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DISASTER MANAGEMENT HANDBOOK FOR BANGLADESH

PART-I
PRE-DISASTER STAGE

MD. SAIDUR RAHMAN

DDP

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PART-I
PRE-DISASTER STAGE

MD.SAIDUR RAHMAN
Director
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SPONSORED BY PACT-BANGLADESH

DHAKA, February 1993

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DISASTER MANAGEMENT HANDBOOK FOR BANGLADESH (PART - I)

First Edition
February 1993

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Published by
PACT Bangladesh/PRIP
House 56, Road 16 (New)
Dhanmondi R/A
Dhaka-1209
Bangladesh

Printed by
Modern Printers &
Advertising Co.
238, Outer Circular Road
Bara Moghbazar
Dhaka

This Handbook has been produced with assistance from PACT Bangladesh/PRIP as part of a grant from the United States Agency for International Development (USAID) Bangladesh.

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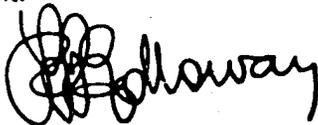
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Introduction

Bangladesh is a country with more than its fair share of disasters. It also has many public spirited citizens who volunteer their time to help others who have been struck by a disaster. It also has many citizens' organizations, often called NGOs, who play a leading role in relief and rehabilitation work when a disaster has struck.

What it does not have, surprisingly, is a system of training, or manuals, or guidelines for what to do at the time of a disaster. And good disaster response needs good preparation - simply a desire to help is not enough.

This Hand book will help people and organizations prepare themselves for what to do when a disaster strikes. It will also be a ready reference during the disaster response period. Please use it. Your help will be better with the aid of this book. PACT/PRIP is proud to be associated with it.



Richard Holloway
Director, PACT/PRIP

Author's Note

Thanks to Allah, we have been able to produce the "Disaster Management Handbook for Bangladesh". It is the first publication of its kind ever to be produced in the country and it is not the product of one man's, the author's, wisdom but is the distillation of the collected experience of hundreds of people, who have either been the victims of disasters or have been involved in the management of relief and recovery from them.

A team of eight selfless people dedicated themselves for nine months to the production of our handbook. They interviewed three hundred and forty-seven inhabitants of areas prone to different types of disasters and twenty-six managers from government and non-government organisations, whose responsibility is to respond to disasters, when they occur. Fifty percent of those interviewed were women. A large number of publications on disaster management were also studied. Finally, the draft of the handbook was discussed with international disaster relief experts and their views incorporated.

Our handbook aims simply to be a guide for managers of disaster relief at all levels - from Chief Executive Officers to field workers. Those using it may adapt it, to suit the size and capacity of their organisation, and to fit it with their chosen role in the management of relief.

Whether our handbook is a success and can be used effectively by such organisations, will only truly be measured in terms of a reduction in the number of deaths, a lessening of damage to property, and a substantial alleviation in the sufferings of disaster victims.

I should like to thank PACT-Bangladesh for sponsoring this project and to express my undying gratitude to those who worked so devotedly with me on it. Lastly, we should like to acknowledge our collective indebtedness to all those who gave us the invaluable benefit of their experience.



Mr Md Saidur Rahman
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Planning Commission
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Dhaka

Member

D.O. No.

Date..... Jan 28, 1993.....

Preface

Because of its geographical location and character of the terrain Bangladesh is a disaster prone country. It is affected by natural disasters almost every year. The Deltaic nature of the land contributes further to the loss of human lives and severe damage to property. These disasters also affect the economy badly and development programmes are also disrupted. The government for a long time, and non-governmental organisations in the recent past, have responded to cope with the situation, trying to mitigate sufferings of the people. This handbook is intended to help them deal with the situation more efficiently and effectively.

In presenting the "Disaster Management Handbook for Bangladesh", the author, Mr. Md. Saidur Rahman has combined his theoretical knowledge with his practical experience in disaster management within and outside Bangladesh for more than 25 years.

I hope the handbook will be useful for those involved in disaster response activities. Proper use of this manual will not only reduce loss of human lives but also alleviate sufferings of the people affected by natural disasters.

M. Mokammel Haque
Member
Planning Commission
Government of People's Republic of Bangladesh

PART - I

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How to use this Book

This book contains five sections, grouped in four volumes as follows :

- VOL 1 : Pre-Disaster Stage**
- VOL 2 : Planning A Disaster Response**
- VOL 3 : Operational Response for up to First Three Weeks**
- VOL 4 : Communication/Record Keeping
: Finishing and Leaving**

Each volume contains many chapters, all of which are organized according to the following questions :

What should be done ?

Who should do it ?

Who should be kept informed ?

Questions to ask

("Questions to ask" is a checklist for you to check whether you have done everything suggested in that chapter)

Annexures :

In many chapters there are references to **Annexures**. These are reference materials on yellow paper at the end of each section which are available for you to photo copy as needed.

Please use this book as a reference book according to your needs. The materials can also become the basis for training courses.

We suggest that the Head Office of an organization should keep Vol 1 and 2 and the field workers should keep copies of Vol 3 and 4.

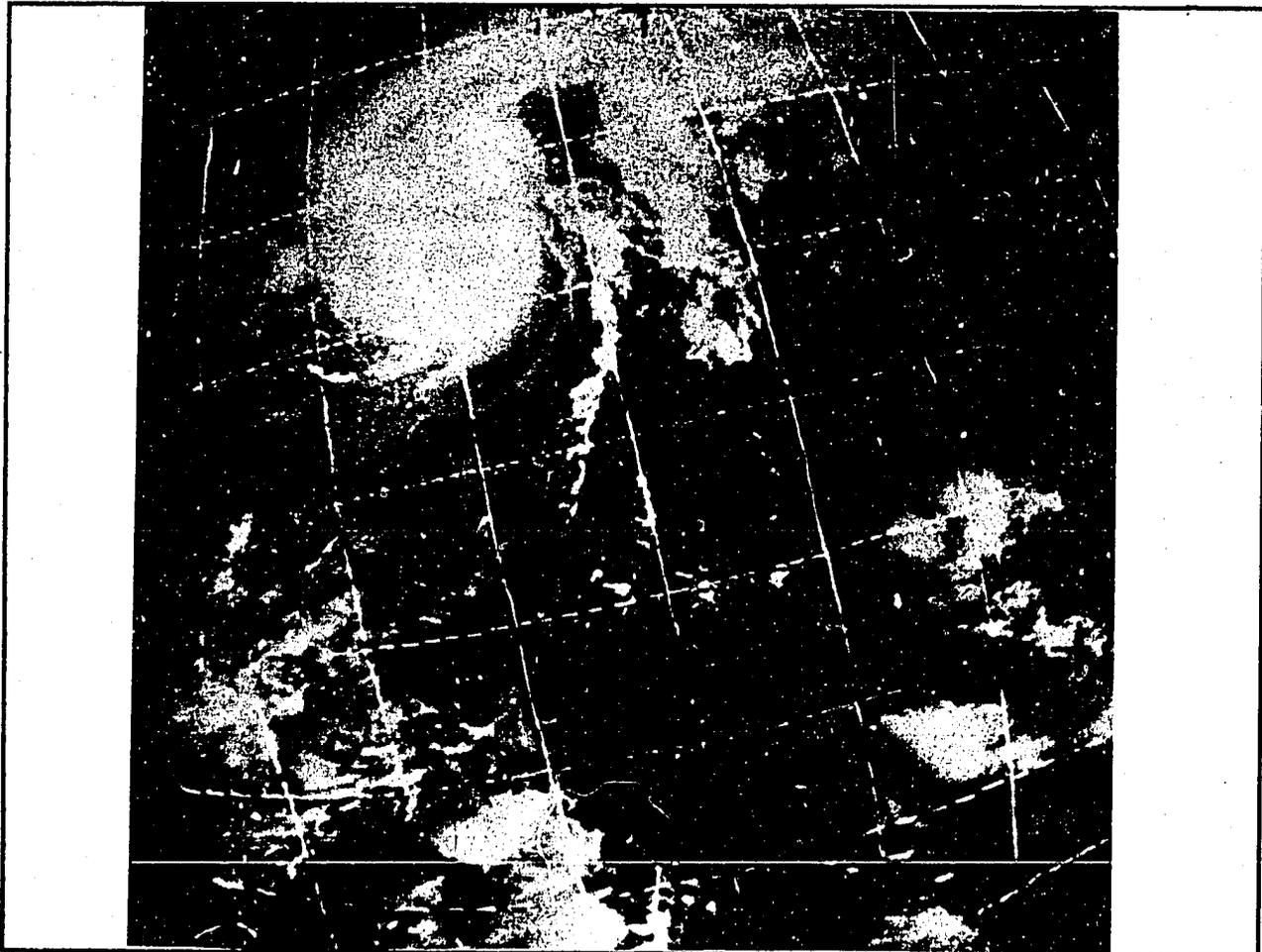
Best of luck in using this book - we hope it helps you.

ABBREVIATION

ADAB	Association of Development Agencies in Bangladesh
ADPC	Asian Disaster Preparedness Centre
AIS	Advanced Information Systems
AIT	Asian Institute of Technology
AODRO	Australian Overseas Disaster Response Organisation
BBC	British Broadcasting Corporation
BDPC	Bangladesh Disaster Preparedness Centre
BDR	Bangladesh Rifles
BDRCS	Bangladesh Red Crescent Society
BMD	Bangladesh Meteorological Department
BP	Bangladesh Police
BRAC	Bangladesh Rural Advancement Committee
Brs	Brothers
BSS	Bangladesh Sangbad Sangstha
C/A	Commercial Area
CAAB	Civil Aviation Authority of Bangladesh
Cap	Capsule
CARE	Cooperative for American Relief to Everywhere
CEO	The Chief Executive Officer
CHO	Carbohydrate
CI	Corrugated Iron
cm	Centi-metre
CPP	Cyclone Preparedness Programme
CSM	Corn-Soya Milk
CV	Curriculum Vitae
DCMU	Disaster Coordination and Management Unit
DMC	Disaster Management Centre
DMU	Disaster Management Unit
DPHE	Department of Public Health & Engineering
DPIS	Disaster Preparedness Information System
DRC	Delivery Receiving Challan
DRC	Disaster Resource Call
DRU	Disaster Resource Unit
DSM	Dried Skim Milk
e.g	as for example
ENA	Eastern News Agency
F.A.Box	First-aid box
FAO	Food and Agriculture Organisation
FEMA	Federal Emergency Management Agency
FSCD	Fire Service and Civil Defence
FWC	Family Welfare Centre
FWV	Family Welfare Visitor
gm	Gram
GOB	Government of Bangladesh
Govt.	Government
HDP Bag	High Density Polythene bag
HF	High Frequency

Ht	Height
i.e.	That is
I.V.fluid	Intra-venous fluid
ICDDR,B	International Centre for Diarrhoeal Disease and Research, Bangladesh
ICRC	International Committee of Red Cross
IUBAT	International University of Business Agriculture & Technology
IVS	International Voluntary Services
Kg	Kilo-gram
LO	Logistics Officer
LRCS	League of Red Cross Societies
Ltd	Limited
LTI	Left Thumb Impression
MCH	Mother and Child Health
ml	Millilitre
MOH	Ministry of Health
MOR	Ministry of Relief
MRN	Material Receiving Note
MRR	Material Received Receipts
MUAC	Mid-Upper Arm Circumference
NCHS	The US National Centre for Health Statistics
NGO	Non-Governmental Organisation
No	Number
ORS	Oral Rehydration Saline
PACT	Private Agencies Collaborating Together
PEM	Protein Energy Malnutrition
PO	Project/Programme Officer
PRIP	Private Rural Initiatives Project
Pvt	Private
Qty	Quantity
R/A	Residential Area
RCY	Red Crescent Youth
RTI	Respiratory Tract Infection
SADMC	South Asian Disaster Management Centre
SENA	Servicio Nacional de Aprendizaje (National Training Service of Colombia)
SL	Serial
SPARRSO	Space Research and Remote Sensing Organisation
SRR	Supply Replenishment Request
SSB	Single Side Band
T & T	Telephone & Telegraph
Tab	Tablet
THC	Thana Health Complex
Tk	Taka
TNO	Thana Nirbahi Officer
Tr.Benzyne	Tincture Benzyne
Tr.Iodine	Tincture Iodine
TV	Television
UK	United Kingdom

UNCHS	United Nations Commissioner for Human Settlement
UNEP	United Nations Environmental Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USA	United States of America
VDP	Village Defence Party
VHF	Very High Frequency
VHSS	Voluntary Health Services Society
Vr.	Voucher
WAPDA	Water and Power Development Authority
WDT	Water Disinfection Tablet
WFP	World Food Programme
WHO	World Health Organisation
WMO	World Meteorological Organisation
WPT	Water Purification Tablet
Wt	Weight



Satellite photo of Cyclone in November 12, 1970. The Coastal areas of Bangladesh were devastated. *Source : SPARRSO*

CHAPTER - I. A

DISASTERS IN BANGLADESH

KNOW THE DISASTERS IN BANGLADESH

What should be done ?

1. Know the definition of disaster and the important terminologies related to disaster management.

DISASTER/DISASTER MANAGEMENT

Disaster

An event, natural or man-made, sudden or progressive, that seriously disrupts the normal functioning of a society, causing human, material, or environmental losses of such severity that the affected community has to respond by taking exceptional measures. The disruption (including to essential services and means of livelihood) is on a scale that exceeds the ability of the affected society to cope, using only its own resources.

Disaster Management

Disaster management includes all aspects of planning for and responding to disasters. It refers to the management of both the risks and the consequences of disasters, and includes both :

- prevention and preparedness measures taken in disaster prone areas in anticipation of the known hazards - often referred to as "pre-disaster" measures; and
- response to disasters when they occur, involving search and rescue, relief, short-term repairs (sometimes referred to as "rehabilitation"), and long-term rehabilitation (sometimes referred to as "reconstruction").

PRE-DISASTER (Normal times)

Pre-disaster stage

A period when there is no immediate threat but long-term actions are taken in anticipation of the impact, at some unknown time in the future, of known hazards.

Disaster Preparedness

Measures to ensure the readiness and ability of the society - Government, communities, and individuals - to :

- (i) take precautionary measures in advance of an imminent threat, in cases where advance warnings are possible, and
- (ii) to organize timely response in the event of a disaster.

Preparedness involves

Forecasting and warning systems for cyclones and floods; and

- operational capability (plans, procedures, resources) to ensure timely action at all levels - by communities, Government, NGOs and other aid organizations - when a warning is issued and following a disaster impact.

This includes arrangements (at local level) for the evacuation of people, livestock, and movable property, from threatened localities, and the implementation of other temporary, precautionary measures to protect lives and property when a warning is issued; and arrangements at all levels to organise search and rescue, provide relief, and make emergency repairs to restore essential services, when needed. Education, training, and practice drills are essential at all levels.

Disaster Prevention (more accurately "Preventive Measures", referred to by some authorities as "Mitigation")

Measures designed to reduce, on a permanent basis, the adverse impact of cyclones, floods, and other potentially damaging events. This can include:

- embankments, drainage channels, afforestation, and other "structural" or "physical" measures to reduce the impact of cyclones, or the likelihood and impact of floods - sometimes referred to as "hazard reduction": adequate maintenance must be assured;
- land use planning (or "zoning") which seeks to ensure that people and economic assets are not located in hazardous areas, and that new developments do not create new risks - sometimes referred to as "hazard avoidance": can be attempted through regulations or incentives;
- improving construction standards for new buildings and other structures, and strengthening existing ones, to better withstand high winds, floods, earthquakes or other phenomena which are likely to occur in the locality - sometimes referred to as "hazard resistance": can be attempted through regulations, incentives, and/or training.

Vulnerability ; Vulnerability analysis

Vulnerability is the extent to which a community, structure, service, economic activity, or geographic area is likely to be damaged or disrupted by the impact of a particular hazardous phenomenon.

Vulnerability analysis is the process of estimating the vulnerability to particular hazardous phenomena of specified elements (structures, services, or whole communities) at risk. Combined with an analysis and mapping of the hazards to which an area is prone, it provides a basis for planning relevant preventive and preparedness measures.

For engineering purposes, vulnerability analysis involves the analysis of theoretical and empirical data concerning the effects of particular phenomena on particular types of structures. For more general socio-economic purposes it involves consideration of all significant elements in society, including physical, social and economic considerations (both short-and long-term), and the extent to which essential services (and local coping mechanisms) will be able to continue functioning during and immediately after a disaster.

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WARNING

Warning stage

The period from the issuing of an alert or public warning of an imminent disaster threat to its actual impact, or the passage of the threat and the lifting of the warning. The period during which pre-impact precautionary, or disaster containment, measures are taken.

Warning systems

Arrangements to rapidly disseminate information concerning an imminent disaster threat to officials, institutions, and the population at large, in the areas at immediate risk.

Warnings normally concern cyclones or floods. A warning system involves links to forecasting systems, the organisational and decision-making processes to decide on the issuing of particular warnings, and the communications facilities (radio and other) to broadcast the warnings. Its effectiveness depends on the prior education and training of officials and the population concerning the meaning of the warnings and the actions to be taken.

The warning signals and their interpretations used for cyclones and floods are Annexed as - I : A. 1



An alert or public warning of an imminent disaster threat.

Poster : Produced by Redcross Society

EMERGENCY (SURVIVAL AND RELIEF) STAGE

Emergency stage

The period during and immediately following the occurrence of a disaster, when exceptional (emergency) measures have to be taken to save lives and property, and to meet the basic needs of the stricken population in respect of shelter, drinking water, food, and medical care.

Emergency Risk Reduction measures

Actions taken in response to a disaster warning to minimize or contain the eventual negative effects. This includes, as and where needed, evacuation and other precautionary measures, flood-fighting and similar measures. These precautionary (pre-impact) measures are pre-planned, and practiced, as a part of preparedness, and put into effect when specified conditions arise.

Emergency Relief

Assistance provided to save and preserve lives, and meet the basic subsistence needs of disaster victims. Relief includes material aid to enable affected families to meet their basic needs for shelter, clothing, water, and food (including the means to prepare food), and emergency medical care. Relief supplies and services are provided free of charge - on a humanitarian basis - in the days and weeks immediately following a sudden disaster. They may need to be provided for extended periods in the case of severe drought and population displacements (refugees or internally displaced people).

Emergency relief measures are planned and implemented on the basis of the (post-impact) assessment, but may be initiated on the basis of the past experience and preparedness plans until sufficiently comprehensive assessment data become available.

Assessment (post-impact)

The process of determining the impact of a disaster on a society; the needs for immediate, emergency measures to save and sustain the lives of survivors; and the possibilities for facilitating and expediting recovery. Assessment is an interdisciplinary process, undertaken in phases, involving on-the-spot surveys and the collation, evaluation and interpretation of information from various sources concerning both direct and indirect losses, short - and long-term effects. It involves not only determining what has happened, what resources are available to the affected communities, and what assistance might be needed, but also defining objectives and how relevant assistance can actually be provided to the victims, considering both short-term needs and long-term implications.

