication in Nijhum Dwip.

Tele Communication: The existing overhead telephone line from the north to the middle of Hatiya is likely to be damaged by cyclones of medium intensity. The wireless sets of T & T Board (VHF) and Cyclone Preparedness Programme (SSB) of BRCS are expected to operate even after a severe cyclone.

Vulnerability & Capacity:

Erosion is a major problem of Hatiya. While the northern 10 miles of Hatiya island has been eroded in last 20 years, land accretion is a continuous process in the south and south east. People loosing houses and properties in the north are settling in the newly accreted land (chars) out side the earthen embankment in the south. There are 35 cyclone shelters in Hatiya but not a single one in the chars and Nijhum Dwip making over 60,000 people very vulnerable to cyclone in general and associated water surge in particular.

Two NGOs eg. Dwip Unnayan Sangstha (DUS) and Proshika, running development programmes in both the islands, have considerable experience in running disaster management programmes. They have excellent working relationship with the Thana administration and the local government leaders.



THANA
HATIYA
DISTRICT
NOAKHALI

LEGEND

- International Boundary
- District Boundary
- Thana Boundary
- Union Boundary
- National/Regional Highway
- Feeder Road Type "A"
- Feeder Road Type "B"
- Rural Road
- Bridge/Culvert/Sluice
- Railway Line
- Embankment
- River & Large Canal
- Steamer Dal/Launch Dal/Villy
- Dist. H.Q. [Symbol]
- Thana H.Q. [Symbol]
- Union H.Q. [Symbol]
- Growth Centre/Market
- Schools Primary/Secondary/Madras
- College
- L.S.D./C.S.D. Godown
- Airport/Helipad
- Hospital
- Family Welfare Centre/Dispensary
- Coastal C.C. Sub-coastal C.C. [Symbol]
- Community Centre
- Cluster Village
- Public Office
- Cyclone Shelter
- Existing
- Under Construction
- Proposed
- KMs
- Existing
- Under Construction
- Proposed
- Sand Bank

NOTE

- [Symbol] = PHD/DA
- [Symbol] = BDRCS
- [Symbol] = HCOs
- [Symbol] = Facilities Dept.
- [Symbol] = MESP (n Existing Primary/Secondary School/Madras)
- [Symbol] = MESP (n New Primary/Secondary School)
- [Symbol] = P.School = Primary School
- ng. = Non-govt.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
MULTIPURPOSE CYCLONE SHELTER PROGRAMME
UNEP/WHO BANG/988 PROJECT 1982/91/988
PREPARED BY

Special Weather Bulletins

These have come from the Metereological Office, Dhaka

Special Weather Bulletin - 1

23 August-1994 at 1800 Hrs.

A depression has formed over East Central Bay and adjoining South East Bay and was centered at 1400 Hrs. today about 870 Kms south west of Chittagong port.

(Lat. 14.5° N & Long. 89.8° E)

It is likely to intensify further and move initially in a west/north westerly direction.

Maximum sustained wind within 45 Kms of the depression center is about 40 Kph rising to 50 Kph in gust/squalls.

Maritime ports of Chittagong, Cox's Bazar and Mongla have been advised to hoist Distant Cautionary Signal No. 1. repeat- 1.

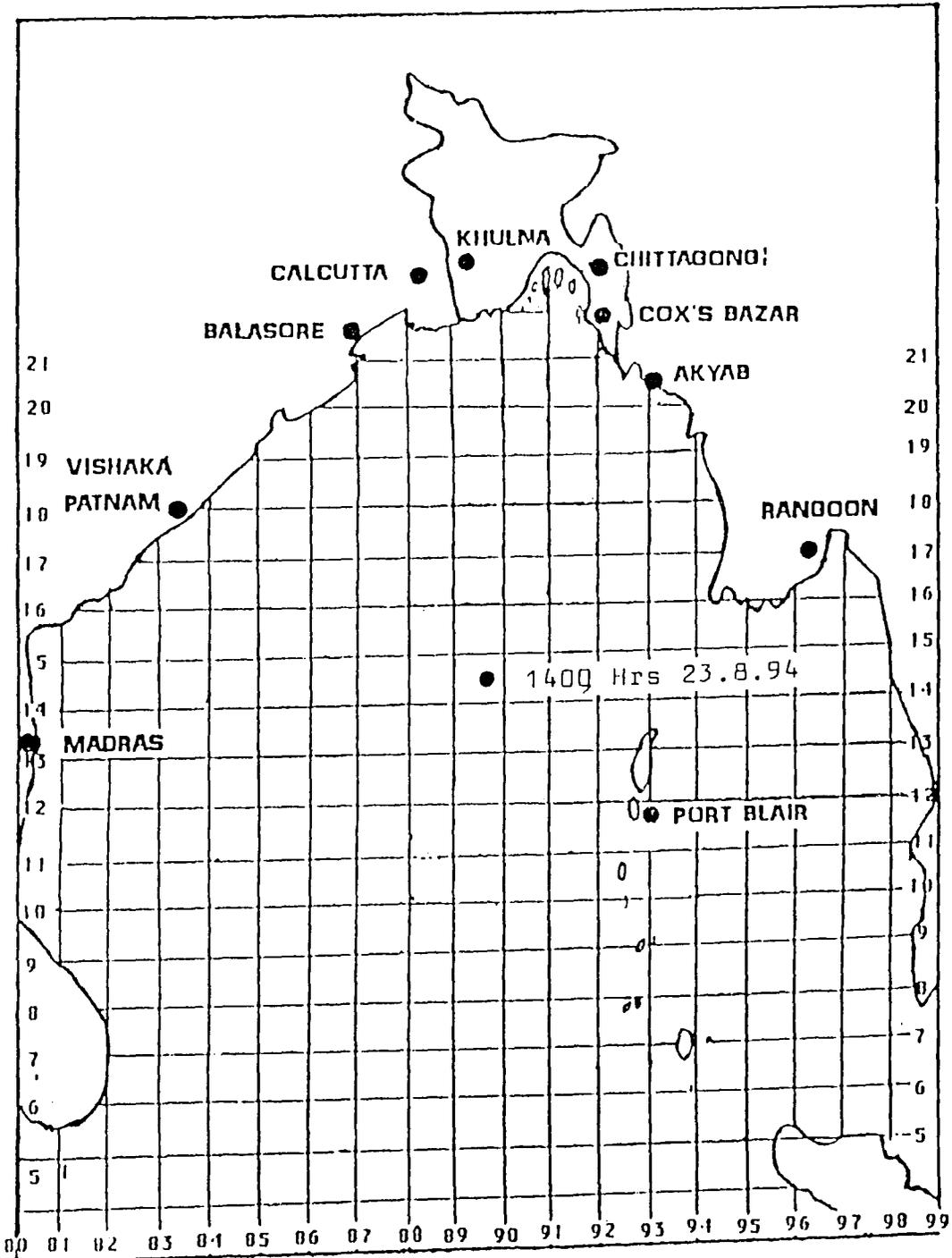
All fishing boats and trawlers in the deep sea have been advised to come close to the coast and proceed with caution.

Received from

Duty Forecasting Officer
Met. Office
Dhaka

 **DEPRESSION TRACKING MAP**
CYCLONE PREPAREDNESS PROGRAMME

CW/1



Special Weather Bulletin - 2

23 August 1994 at 2100 Hrs.

Depression over East Central Bay and adjoining South East Bay moved North/North Westward and rapidly intensified into a Cyclonic storm and was centered at 2000 Hrs. today about 750 Kms. south/south west of Chittagong port.

(Lat. 16.0° N & Long. 89.5° E)

It is likely to intensify further and move in a north westerly direction at a speed of about 30 Kph. Sea will remain rough.