Damage Assessment

The preparation of specific, quantified estimates of physical damage resulting from a disaster, and recommendations concerning the repair, reconstruction or replacement of structures and equipment, and the restoration of economic (including agricultural) activities.

RECOVERY

Recovery stage

The period following the emergency phase during which actions are taken to enable victims to resume normal lives and means of livelihood, and to restore infrastructure, services and the economy in a manner appropriate to long-term needs and defined development objectives. Recovery encompasses both rehabilitation and reconstruction, and may include the continuation of certain relief (welfare) measures in favour of particular disadvantaged, vulnerable groups.

Short-term Rehabilitation and Repairs

Actions taken in the aftermath of a disaster to enable basic services to resume functioning, to assist victims' self-help efforts to repair dwellings and community facilities, and to revive economic activities, including agriculture.

Rehabilitation focuses on enabling the affected populations (families and local communities) to resume more-or-less normal (pre-disaster) patterns of life.

Long-term Rehabilitation/Reconstruction

The permanent reconstruction or replacement of severely damaged physical structures, the full restoration of all services and local infrastructure, and the revitalization of the economy (including agriculture). Reconstruction must be fully integrated into ongoing long-term development plans, taking account of future disaster risks and possibilities to reduce those risks by the incorporation of appropriate mitigation measures. Damaged structures and services may not necessarily be restored in their previous form or locations. It may include the replacement of any temporary arrangements established as a part of emergency response or rehabilitation.

2. Know the types of disasters which affect Bangladesh.

The different types of disasters which affect Bangladesh are listed below.

- Cyclones with storm surges
- Floods : Flash flood
 Monsoon flood
- Tornadoes
- Droughts
- River erosions
- Epidemics

3. Learn about the causes and effects of different types of disasters in terms of loss of lives, cattle and livestock, crops, trees and plants, infra-structure, public establishments, short and long-term economic development.

4. Locate appropriate sources of and obtain maps of Bangladesh showing disaster-prone areas by types of natural disasters.

- * **Thanas vulnerable to Cyclone are shown in Map at Annexure I : A. 2 and the list of Thanas is at Annexure I : A. 3**
- * **Thanas vulnerable to Monsoon and River Floodings are shown in the map at Annexure I : A. 4 and listed at Annexure I : A. 5**
- * **Thanas which are affected by Flash Flood are shown in the map at Annexure I : A. 6 and listed in Annexure I : A. 7**
- * **Thanas vulnerable to River Erosion are shown in Map at Annexure I : A. 8 and listed as Annexure I : A. 9**
- * **The Areas prone to Diarrhoeal disease are shown in Map in Annexure I : A. 10 and listed in Annexure I : A. 11**
- * **Areas prone to Different Disasters in Bangladesh are shown in Annexure I : A. 12**

5. Identify and get acquainted with the vital, social, anthropometric and other disaster-related characteristics or indicators of the disaster-prone areas.

6. Procure maps projecting communication system in disaster-prone areas .

7. Know about and obtain/prepare maps indicating sources of water in disaster-prone areas.

8. Know about existence and programmes of other NGOs/Govt. Departments in disaster prone areas. Plot them in the maps.
9. Maps of Bangladesh could be obtained on payment from the office of the Director General of Survey and Records of Bangladesh, located at Tejgaon Industrial Area, Telephone No. 812380, 811921. Graphosmar, 16 A, Bangabandhu Avenue, Dhaka-1000, Phone : 232394, has produced various maps of Bangladesh showing political divisions, road and railway communications, river routes, etc. They are capable of producing maps as per requirement of the buyers using computers and other sophisticated equipments. For cyclone areas, the best maps are those produced by the multipurpose Cyclone Shelter Project, c/o BUET, Dhaka.
10. Administrative maps with statistics are also available from the Small Area Atlas of Bangladesh produced by B.B.S. and available from the Government Stationery office and from booksellers. These maps of all Bangladesh down to Mouza area are also available on computer (Macintosh) via PACT.

Who should do it ?

- Senior officers of the organization, especially those engaged in the policy making, planning, monitoring and implementation of pre disaster preparedness programmes and post disaster relief and rehabilitation operations. (For convenience of this hand book, they will be termed as Disaster Management Unit - DMU)

Who should be kept informed ?

- All personnel in the Head office and in the field who may be associated with relief operations.

Questions to ask

- Do we know the definition of disaster ?
- Do we know the types of disasters which affect Bangladesh ?
- Do we know their causes and effects in terms of loss of life, properties, assets, crops, plants, etc.
- Do we have the list of areas vulnerable to different types of disasters ?
- Does the national/regional/local office have disaster wise maps of the disaster prone areas ?
- If not, what is the nearest appropriate source for the required map(s) and on what terms and conditions are these available either for temporary or permanent use?
- Is the disaster prone area served by other NGOs or/and governmental agencies?

CHAPTER - I : B

THE NORMAL SITUATION IN BANGLADESH

KNOW THE NORMAL SITUATION IN BANGLADESH SO THAT THE CHANGES IN A DISASTER CAN BE ASSESSED PROPERLY

What should be done ?

1. Know the maps of Bangladesh and identify the following:
 - Divisions and their boundaries
 - Districts and their boundaries
 - Important cities and towns
 - Important sea ports and river ports
 - Important communication centres
 - Important river routes
 - Important road communications
 - Important railway networks
 - Areas of operation of important NGOs.
2. Try to prepare maps of disaster prone areas with location of the following
 - Road, River, railway routes
 - Food Depots (Godowns and capacities)
 - Govt buildings, schools, Health centres, shelters
3. Procure separate adequate-sized maps, preferably in 1:50,000 scale, of Bangladesh showing the information outlined above.
4. Know the average family size in Bangladesh. The average size is 5.31. The size varies between rural and urban areas and amongst various regions or districts.
5. Know that the crude birth rate in Bangladesh is 32.8 per thousand. This rate varies between rural and urban areas as 34.1 and 24.6 per thousand respectively.
6. Know that the crude death rate in Bangladesh is 11.3 per thousand. It varies between rural and urban areas as 11.8 and 7.8 per thousand respectively.
(It is suggested that the NGO's should have Statistical Year Book of Bangladesh published every year from Bureau of Statistics, Govt. of People's Republic of Bangladesh).
7. Know the commonly prevalent diseases in Bangladesh, which vary by seasons, regions of the country and disasters. These are :

Gastro-enteritis , Measles, Dysentery, Meningitis, Cholera, Whooping-cough, Typhoid, Diphtheria, Hepatitis, Tuberculosis, Polio, Malaria, Cardiovascular diseases, Pneumonia, Kidney-related diseases, Pulmonary diseases, Viral fevers, Diarrhoea, Venereal diseases, Eye diseases, Goitre, Scabies, Leprosy.

Seasonal Dimension to Diseases/Rural Health Status

The effect of infectious diseases upon poor rural communities in the tropics is very great, and the importance of seasonal fluctuations has been examined in various studies ; the conclusions drawn from the studies are given below:

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- malnutrition, morbidity and mortality have seasonal patterns and often peak during the wet season;
- the poorer people, women and children, are especially vulnerable to hardship, malnutrition, sickness and death in the wet season;
- the economic costs of sickness and weakness are concentrated in the wet season;
- it is during the wet season that sickness is most liable to make people permanently poorer;
- rural health services are likely to be at their least effectiveness in the wet season;
- urban-based professionals underperceive seasonal deprivation and underestimate morbidity in the wet season.
- for agriculturist in the tropics, the worst times of the year are the wet seasons, typically marked by a concurrence of food shortages, high demands for agricultural work, high exposure to infection especially diarrhoeas, malaria and skin diseases, loss of body weight, low birth weights, high neo-natal mortality, poor child care, malnutrition, sickness and indebtedness.

It is precisely at this time that exposure to infection is often most pronounced and morbidity, highest. It is common during tropical rains for there to be a rise in the incidence of diarrhoeas, malaria. Other diseases may also be most prevalent at these times.

Seasonal malnutrition and poverty go together and for many of the poorer people, seasonal shortages of food coincide with a demand for high energy output in agricultural activities.

Mortality is also, as might be expected, higher among poorer people. This is notoriously so during famine, and is illustrated by McCords much quoted evidence from Companiganj in Bangladesh in 1975 in the sequel to the flood of 1974.

Becker and Sardar, analysing data from Matlab thana, found that the age groups with the most marked seasonality of death were those in which the overall risk of death was high. They reported that there were children in the first month and first year of life and people aged 44 and above.

In order to prevent and treat sickness, to reduce mortality, to help the poorer people, women and children, to reduce the economic costs of sickness, rural health services should be at their most effective during the time of greatest need, typically in the wet season. This is, however, when they are likely to be least effective.

N.B. The wet season' here refers to the period from the onset of rains until the harvest.

8. Know about the best method of assessment of acute mal-nourishment, especially among children. This can be done by measuring weight for height table or measuring arms circumference, etc.
The standard chart for weight for height measurement is shown in Annexure - I : B. 1 & I : B. 2 .

Malnutrition of children is a major problem in post disaster situations. Details about malnutrition, the different types of malnutrition, their degrees, the best methods of measuring malnutrition, etc. are presented in next six pages.

Definition of Malnutrition

Malnutrition can be broadly divided into two groups :

- a. Protein Energy Malnutrition (PEM)
- b. Vitamin and Mineral Deficiencies.

a. Protein Energy Malnutrition (PEM)

This can be the most important health problem at times of nutritional emergencies and can be present in various forms.

Marasmus :

This results from insufficient intake of food (i.e. not enough calories). In its early stages marasmus is recognised only as loss of weight . As the disease progresses severe wasting occurs until the skin hangs loosely from the bones, especially around the buttocks, where the lack of fat and muscle causes the skin to hang like 'baggy pants'. The eyes become sunken, producing an 'old man's face'.

Kwashiorkor :

Under normal conditions kwashiorkor is most frequently found in children recently displaced from mother's breast by the arrival of a new baby, or following acute infections. In famine conditions it can affect any age group, although it is usually still seen mainly in young children. Swelling or oedema is the earliest and most important sign of kwashiorkor, the swelling usually starting in the feet and lower legs, although it can occur all over the body. To check for oedema, press the area on the back of the foot or shin and see if a pit remains when the finger is removed (pitting oedema).

Marasmic-Kwashiorkor :

This is a combination of the above two conditions.

b. Vitamin and Mineral Deficiencies

Anaemia :

Low level of haemoglobin in the blood. The main causes are parasitic infections (particularly hookworm and malaria), and low intake or poor absorption of iron and folic acid. Malnourished people are often severely anaemic.

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Xerophthalmia or nutritional blindness :

This is the most important effect of vitamin A deficiency. It can lead to permanent blindness if not recognised and treated in time.

Beriberi: (Vitamin B1 deficiency) :

Beriberi occurs in areas where the people have had to exist for long time only on a starchy staple food, e.g., white polished rice, wheat, flour, etc.

- Several forms exist : (i) Moderate deficiency
- (ii) Dry beriberi
- (iii) Wet beriberi



Courtesy : UNICEF

Scurvy (Vitamin C deficiency) :

In long-term disaster situations, scurvy can occur when the basic general ration contains inadequate vitamin C. i.e., less than 10 mg/day.

How to assess Malnutrition ?

There are two main ways of assessing malnutrition in emergencies :

- a. Weight in relation to height.
- b. Mid Upper Arm Circumference (MUAC).

For longer-term development phase the following methods are also used:

- c. Weight for age
- d. Height for age.

a. Weight for height:

It is possible to assess the severity of Protein Energy Malnutrition (PEM) by comparing the weight of a malnourished child with the weight of a well-nourished child of the same height. This is the best method of assessment of acute malnutrition, provided there is no oedema present. A normal, well-nourished child of a certain height can be expected to be of a certain weight. A series of these 'normals' has been calculated and they are considered to be 100% of standard weight for height.

For example :

wt/ht over	100%	=	over weight
wt/ht from	80 to 100%	=	adequately nourished
wt/ht from	70 to 80%	=	moderately malnourished
wt/ht below 70% and/or oedema		=	severely malnourished

Any child with oedema should be considered malnourished, regardless of weight. This percentage weight for height is calculated as follows :

$$\text{Percent weight-for-height} = \frac{\text{Child's weight. X 100}}{\text{Reference weight for same sex and height}}$$

Example :

A girl who is 98.5 cm tall weighs 13 kg.
The reference median weight for a girl of
her height is 15 kg. Then that girl would be

$$\frac{13 \times 100}{15} = 86.7\% \text{ of the reference median weight-for-height.}$$

Wasting is defined as less than 80% weight-for-height. The girl in the above example is not wasted since she is 86.7% of the reference median weight-for-height.

Standard weight for height tables are available with Bangladesh Population and Health Consortium (BPHC), NGO project located at Road No.- 14/A, House No.- 38, Dhanmondi R/A, Dhaka - 1209. They make this calculation a quick and easy procedure.



Courtesy : UNICEF

b. Mid-Upper Arm Circumference : (MUAC)

It is possible to assess the nutritional status of a child using the measurement of the mid-upper arm circumference (MUAC). The advantage of this method is that the normal arm circumference of children between the ages of 1 and 5 years remains relatively static, so that standard cut-off points can be used. It is not essential to know the exact age; a normal 1 year old has six or more teeth and can stand or walk; a 5 year old is normally less than 115 cm tall.

Method :

The left arm of the child should hang in a relaxed position. The arm circumference is measured mid-way between the elbow and the shoulder. The tape should be wrapped closely around the arm but must not be twisted or pulled tight.

It is helpful to put a mark at the 10 cm line and read off the measurement from that point. If this is 19.5 cm then the arm circumference is 9.5 cm. The following classification should be used until further research has been done :

MUAC	over 13.5 cm	=	adequately nourished
MUAC	12 to 13.5 cm	=	moderately malnourished
MUAC	below 12 cm and /or oedema	=	severely malnourished.

c. Weight-for-age :

In the initial stages of a disaster, weight for age is not as useful for assessment as weight for height, because it is often difficult to assess age accurately. Even adults

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rarely can tell accurate birth dates. Weight-for-age is calculated by expressing the child's weight as a percentage of the reference weight for a child of the same age and sex. The formula is as follows :

$$\text{Percent weight-for-age} = \frac{\text{Child's weight for age}}{\text{Reference weight-for-age}} \times 100$$

Example :

A girl aged two years and three months weighs 9.8 kg. The reference weight for a girl of this age is 12.4 kg. The calculation of this girl's weight-for-age is :

$$\text{Percent weight-for-age} = \frac{9.8 \text{ kg}}{12.4 \text{ kg}} \times 100 = 71\%$$

Therefore, this girl is 71% of the reference median weight-for-age.

Underweight (i.e. low weight-for-age) is defined as a weight-for-age of less than 80% of the reference median. Therefore the girl in this example is underweight since she is 71% of the reference median.

d. **Height-for-age :**

This measures chronic malnutrition and long-term stunting and is not useful in planning Feeding Programmes in emergency situations.

This is the height of a child expressed as a percentage of, or as a standard deviation from, the height of a 'reference' child of the same age and sex. Age must be known to the nearest month. The calculation is as follows:

$$\text{Percent Height-for-Age} = \frac{\text{Child's height-for-age}}{\text{Reference height-for-age}} \times 100$$

Example: A boy aged 3 years 5 months is measured for height (i.e. stature) as 93.2 cm. The reference height for boys of this age is 98.4 cm. The calculation of this boy's height-for-age is :

$$\text{Percent height-for-age} = \frac{93.2 \text{ cm}}{98.4 \text{ cm}} \times 100 = 94.7\%$$

Therefore, this boy is 94.7 % of the reference median height-for-age.

Stunting (i.e. short for age) is defined as a height-for-age of less than 90% of the reference median. Therefore, the boy in the above example is not stunted since he is 94.7% of reference.

9. Prepare lists, charts/tables showing names, addresses and phone numbers of national level disaster-related resources or procure such information if not already available.

10. Procure an inventory list of NGOs operating in various regions of the country, and if not readily available, prepare such an inventory highlighting their specialities at least in your operations area. This could be available from ADAB and PRIP through their DPIS computer program.
11. Prepare a list of important past disasters with losses.

Who should do it ?

- Disaster Management Unit (DMU)

Who should be kept informed ?

- All personnel of the organisation, especially those who are likely to have responsibility in disaster operations.

Questions to ask

- Have we procured all the maps required for planning and implementation of relief programmes ?
- Do we know the basic statistics like average family size, death rate, birth rate, etc. in different parts of Bangladesh ?
- Do we know the diseases commonly prevalent in Bangladesh ?
- Do we know the causes and effects of diseases in different disaster prone areas?
- Do we have a list of national level resources on disaster management ?
- Do the National/Regional/Local offices have a list of the NGO's active at different levels and in different areas?
- Are separate maps of disaster prone areas showing all important information readily available at the National/ Regional/Local offices of the organisation ?
- Are the people responsible for implementing programmes in the field trained to measure severe malnourishment among the children ?

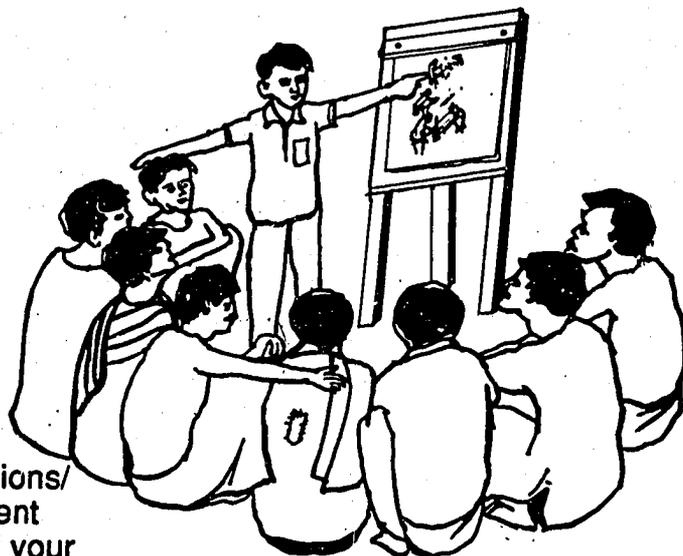
CHAPTER - I : C

DISASTER MANAGEMENT PLAN

TO HAVE A DISASTER MANAGEMENT PLAN FOR YOUR ORGANISATION

What should be done ?