Maximum sustained wind within 56 Kms. of the storm center is about 65 Kph rising to 90 Kph in gust/squalls.

Maritime ports of Chittagong, Cox's Bazar and Monghla have been advised to lower Distant Cautionary Signal No. 1 but instead hoist Local Warning Signal No. 4 repeat- 4.

Coastal districts of Bangladesh may experience gusty/squally winds from morning of 24 August, 1994.

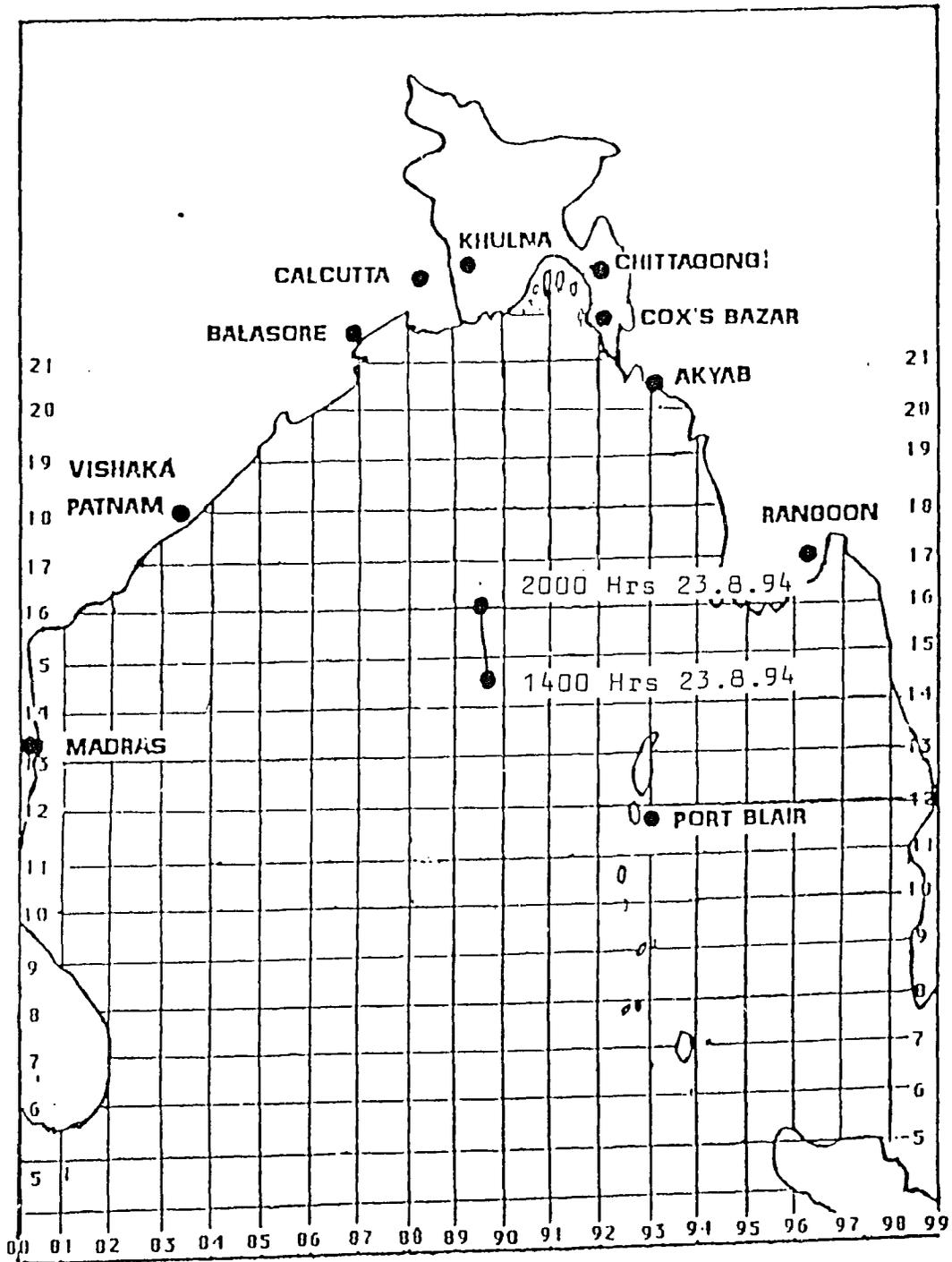
All fishing boats and trawlers over deep sea have been advised to take shelter immediately till further notice.

Received from

Duty Forecasting Officer
Met. Office
Dhaka.

C.W/2

 **DEPRESSION TRACKING MAP**
CYCLONE PREPAREDNESS PROGRAMME



Special Weather Bulletin - 3

24 August 1994 at 0400 Hrs.

Cyclonic storm over East Central Bay and adjoining West central Bay moved north north west ward and intensified into a severe cyclonic storm and was centered at 0200 hrs. today about 500 Kms. South/South West of Chittagong port.

(Lat. 17.5° N and Long. 89.5° East)

It is likely to intensify further and move in a northerly direction at a speed of 30 Kms/hr. and its peripheral gusty wind may touch Bangladesh coast by next few hours.

Maximum sustained wind within 75 Kms. of the storm center is about 90 Kph rising to 120 Kph in gust/squalls. Sea will remain high.

Maritime ports of Chittagong has been advised to lower Local Warning Signal No. 4 but instead hoist Danger Signal No. 6 repeat- 6.

Maritime ports of Mongla has been advised to lower distant warning signal No.2 but instead hoist Danger Signal No. 5 repeat- 5.

Maritime ports of Cox's Bazar has been advised to keep hoisted Local Warning Signal No.4 repeat- 4

River ports of the districts of Chittagong, Noakhali, Bhloa, Barisal, Laxmipur, Feni, Patuakhali and Barguna have been advised to keep hoisted Riverine Danger Signal No. 3 repeat- 3.