1. Ensure a comprehensive disaster management plan for the organization.
2. Ensure adequate budgetary provisions for the plan.
3. Ensure the establishment of a disaster management department/section/cell/unit (DMU) in the organization exclusively responsible for disaster management.
4. Assign adequate number of staff members/personnel exclusively responsible for the organization's pre-disaster preparedness and post disaster response programmes in the absence of an exclusive section/cell/unit in the organization set up for this purpose.
5. Have the Chief Executive and other Senior Executives of the organization look after the organization's disaster management programme, in case there is no specific disaster unit (DMU), or no staff exclusively assigned to the programme.
6. Know the important elements, in order of importance, of planning disaster management :
 - Policy decision
 - Preparedness plan
 - Collection of information
 - Planning of response
 - Disaster monitoring
 - Funding arrangement
 - Allocation of manpower
 - Logistics and related support
 - Orientation and training of disaster personnel
 - Materials and equipment for emergency programme
7. Initiate, prepare and submit suggestions/recommendations for the improvement of disaster management planning of your organization.
8. Review existing planning essentials and recommend additions, alternations, improvement of the same.
9. Review current allocation, and if necessary, allocate more manpower to DMU
10. Ensure adequate participation of operational/field level staff members in the planning process.



Courtesy : BRDB

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Who should do it ?

- The Disaster Management Unit (DMU)
- The Chief Executive of organization
- Finance Officials
- Personnel Officials
- Officials in charge of Logistics Support.

Who should be kept informed ?

- Organization's key personnel at National, regional and local levels
- Association of Development Agencies in Bangladesh (ADAB)
- Other sister organizations at the national, regional and local levels
- Government Authorities, especially Bureau of NGO Affairs (NGO Bureau) and Ministry of Relief and Rehabilitation (MOR)
- Development Partners at home and abroad
- Local UNDP Disaster Personnel

Questions to ask

- Have we got a comprehensive Disaster Management Plan ?
- Have we got budgetary provision for Disaster response ?
- Have you got separate Department/Unit/Cell for Disaster Management, i.e., DMU ?
- Do the key officials of the organization realize and appreciate the importance of the main elements of planning disaster management ?
- If the organization does not have a separate disaster management unit or personnel exclusively assigned to such management
 - What are the reasons for this deficiency ?
 - What are the obstacles in the way of establishing such a unit or assigning personnel ?
 - Is the basic reason for not having a disaster management plan for the organization lack of funds?
 - Can these obstacles be reasonably overcome ?

CHAPTER - I : D

DISASTER PREPAREDNESS TRAINING COURSES

SEND STAFF ON DISASTER PREPAREDNESS TRAINING COURSES

What should be done ?

1. Make the organization's key officials realize and appreciate that Disaster Management requires professional expertise and the need for training for the personnel engaged in a disaster response and management programme.
2. If possible, appoint a Training Officer/Co-ordinator in your own organization exclusively responsible for imparting training on Disaster Management.
3. Train some personnel in your own organization .
4. Send a variety of personnel to disaster preparedness training courses : field level workers; logistics/auxiliary staff; volunteers; mid-level managers; senior managers; chief executive officers.
5. Send different personnel to different courses suitable for them.
6. Send personnel for training to a variety of institutions: in-country specialized institutions/ organizations; other in-country institutions; and if necessary, to institutions abroad.

List of Institutions within and outside Bangladesh is Annexed as - I : D. 1

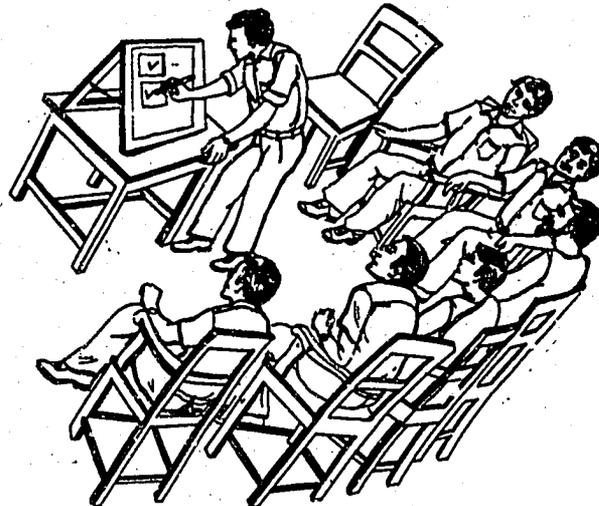
7. Send an official of the next higher level to attend the same training from time to time for proper supervision and evaluation.
8. Ensure supervision of training received by personnel at one level by personnel at the next higher level.
9. Ensure that any training received outside the organization is followed up by intensive discussion/analysis inside the organization immediately after the training period.
10. Ensure that the subject matters of the training courses involve concepts and practical tools related to planning and implementation of disaster preparedness relief and rehabilitation programmes.
11. Ask for training courses of generally six to seven working days duration, although courses may also be for varying periods of three to fifteen days.
12. Define the scope of necessary training activity and translate it into an appropriate training policy in terms of a simple policy document which spells out:
 - major training considerations
 - the objectives of training policy
 - responsibility for implementing training policy
 - scope of training to be carried out (e.g. which aspects of preparedness and management)
 - process for reviewing and updating training programmes.
13. Seek national/international assistance, if considered appropriate, for training needs.

Who should do it ?

- Training Co-ordinator, if any
- Disaster Management Unit (DMU)
- The Chief Executive of the organization (C E O)

Who should be kept informed ?

- Training Co-ordinator, if any
- All recipients of training: Volunteers; field level workers; senior managers; mid-level managers; logistics/auxiliary staff etc..
- Supervisory Officers.
- The Chief Executive Officer, Senior Managers, Mid-level Managers
- Training institutions at home and abroad



Courtesy : BRDB

Questions to ask

- Have we identified the need for training ?
- Have we identified the personnel at different levels who should be trained ?
- What should be the responsibilities and functions of a Training Co-ordinator, if appointed ?
- Are we covering all potential recipients of training under existing programmes ?
- Is the pace or speed of training consistent with the organizations dynamic training requirements ?
- Are the concerned personnel receiving the right kind of training ?
- Is the training received systematically supervised and evaluated ?
- Are the funds allocated for training activities adequate ?
- Are there institutions at home and abroad from whom resources can be sought for training ?
- Does the Training Co-ordinator have the necessary background/ qualifications and experiences for the job ?
- Is the training time period adequate ?

CHAPTER - I : E

OPERATIONAL KIT FOR FIRST-IN WORKERS

HAVE OPERATIONAL KIT FOR FIRST-IN WORKERS

What should be done ?

1. Ensure that your organization has at least one emergency kit for the use of first-in relief/survey and other emergency workers.
2. Ensure that the contents of the emergency kit include the following (arranged in order of importance):
 - Shoulder bag
 - Rain Coat
 - Flash Light with batteries
 - Air pillow
 - Towel
 - Soap
 - Toilet roll/Tissue paper/Pitcher with a small spout
 - Candle
 - Match box/Gas light
 - Diaries
 - Rough pad
 - Envelope (big and small)
 - Ball pen (Black or blue)
 - Ball pen (Red)
 - Wood pencil
 - Pencil sharper
 - Eraser
 - Scale/ruler
 - Stapler
 - Stapler pin
 - Paper clip
 - Stamp pad
 - Knife
 - Map of the area heading for
 - Work plan
 - Nylon rope
 - Big Needle
 - Muster roll
 - Survey check-list
 - Survey Form
 - White paper
 - Loose-sheet-rolled
 - ORS
 - WPT
 - Operation Log Book
 - Bed sheet
 - Mosquito net

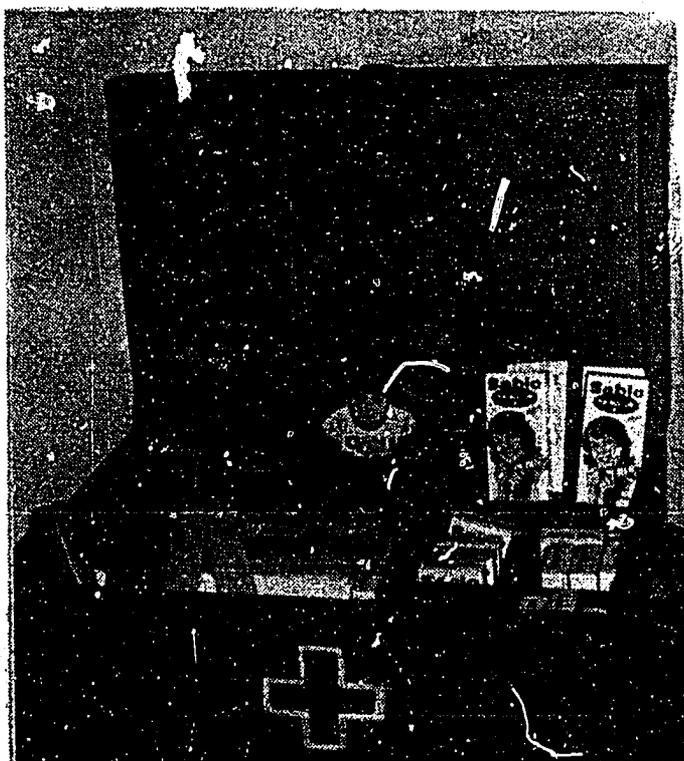
A complete kit-bag for first-in relief/survey team and other emergency workers could be available on order from Bangladesh Disaster Preparedness Centre (BPDC), 9/23, Iqbal Road, Mohammadpur, Dhaka-1207, Bangladesh

Additional contents for Team Leaders only

- Letter-head pad
- Rubber Stamp of organisation/Team
- Copy of Project Proposal
- Calculator with batteries
- Master Roll Summary Form
- Banner, if any or needed
- Letter of introduction from Chief of Organisation/Programme
- Copy of Letter Approval of Government, if any
- Punching machine
- Gum pot/Aica

3. Ensure that the operational kit has a small first aid box containing the following (arranged in order of importance):

- First-aid bag/box
- Bandage roll
- Bandage gauze
- Square gauge
- Sterilized cotton
- Boric Acid
- Forceps
- Scissors
- Knife
- Thermometer
- Dettol/Savlon/sepnil
- Tr. Iodine
- Tr. Benzoyne
- Leukoplast
- Paracetamol
- Tetracycline Cap.
- Ampicillin Cap.
- Metronidazole Tab
- Nelidexin Tab/Cap
- Savlon Cream
- Tetracycline ointment
- Avomin Tab.
- Histacin Tab
- ORS
- WPT
- Antacid Tab.
- Cloth Duster/Small napkin
- Soap



First-Aid Box
 Courtesy : Redcross Society

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- One set of delivery kit
 - Quinine tabs
4. Ensure that the first-in workers use the following equipment/materials (arranged in order of importance):
- Emergency Kit
 - First-aid Box/Bag
 - Life-Jacket
 - Bottled water/Treated water in plastic container
 - Umbrella
 - Thermos Flask
 - Tiffin Box/Carrier
 - Megaphone with batteries
 - Pressure Light <Petromax>
 - Compass
 - Radio with batteries
 - Blanket
 - Cash
 - Binoculars
 - Camera with films and batteries

Who should do it ?

- DMU

Who should be kept informed ?

- The Chief Executive Officer
- Senior Managers
- First in relief/survey and other emergency workers

Questions to ask

- Do we have all the items in adequate quantity/amounts required for the emergency kit bags/boxes ?
- How many emergency kit bags/boxes should be kept ready at all times ?
- Do we have all the items in adequate amounts required for the first-aid kit bags/boxes ?
- How many first-aid kit boxes/bags should be kept ready at all times ?
- Are emergency or first-aid kit boxes/bags periodically checked to ensure that contents are in proper order and are preserved correctly ?
- Are emergency or first-aid kit boxes/bags stored in a suitable place in the office accessible readily to first-in workers at time of urgent need ?
- Are adequate numbers of boxes/bags available with regional/field offices ?
- Are proper inventory registers maintained at stores at national/regional/field levels ?
- Is everyone/every institution concerned kept properly informed ?
- Are boxes/bags replenished regularly after uses ?

CHAPTER - I : F

STOCKPILE OF SUPPLIES

STOCKPILE SOME SUPPLIES

What should be done ?

1. Ensure adequate stockpile of supplies according to the financial capacity of your organization for emergency purposes.
2. Ensure that the stockpiled supplies contain the following (in order of importance):
 - HP biscuit, chira, gur and other food items
 - Sarees
 - Lungis
 - Baby wear
 - WPT/Bleaching Powder
 - Alum
 - Blanket
 - Polythene sheeting
 - ORS
 - Tents/tarpaulins
 - Plastic bucket
 - Plastic Jerry cans.
3. Make an additional list of items that could be stockpiled.
4. Ensure that the stockpiled materials are in adequate quantities in relation to emergency needs.
5. Stockpile a part of the materials near to potential disaster areas in the Organization's regional/local offices.
6. Maintain inventory registers of stockpiled items.
7. Replenish stockpiled items expended during emergency operations.

Who should do it ?

- DMU
- Logistics and supply section
- Regional/local officials

Who should be kept informed ?

- The Chief Executive Officer
- Regional/Local offices
- First-in relief/survey and other emergency workers.
- ADAB
- Sister Organisations in the same operational areas.
- MOR
- Deputy Commissioners/TNOs



Women and Children are the main victims of any disaster
Courtesy : UNICEF

Questions to ask

- Do we have all the items in adequate quantities/amounts as suggested by past disaster response experiences ?
- How do the items and amounts stockpiled compare with those stockpiled by similar sister organizations ?
- Are stockpiled materials periodically checked to ensure that the contents are in proper order, and are preserved ?
- Are there readily available replenishments, if required ?
- Are there budget provisions for such replenishment ?

CHAPTER - I : G

STAFFING/LOGISTICS PLAN

Staffing Plan

What should be done

1. Make a list of staff and volunteers who will be called on at short notice to take on the following responsibilities :-
 - Information gathering
 - Planning
 - Monitoring
 - Finance control
 - Audit
 - Logistics
 - Field operation
 - Reporting
 - Public relations
 - Etc.
2. Keep a roster of staff and volunteers with their detailed C.V.s.
3. Give them orientation and training in different aspects of disaster management.
4. Keep them informed of the situation about the disaster.
5. Give them advance warnings, if possible, before they are called to take on the responsibility.
6. Plan for replacement of staff at regular intervals, especially those who have to work in harsh/difficult condition.
7. Plan to keep them abreast of the situation outside their operational area (with Newspaper, Magazines, Transistor Radio, Communication facilities, through their families, etc.)

Who should do it ?

- D M U/P O

Who should be kept informed ?

- C E O
- Staff and volunteers at National, Regional and Field levels.

Questions to ask

- Have we prepared and updated the list of staff and volunteers ?
- Have we arranged orientation, briefing, training for them ?
- Have we prepared a plan for replacement of the staff ?
- Have we made arrangement for recreational facilities of the people working in difficult/harsh condition ?

Logistics Plan

What should be done ?

1. Prepare a plan to provide logistic support for the emergency relief operation.
2. The plan should include the following :
 - Procurement/Purchase of supplies,
 - Arrangement of transports,
 - Arrangement for carrying and transportation of supplies,
 - Arrangement for storage of supplies at National and Regional levels,
 - Procurement of equipments, kit bags, first-aid boxes, measuring pots, etc.
 - Production and distribution of Relief Distribution Card, muster rolls and other stationery items,
 - Arrangement for accommodation of staff and volunteers at Regional and field levels.

Who should do it ?

- DMU/LO
- Leaders of Relief/Survey Team.

Who should be kept informed ?

- CEO
- ADAB/VHSS
- Other NGOs

Questions to ask

- Do we have a logistic plan ?
- Does the plan include how to procure supplies, transport, equipment, stationery, kit bag, first-aid box, etc. ?
- Does the plan specify where and how to transport and store the supplies ?
- Is there any budget provision for the logistic activities ?



CHAPTER - I. H

INFORMATION TRACKING COMPUTER PROGRAMME

HAVE A DISASTER INFORMATION AND RESPONSE TRACKING COMPUTER PROGRAMME READY TO GO (Large and medium sized organizations using computers should have it)

What should be done ?

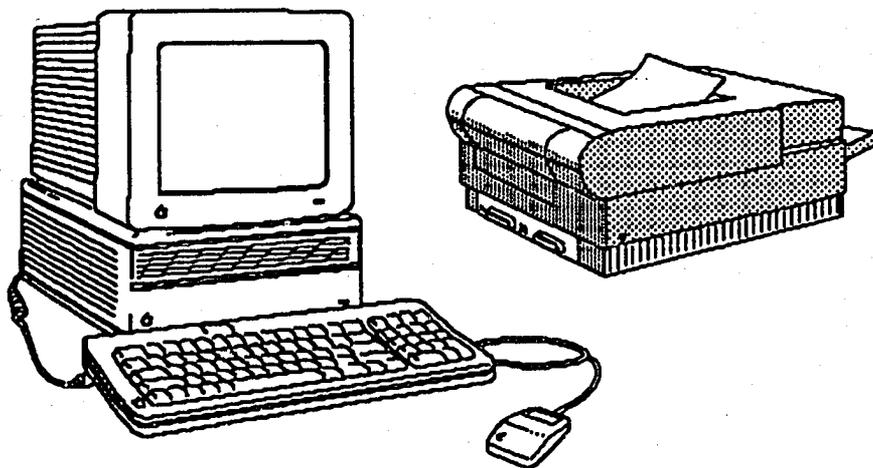
1. Ensure that the organization has a disaster programme tracking tools/system/format.
2. Acquire for the organization, a disaster information and response tracking computer programme ready to go from ADAB/PRIP. Their programme is titled "Disaster Response Tracking System" working on IBM format. **The form to use for this program along with the introduction of how to use the form is attached at Annexure I : H.1**
3. Ensure that a copy of the information sheet/format used is readily available, or can be made available quickly.
4. Ensure systematic tools/formats/procedures for manual uses for information tracking, pending acquisition and installation of the information tracking computer programme.
5. Designate a Senior Officer of the Computer section for the job.
6. If you do not have a program have a stock of information sheets/formats ready to feed to ADAB so that they can keep track.

Who should do it ?

- DMU
- A Senior Officer of the Computer Section specifically assigned with this responsibility

Who should be kept informed ?

- The Chief Executive Officer
- DMU
- ADAB/PRIP
- MOR



Questions to ask

- Have we obtained the Disaster Information and Response tracking computer programme from ADAB/PRIP ?
- Have we learnt how to use it ?
- Do we feed in all data into the computer as per the programme ?
- Is the organization's information tracking computer programme compatible with similar programmes in other sister organizations ?
- Is the programme capable of systematically storing and retrieving all pertinent information ?
- What is the scope of improving the existing programme/tools/system/ format ?
- Does the programme/tools/system/format provide all required information?
- Do we have the blank sheets/formats for the computer programme ?
- Are we providing these regularly to ADAB ?

P A R T - I : ANNEXURES

Storm Warning Signals in Bangladesh

Storms generally occur in Bangladesh in the months of April to May and October to November (Early part).

The meteorological Department uses separate codes of signals for storm warnings for maritime and river ports.

Interpretation of warning signals for the maritime and the river ports:

There are 11 (eleven) storm Warning Signals meant for the maritime ports which are as follows :

(a) Distant signals :

- Cautionary Signal No. I** : There is a region of squally weather in the distant sea where a storm may be formed.
- Warning Signal No. II** : A storm has been formed in the distant sea.