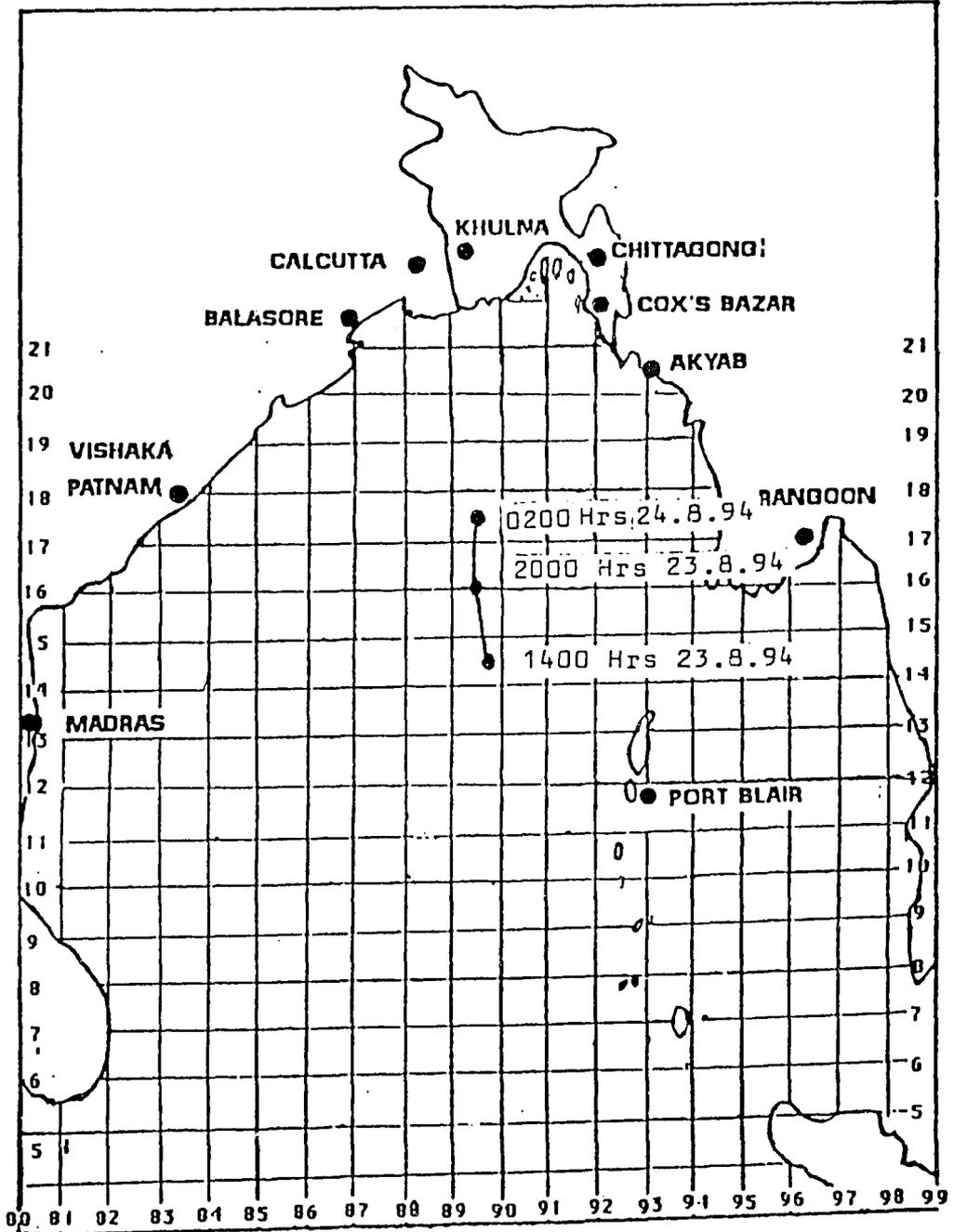
Low lying areas of the district of Chittagong, Feni, Noakhali, Laxmipur, Bhola, Patuakhali and Barisal and their offshore islands and chars are likely to be inundated by a storm surge of height 08 to 10 feet above normal astronomical tide.

All fishing boats and trawlers over North Bay have been advised to remain in shelter till further notice.

Received from

Duty Forecasting Officer
Met. Office
Dhaka

 **DEPRESSION TRACKING MAP**
CYCLONE PREPAREDNESS PROGRAMME



Special Weather Bulletin - 4

24 August 1994 at 0800 Hrs.

Severe Cyclonic storm over East central Bay and adjoining North Bay moved North North East wards into North Bay and intensified into a severe Cyclonic storm with a core of hurricane wind and was centered at 0700 hrs. today about 350 Kms. South/South West of Chittagong port.

(Lat. 19.5° N and Long. 89.6° East)

It is likely to intensify further and move in a north easterly direction at a speed of 35 Kms/hr. and may cross Noakhali Chittagong coast by next 5 to 6 hours.

Maximum sustained wind within 75 Kms. of the hurricane center is about 190 Kph rising to 210 Kph in gust/squalls. Sea is very high.

Maritime ports of Chittagong has been advised to lower Danger Signal No. 6 but instead hoist great Danger Signal No. 9 repeat- 9.

Maritime ports of Monghla has been advised to lower Danger Signal No. 5 but instead hoist Great Danger Signal No. 8 repeat- 8.

Maritime ports of Cox's Bazar has been advised to lower local warning signal No.4 but instead hoist Danger Signal No. 6 repeat- 6

River ports of the district of Chittagong, Noakhali, Bhola, Barisal, Laxmipur, Feni, Patuakhali and Barguna have been advised to lower Riverine Danger Signal No. 3 but instead hoist Riverine Great Danger Signal No. 4 repeat- 4.

River port of the Districts of Cox's Bazar, Chandpur, Pirojpur, Eagerhat and Khulna have been advised to keep hoisted Riverine Danger Signal No. 3 repeat- 3

Low lying areas of the districts of Chittagong, Feni, Noakhali, Laxmipur, Bhola, Barisal, Patuakhali and their offshore islands and chars are likely to be inundated by a storm surge of height 15 to 18 feet above normal astronomical tide.

All fishing boats and trawlers over North Bay have been advised to remain in shelter till further notice.

Received from

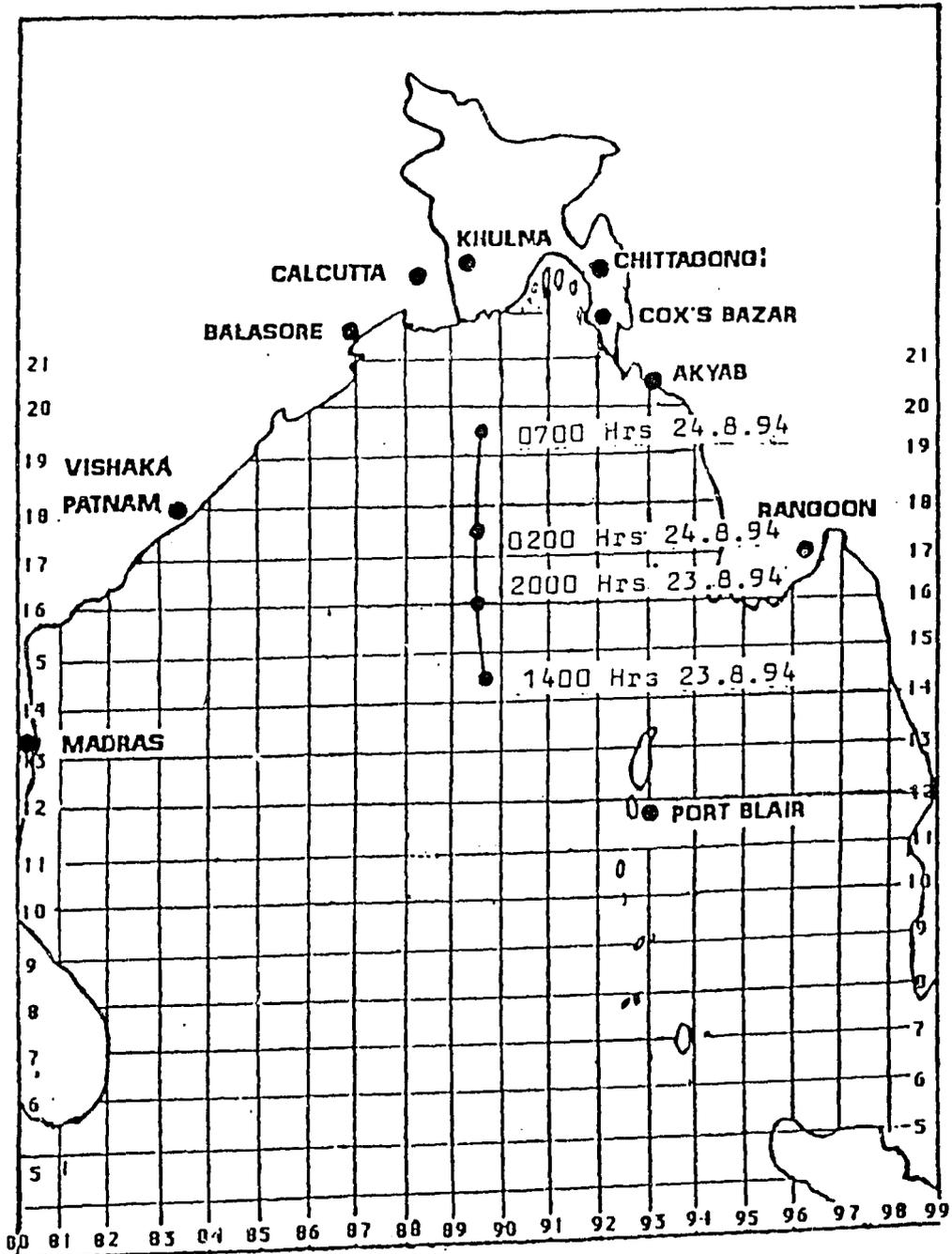
Duty Forecasting Officer
Met. Office
Dhaka.