(b) Local signals:

- Cautionary Signal No. III** : The port is threatened by squally weather.
- Warning Signal No. IV** : The port is threatened by a storm, but the danger is not yet sufficiently great to justify extreme precautionary measures.
- Danger Signal No. V** : The port will experience severe weather from a storm of slight or moderate intensity that is expected to cross the coast to the South of the port in case of Chittagong and East of the port in case of Chalna.
- Danger Signal No. VI** : The port will experience severe weather from a storm of slight or moderate intensity that is expected to cross the coast to the North of the port in case of Chittagong and to the East of the port in case of Chalna.
- Danger Signal No. VII** : The port will experience severe weather from a storm of slight or moderate intensity that is expected to cross over or near the port.
- Great Danger Signal No. VIII:** The port will experience severe weather from a storm of great intensity that is expected to cross the coast to the South of the port in case of Chittagong and to the East of the Port in case of Chalna.

Great Danger Signal No. IX : The port will experience severe weather from a storm of great intensity that is expected to cross the coast to the North of the port in case of Chittagong and to the East of the port in case of Chalna.

Great Danger Signal No. X : The port will experience severe weather from a storm of a great intensity that is expected to cross over or near to the port.

Failure of Communication No. XI: Communications with the Meteorological warning centre have broken down and the local officers consider that a devastating Cyclone is following.

There are 4 (four) signals for the River ports which are as follows:

Cautionary Signal No. I : The area is threatened by squally winds of transient nature.

Warning Signal No. II : A storm is likely to strike the area. (All vessels of 65 feet and under in length are to seek shelter immediately.)

Danger Signal No. III : A storm will strike the area. (All vessels will seek shelter immediately.)

Great Danger Signal No.IV : A violent storm will soon strike the area. (All vessels will take shelter immediately.)

List of Thanas Vulnerable to Cyclone

A : Severely affected area
 B : Less affected area

Division - Chittagong

Districts	Thanas A	B
Cox's Bazar	Teknaf Ukhia Cox's bazar Moheshkhali Chakaria Kutubdia	Ramu
Chittagong	Banskhali Anwara Chittagong Metropolitan City areas comprising thanas: Chandgaon, Chittagong, Bandar, Double Mooring, Kotwali, Pahartali and Panchlais Sitakunda Sandwip Mirsharai	
Feni	Sonagazi	Feni
Noakhali	Companigonj Noakhali Hatiya	
Lakshimpur	Rangamati	Lakxmipur Raipur
Barisal Division		
Pirojpur	Mathbaria	
Bhola	Char Fession Monpura Lalmohan Tajumuddin Burhanuddin Daulatkhan Bhola	

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Patuakhali

Kalapara
Galachipa
Dashmina

Mirzagonj
Patuakhali
Bauphal

Barguna

Patharghata
Barguna
Amtali

Bamna

Khulna Division

Bagerhat

Sarankhola
Mongla

Morelgonj

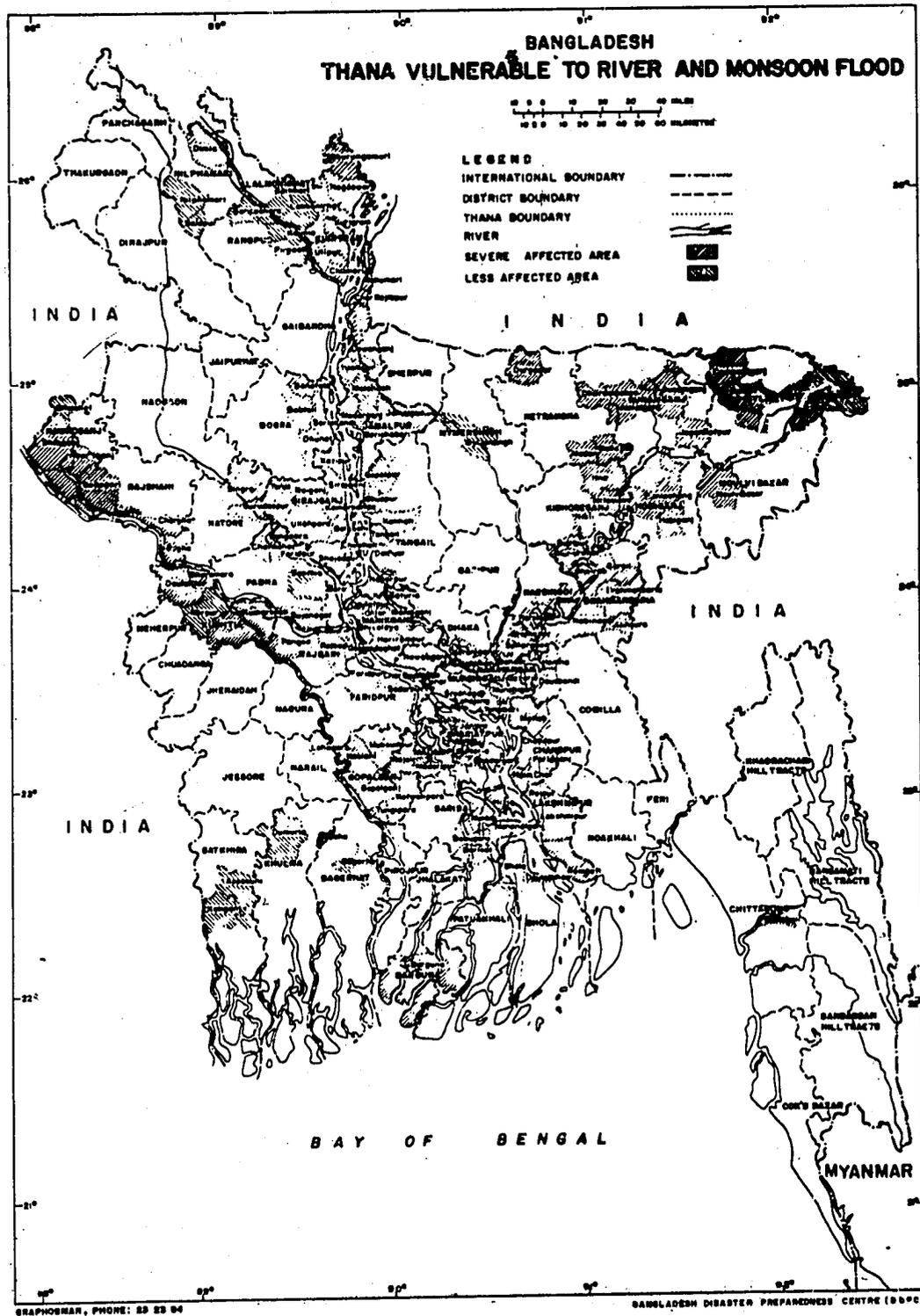
Khulna

Koyra
Dacope

Satkhira

Shyamnagar

Map of Bangladesh Showing Areas Vulnerable to River and Monsoon Flood



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List of Thanas vulnerable to River and Monsoon Floods

A : Severely affected area

B : Less affected area

Rajshahi Division

Districts	Thanas	
	A	B
Kurigram	Bhurungamari Nageshwari Kurigram Ulipur Chilmari Rohumari Razibpur	
Lalmonirhat		Lalmonirhat Aditmari
Nilphamari	Dimla	Saidpur Nilphamari
Rangpur		Pirgachha Kaunia Gangachara
Bogra	Sonatola Shariakandi Gabtali Dhunot	
Sirajgonj	Kazipur Sirajgonj Raigonj Belkuchi Taras Chauhali Ullapara Shahzadpur Kamarkhanda	
Natore	Gurudaspur Singra	

Pabna	Bera Sujanagar Faridpur Bhangura Chatmohar	Santhia
Chapai Nawabgonj	Shibgonj Nawabgonj	Bholahat
Rajshahi	Godagari Boalia Charghat Bagha	
Khulna Division		
Kustia	Daulatpur Bheramara Kumarkhali	Mirpur
Narail		Lohagara
Satkhira		Asasuni Kaligonj
Khulna		Dumuria Rupsha
Bagerhat		Bagerhat
Barisal Division		
Barguna	Barguna	
Bhola	Daulatkhan Bhola	
Barisal	Hizla Mehendigonj Muladi Babuganj Barisal	

Dhaka Division

Gopalganj	Kotalipara Tungipara Gopalganj Kasiani Muksudpur	
Madaripur	Shibchar	Rajoir Madaripur
Shariatpur	Janjira Naria Bhedarganj	Shariatpur
Faridpur	Sadarpur Char Bhadrasan Faridpur	
Rajbari	Pangsa Rajbari Goalundo	
Manikgonj	Harirampur Sibalay Daulatpur	Ghior Saturia Manikgonj
Dhaka	Keraniganj Nawabganj Dohar	
Munshigonj	Srinagar Serajdikhan Lohajang Tangibari Munshiganj Gazaria	
Narayangonj	Bandar Baidyer Bazar Araihazar	
Narshingdi	Narshingdi Raipur	
Tangail	Nagarpur Delduar Tangail Kalihati Bhuapur	Gopalpur

Jamalpur	Jamalpur Sharishabari Madarganj Islampur Dewanganj	Melandaha
Mymensingh Kishoregonj	Kuliarchar Bhairab Bajitpur Nikli Mithamoin Itna	Memensingh
Netrokona	Durgapur Khaliajuri Modan	
Chittagong Division		
Sunamgonj	Dharmapasha Jamalganj Sunamganj Jagannathpur	
Sylhet	Sylhet Companigonj Beani Bazar	Kanairghat Zakiganj
Moulavibazar	Moulavibazar	
Hobigonj	Baniyachang Habigonj	
Brahmanbaria	Brahmanbaria Akhaura Nabinagar Sarail	
Comilla	Homna Daudkandi	
Chandpur	Matlab Chandpur Faridganj Hairchar	
Laksmipur	Raipur Laksmipur Ramgati	
Chittagong	Boalkhali	

List of Thanas vulnerable to Flash Flood :

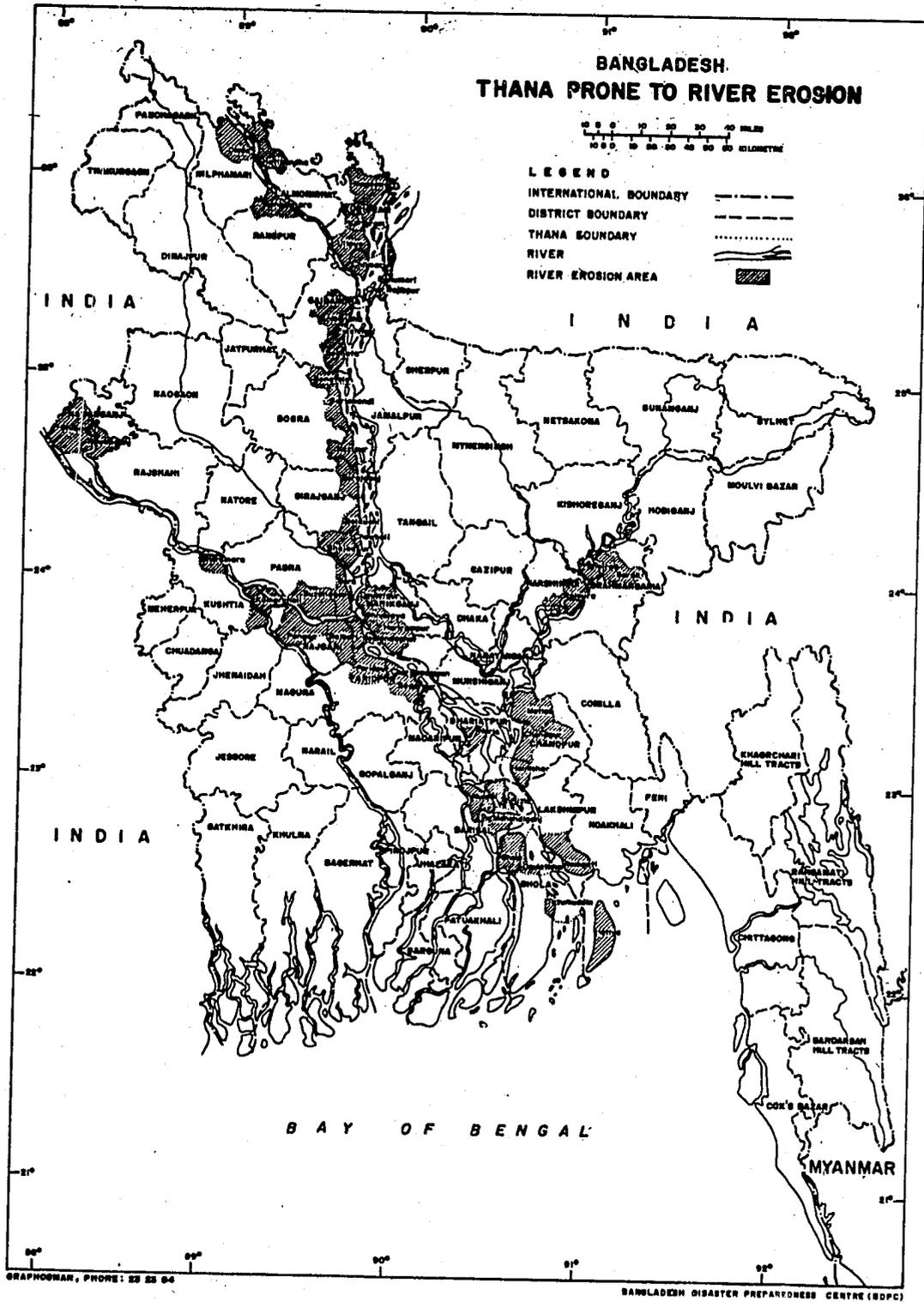
Chittagong Division

Sylhet	Sylhet Companiganj Gowainghat Jaintapur Kanairghat
Sunamgonj	Madhyanagar Tahirpur Bishambaripur Duwarabazar
Feni	Parshuram Fulgazi Chhagalnaiya

Dhaka Division

Netrokona	Dhubaura Durgapur Kamlakanda
Mymensingh	Haluaghat
Sherpur	Sribardi Jhinaigati Nalitabari
Jamalpur	Bakshiganj

Map of Bangladesh Showing Thanas Prone to River Erosion



List of Thanas vulnerable to River Erosion

A : Most vulnerable areas

B : Less vulnerable areas

Division Rajshahi

Districts

Thanas

A

B

Nilphamari

Dimla

Lalmonirhat

Hatibanda

Kurigram

Nageswari
Kurigram
Ulipur
Chilmari
Rohumari
Razibpur

Rangpur

Gangachara

Gaibandha

Gaibandha
Fulchari
Shaghata

Bogra

Sonatola
Shariakandi

Sirajgonj

Kazipur
Sirajgonj
Belkuchi
Shahjadpur
Chouhali

Pabna

Bera
Sujanagar

Chapai Nawabgonj

Shibganj
Nawabganj

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Khulna Division**District**

Kustia Bheramara
 Kumarkhali

Barisal Division

Bhola Tajumuddin
 Daulatkhan
 Bhola

Barisal Hizla
 Mehendiganj
 Muladi

**Dhaka Division
Districts**

Rajbari Pangsa
 Rajbari
 Goalunda

Faridpur Char Bhadrasan
 Faridpur
 Sadarpur

Shariatpur Naria

Manikgonj Harirampur
 Sibalaya
 Daulatpur

Narshingdi Raipur

Kishoregonj Bhairab

**Chittagong Division
Districts**

Brahmanbaria Sarail

Chandpur Matlab
 Chandpur
 Haimchar

Laksmipur Ramgati

Noakhali Hatiya

List of Thanas prone to Diarrhoeal disease

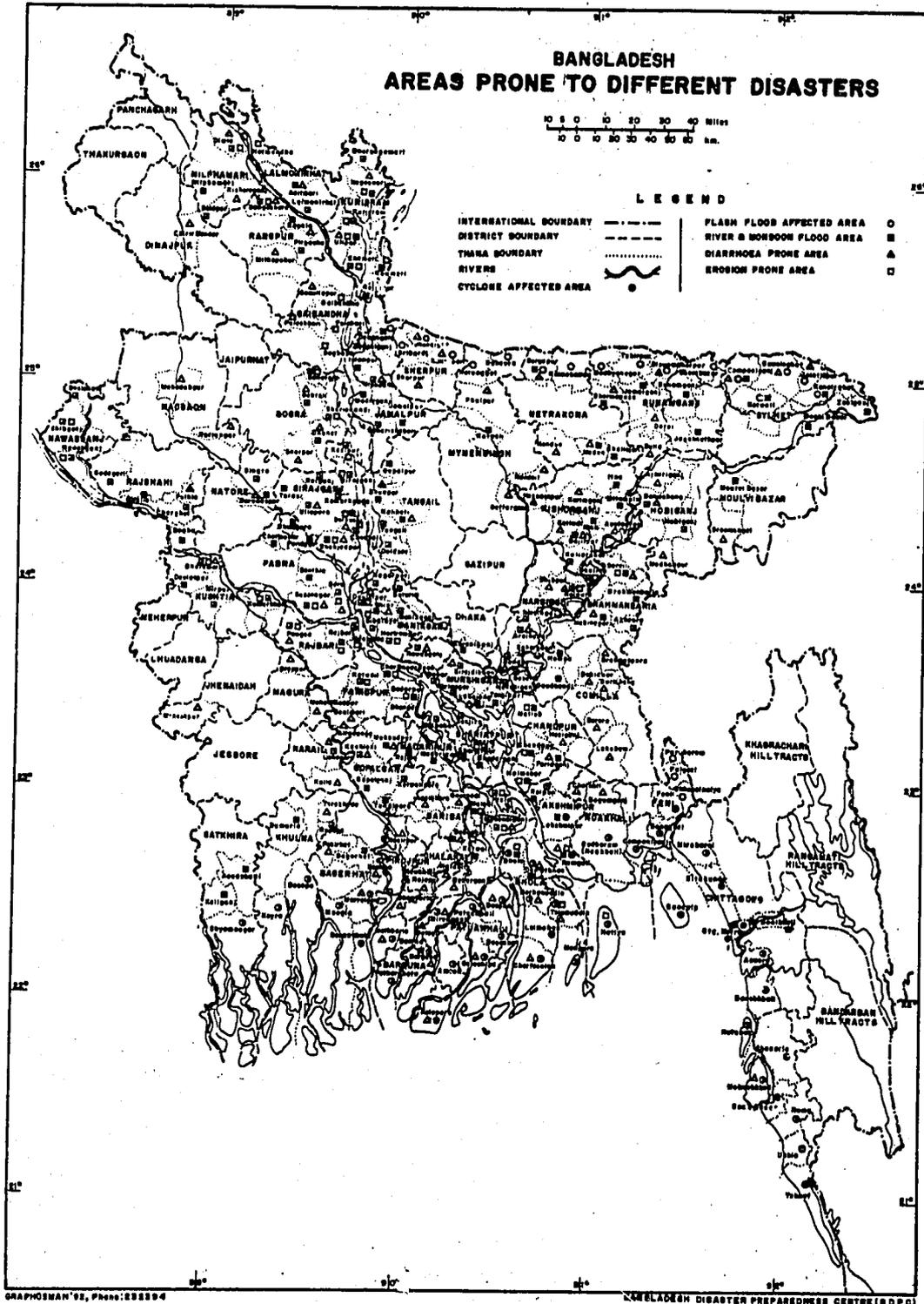
Division	District	Thanas
Dhaka	Dhaka	Nawabganj
	Faridpur	Alfadanga, Bhanga, Boalmari
	Gopalganj	Kashiani, Mokshedpur, Tongipara
	Madaripur	Rajoir
	Manikgonj	Daulatpur, Ghior
	Munshigonj	Louhajang, Serajdikhan
	Narayangonj	Araihazar, Bandar
	Narshingdi	Raipur, Shibpur
	Rajbari	Pangsha
	Tangail	Bhuapur, Kalihati
	Jamalpur	Melandaha
	Kishoregonj	Austagram, Bajitpur, Hossainpur, Kathiadi, Karimgonj
		Mymensingh
	Netrokona	Kendua, Durgapur, Madan
	Sherpur	Sadar, Jhenaigati, Nalitabari.
Chittagong	Cox's Bazar	Moheshkhali
	Laxmipur	Ramgati
	Noakhali	Begumgonj, Chatkhil
	Brahmanbaria	Nabinagar, Sarail
	Chandpur	Faridgonj, Hajigonj
	Comilla	Barura, Brahmanpara, Burichong, Debidwar, Laksam
		Hobigonj
	Maulovibazar	Sreemangal
	Sunamgonj	Bishwambarpur, Deerai, Dharmapasha, Sulla
	Sylhet	Companygonj, Gowainghat, Jaintapur.
Khulna	Bagerhat	Kochua, Morrelgonj
	Jhenaidah	Moheshpur
	Khulna	Terokhada
	Kushtia	Bheramara
	Magura	Fakirhat, Mohammadpur, Sreepur
	Narail	Kalia, Lohagara
Barisal	Barguna	Sadar, Betage
	Barisal	Agailjhara, Babugonj, Bakergonj, Gournadi, Mehendigonj
		Bhola
		Borhanuddin, Charfession, Daulatkhan, Tajumuddin
		Jhalokati
	Patuakhali	Kolapara, Bauphal, Galachipa, Mirzagonj
	Perojpur	Bhandaria, Kowkhali, Mathbaria, Nazirpur

Rajshahi

Bogra
Dinajpur
Gaibandha
Kurigram
Lalmonirhat
Naogaon
Natore
Nilphamari
Pabna
Rajshahi
Rangpur
Sirajgonj

Dhunot, Gabtali, Sherpur
Chirir Bandar
Palashbari, Sadullapur
Nageswari, Ulipur
Aditmari
Mohadepur, Raninagar
Gandashpur
Dimla
Bera, Sujanagar
Puthia
Gangachara, Kownia, Mithapukur
Belkuchi, Shahjadpur, Ullapara.

Map of Bangladesh Showing Areas Prone to Different Types of Disasters



51

NCHS Standard Chart of Weight for Height Measurement

Percent of Children age 6 - 71 months below 80 or 90 percent of NCHS Reference Median Height-for-age, Weight-for-age, and weight-for-Height (1989-90 Nutrition Module of Bangladesh)

Variable	Height-for-age (below 90%)	Weight-for-age (below 80%)	Weight-for-Height (below 80%)
Age in completed months			
6-11 (219)	25.4	64.3	12.0
12-23 (407)	52.3	81.2	19.1
24-35 (453)	45.0	67.0	9.9
36-47 (418)	52.6	68.8	7.5
48-59 (417)	53.3	70.2	4.6
60-71 (442)	58.3	78.5	6.4
Area of Residence			
Urban (843)	41.7	69.9	8.3
Rural (1513)	50.6	72.5	9.9
Sex			
Male (1240)	49.6	72.0	8.9
Fem. (1116)	49.6	72.4	10.6
Season			
Apr.-June 1989 (690)	42.8	72.8	14.8
July-Sept 1989 (548)	53.9	73.9	9.1
Oct.-Dec 1989 (577)	47.9	70.3	8.7
Jan-Mar 1990 (541)	55.3	71.3	5.0
All Groups Sample	49.6 1115.0	72.2 1686.0	9.8 219.0

Note: All percentages are calculated by weighting urban and rural observations by 1201 and 1884 respectively. Sample size are reported in parentheses.

Annexure - I : B. 2

NCHS STANDARDS, OF HEIGHT AND WEIGHT
 Reference Data for Height by Age of Children 6 to 71 Months of Age.
 50th percentile (Median) of height and weight

Completed (in months)	Height (in cm)		Weight (in Kg.)		Completed (in months)	Height (in cm)		Weight (in Kg.)	
	Boys	Girls	Boys	Girls		Boys	Girls	Boys	Girls
6	67.8	65.9	7.8	7.2	39	97.0	96.0	15.2	14.6
7	69.5	67.6	8.3	7.7	40	97.7	96.6	15.3	14.8
8	71.0	69.1	8.8	8.2	41	98.4	97.3	15.5	14.9
9	72.3	70.4	9.2	8.6	42	99.1	97.9	15.7	15.1
10	73.6	71.8	9.5	8.9	43	99.7	98.6	15.8	15.2
11	74.9	73.1	9.9	9.2	44	100.4	99.2	16.0	15.4
12	76.1	74.3	10.2	9.5	45	101.1	99.8	16.2	15.5
13	77.2	75.5	10.4	9.8	46	101.7	100.4	16.4	15.7
14	78.3	76.7	10.7	10.0	47	102.3	101.0	16.5	15.8
15	79.4	77.8	10.9	10.2	48	102.9	101.6	16.7	16.0
16	80.4	78.9	11.1	10.4	49	103.6	102.2	16.9	16.1
17	81.4	79.9	11.3	10.6	50	104.2	102.8	17.0	16.2
18	82.4	80.9	11.5	10.8	51	104.8	103.4	17.2	16.4
19	83.3	81.9	11.7	11.0	52	105.4	104.0	17.4	16.5
20	84.2	82.9	11.8	11.2	53	106.0	104.5	17.5	16.7
21	85.1	83.8	12.0	11.4	54	106.6	105.1	17.7	16.8
22	86.0	84.7	12.2	11.5	55	107.1	105.6	17.9	17.0
23	86.8	85.6	12.4	11.7	56	107.7	106.2	18.0	17.1
24	85.6	84.5	12.3	11.8	57	108.3	106.7	18.2	17.2
25	86.4	85.4	12.5	12.0	58	108.8	107.3	18.3	17.4
26	87.2	86.2	12.7	12.2	59	109.4	107.8	18.5	17.5
27	88.1	87.0	12.9	12.4	60	109.9	108.4	18.7	17.7
28	88.9	87.9	13.1	12.6	61	110.5	108.9	18.8	17.8
29	89.7	88.7	13.3	12.8	62	111.0	109.5	19.0	18.0
30	90.4	89.5	13.5	13.0	63	111.5	110.0	19.2	18.1
31	91.2	90.2	13.7	13.2	64	112.1	110.5	19.3	18.3
32	92.0	91.0	13.9	13.4	65	112.6	111.0	19.5	18.4
33	92.7	91.7	14.1	13.6	66	113.1	111.6	19.7	18.6
34	93.5	92.5	14.3	13.8	67	113.6	112.1	19.8	18.7
35	94.2	93.2	14.4	13.9	68	114.1	112.6	20.0	18.9
36	95.9	93.9	14.6	14.1	69	114.6	113.1	20.2	19.0
37	95.6	94.6	14.8	14.3	70	115.1	113.6	20.3	19.2
38	96.3	95.3	15.0	14.4	71	115.6	114.1	20.5	19.4

Names of Institutions which Conduct Training Courses and Workshops on Disaster Preparedness and Response:

In Bangladesh :

- * **Association of Development Agencies in Bangladesh (ADAB)**
1/13, Block - F
Lalmatia , Dhaka-1207
Tel : 324162-3, 327424
- * **Bangladesh Disaster Preparedness Centre (BDPC)**
9/23, Iqbal Road, Mohammadpur
Dhaka - 1207.
Tel : 317092
Fax : 880-2-801881
- * **Disaster Resource Unit (DRU)**
Bangladesh Development Partnership Centre
2/3, Block A, Lalmatia
Dhaka-1207
- * **International Voluntary Services (IVS)**
House No. 36 F, Road No. 7
Banani, Dhaka-1213
Tel : 600929
- * **OXFAM**
6/8 , Sir Syed Road
Mohammadpur , Dhaka-1207
Tel : 315386, 319617
- * **South Asian Disaster Management Centre, SADMC
International University of Business Agriculture
and Technology (IUBAT).**
House No. 133 , Road No. 9A
Dhanmondi Residential Area
Dhaka-1205
- * **COMMUNICA**
90, Road 7A, Dhanmondi
Dhaka-1209, Bangladesh
Tel : 329001

Besides these Institutes some of the organizations conduct Training courses and Workshops on 'Disaster Preparedness and Response' for their own staff. These organizations are :

1. **BRAC**
66, Mohakhali C/A
Dhaka-1212
Phone : 600161-4, 600106-7, 883614, 884180-7
2. **BDRCS**
684-686, Bara Moghbazar
Dhaka-1217
Phone : 400188-9
3. **CONCERN**
House No.63, Road 15 A
Dhanmondi R/A
Dhaka-1209
Phone : 812795-6
4. **CARITAS**
2, Outer Circular Road
Shantibagh, Dhaka-1217
Phone: 402407-9, 403706
5. **CCDB**
88 (Old 26/A), Senpara Parbatta
Section-10, Mirpur,
Dhaka-1216, Bangladesh

Outside Bangladesh

- * **Disaster & Settlement Unit**
Department of Architecture
Oxford Polytechnic
Headington, Oxford OX3 0BP
United Kingdom.
- * **Cranfield Royal Military College of Science
(School of Defence Management)**
Shrivenham Swindon Wilts
SN 6 8LA England.
Contact Person:
George Ritchie
Director
Disaster Preparedness Centre
- Asian Disaster Preparedness Centre (ADPC)**
Asian Institute of Technology (AIT)
P.O. Box 2754, Bangkok 10501
Thailand.

- * Indonesia Disaster Management Center.
- * National Research Centre for Disaster Prevention,
Ibaraki-Ken, Tokyo, Japan.
- * Pan American Health Organisation, Washington, D.C.
- * Administrative Staff College, Hyderabad, India.
- * Centre for the Study of Administration of Relief,
New Delhi, India.
- * Joint Assistance Centre, New Delhi, India.
- * Oxford Polytechnic Disaster Management Centre, U.K.
- * University of Wisconsin Disaster Management Centre, (DMC), Madison,
Wisconsin, USA.
- * WHO Disaster Management Training Programme, Addis Ababa, Ethiopia
- * Disaster Management Training Centre
Ankara, Turkey.
- * International Relief/Development Project
Harvard University, USA
- * Australian Overseas Disaster Response Organisation (AODRO),
Sydney, Australia.
- * National Training Service (Servicio Nacional de Aprendizaje, SENA)
Regional Office
Popayan, Colombia.
- * Emergency Management Institute
Federal Emergency Management Agency (FEMA)
Emmitsburg, Maryland
USA.
- * Medecins Sans Frontieres
France.
- * Office of US Foreign Disaster Assistance
Washington D.C.
- * CARE - East Africa Regional Advisory Team
Nairobi, Kenya.

- * CARE - Mozambique.
- * Disaster and Emergency Reference Centre
Delft Technical University
Netherlands.
- * London School of Hygiene and Tropical Medicine, London, UK.
- * Hadassah School of Public Health and Community
Medicine, Jerusalem, Israel.
(Programme for the study of Emergency Relief and Development Projects).
- * Organisation of American States
Department of Regional Development
Washington, D.C.

Emergency Health Training Programmes Institutes

- * Colombian National Faculty of Public Health
Medellin, Colombia.
- * Hadassah School of Public Health and Community Medicine
Jerusalem, Israel.
- * PAHO - ECO, Mexico.
- * University of West Indies
Department of Social and Preventive Medicine
Kingston, Jamaica.

Institutes with Irregular Training Programmes:

- * **Appropriate Reconstruction & Training Information Centre**
Vijayawata
Andhra Pradesh
India.
- * **University of San Carlos**
Cebu
Philippines.
- * **Centre for Information and Research on Natural Hazards**
P.O. Box No. 197 , Gaul Field
East Melbourne , Victoria - 3145, Australia
- * **Australian Counter Disaster College**
Mount Macedon , Melbourne
Victoria, Australia
- * **Citizens Disaster Rehabilitation Society**
Manila, Philippines

United Nations organisations engaged in training for various aspects of disaster management include :

- * **UNHCR** Conducts 4 types of emergency management programmes.
- * **UNICEF** Conducts emergency management training programmes.
- * **UNEP** Conducts workshops on environmental issues that have disaster management aspects, especially in mitigation.
- * **UNCHS** Supports workshops on topics related to human settlements and disaster management
- * **UNCRD** Has conducted training seminars on regional development planning for disaster prevention.
- * **FAO** Conducts workshops and regional seminars on aspects of food emergencies.
- * **UNESCO** Supports training of technical/scientific aspects of natural disasters.
- * **WFP** Conducts workshops out of its training centre in Dhaka, Bangladesh.
- * **WHO** And PAHO offer a large training programme on various aspects of disaster preparedness and management.
- * **WMO** Conducts training on disaster related aspects of cyclones and hydrology.
- * **ICRC** LRCS, International Civil Defense Organisation and the OAS each have training programmes in aspects of disaster management.

Guidelines for Filling out Disaster Relief and Disaster Rehabilitation Activities Reports

The purpose of these reports is to acquire information about what NGOs are doing in any particular disaster. Please take a small amount of time to fill it in, using these guidelines.

The information given by you in the report will be fed into a computer data base system which will allow information on any organisation, donor, item, area, or program to be tracked, retrieved, and made available.

The computer information tracking and retrieval system will work well if the correct kind of information is put into it. If the information is of the wrong kind, or wrongly entered, it will not give back the useful information that we all want. Please therefore take time to read these instructions and provide the information as requested.

There are two forms for you to fill in:

- a. Disaster Relief Activities Report
- b. Disaster Rehabilitation Activities Report

Each report is the same apart from providing different program names.

If you need more copies of the form please photocopy them yourselves, or ask for more copies.

Disaster Relief Activities Report

Please follow the instructions carefully - If you put wrong information in, you get wrong information out !

- NGO :** Please write the acronym of your organization (maximum 10 letters)
- DISASTER:** ADAB will give a name to each disaster and this will be used for all information about that disaster. Do not fill in this section.
- DATE:** Please write the date on which this information is being supplied. We will be able to update your information.

A: NGO Relief by Program, Area, Item, Population Served

1. Program Name

Please write one name taken from the list in the box in the bottom right. Do not use any other words apart from the words on that list.

If you are doing some activity which is not on the list, please write a note and send it to ADAB, and we will try to modify the list.

The Program Name is the start of other information. Please fill in all other columns as they refer to this particular program.

2. District

Please fill in the name of the District in which you are carrying out the program you have written in 1. The District will take a geo-code number from the Small Area Atlas of Bangladesh. This will be filled in by the computer operator - DO NOT fill this code in yourself.

3. Thana

Please fill out the name of the Thana within the District you have mentioned in 2 where you are carrying out the program you have written in 1.

4. Union

Please fill out the name of the Union (within the Thana you have written in 3 and the District you have written in 2) where you are carrying out the program (you have written in 1)

5. Village

Please fill in the name of the Village (within the Union you have written in 4, within the Thana you have written in 3 and the District you have written in 2) where you are carrying out the program (you have written in 1)

N.B. The computer recognizes Mauzas not villages. The Mauzas are listed in the small Area Atlas of Bangladesh, which we can provide to a" of you. If the village is different from the Mauza please write the Mauza name and then the village name in brackets.

6. **Items**
Please give the name of the items supplied (if relevant) for that specified village, in specified union, in specified Thana, in specified district, in specified program.
7. **Quantity**
Please write the number or quantity of the items supplied (if relevant)
8. **Measure :**
Please write the measure being used for the quantities of the items
9. **Population**
Please write the number of people you estimate that your organization is helping in the village specified in the program specified.

B : NGO Rehabilitation by Program, Donors, Fund

1. **Program Name**
Please write down one of the items from the Relief Program Name list on the bottom right side box.
2. **Donor**
Please write the name of the donor (acronym 10 letters maximum) who is funding the program you have specified.
3. **Cash Received**
Please write (in any currency) the amount of cash received from the donor specified for the program specified and give the currency
4. **In Kind Received**
Please write the amount and kind of commodity received from the donor specified for the program specified.
5. **Amount Spent**
Please write in any currency what has been spent to date against the Donor and Program specified.