DEPRESSION TRACKING MAP

CYCLONE PREPAREDNESS PROGRAMME

CW/2



Special Weather Bulletin Sl. No. 5

24 August 1994 at 1400 hrs.

Radar observation from Cox's Bazar indicates that Severe Cyclonic storm with a core of hurricane wind over North Bay and adjoining Bay areas moved North East wards and lay centered at 1300 hrs today close to Noakhali coast and 90 Kms. South West of Chittagong port.

(Lat. 21° N and Long. 90.8° East)

It is approaching in a north north easterly direction at a speed of 40 Kms/hr. and may cross Noakhali coast grazing Hatiya island by next 4 to 5 hours.

Maximum sustained wind within 75 Kms. of the hurricane center is about 190 Kph rising to 210 Kph in gust/squalls. Sea is very high.

Maritime ports of Chittagong has been advised to lower Great Danger Signal No. 9 but instead hoist Great Danger Signal No. 10 repeat- 10.

Maritime ports of Cox's Bazar has been advised to keep hoisted Great Danger Signal No. 9 repeat- 9

Maritime ports of Monghla has been advised to keep hoisted Great Danger Signal No. 8 repeat- 8.

River ports of the district of Chittagong, Noakhali, Bhola, Barisal, Laxmipur, Feni, Patuakhali and Barguna have been advised to lower Riverine Danger Signal No. 3 but instead hoist Riverine Great Danger Signal No. 4 repeat- 4.

River port of the Districts of Cox's Bazar, Chandpur, Pirojpur, Bagerhat and Khulna have been advised to keep hoisted Riverine Danger Signal No. 3 repeat- 3

Low lying areas of the districts of Chittagong, Feni, Noakhali, Lakshmipur, Bhola, Barisal, Patuakhali and their offshore islands and chars are likely to be inundated by a storm surge of height 15 to 18 feet above normal astronomical tide.

All fishing boats and trawlers over North Bay have been advised to remain in shelter till further notice.

Received from

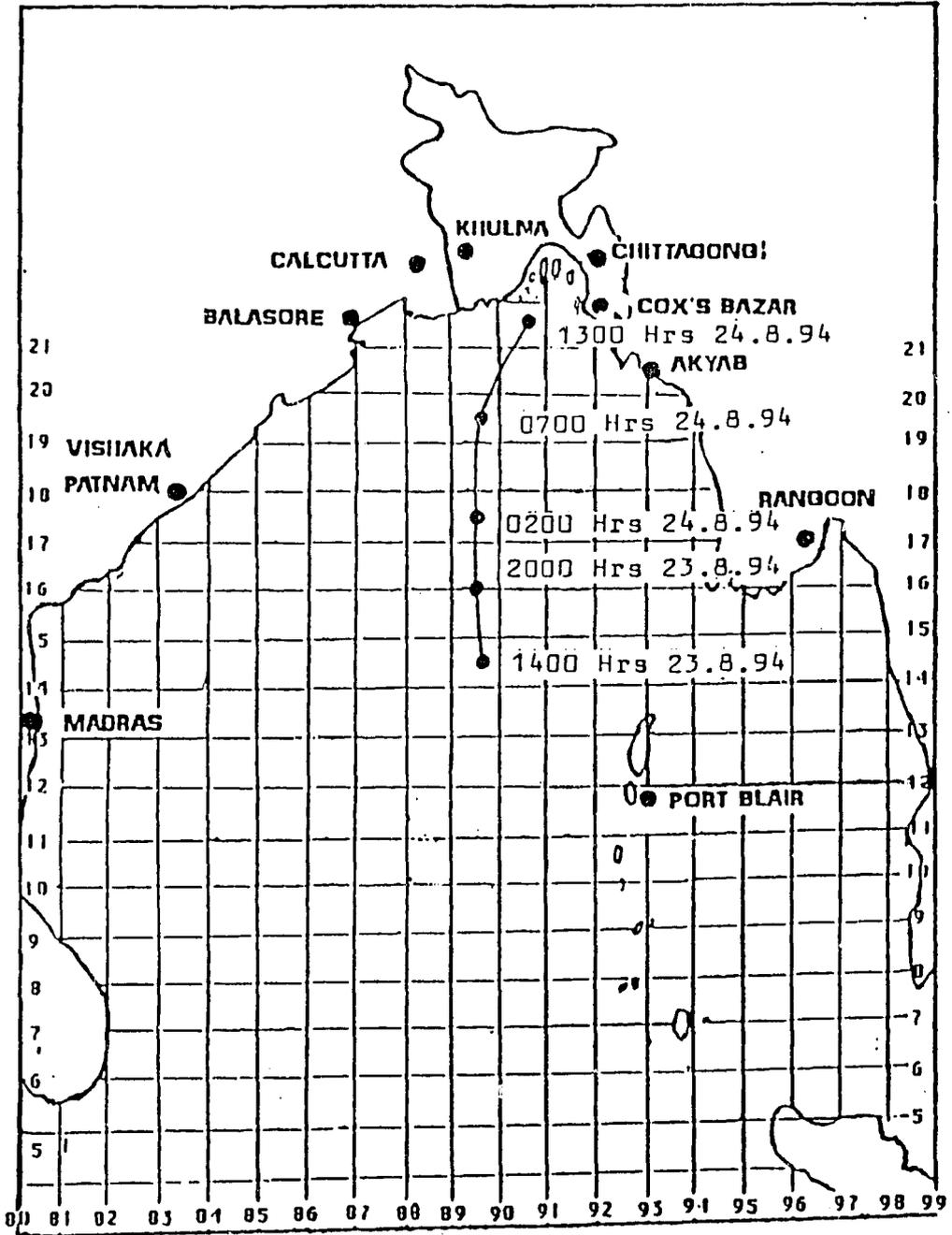
Duty Forecasting Officer
Met. Office
Dhaka.

C.W/5



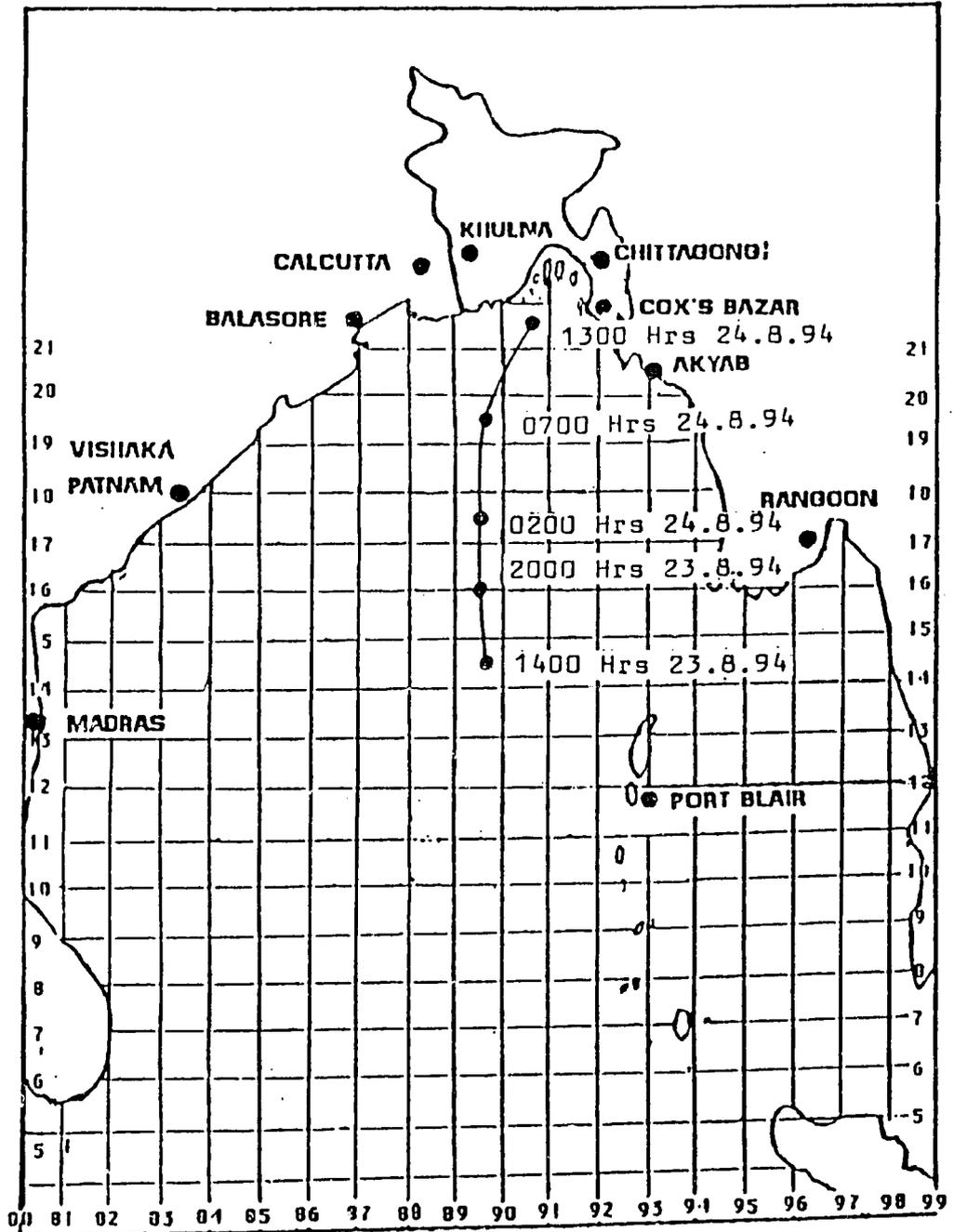
DEPRESSION TRACKING MAP

CYCLONE PREPAREDNESS PROGRAMME



DEPRESSION TRACKING MAP

CYCLONE PREPAREDNESS PROGRAMME



Special Weather Bulletin - 6

24 August 1994 at 2000 hrs.

Latest Radar observation from Khepupara indicates that Severe Cyclonic storm with a core of hurricane wind made landfall at Noakhali coast grazing over Hatiya island and lay centered at 1900 hrs. tonight slightly West of Chittagong port.

It is likely to continue crossing for next 2 or 3 hrs. and moved further inland in a North Easterly direction and weakened gradually.

Maximum sustained wind within 75 Kms. of the hurricane center is about 130 Kph rising to 150 Kph in gust/squalls. Sea is very high.

Maritime ports of Chittagong has been advised to lower Great Danger Signal No. 9 but instead hoist Great Danger Signal No. 10 repeat- 10.

Maritime ports of Cox's Bazar has been advised to keep hoisted Great Danger Signal No. 9 repeat- 9

Maritime ports of Mongla has been advised to keep hoisted Great Danger Signal No. 8 repeat- 8.

River ports of the districts of Chittagong, Noakhali, Bhola, Barisal Laxmipur, Feni, Patuakhali and Barguna have been advised to keep hoisted Riverine Great Danger Signal No. 4 repeat- 4.

River ports of the districts of Cox's Bazar, Chandpur, Pirojpur, Bagerhat and Khulna have been advised to keep hoisted Riverine Danger Signal No. 3 repeat- 3

Low lying areas of the districts of Chittagong, Feni, Noakhali, Laxmipur, Bhola, Barisal, Patuakhali and their offshore islands and chars are likely to be inundated by a storm surge of height 15 to 18 feet above normal astronomical tide.

All fishing boats and trawlers over North Bay have been advised to remain in shelter till further notice.

Received from

Duty Forecasting Officer
Met. Office
Dhaka

Special Weather Bulletin - 624 August 1994 at 2000 hrs.

Latest Radar observation from Khepupara indicates that Severe Cyclonic storm with a core of hurricane wind made landfall at Noakhali coast grazing over Hatiya island and lay centered at 1900 hrs. tonight slightly West of Chittagong port.

It is likely to continue crossing for next 2 or 3 hrs. and moved further inland in a North Easterly direction and weakened gradually.

Maximum sustained wind within 75 Kms. of the hurricane center is about 130 Kph rising to 150 Kph in gust/squalls. Sea is very high.

Maritime ports of Chittagong has been advised to lower Great Danger Signal No. 9 but instead hoist Great Danger Signal No. 10 repeat- 10.

Maritime ports of Cox's Bazar has been advised to keep hoisted Great Danger Signal No. 9 repeat- 9

Maritime ports of Mongla has been advised to keep hoisted Great Danger Signal No. 8 repeat- 8.

River ports of the districts of Chittagong, Noakhali, Bhola, Barisal Laxmipur, Feni, Patuakhali and Barguna have been advised to keep hoisted Riverine Great Danger Signal No. 4 repeat- 4.

River ports of the districts of Cox's Bazar, Chandpur, Pirojpur, Bagerhat and Khulna have been advised to keep hoisted Riverine Danger Signal No. 3 repeat- 3

Low lying areas of the districts of Chittagong, Feni, Noakhali, Laxmipur, Bhola, Barisal, Patuakhali and their offshore islands and chars are likely to be inundated by a storm surge of height 15 to 18 feet above normal astronomical tide.