BIBLIOGRAPHY

1. Disaster Preparedness Manual, ADAB/PRIP
2. African Disaster Handbook
World Health Organisation
Pan-African Centre for Emergency preparedness and Response, 1990
3. Aim and Scope of Disaster Management.
Frederick C. Cuny,
Asian Institute of Technology, Bangkok, Thailand
4. Comprehensive Disaster Preparedness
Action Plan For Flood Control, UNDP, January 1990.
5. Cyclone affected Area Survey Guideline/Directives - CODEC
6. "Cyclone '91" - An Environmental And Perceptual Study
Bangladesh Centre for Advanced Studies (BCAS)
7. Cyclone in Bangladesh
Dr. M. A. Choudhury
Dhaka, 1991
8. Cyclone Disaster - 1991
A First Hand Aerial Survey Report and Recommendation for Emergency
Intervention
- Md. Saidur Rahman - OXFAM.
9. Cyclone Relief Programme, 1991
The BRAC Response, September, 1991
10. "Cyclone '91, A cry for effective co-ordination among NGOs"
- Md. Saidur Rahman, Oxfam.
11. Directory of NGOs in Bangladesh, 1992 - ADAB
12. "Disaster Programming Guide Tools"
CONCERN Bangladesh
13. Disaster Management Guidelines,
Save the Children Fund (UK)- Reviewed October 1990
14. Disaster Management : A Disaster Managers Handbook
Carter W. Nick - Manila : Asian Development Bank (ADB) 1991
15. Disaster Mitigation In Asia and the Pacific
Asian Development Bank, Manila, Philippines

16. Disaster Relief Manual
Caritas International - September, 1977
17. Emergency Services in the Event of a Disaster
Bangladesh Disaster Preparedness Centre, BDPC
18. Emergency Standing Orders for Flood
Govt. of the Peoples Republic of Bangladesh
Relief and Rehabilitation Division
Ministry of Food, February, 1984.
19. Emergency Flood Relief Programme - 1988
- Md. Saidur Rahman - OXFAM
20. Families and Floods : ADAB/PRIP/RDRS/BNELC/IVS/PRIP
21. Flood in Bangladesh : Community Development Library (CDL), April, 1989
22. Floods in Bangladesh : Bangladesh Views
23. Flood Policy Study (Inception Report)
To the Govt. of Bangladesh, UNDP, November, 1988
24. Flood Response (Inception Report)
Flood Action Plan 14
Flood Plan Coordination Organisation
Irrigation Support Project for Asia and the Near East (ISPAN).
Ministry of Irrigation, Water Development, and Flood Control. August, 1991.
25. Food Value of the common Country Food Items
Institute of Nutrition and Food Research
Dhaka University
26. Guidelines for Cyclone
Cyclone Preparedness Review Committee, August, 1977
27. Guidelines for Health Care in Refugee Camps
Refugee Health Unit, Somali Ministry of Health.- OXFORD 1983
28. Human Response to Natural Disasters : Issues Involved
- Atiur Rahman, BIDS - January, 1990
29. Inception Report
Disaster Co-ordination and Monitoring Unit
Ministry of Relief and Rehabilitation.
30. Joint BDRCS/IFRCs Relief Operation in Aid of Myanmar Refugees; 1992

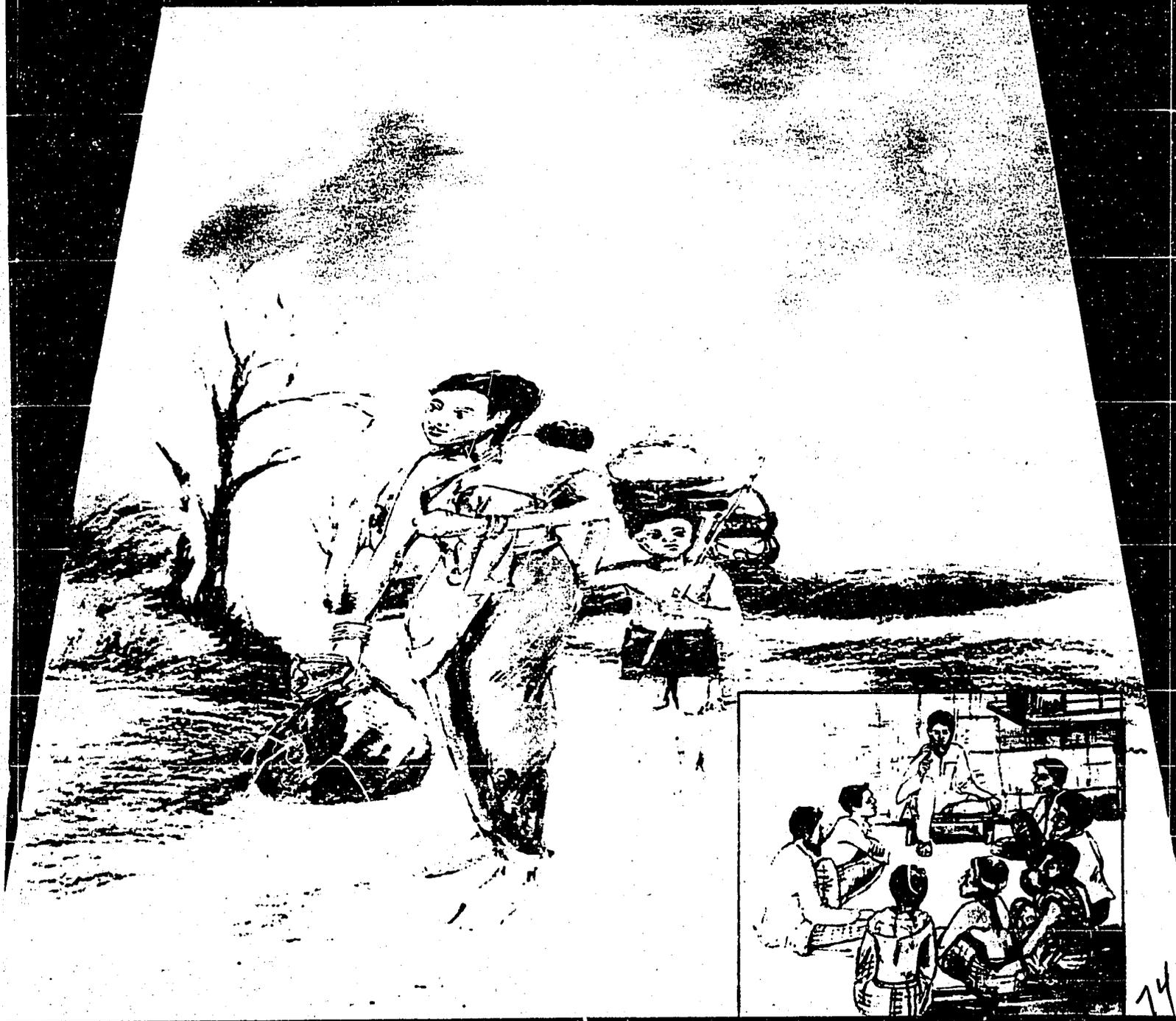
31. "Lessons Learnt During Cyclone" - April 1991
Ministry of Health and Family Welfare
Govt. of Bangladesh (In joint Collaboration with World Health Organisation)
32. Managing Disaster Response - Three Computer Programs which will help
(i. Disaster Information System -DIS, ii. Disaster Preparedness Information System - DPIS, iii. Disaster Response Tracking System - DRTS)
PACT/PRIP, Aug.'92, Dhaka, Bangladesh
33. Management of Severe Protein-Energy Malnutrition at Children's Nutrition Unit.
Dhaka
- Dr. Sultana Khanum - SCF (UK)
34. Map of GEODESEC, July, 1991
35. Maps of Bangladesh
- Graphosman, Dhaka
36. NGO Guide to Disaster Assistance Agreements
USAID, Dhaka, Bangladesh, May, 1992
37. Operation SHEBA, M. Mokammel Haque
June, 1991
38. Patterns, levels, Trends in Mortality and Regional Life Tables For Bangladesh.
Bangladesh Bureau of Statistics
39. Practical Guide to Refugee Health Care, OXFAM Health Unit
(OXFAM Practical Guide No. 2), Second Edition February, 1986.
40. Preliminary Report-Population Census, 1991
Bangladesh Bureau of Statistics
41. Readings in Disaster Management (June, 1983)
Dr. Aqueil Ahmed
Administrative Staff College of India
42. Report of the Child Nutritional Status Survey 1989-90
Bangladesh Bureau of Statistics April, 1991
43. Red Cross Disaster Relief Handbook, League of Red Cross Societies 1970
44. Recommendations for : "A Program Strategy To Enhance Disaster Preparedness and Emergency Response in Bangladesh"
Mr. Erlins Dessau, Mr. David Read Barker
UN. Systems Operational Activities for Development in Bangladesh.
45. Research on the Fallout of Cyclone
(A.M.R. Chowdhury & A.Y. Choudhury)

46. Report of The Cyclone Disaster Preparedness Review Committee
Govt. of The Peoples Republic of Bangladesh - 1985
47. Seasonal Dimensions to Rural Poverty :
Analysis and Practical Implications
Robert Chambers, Richard Longhurst
Institute of Development Studies
University of Sussex
United Kingdom.
48. Selective feeding Programme, OXFAM Practical Health Guide No. 1
- Dr. Tim Lusty, Pat Diskett.
49. Small Atlas of Bangladesh
- Bangladesh Bureau of Statistics, 1991
50. Standing Orders For Cyclone
Govt. of the People's Republic of Bangladesh, Ministry of Relief and
Rehabilitation, 1985.
51. Statistical Pocket Book of Bangladesh, 1991
Bangladesh Bureau of Statistics
52. Sun-cleaned Drinking Water
Professor David Morley
Tropical Child Health Unit, London
53. The Flood of 1988 in Bangladesh : "An Assessment of Damages and Losses"
- Monowar Hossain
Multidisciplinary Action Research Centre. September, 1989
54. The Local Govt. Engineer in Disaster Recovery
- Australian Counter Disaster College
Snowy Mountains Engineering Corporation Limited
55. UNHCR Handbook for Emergencies
Part One : Field Operations
United Nations High Commissioner for Refugees, Geneva, December, 1982

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DISASTER MANAGEMENT HANDBOOK FOR BANGLADESH

PART - II PLANNING A DISASTER RESPONSE



DISASTER MANAGEMENT HANDBOOK FOR BANGLADESH

PART - II PLANNING A DISASTER RESPONSE

MD. SAIDUR RAHMAN
Director
Bangladesh Disaster Preparedness Centre

SPONSORED BY PACT-BANGLADESH

DHAKA, February 1993

75

DISASTER MANAGEMENT HANDBOOK FOR BANGLADESH (PART - II)

First Edition
February 1993

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Published by
PACT Bangladesh/PRIP
House 56, Road 16 (New)
Dhanmondi R/A
Dhaka-1209
Bangladesh

Printed by
Modern Printers &
Advertising Co.
238, Outer Circular Road
Bara Moghbazar
Dhaka

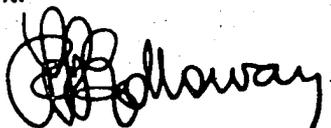
This Handbook has been produced with assistance from PACT Bangladesh/PRIP as part of a grant from the United States Agency for International Development (USAID) Bangladesh.

Introduction

Bangladesh is a country with more than its fair share of disasters. It also has many public spirited citizens who volunteer their time to help others who have been struck by a disaster. It also has many citizens' organizations, often called NGOs, who play a leading role in relief and rehabilitation work when a disaster has struck.

What it does not have, surprisingly, is a system of training, or manuals, or guidelines for what to do at the time of a disaster. And good disaster response needs good preparation - simply a desire to help is not enough.

This Hand book will help people and organizations prepare themselves for what to do when a disaster strikes. It will also be a ready reference during the disaster response period. Please use it. Your help will be better with the aid of this book. PACT/PRIP is proud to be associated with it.



Richard Holloway
Director, PACT/PRIP

Author's Note

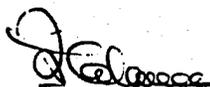
Thanks to Allah, we have been able to produce the "Disaster Management Handbook for Bangladesh". It is the first publication of its kind ever to be produced in the country and it is not the product of one man's, the author's, wisdom but is the distillation of the collected experience of hundreds of people, who have either been the victims of disasters or have been involved in the management of relief and recovery from them.

A team of eight selfless people dedicated themselves for nine months to the production of our handbook. They interviewed three hundred and forty-seven inhabitants of areas prone to different types of disasters and twenty-six managers from government and non-government organisations, whose responsibility is to respond to disasters, when they occur. Fifty percent of those interviewed were women. A large number of publications on disaster management were also studied. Finally, the draft of the handbook was discussed with international disaster relief experts and their views incorporated.

Our handbook aims simply to be a guide for managers of disaster relief at all levels - from Chief Executive Officers to field workers. Those using it may adapt it, to suit the size and capacity of their organisations, and to fit it with their chosen role in the management of relief.

Whether our handbook is a success and can be used effectively by such organisations, will only truly be measured in terms of a reduction in the number of deaths, a lessening of damage to property, and a substantial alleviation in the sufferings of disaster victims.

I should like to thank PACT-Bangladesh for sponsoring this project and to express my undying gratitude to those who worked so devotedly with me on it. Lastly, we should like to acknowledge our collective indebtedness to all those who gave us the invaluable benefit of their experience.



Mr Md Saidur Rahman
Director
BDPC



Planning Commission
Government of the People's Republic of Bangladesh
Dhaka

Member

D.O. No.

Date.....

Jan 28, 1993

Preface

Because of its geographical location and character of the terrain Bangladesh is a disaster prone country. It is affected by natural disasters almost every year. The Deltaic nature of the land contributes further to the loss of human lives and severe damage to property. These disasters also affect the economy badly and development programmes are also disrupted. The government for a long time, and non-governmental organisations in the recent past, have responded to cope with the situation, trying to mitigate sufferings of the people. This handbook is intended to help them deal with the situation more efficiently and effectively.

In presenting the "Disaster Management Handbook for Bangladesh", the author, Mr. Md. Saidur Rahman has combined his theoretical knowledge with his practical experience in disaster management within and outside Bangladesh for more than 25 years.

I hope the handbook will be useful for those involved in disaster response activities. Proper use of this manual will not only reduce loss of human lives but also alleviate sufferings of the people affected by natural disasters.

M. Mokammel Haque
Member
Planning Commission
Government of People's Republic of Bangladesh

PART - II

PLANNING A RESPONSE

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How to use this Book

This book contains five sections, grouped in four volumes as follows :

- VOL 1** : **Pre-Disaster Stage**
- VOL 2** : **Planning A Disaster Response**
- VOL 3** : **Operational Response for up to First Three Weeks**
- VOL 4** : **Communication/Record Keeping**
: **Finishing and Leaving**

Each volume contains many chapters, all of which are organized according to the following questions :

What should be done ?

Who should do it ?

Who should be kept informed ?

Questions to ask

("Questions to ask" is a checklist for you to check whether you have done everything suggested in that chapter)

Annexures :

In many chapters there are references to **Annexures**. These are reference materials on yellow paper at the end of each section which are available for you to photo copy as needed.

Please use this book as a reference book according to your needs. The materials can also become the basis for training courses.

We suggest that the Head Office of an organization should keep Vol 1 and 2 and the field workers should keep copies of Vol 3 and 4.

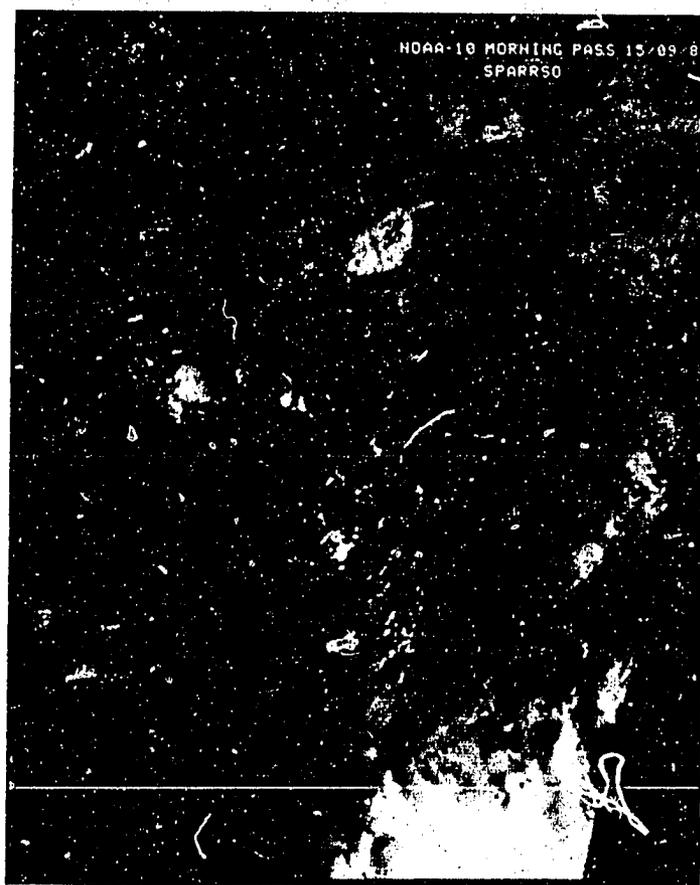
Best of luck in using this book - we hope it helps you.

ABBREVIATION

ADAB	Association of Development Agencies in Bangladesh
ADPC	Asian Disaster Preparedness Centre
AIS	Advanced Information Systems
AIT	Asian Institute of Technology
AODRO	Australian Overseas Disaster Response Organisation
BBC	British Broadcasting Corporation
BDPC	Bangladesh Disaster Preparedness Centre
BDR	Bangladesh Rifles
BDRCS	Bangladesh Red Crescent Society
BMD	Bangladesh Meteorological Department
BP	Bangladesh Police
BRAC	Bangladesh Rural Advancement Committee
Brs	Brothers
BSS	Bangladesh Sangbad Sangstha
C/A	Commercial Area
CAAB	Civil Aviation Authority of Bangladesh
Cap	Capsule
CARE	Cooperative for American Relief to Everywhere
CEO	The Chief Executive Officer
CHO	Carbohydrate
CI	Corrugated Iron
cm	Centi-metre
CPP	Cyclone Preparedness Programme
CSM	Corn-Soya Milk
CV	Curriculum Vitae
DCMU	Disaster Coordination and Management Unit
DMC	Disaster Management Centre
DMU	Disaster Management Unit
DPHE	Department of Public Health & Engineering
DPIS	Disaster Preparedness Information System
DRC	Delivery Receiving Challan
DRC	Disaster Resource Cell
DRU	Disaster Resource Unit
DSM	Dried Skim Milk
e.g	as for example
ENA	Eastern News Agency
F.A.Box	First-aid box
FAO	Food and Agriculture Organisation
FEMA	Federal Emergency Management Agency
FSCD	Fire Service and Civil Defence
FWC	Family Welfare Centre
FWV	Family Welfare Visitor
gm	Gram
GOB	Government of Bangladesh
Govt.	Government
HDP Bag	High Density Polythene bag

Hf	High Frequency
Ht	Height
i.e.	That is
I.V.fluid	Intra-venous fluid
ICDDR,B	International Centre for Diarrhoeal Disease and Research, Bangladesh
ICRC	International Committee of Red Cross
IUBAT	International University of Business Agriculture & Technology
IVS	International Voluntary Services
Kg	Kilo-gram
LO	Logistics Officer
LRCS	League of Red Cross Societies
Ltd	Limited
LTI	Left Thumb Impression
MCH	Mother and Child Health
ml	Millilitre
MOH	Ministry of Health
MOR	Ministry of Relief
MRN	Material Receiving Note
MRR	Material Received Receipts
MUAC	Mid-Upper Arm Circumference
NCHS	The US National Centre for Health Statistics
NGO	Non-Governmental Organisation
No	Number
ORS	Oral Rehydration Saline
PACT	Private Agencies Collaborating Together
PEM	Protein Energy Malnutrition
PO	Project/Programme Officer
PRIP	Private Rural Initiatives Project
Pvt	Private
Qty	Quantity
R/A	Residential Area
RCY	Red Crescent Youth
RTI	Respiratory Tract Infection
SADMC	South Asian Disaster Management Centre
SENA	Servicio Nacional de Aprendizaje (National Training Service of Colombia)
SL	Serial
SPARRSO	Space Research and Remote Sensing Organisation
SRR	Supply Replenishment Request
SSB	Single Side Band
T & T	Telephone & Telegraph
Tab	Tablet
THC	Thana Health Complex
Tk	Taka
TNO	Thana Nirbahi Officer
Tr.Benzyne	Tincture Benzyne
Tr.Iodine	Tincture Iodine

TV	Television
UK	United Kingdom
UNCHS	United Nations Commissioner for Human Settlement
UNEP	United Nations Environmental Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USA	United States of America
VDP	Village Defence Party
VHF	Very High Frequency
VHSS	Voluntary Health Services Society
Vr.	Voucher
WAPDA	Water and Power Development Authority
WDT	Water Disinfection Tablet
WFP	World Food Programme
WHO	World Health Organisation
WMO	World Meteorological Organisation
WPT	Water Purification Tablet
Wt	Weight



A Satellite Photo of Floods in Bangladesh in 1988
 Courtesy : SPARRSO

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CHAPTER II : A

COLLECTION OF INFORMATION ON DISASTER

Assemble pertinent information on the affected area

What should be done ?