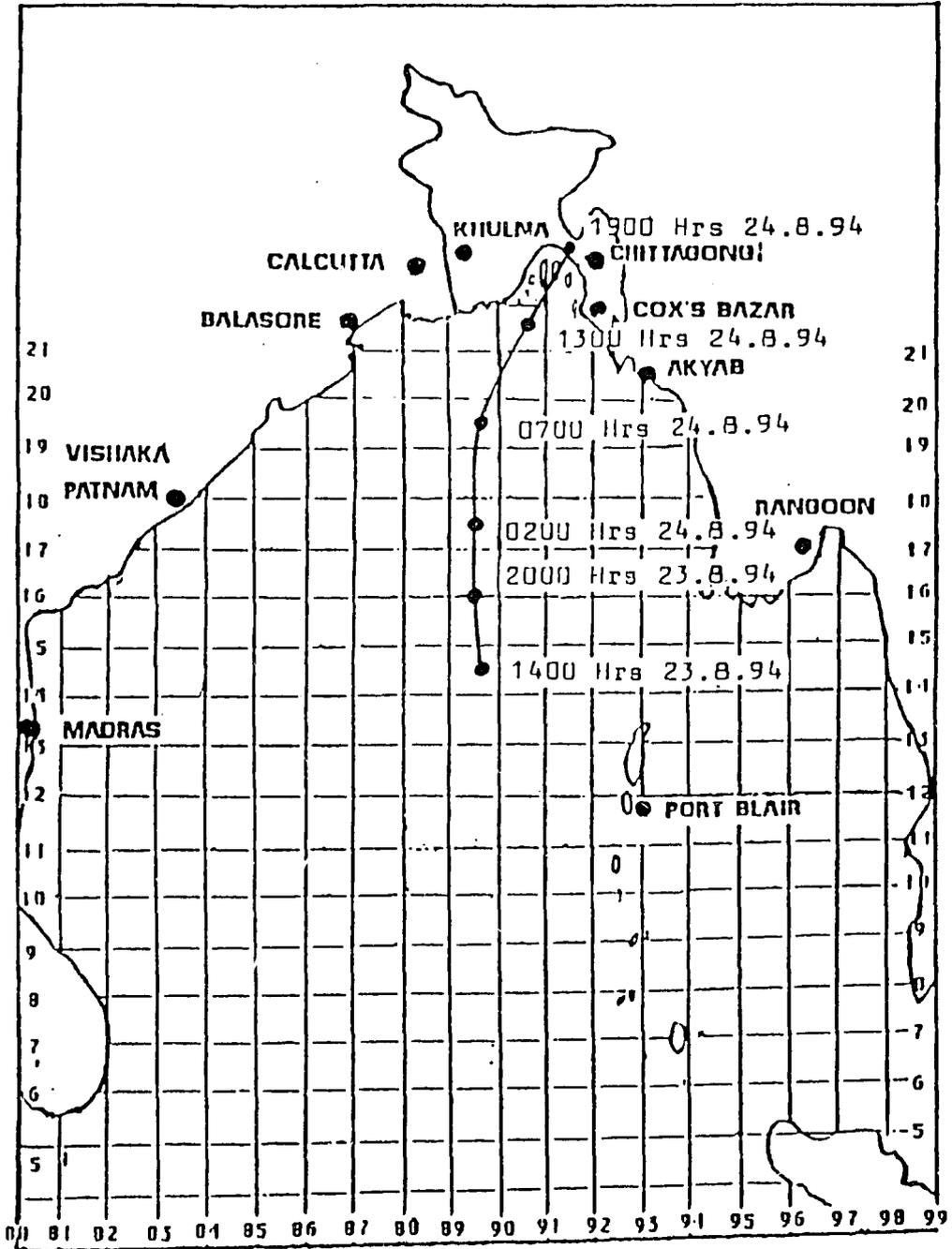
All fishing boats and trawlers over North Bay have been advised to remain in shelter till further notice.

Received from

Duty Forecasting Officer
Met. Office
Dhaka


DEPRESSION TRACKING MAP
CYCLONE PREPAREDNESS PROGRAMME

cw/6



Special Weather Bulletin - 7

24 August 1994 at 2100 hrs.

Latest Radar observations and satellite pictures indicate that severe Cyclonic storm with a core of hurricane wind crossed Noakhali coast grazing over Hatiya island at 2100 hrs. tonight and lay as a land depression over South Eastern part of Bangladesh and North Eastern part of Assam.

It is likely to move further inland in a north easterly direction and weakened gradually.

Under its influence squally weather is likely to continue over North Bay.

Maritime ports of Chittagong has been advised to lower Great Danger Signal No. 10 but instead hoist Local Cautionary Signal No. 3 repeat- 3

Maritime ports of Mongla has been advised to lower Great Danger Signal No. 8 but instead hoist Local Cautionary Signal No. 3 repeat- 3.

Maritime ports of Cox's Bazar has been advised to lower Great Danger Signal No. 9 but instead hoist Local Cautionary Signal No. 3 repeat- 3

All fishing boats and trawlers over North Bay have been advised to remain in shelter till tomorrow and proceed with caution.

No further Special Weather Bulletin will be issued in this series.

Received from

Duty Forecasting Officer
Met. Office
Dhaka.

Ending the Simulation

PM 1 All Participants

Distribution: ALL PARTICIPANTS

**Time D-Day Plus Two - 1500 in the afternoon of second
day**

Return of the Prime Minister

From: Prime Minister's Secretariat

To: Secretary, Ministry of Disaster Management and Relief

The Prime Minister has just landed back in Bangladesh from the UK and wants to be apprised of the situation as soon as possible.

She has asked all concerned in responding to the disaster (Government Departments, Armed Forces, Donors, NGOs) to come to the International Conference Centre at 1530 to discuss the disaster.

Please pass this letter to all concerned

Representatives of each group should be prepared to provide a 10 minute overview of what their group has been doing.

POSSIBLE ADAPTATIONS

A simulation will work if it is surprising and fresh. If all the participants have read the script and/or played the simulation before, a lot will be lost.

Therefore, the simulations needs to be kept secret until the day it is used.

One you have read this simulation, you could adapt it to a flood, or river erosion. You could involve other actors, or you could cover different time periods.

If you are going to adapt this ideas for your own simulation, you need time, familiarity with the subject, a preparedness to be controversial, and organising skill

Time

Writing Briefing Documents, Weather Reports etc. takes time. Leave yourself two weeks to prepare a new simulation.

Familiarity with the Subject

Simulations are meant to be realistic. You will be working with people who know their subjects. Make sure that you have researched who does what to whom at time of disaster before writing. Write your briefing papers as much as possible in the language which is usually used.

A Preparedness to be Controversial

A simulation is not a dress-rehearsal in which you just go through your lines. A simulation is meant to challenge you with problems and possibilities. If there are problems between different groups, provide briefing materials which acknowledge this. If there are "sore points", do not ignore them. The simulation is meant to be an aid to learning - and learning requires some changes. Controversy will get people involved and engaged.

Organising Skill

Directing a Simulation is complicated. Make sure you have a master list of simulation activities list (as in Appendix 1). Make sure you use it.

Try to avoid letting people drift away from the meetings. Use the force of your personality to keep people working hard. Keep up the excitement and the sense of urgency.

APPENDICES

Appendix 1: Schematic of Simulation Activities

Evening of First day

1. Brief Chairs of three groups on their roles,
2. Brief Observers on their roles,
3. Brief Press on their roles

4. Present introduction to simulations in general
5. Present introductions to this simulation
6. Present Ground Rules for this simulation
7. Detail who goes into which group
8. Provide organisational badges

Second Day

Simulated Time	Real Time Time	Doc.	Doc. Name To	No	Distribution
D-Day Minus Two	Evening of First Day	CW 1 BD 1-30 IM 1 IM 2 IM 3 BC 1.1 BC 1.2. BC 1.3	Weather Report 1 Briefing Documents Invitation to Meeting Invitation to Meeting Invitation to Meeting Briefing Chair - Govt Briefing Chair - UNDP Briefing Chair - ADAB	1800 1800 1800 1800 1800 1800 1800 1800	all respective participants Govt participants Donor participants NGO participants GOB chair Donor Chair NGO Chair

**Show video/film/slides on disasters
Set up the six locations**

D-Day Minus One	Morning of Second Day	CW 2 CW 3	Weather Report 2 Weather Report 3	0600 0800	all all
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Copy the Action Points from all groups flip charts at 1000

D-Day	Morning of Second day	CW 4 SR 1 BC 1.2 BC 3.2. CW 5 SR 2 SR 3	Weather Report 3 Situation Report 1 Briefing Chair - GOB Briefing Chair - NGOs Weather Report 5 Situation Report 2 Situation Report 3	1000 1000 1000 1000 1100 1100 1145	all all Chair GOB Chair ADAB all Govt. Group NGO Group
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Copy the Action Points from all groups flip charts at 1200

D-Day Plus One	Afternoon of Second Day	BC 1.3 BC 2.2. BC 3.3 CW 6 SR 4 HB 1	Briefing Chair - GOB Briefing Chair - Donors Briefing Chair - NGOs Weather Report 6 Situation Report Hatia Background	1200 1200 1200 1200 1200 1215	Chair GOB Chair UNDP Chair ADAB all Govt. Group all
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HM 1	Hatimap	1215	all
CW 7	Weather Report 7	1230	all
SR 5	Situation Report 5	1300	all
SR 6	Situation Report 6	1315	all

Copy the Action Points from all groups flip charts at 1400

D-Day Plus Two	Afternoon of Second Day	BC 1.4	Briefing Chair - GOB	1400	Chair GOB
		BC 3.4.	Briefing Chair - NGOs	1400	Chair ADAB
		SR 7	Situation Report 7	1400	all
		PM 1	Prime Ministers meeting	1500	all

Prime Ministers Meeting at 1530 for all

Take Notes on Presentation to Prime Minister

Finish	1600
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Third Day

Morning of Third day	Debriefing	0800
	Finish	1030

Appendix 2

Ground Rules of the Simulation

1. Join the Group in which you are listed
2. Participate in the meetings of your group in line with the briefing documents you have received, together with:
 - new documents that you receive
 - what comes from interaction with other participants
 - your own experience of Cyclones in 1991 and 1994
3. When you want to communicate with another group, or with the EOC, write a memo in your message pad, and keep a copy of it with a carbon paper
4. Appoint a person in your group to be the contact for those outside the group
5. Appoint a person in the group to receive new documents from the Simulation Director and pass them out.
6. In the last 15 minutes of each simulated day, write the action decisions of your group on the Flip Chart in big letters, and post it on the wall for all to see.
7. Take lunch as you work.
8. If you want to contact EOC, or other groups, you can do it by visiting them, or by phone. Always log your message on the message pad.
9. If you want to talk to the affected area you must do it through the radio operator in the EOC. The EOC is under the control of the Government.
10. Observers/Secretariat cannot supply more information than is contained in the documents distributed. Do not ask them.

READ everything you are given CAREFULLY

Be CREATIVE:

Be CONSTRUCTIVE

Appendix 3

List of Documents

No.	Code	Name	Copies
1.	OB	Briefing for Observers	3
2.	BC	Briefing for Chairs	
	BC 1.1	Briefing for GOB Chair (D-Day Minus Two)	1
	BC 1.2	Briefing for GOB Chair (D-Day Minus One)	1
	BC 1.3	Briefing for GOB Chair (D-Day)	1
	BC 1.4	Briefing for GOB Chair (D-Day Plus One)	1
	BC 1.5	Debriefing Notes (Morning, 3rd day)	1
	BC 2.1	Briefing for UNDP Chair (D-Day Minus Two)	1
	BC 2.2	Briefing for UNDP Chair (D-Day)	1
	BC 2.3	Briefing for UNDP Chair (D-Day Plus One)	1
	BC 2.4	Briefing for UNDP Chair (D-Day Plus Two)	1
	BC 2.5	Debriefing Notes (Morning, 3rd Day)	1
	BC 3.1	Briefing for ADAB Chair (D-Day Minus Two)	1
	BC 3.2	Briefing for ADAB Chair (D-Day Minus One)	1
	BC 3.3	Briefing for ADAB Chair (D-Day)	1
	BC 3.4	Briefing for ADAB chair (D-Day Plus One)	1
	BC 3.5	Debriefing Notes (Morning 3rd Day)	1
3.	LP	List of Participants	4
4.	CW	Cyclone Warnings	
	CW/1	23 Aug 94: 1800	50
	CW/2	23 Aug 94: 2100	50
	CW/3	23 Aug 94: 2400	50
	CW/4	24 Aug 94: 0800	50
	CW/5	24 Aug 94: 1400	50
	CW/6	24 Aug 94: 2000	50
	CW/7	24 Aug 94: 2100	50
7.	HB/1	Backgrounder on Hatia	50
	HB/2	Map of Hatia	50
8.	SR	Situation Report	
	SR/1	First report from Noakhali 0600 24 Aug	50
	SR/2	First Report from Hatia 1200 24 Aug	50
	SR/3	NGO report from Hatia 1800 24 Aug. 94	50
	SR/4	Hatia Radio Transcript 1930 24 Aug 10	50
	SR/5	<i>Aerial Assessment 1700 25 August</i>	50
	SR/6	Radio Message 1200 25 August	50
	SR/7	Newspaper story 0900 26 August	50
	SR/8	NGO Report 0900 27 August	50
9.	IM	Invitation to Meeting	
	IM/1	Invitation from PM to GOB meeting	30
	IM/2	Invitation from UNDP to Donors	10
	IM/3	Invitation from ADAB to NGOs	10

10.	BD	Briefing Documents	
	BD/1	PM's Office	2
	BD/2	Armed Forces	2
	BD/3	Ministry of Disaster and Relief	2
	BD/4	Disaster Management Bureau	2
	BD/5	DC Noakhali	2
	BD/6	DPHE	2
	BD/7	BWDB	2
	BD/8	Meteorological Office	2
	BD/9	NGO Bureau	2
	BD/10	Ministry of Health	2
	BD/11	Red Crescent	2
	BD/12	CPP	2
	BD/13	UNDP	2
	BD/14	UNICEF	2
	BD/15	USAID	2
	BD/16	WFP	2
	BD/17	ODA	2
	BD/18	ADAB	2
	BD/19	BRAC	2
	BD/20	CARE	2
	BD/21	OXFAM	2
	BD/22	CARITAS	2
	BD/23	Cabinet Division	2
	BD/24	LGRD	2
	BD/25	Water Transport	2
	BD/26	Railway	2
	BD/26	Posts and Telecommunications	2

- *Documents in Italics are documents which are expected, but will depend on the participants taking certain actions*
- Each briefing document will have the distribution list, and the time of distribution marked on it

Appendix 4

Logistics and Equipment

1. 4 x Flip Charts and Boards, markers
 - 1 x GOB group
 - 1 x UNDP group
 - 1 x ADAB group
 - 1 x Secretariat
2. 1 x SSB radio in EOC (plus antenna)
1 x SSB radio in simulated affected area (plus antenna)
3. Documents as per Appendix 3
4. Each Group needs:
 1. 1 x phone
 2. 1 x Copy of Grand Rules
 3. 1 x Simulation Calendar
 4. 1 x Flip Chart Easel, Board and paper
 5. 3 felt tip markers
 6. 1 roll masking tape
 7. Message pad (with carbon paper for duplicates).
8. EOC needs
 1. 1 x Message log book

Appendix 5

List of Participants

List of Participants	No expected
PM's Office	2
Armed Forces	2
Ministry of Disaster and Relief	2
Disaster Management Bureau	2
DC Noakhali	1
DPHE	2
BWDB	2
Metereological Office	1
NGO Bureau	1
Red Crescent	2
CPP	2
UNDP	1
UNICEF	1
USAID	1
WFP	1
ODA	1
UNDMT	1
ADAB	1
BRAC	1
CARE	1
OXFAM	1
CARITAS	1
Proshika	1
Press	2

Appendix 6

Bibliography

1. Games and Simulations
(in Indonesia - Kridulaksana dan Simulasi)
Yayasan Purba Danarta 1980
2. Designing and Using Simulations for Training
Technical Note 20
University of Massachusetts
3. Atlantis
Cranfield Disaster Preparedness Centre
Shrivenham, UK
4. Exercise Exodus
ADPC, Bangkok
5. Operation Early Blanket
ADPC Bangkok
6. Exercise Alert
Terry Jeggle, ADPC, Bangkok
7. Exercise Kalngo Cyclone
Sharif Kafi, BDevPC, Dhaka
8. Zenon Hurricane
Fred Cuny
9. Simulation Exercise : Managing Emergency Response in the Caribbean
following Hurricane Impact
Aysan and Davis
Disaster Management Centre, Oxford Polytecnic, UK