1. Correct information on the effects of the disaster and the statistics of the damages it has caused is very important in planning emergency relief and rehabilitation programmes.
2. Acquire and enforce a disaster information gathering system for the organization.
3. Develop and have a standard format for disaster monitoring/information gathering.

A specimen of the standard format of damage assessment for use at national level is annexed as II : A. 1

4. Ensure that a copy of the standard format is readily available, or can be made available quickly to anyone requesting such a copy.
5. Ensure that the information can quickly be put into a visual form on maps and /or computer.
6. Maps of all of Bangladesh down to Mauza level is available from the "Small Area Atlas of Bangladesh", published by Bangladesh Bureau of Statistics and there is a computer programme with these maps available from PACT/PRIP for use on Macintosh computer.
7. Collect information about disaster from the following sources:

LIST - A

Information About Cyclone and Tornadoes

SI	Name and address	Contact person	Telephone No. Office
*	Meteorological Department Sher-E-Bangla Nagar Dhaka	Director	311032 318917
		Deputy Director Fore-casting	314388
		Duty Fore-casting Officer	313124
		Auto Fore-casting (Tele Fax)	319251
*	SPARRSO Sher-E-Bangla Nagar Dhaka	Director	318917

*	Cyclone Preparedness Programme, 684-686, Bara Moghbazar Dhaka	Director Deputy Director Control Room	416169 417895 417895
*	Ministry of Relief and Rehabilitation Bangladesh Secretariat Ramna, Dhaka	Secretary Joint Secretary, Relief Deputy Secretary, Disaster Relief Control Room Director General Relief and Rehabilitation	PABX 235111-39 832063 404382 831591 243129 402128 241749 243285
*	ADAB 1/3, Lalmatia Block-F, Dhaka	Director Deputy Director	PABX 324162-3 327424 812353 316184
*	NGO Affairs Bureau 1, Park Avenue Matsa Bhaban Dhaka	Director General Director, Project Director, Registration/ Operation Assignment Officer, Disaster Relief	PABX 861011-3 865686 865245 865247 865246 865248
*	VHSS 273-274, Baitul Aman Road No. 1, Adabor Shyamoli, Dhaka	Director	812962 815755
*	Radio Bangladesh	-	315026-9
*	Bangladesh TV	-	400131-9

* NEWS AGENCY		
Press Club	-	864611-2
BSS	-	235036-9
		404274
UNB	-	412120
BBC	-	410455
Reuter	-	864088
		863188
 * NEWSPAPER OFFICES		
Azad	-	502403
Ajker Kagoj	-	861443
		862968
Bangladesh Observer	-	235105-9
Bangladesh Times	-	258840
Banglar Bani	-	231173-4
Dainik Bangla	-	231378
		232565
Daily Star	-	863036
		246023-4
Daily Telegraph	-	246971-2
		862783
Ittefaq	-	245011-9
Inquilab	-	240147-9
		242281
Morning Sun	-	831624
		831694
New Nation	-	232225-9
Sangbad	-	238147
		238160

LIST - B

Information about Floods and River Erosion

* Flood Forecasting Centre		
Water Development Board		
WAPDA Bhaban,	Control Room	231680
Motijheel C/A, Dhaka		233118
	Deputy Director	233118
 * Ministry of Relief and Rehabilitation		
		PABX
		235111-39
Bangladesh	Secretary	832063
Secretariat		404382
Ramna, Dhaka	Joint Secretary, Relief	831591
	Deputy Secretary, Disaster Relief	243129
	Control Room	402128
		241749

*	ADAB 1/3, Lalmatia Block-F, Dhaka		PABX 324162-3 327424
		Director	812353
		Deputy Director	316184
*	VHSS 273-274, Baitul Aman Road No. 1 Adabor Shyamoli, Dhaka	Director	812962 815755
*	Bangladesh Red Crescent Society 684-686, Bara Mogbazar, Dhaka		PABX 400188-9
		Chairman	406902
		Secretary General	407908
		Director Project	402540
*	NGO Affairs Bureau 1, Park Avenue Matsa Bhaban Dhaka		PABX 861011-3
		Director General	865686 865245
		Director, Project	865247
		Director, Registration/ Operation	865246
		Assignment Officer, Disaster Relief	865248
*	Radio Bangladesh	-	315026-9
*	Bangladesh TV	-	400131-9
*	NEWS AGENCY		
	BSS	-	235036-9 404274
	UNB	-	412120
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		862968
Bangladesh Observer	-	235105-9
Bangladesh Times	-	258840
Banglar Bani	-	231173-4
Dainik Bangla	-	231378
		232565
Daily Star	-	863036
		246023-4
Daily Telegraph	-	246971-2
		862783
Ittefaq	-	245011-9
Inquilab	-	240147-9
		242281
Morning Sun	-	831624
		831694
New Nation	-	232225-9
Sangbad	-	238147
		238160

For Drought, contact the organisations in List-B above and the Following :

* Agriculture Information Centre	325061-5
Khamar Bari, Farm Gate	
Tejgaon	
Dhaka.	

For Epidemics, contact the organisation from in list - B above and the following agencies:

* UNICEF	PABX
House - 73, Road - 5A	500181-6
Dhannondi R/A, Dhaka	814660
* D.G. Health	881424
Mohakhali C/A	884116
Dhaka - 1212	607134
	606084
* WORLD HEALTH ORGANIZATION (WHO)	
House 12, Road - 7, Dhanmondi	864653-55
Dhaka	
GPO Box : 250	
* INTERNATIONAL CENTRE FOR DIARRHOEAL DISEASE RESEARCH BANGLADESH (ICDDR,B)	
Mohakhali, Dhaka-1212	600171-8
GPO Box : 128	

8. In collecting information, cross check information from one source with that of the others.
9. Identify and make a list of all pertinent information to be collected.
10. Include pertinent information of all losses: losses of human lives, livestock, poultry, crops, trees and plants, seeds, seedlings, medicines, agricultural equipment, fishery resources, stored food, utensils, infrastructure.
11. Periodically check the information in the pre-arranged format in the light of recent/current experiences and modify them, if necessary.
12. Update all information from time to time.
13. Consider if it is necessary to use different types of formats for different disasters.
14. Store information in a proper manner for retrieval later, if required.

Who should do it ?

- DMU
- Survey personnel of the organization
- First-in emergency workers

Who should be kept informed

- The Chief Executive Officer (CEO)
- DMU
- Regional/local level offices
- ADAB
- MOR
- NGO Bureau

Questions to ask

- Have we updated the list of sources of information on disaster (with names of persons responsible, change in telephone number, etc.)
- Are there other alternative sources of information ?
- Has the pre-arranged format been prepared and then adopted for use, after thorough analysis, discussion and review in the organisation ?
- Does the pre-arranged format exclude any important information ?
- Is there any scope for improvement of the format in terms of the information and its presentation ?
- Does a single pre-arranged format serve the purpose, or is it necessary to have different types of formats for different disasters ?
- Is the information in the format capable of being readily transformed into visual representations ?
- How does this format compare with a similar format used by other operating organizations and the Government ?
- Are all relevant and required information being collected ?
- Are the information collected analysed and disseminated within the organisation ?

CHAPTER II : B

REACHING AFFECTED AREA

Reach the Disaster Area for Damage Assessment

What should be done ?

1. Identify the disaster area in the map showing communication networks, (roads, telecommunications, ghats).
2. Estimate approximate distance of the disaster area from the organization's nearest regional/local/field offices.
3. Explore alternative modes of transport to reach the disaster area, taking into account travel time, actual damages to communication/transport network already reported and potential damages.
4. Decide quickly the mode of transport to be used.
5. Consider using the organization's own vehicle(s), if there is any, for moving to the disaster area.
6. Estimate movement time.
7. Carry with you the pre-arranged forms for collecting information and assessment of damage.



Random Distribution of Relief after the Devastation of Cyclone 1991

Courtesy : UNICEF

The specimen format is annexed as II : B. 1

8. Carry with you emergency kit and first aid boxes/bags.
9. Report back, if possible, national/regional/local offices of the organization on reaching the disaster area.
10. Identify if there are previously registered volunteers.
11. Contact volunteers, if available, on reaching the disaster area.
12. Contact other agencies or organisation likely to be operational in the same areas.

Who should do it ?

- First-in survey/relief workers/volunteers

Who should be kept informed ?

- DMU
- CEO
- Regional Offices
- DC/TNOs

Questions to ask

- Have we got access to vehicle(s) ?
- Are the survey kit/First-Aid Boxes available ?
- What is the best point to reach in the disaster area ?
- Can the entire area be covered from this point ?
- What is the distance of the affected area from the organization's regional/ local/field office ?
- What problems may be faced in reaching the disaster area ?
- Is it necessary to set up several camps over the entire affected area?
- Are there other organizations/government agencies operating locally to collect information, determine needs and provide relief ?
- Are there previously registered volunteers to help the survey team ?
- Are the volunteers, if available, capable of helping in survey/emergency work ?

CHAPTER II : C

ASSESSMENT OF NEEDS

Make first hand assessment fast

What should be done ?

1. Ensure that the survey team has guidelines/a checklist for first hand fast survey. The checklist for first/primary survey is shown below :
 - Visit to the severely affected areas made
 - Information from district/thana administration collected
 - Locally operating NGO(s) contacted and information collected
 - Discussion with local people held and information collected
 - Assessment of the extent of damages done
 - Information about number of affected people/ families collected
 - Price of commodities in local markets checked
 - Employment situation and wage rate in the area checked
 - Information about population drift and disposal of family assets, if any, checked
 - Sources as well as availability of drinking water checked
 - Information on health and nutrition status of affected people/area checked
 - Information on environmental sanitation status checked
 - Survival and immediate needs assessed
 - Information about Government and NGO programmes for the affected people/area collected
 - Sources of local alternative resources checked
 - Information on local sources for procurement of relief goods collected
 - Locally available facilities for transportation, storage and setting up of base-camp checked
 - Prompt report on commodities and quantities of assistance required, manpower needed, probable duration of operation, etc. sent to Head office/Co-ordinating Office
 - Other necessary data and information for report on the primary/first survey are collected
 - First/primary survey report prepared for submission



Courtesy : Red Crescent Society

2. Have the guidelines/checklist readily available.
3. Use a standard survey form for first-hand fast survey, which is Annexed at - II : B. 1
4. Have a sample of this standard survey form readily available.
5. If no standard survey form is used, make the first survey using the following sources, in order of preference, and a combination of them:
 - narrative report from first-in workers
 - report from government sources
 - report from other organisations
 - visit and discussion notes
6. Keep a copy of the first survey report from the field on the last disaster you were involved in for ready reference and comparison purposes.
7. Do not make the first survey report confidential .
8. Compare the information in the first survey report with the information from other NGOs and the government reports, if available.
9. Make sure the first survey report includes, among other things, an estimate of human and material losses and a very rough estimate of relief/emergency assistance required.
10. Suggest relief/emergency assistance/measures, in the first survey.

A format for need assessment is shown in annexure II : C. 1
11. In suggesting requirements for relief/emergency assistance, measures, be as specific as possible with regard to the following : types and amounts of assistance, best delivery points, best modes of transport, storage facilities, etc.

Who should do it ?

- Survey teams
- First-in emergency relief workers

Who should be kept informed ?

- DMU
- Regional/Local office
- CEO
- Other operating NGOs.
- DC/TNO
- MOR
- NGO Bureau

Questions to ask

- How do the guidelines/checklist for first hand fast survey compare with those of other operating organizations ?
- Is there any scope of improvement of these guidelines/checklist ?
- Is there any scope of improvement of the standard survey form, if used ?
- Does the standard survey form, if used, exclude any important information ?
- Does a single standard survey form serve the purpose for all disasters, or is it necessary to have different types of survey forms for different disasters ?

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CHAPTER II : D

REPORT TO DECISION BASE

GET ASSESSMENT BACK TO THE DECISION BASE

What should be done ?

1. Get assessment in the standard survey form or any other form to the decision base very fast.
2. Keep a copy of the assessment report at the local camp/office.
3. Avail of the fastest means of communications to dispatch survey reports. In case of cyclone, you may consider using CPP S.S.B Wireless sets available in all Thanas in the coastal belt and off shore islands. Radio facilities of the Government in all the district control rooms, and of other organisations like BMD, T & T, etc. could be used.

A list of Radio installations in the country is shown in Annexure II : D. 1

4. If available, also despatch survey reports from other operating agencies.
5. You may use telex, telegram, courier services, if available.
6. Investigate the possibility of sharing resources for communication.
7. Get confirmation of the receipt of the assessment report by the decision base.

Who should do it ?

- Survey team leader(s)
- First-in emergency workers

Who should be kept informed ?

- DMU
- CEO
- Other operating NGOs
- ADAB
- DC/TNO

Questions to ask

- Have we used the available radio facility to send the survey reports to the decision base ?
- Have we made sure that the survey reports reached the decision base ?
- Have we shared our report with other organisations ?
- Have we collected survey reports from other organisations ?
- Have other operating organizations also despatched their survey reports?
- Is there anything else that needs to be done by the time the decision is sent back?
- Is it necessary to send any reminder for decisions ?
- If courier services are used to send survey reports to the decision base, can we consider using one courier to carry reports from several operating agencies to the decision bases of the agencies located in same city/town ?

CHAPTER - II : E
PLAN INITIAL RESPONSE

II : E.1. SELECTION OF OPERATIONAL AREA

What should be done ?

1. Select operational area on the basis of the first hand survey report from the field.
2. In selecting an operational area, consider the immediate survival need of the people based on the degree of damages and destitution as the most important factor.
3. Consider areas known and having contacts previously as the second most important priority consideration in selecting an operational area.
4. Weigh the following other priorities considered in selecting operational area:
 - socio-economic condition of the area/people
 - remoteness of the area
 - resources and manpower
 - presence of other operating organizations, and
 - accessibility.
5. If first hand survey report is not available or late, decide priority area based upon available information and reports from ADAB and/or other NGOs.
6. Through regional/local offices, liaise with local and district government officials as well as other NGOs, planning to operate in the affected area, and then select the operational area.
7. Consider selection of operational area on the basis of request from local people, government officials and/or project offices.
8. Delegate the selection of the operational area to first-in/operational teams.
9. If formal co-ordination forums are formed at national/local level, consider selection of operational area in these forums.
10. Advocate and promote more NGO-NGO Co-ordination in selecting the operational area through such agencies as ADAB or NGO Bureau.
11. Consider and promote better co-ordination at the local level in the selection.

Who should do it ?

- DMU
- First-in/Operational Team
- Regional/Local office Chief

Who should be kept informed ?

- CEO
- DMU
- Other operating NGOs
- ADAB
- DC/TNO
- MOR
- NGO Bureau

Questions to ask

- Have we selected the operational area based on the first-hand survey report from the field, the immediate survival need of the people, degree of damage done by the disaster, known contacts in area ?
- Have we considered the socio-economic condition, communication network, presence of other NGO's in the area ?
- Have we collected information from different sources at National-level ?
- Have we liaised with other NGO's agencies, Govt. Departments, etc. ?
- Are we encouraging better coordination among the NGO's and between the NGO's and the Govt. to avoid duplication and ensure maximum utilization of the resources?

II : E. 2. SELECTION OF BENEFICIARIES

What should be done ?

1. Select beneficiaries of emergency relief operations mainly on the basis of door to door survey and categorization according to the immediate survival need of the people affected.
2. In judging the immediate survival need and degree of destitution, visit villages and select people according to the degree of damages caused by the disaster.
3. In the preparation of the list, ensure as much participation of the local community as possible.
4. Make sure you have women survey workers/volunteers to ensure listing of women beneficiaries.
5. Establish direct contacts with potential beneficiary families/ communities.
6. Avoid using intermediaries in the preparation of the list.
7. Make a list of intended beneficiaries after discussion with local affected people.
8. Make a list in consultation with school teachers/local youth club/local leaders/UP members/volunteers and other.
9. Collect a list of affected people/families from local government officials at lowest level for information and cross checking.
10. Avoid carefully duplication of persons/families in preparing the list of intended beneficiaries.
11. Avoid as far as practicable interference by local leaders.
12. Make house to house survey in order to make sure that severely affected and needy people are not left out.
13. Critically examine, and check as far as practicable, the number of family members in order to minimize exaggeration or inflation.
14. Avoid as far as practicable inclusion of ghost beneficiaries in the list.
15. Avoid as far as practicable enlistment of unaffected and/or wealthy families/ persons/outside who have access to other resources.
16. Gather from a variety of sources as much knowledge about the affected area as possible.
17. Double check the list to minimize inaccuracies.
18. Maintain the initial survey list for ready reference, cross checking, etc.
19. For intended beneficiaries at a later date, consider making a list from the inhabitants of relief camps.

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Who should do it ?

- Survey/emergency relief workers

Who should be kept informed ?

- Regional/local offices
- DMU
- DC/TNO
- Other locally operating NGOs
- Volunteers

Questions to ask

- Are we covering all the villages/places in our intended operational area?
- Have we made direct contact with the people while preparing the list of beneficiaries?
- Are we covering all potential beneficiaries still hovering and drifting around ?
- Are we including in our list all vulnerable groups of women, children, aged, sick and the disabled ?
- Do we have women members in the survey teams to ensure that women beneficiaries are registered ?
- What relative weights should be attached to different important factors for selection?
- What information should be collected from the door to door survey ?
- How best to assess the losses/damages suffered by and needs of potential beneficiaries?
- How best to assess the immediate survival need of the people affected ?
- How can we devise a good method to avoid duplication of individuals/families in the list of intended beneficiaries ?
- What is the best way(s) of minimizing interference by local leaders ?
- Should the list prepared be discussed informally with ordinary village people in order not to overlook really affected and needy people ?
- Should a small random second survey be carried out to exclude "ineligible" beneficiaries ?
- Have we made sure that the same beneficiaries are not registered by other NGOs/agencies/Govt.?

II : E. 3. RESPONSE PLANNING

What should be done ?

1. In deciding planned response, consider the following elements in order of priority:

- | | |
|-----------------------------|---|
| - Goals and objectives | - Rationale/justification |
| - Plan of operation | - Area to be covered |
| - Duration of the operation | - Number and selection of beneficiaries |
| - Components of operation | - Mode of distribution |
| - Source(s) of funds | - Financial control |
| - Manpower | - Logistics |
| - Procurement and storage | - Mode of transportation |

- Record keeping
- Community participation
- Coordination
- Legal formalities
- Closing
- Flexibility of operations
- Local/alternative resources
- Reporting
- Evaluation

2. Plan response after seriously taking into account training/skill of related officials/workers in the specific tasks to be undertaken.
3. Plan response consistent with the scope and limit stipulated in the organization's preparedness plan.
4. In planning a response, ensure rapid feedback between planning and operation.
5. Plan a response which is adequately participatory.
6. Consider establishment of a specialized unit to plan and monitor responses.
7. Consider a high level of delegation in decision making.