(All books are available in PACT Bangladesh Library, Dhaka)

Appendix 7

Participants at the original simulation 24.8.94 in Cox Bazaar

Sl. No	Name	Organisation	Designation
1.	Mr. Shahabuddin Ahmed	R&R	Director General
2.	Mr. Nayeen Wahra	OXFAM	Programme Officer
3.	Mr. Khoda Bux	DPHE	Assistant Chief Engr.
4.	Mr. Sajedul Hasan	CARE	Assistant Coordinator
5.	Mr. Golam Kabir	US-AID	Dis. Prog. Specialist
6.	Ms. Dilruba Haider	ODA	Aid Prog. Officer
7.	Md. Abul Qumshem	M/o. Environment and Forest	Jt. Secretary
8.	Mr. Khan Amir Ali	Cabinet Division	Joint Secretary
9.	Dr. A.A.Z. Ahmed	SPARRSO	Chairman
10.	Mr. Sakander Ali Mandal	Dist. Admin., Bhola	D.C.
11.	Mr. M. A. Maleque	Dist. Admin., Rajshahi	D.C.
12.	Mr. Tofazzel Hossain	Dist. Admin., Barguna	D.C.
13.	Lt. Col. Tarique Ahmed Siddique	DSCSC	Lt. Col.
14.	Mr. Emdad Hossain	CPP	Director
15.	Mr. Syed Abdul Malek	Dist. Admin., Sirajganj	D.C.
16.	Mr. Nazmul Alam Siddique	LORD	Joint Secretary
17.	Mr. Abdul Moktadir	Road and Highways	XEM
18.	Mr. Mohammed Alauddin	T&T Board	Director
19.	Mr. Kazi Shamsul Alam	PATC, Savar	Deputy Director
20.	Mr. Md. Aftabuddin Khan	DG, Health Services	Deputy Director
21.	Mr. Md. Abdul Halim	M/o. Agriculture	Joint Secretary
22.	Lt. Col. Mohammad Ali	Army Headquarter	Lt. Col.
23.	Mr. M. Golam Mortuza	PM Office	Director General
24.	Mr. M.A. Matin	Red Crescent Society	Acting Secretary General
25.	Mr. Q.I. Siddique	LGED	Chief Engineer
26.	Mr. Syed Abdul Mayeed	PDB	Supt. Engineer

27.	Brig. (Rtd) Q.M.S. Hafiz	WHO	National Programme Officer
28.	Mr. Ruben Gomes	CARITAS	Welfare Director
29.	Mr. M. Ershad Hossain	Meteorological Department	Dy. Director
30.	Brig. (Rtd) Nurul Islam Lasker	Civil Defence & Fire Service	Director General
31.	Mr. Akramul Islam	Director General	DMB
32.	Gp. Capt. Shahanul Islam	BPA, Chittagong Base	Group Captain
33.	Mr. M. Aminullah	M/o. DM&R	Jt. Secretary
34.	Mr. A. Matin	IVS	Director
35.	Mr. Md. Jahangir	Meida	Executive Director
36.	Mr. Md. Shafiqul Islam	Div. Admin.	Commissioner, Chittagong Division
37.	Mr. Enamul Kabir	Dist. Admin, Cox's Bazar	DC
38.	Mr. S.M. Shamsul Alam	Primary and Mass Education	Jt. Secretary
39.	Mr. Khandaker Fazlur Rahman	Repatriation Commissioner Office, Cox's Bazar	Repatriation Commissioner
40.	Capt. Humayun Kabir	BN	Captain
41.	Chowdhury A. A. Golam Kabir	S. P., Cox's Bazar	S. P., Cox's Bazar
42.	Mr. Richard Dictus	UNDP	Assistant Resident Representative
43.	Ms. Sylvia Islam	UNDP	Programme Officer
44.	Ms. Nancy Blum	Mott MacDonald	Disaster Management Adviser
45.	A.P.M. Sirajul Haq	DMB	Director (Training)
46.	Muhammad Rabiul Islam	DMB	Dy. Director
47.	Ms. Anne Marie Gerbrandy	UNICEF	APO
48.	Mr. Elias Ahmed	DMB	Dy. Director (Planning)
49.	Mrs. Amatur Razzakque	BLC	MIS Specialist
50.	Mr. Sonny Jegillos	ADPC	Workshop Coordinator
51.	Mr. Harry Joyasinghe	ADPC	Asst. Workshop Coordinator
52.	Mr. Saidur Rahman	BDPC	Director
53.	Mr. Richard Holloway	PACT/PRIP	Director

54.	Dr. J R Chowdhury	BURT	Professor
55.	Dr. Ainun Nisbat	BURT	Professor
56.	Ms. Eimi Watanabe	UNDP	Resident Representative
57.	Mr. M. Hafizuddin Khan	MoDMR	Secretary
58.	Mr. Harun-al-Rashid	MoDMR	Minister
59.	Mr. Naimul Haq	The Daily Star	Sub-Editor
60.	Mr. M. R. Chowdhury	UNICEF	Co-ordinator
61.	Mr. Klaus Wiersing	UNDHA	Relief Coordination Officer
62.	Mr. Md. Ataul Huq	BWDB	Additional Chief Engineer
63.	Mr. Syed Khabir Ahmed	World Food Programme	Programme Officer

Appendix 8

Cox Bazar 22 August 94

Management of the Simulation

Organisers

Sonny Jegillos, Harry Jayasinghe
Richard Holloway
Saidur Rahman
Rafiqul Alam

ADPC
PACT/PRIP
BDPC
DUS/Hatia

Planning

a. Before departure to Cox Bazar

1. Finalize list of participants and decide who can play themselves, and who can play others.
2. Collect 40 copies of Background Reading for each participant
 - a. Standing Orders for Cyclone
 - b. 40 copies of Bangladesh Disaster Management Handbook (30 Bangla, 10 English),
 - c. 40 copies of Disaster and Development (30 Bangla, 10 English)
 - d. 40 copies of the NGO May 2 94 Cyclone report
3. Collect VIPP cards, backing paper, marker pen, masking tape
4. Prepare edited version of UNICEF film
5. Prepare all the handouts, ready for distribution on Days 3 and 4 in Bangla and English
6. Make sure there is a type writer/ computer + printer / photocopier available in Cox Bazar
7. Make sure there is a phone link between the Hatia unit and the Control Room (or a SSB radio)

b. In Cox Bazar

The simulation takes place on the evening of the 3rd Day, on the 4th Day and on the morning of the 5th Day of a 5 day Training Workshop

At the start of the whole workshop

- Hand out the Standing Orders, the Handbook, Disaster and Development, and NGO Report and announce that there will be a simulation of a Cyclone on Day 4, with further information coming on the evening of Day 3. No other information to be given.

On the evening of the Third day of the workshop

- explain the ground rules of the Simulation, and pass out
 - a. the first of a series of information bulletins on the progress of the Cyclone.
 - b. the background briefing papers for the individual participants which give them parts to play, and their concerns during the next day.
 - c. their invitations to the first meetings
- Also plan some activity which will unsettle the participants who are used to more sedentary, passive workshops.
- Show some parts of the UNICEF film to situate people into the real events of a cyclone.
- Set up the Control Room, the Hatia TNOs office, and the spaces for the three groups.
- brief the three chairs separately

On the Fourth Day of the Workshop (the day of the Simulation)

- start smartly on time (0800), and pass out updates on the situation, and get the three groups to work on the topics of the sequential days
- At the end of Day Minus One pass out the backgrounder on Hatia
- At appropriate moments pass out the other situation reports
- Be prepared to write and distribute other situation reports or memos as dictated by the dynamics of the simulation

On the Fifth Day of the Workshop

- Debriefing