Who should do it ?

- DMU
- Regional/local offices

Who should be kept informed ?

- CEO
- DMU
- Other locally operating NGOs
- Volunteers
- ADAB
- DC/TNO
- NGO Bureau
- MOR

Questions to ask

- Are the goals and objectives of the plan as specific as they can be ? Are they feasible ?
- Does the potential selected area have any special features/problems ?
- Are all the components of the plan as specific as they can be ?
- Are the components of operation internally consistent and in logical sequence ?
- Are the components of operation consistent with available resources and the intended pace of operation ?
- Is there adequate flexibility in the plan to ensure adjustments in components, pace of operations, priorities, etc ?
- What coordination mechanism is envisaged in the plan ?
- Is maximum community participation ensured in the plan ?
- Is it really necessary to establish specialized unit ?
- At what level should this unit be set up, if at all ?
- Will the implementation of the plan affect the normal activity of the organisation ?

II : E. 4. REQUIREMENT LIST

What should be done ?

1. List requirement of the Emergency Relief Programme based on survival and emergency needs of the beneficiaries.
2. List requirement based on the budget allocation and the administrative capacity of the organisation.
3. Base the list on the availability of the materials. Alternative list may be prepared if the materials of the first choice are not available.
4. Consider the shelf-life, storage and handling situation.
5. In preparing the list, include the essential items first.
6. Give due respect to the culture, custom, tradition and practice of the people while the list is prepared.
7. Materials/supplies needed to meet emergency and survival needs immediately after a disaster can be listed under the following heading :

(1) **Survival food (Ready to eat):**

Chira	Muri
Gur	High Energy biscuit
Bread	Sweet Potato
Chapati	Khichuri (Rice and pulse mix).

(2) **Dry food ration**

Rice	Wheat flour
Pulse (Dal)	Potato
Salt	Oil
Powdered milk (Please see warning in Part III)	
Spices, etc.	

(3) **Shelter materials**

Polythene sheeting
Bamboo - Barak for pillars
 - Muli for roof structure and walling
Split Bamboo walling
Thatch/Ridging/Local grass
Wood
CI sheet (Not recommended for cyclone prone areas)
Wire/Rope/nut bolts/nails, etc.

(4) **Clothing**

Saree	Lungi
Children wear	Gamcha (Towel)
Blouse	Gangi (Under shirt)
Blanket, etc.	

Who should do it ?

- DMU
- Logistic Officers (LO)

Who should be kept informed ?

- CEO
- DMU
- LO
- ADAB

Questions to ask

- Have we prepared the list of requirements after thorough consideration of important factors such as emergency needs and custom of the beneficiaries ?
- Have we considered the capacity of the organisation ?
- Is there adequate budget allocation ?
- Have we considered the shelf-life, transportation hazard, etc. ?
- Have we prepared the list in order of priority of needs ?
- Have we prepared alternative lists ?

II : E. 5 LIAISON WITH OTHER ORGANISATIONS

Liaise with other organizations possibly operational in your intended area

What should be done ?

1. Liaise with other organizations through existing co-ordination forums.
2. Liaison directly with other NGOs intending to operate in the same or adjacent area.
3. Liaise through ADAB. In particular send information on your organisation's work to ADAB on the proper forms (see Annexure 1: H. 1)
4. Liaise through VHSS.
5. Liaise directly with government ministries and departments.
6. Liaise with NGO Affairs Bureau.
7. In liaison, place maximum emphasis on liaison at operational/field level, followed, in order of priority, at local, regional and national levels.
8. Make specific personnel responsible for liaison at different levels.
9. In liaison, avoid the inherent lack of interest/ initiative in liaison by NGOs.
10. Get rid of the idea that it is difficult to make time for liaison, partly because it is difficult to maintain meeting schedules owing to operational work pressure.
11. Take initiative and promote good timing for liaison meetings.
12. In order to make liaison effective, avoid, as far as practicable, clash between schedules of individual agencies.
13. Do not let liaison work suffer because of the general lack of communication between government and NGO sectors.
14. For adequate and effective liaison, actively promote improved communication among NGOs as well as NGOs and government agencies at the National, Regional and the operational levels.
15. Lobby for and take part in regular meetings of operational NGOs
(a) in the field and (b) in the capital.
16. For better liaison, promote improved and effective communication among agencies at policy making/central level.
17. Towards the goal of better liaison, promote a regular information sharing system amongst all concerned agencies through ADAB/VHSS.

18. Maintain liaison also through regular attendance in co-ordination meetings.
19. To the extent feasible, encourage proper planning of co-ordination meetings.
20. Arrange prior adequate orientation training of the representatives of the organisation responsible for liaison business.
21. Lobby for and take part in monthly one day workshops on what has been learnt from operations.

Who should do it ?

- DMU
- ADAB/VHSS
- NGO Bureau
- Donor representatives
- Field personnel of organizations
- DC/TNO
- MCR

Who should be kept informed ?

- CEO
- ADAB/VHSS
- Concerned Government Departments
- MOR
- DC/TNO
- Field personnel
- NGO Bureau

Questions to ask

- Have we ensured and established satisfactory liaison/co-ordination practice at national/regional/field levels ?
- How can we reduce operational work pressure, and maintain liaison meeting schedules ?
- Is it necessary to expand/change the existing co-ordination forums to promote better liaison ?
- What are the problems of liaising directly with other NGOs operating in the same area?
- Are co-ordinating bodies, Governmental and non-Governmental, capable of and really appreciate and emphasise liaison among operational agencies ?
- Why do NGOs and donors under emphasise liaison work ?
- At what time intervals should liaison be maintained ?
- What is the existing information sharing system amongst agencies ?
- How can we promote and improve this system ?

II : E. 6 PERMISSION FROM BUREAU OF NGO AFFAIRS

What should be done ?

1. As a general rule, NGO's must obtain permission from the Govt. to start relief operation.
2. Apply to the Bureau of NGO Affairs for permission of Relief work/Rehabilitation.
3. The Bureau of NGO Affairs is located at the following address:

NGO Affairs Bureau
Prime Minister's Secretariat
1 Park Avenue
Matsa Bhaban (9th Floor)
Ramna, Dhaka.

4. Persons responsible for issue of permission are as follows :

Designation	Tel	
DG	865245	861011-13
Director of Programme	865247	

5. Apply for permission in prescribed form titled "FD-7 Proposal/Programme for Emergency Relief Operation for Disaster victims".

A specimen of the Form FD-7 is annexed as II : E. 1

6. Make sure that FD-7 form is properly filled in.
7. The important elements of the form are
- Description of the materials to be distributed and their costs.
 - Overhead cost of the operation.
 - Source of fund.
 - Area of operation.
 - Plan of operation.
 - Duration of operation, etc.

Who should do it ?

- DMU

Who should be kept informed ?

- CEO
- ADAB/VHSS
- MOR

Questions to ask

- Do we know the procedure to obtain permission from the Govt. ?
- Have we got the address of D.G, Bureau of NGO Affairs ?
- Do we know the person responsible for issue of permission in the NGO Affairs Bureau ?
- Have we got form FD-7 collected from NGO Affairs Bureau ?
- Have we got all the information required to fill in the form ?
- Are we making necessary effort to obtain permission from NGO Affairs Bureau ?

CHAPTER II : F

PROCUREMENT OF MATERIALS

Purchase and Assembling of Needed Materials

II. F. 1. Purchase of Food Items:

What should be done ?

1. For emergency relief operations immediately after the disaster, use the following items in order of priority as food stuffs:
 - Chira/Muri and Gur
 - High protein biscuit
 - Chapati/flat bread
 - Rice
 - Wheat flour
 - Dal
 - Potato
2. Consider buying and assembling the following stuffs also :
 - Local biscuit
 - Oil
 - Salt
 - Khichuri
 - Sweet potato
 - Loaf
 - Powder milk
 - Vegetables
 - Spices
3. As a general rule, buy and assemble foodstuffs which are dry and ready to eat. You may also procure/arrange for the following:
 - foodstuffs which are dry to take home
 - foods which are cooked/wet
4. Try to make packets of food items before distribution.
5. Buy and assemble dry food items in packets, if possible, in order to save packeting time and to ensure uniformity in distribution.
6. Make food packets at the organization's central office/regional or field centre.
7. Use volunteer groups, students, community volunteers at all levels and hired labor under supervision of staff members to make the packets.
8. Buy food/stuffs from wholesale markets.
9. Procure donated food from aid agencies, if available.
10. If necessary, consider buying food stuffs through suppliers.
11. Buy biscuits and other bakery items from the Central/Dhaka market, or regional/district markets.
12. Buy dry food and ration items from Central/Dhaka market or regional or district markets.
13. For dry food and ration items, you may also consider local markets around the affected area.

14. Buy skimmed milk or other canned items from the Central/Dhaka market, or regional/district markets.
15. Buy vegetables and other fresh items from regional/district market.
16. Buy chira, muri, gur, etc., from Central/Dhaka market or regional/district market.
17. For different kinds of food items, identify and list wholesale marketing points.
18. Also prepare a list of some important and reliable food item suppliers/supplying contractors in Dhaka, and outside Dhaka.

A list of sellers of food items in wholesale markets of Dhaka and Chittagong is given as annexure II : F. i

19. If you make successful purchase, inform other NGOs through the co-ordinating agency (ADAB, NGO Bureau) the names of suppliers, availability, price, etc.
20. Inform other NGOs of merchants who inflate prices.

Who should do it ?

- Purchase/Logistics personnel of the organization
- Regional/local offices
- Relief teams

Who should be kept informed ?

- DMU
- LO

Questions to ask

- Have we prepared the list of the items to be bought and assembled ?
- Have we prioritized the materials according to the needs of the beneficiaries ?
- Have we considered to buy dry food stuff which have longer shelf-life ?
- Have we checked cost from different sources of supply to get a good bargain ?
- Have we checked the producers/wholesalers/dealers of the food stuff in major markets in Dhaka/Chittagong and around the affected area ?
- Have we taken steps for packeting the food items ?
- Have we tried to procure food items from other agencies/ Govt. sources/donors ?
- Have we shared the information with other NGOs through the Co-ordinating agencies of the source, availability, price etc. of the relief materials ?

II : F.2 Purchase of clothing and utensils

What should be done ?

1. Buy the following clothing arranged in order of priority.
 - Saree
 - Lungi
 - Children garments
 - Gamcha (Towel)
 - Blankets/Chadar (For distribution in winter only)
2. Buy the following aluminium utensils arranged in order of priority.
 - Dekchi (for rice)
 - Dekchi (for curry)

- Plates
- Spoons
- Glass/Mugs
- Sauce pan
- Jug
- Plastic buckets
- Hurricane

3. Make a list of the manufacturers/distributors/wholesalers/ wholesale markets for supply of the utensils.

The list of manufacturers/ distributors/ wholesalers/ wholesale markets for supply of clothing is annexed as - II : F. 2. 1

The list of manufacturers/ distributors/ wholesalers/ wholesale markets for supply of the utensils is annexed as - II : F. 2. 2

4. Buy from the cheapest source and in bulk quantity if possible.

Who should do it ?

- Purchase/Logistic personnel
- Regional/Local Offices

Who should be kept informed ?

- DMU
- LO
- ADAB

Question to ask

- Are the materials procured of the right kind ?
- Have we checked the quality of the materials ?
- Have we compared the rates with different suppliers to get a good bargain ?
- Have we arranged the storage of the material at regional and field levels ?

II : F. 3 Purchase of materials for water supply

What should be done ?

1. Buy tube-well materials from regional/district wholesale market or centrally from Dhaka wholesale market.
2. If necessary, procure tube-well materials from UNICEF/Public Health Engineering Department (DPHE).
3. Prepare a list of wholesale market outlets for tubewell materials.
4. Prepare a list with names, addresses and contact telephone numbers of some reliable tube-well material suppliers and wholesalers.

A list of wholesalers/Distributors of Tube-well Materials is annexed as in II : F. 3.1

5. Buy/procure water purification tablets (WPT) from other agencies or UNICEF.
6. Also consider importing from abroad, or buying from Dhaka wholesale market.
7. List important sources for supply/purchase of WPT.
8. Buy "fitkiri" (alum) from Dhaka wholesale market.

List of Suppliers of Fitkiri and Water Purification Tablets in Dhaka and Chittagong is given as annexure II : F. 3.2

9. Identify and list some important sources for import/procurement of quick filtration units.
10. Prepare and keep ready a list of some sources of tank-lorries for water, in case a unit is need for hire.
11. Consider procuring piped water in plastic cans, bought through contractors/suppliers.
12. If necessary, fill the plastic cans on own arrangement at the sub-centre near/around the affected area.

List of Wholesalers of Plastic Bucket, Container and Bottle, etc. is given in annexure II : F. 3.3

13. Procure bottled water centrally from producers, or from Dhaka wholesale market.
14. Check the cost of materials with different suppliers to get a good bargain.

Who should do it ?

- Purchase/Logistics personnel of the organization
- Regional/local offices

Who should be kept informed ?

- DMU/LO
- ADAB

Questions to ask

- Are tube-wells/WPT/Plastic can/Fitkari readily available in/around the affected area?
- Have we contacted the suppliers of WPT/Tube-well materials/plastic cans/Fitkiri in Dhaka and Chittagong?
- Have we kept prices down ?
- Are we sure that we are not overcharged ?
- Are budget provisions adequate for the needed supplies of WPTs and Tube-well/spare parts ?
- What formalities need to be completed before the relief team can hire a tank lorry, if needed?

II : F.4. MEDICINE

Purchase and assemble Medicine

What should be done ?

1. Buy/procure medicines and medical supplies from the pharmaceutical companies/their distribution depots.
2. If necessary, buy medicines and medical supplies also from wholesale market in Mitford area in Dhaka, or regional/district wholesale market, or Local market in and around the affected area.

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3. Establish direct contact with medicine companies or purchase supplies directly from the Dhaka market.
4. Make a list of pharmaceutical companies who adequately co-operate with reasonable prices in times of emergencies.
5. Make a list of some wholesale medicine marketing points in the country.
6. Make a list of important drug stores/suppliers for bulk supply of medicines/ medical supplies.
7. In buying medicines, pay special attention to expiry dates.
8. To the extent feasible, purchase medicines in solid or semi-solid, rather than liquid, form.
9. For cost savings, buy generic rather than brand products if available.

A list of pharmaceutical companies and whole sale markets of medicine is Annexed as II : F. 4

Who should do it ?

- Purchase/Logistics Personnel
- Regional/Local Offices

Who should be kept informed ?

- DMU/LO
- ADAB

Questions to ask

- Are the medicines and medical supplies bought/procured of the right kind, those most needed for the emergency ?
- Were qualified physicians/medical personnel adequately consulted before shopping with regard to the appropriateness of the items ?
- Are qualified medical personnel available in the field to use the medicines ?
- Have we checked the expiry dates of the medicines ?
- Are the items bought at the cheapest possible price to save money ?

II.F : 5. SHELTER MATERIALS

Purchase and Assemble shelter materials

What should be done ?

1. Buy the following shelter materials, arranged in order of importance :
 - Polythene sheeting
 - Tarpaulin sheeting
 - CI sheeting (not recommended for cyclone affected areas)
 - Ridging
2. If feasible, import shelter materials which are not produced locally.
3. Purchase the following shelter materials from manufacturers, suppliers, distributors, and/or wholesale market (arranged in order of importance):

<ul style="list-style-type: none"> - Bamboo - CI sheeting - Wood - Wire/rope - Bamboo mat/fencing/muli 	<ul style="list-style-type: none"> - Thatch/Reed - Roofing screws, - Polythene sheeting - Nail & bolts - Ridging
---	---

4. Buy/procure the following shelter materials locally in or around the affected area (arranged in order of importance):

<ul style="list-style-type: none"> - Bamboo - Bamboo mat/muli/fencing - Wire/rope - Local nails/gozals 	<ul style="list-style-type: none"> - Wood - Grass - Nails and bolts
--	--
5. Consider the following arranged in order of preference, in buying/procuring shelter materials:
 - Directly from wholesale market
 - From local market suppliers
 - From manufacturers/suppliers on contractual basis
 - Importing from abroad.
6. As a general rule receive delivery/supply of shelter materials at suppliers' point in Dhaka, or appropriate suppliers' point outside Dhaka.
7. Also consider the following supply points :

<ul style="list-style-type: none"> - Marketing points outside Dhaka - Field centre/stores - Local marketing points 	<ul style="list-style-type: none"> - Central/Dhaka office - Regional office/centre
---	--
8. Make a list of the manufacturers/ distributors/ suppliers/ wholesale markets for supply of sheets and ridging, hardware materials, polythene sheets and wood and bamboo.
9. Include in this list entities (names, addresses and contact phone numbers) for both Dhaka and outside Dhaka.

A list of wholesalers of shelter materials is Annexed as II: F. 5

Who should do it ?

- Purchase/Logistics personnel
- Regional/local offices

Who should be kept informed ?

- DMU
- ADAB

Questions to ask

- Are the shelter materials purchased/procured of the right kind, of good quality and right quantity, those most appropriate for the affected area ?
- Are the items bought at the cheapest possible rate to save money ?
- Have we checked prices to be sure that we are using the cheapest sources ?
- How can we reduce dependence on imported materials ?
- Have we made an evaluation of alternative materials with regard to needs ?
- Have we specified purchasing agents the delivery points and personnel designated to receive the materials ?
- Have we arranged storage of the shelter materials ?

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II.F : 6 TOOLS AND EQUIPMENT

Purchase and Assemble Tools & Equipment

What should be done ?

1. Buy the following tools and equipment :
 - Life Jacket
 - Emergency kit bag and related materials
 - First aid kit bag/box and related materials
 - Camera and binocular
 - Megaphone
 - Spade, shovel, hoe, etc.
 - Aluminium foil
2. List the sources of supply of these items and buy from the most convenient sources.
3. Buy from the cheapest source, and if possible, buy in bulk quantities.
4. Make a list of the manufacturers/ distributors/ suppliers/ wholesale markets for supply of the materials.

List of wholesalers/Distributors and producer of life jacket and items related to kit bag and first-aid box is shown in annexure - II : F. 6

Who should do it ?

- Purchase/Logistics personnel
- Regional/local offices

Who should be kept informed ?

- DMU
- LO
- ADAB

Questions to ask

- Are we buying the right kind of materials, and of right amounts ?
- Are the items bought of good quality ?
- Have we checked prices to make sure that we are using the cheapest sources to save money ?

CHAPTER - II : G

BRIEFING AND ORIENTATION OF RELIEF WORKERS

Assemble Relief Workers for Briefing/Orientation

What should be done ?

1. Maintain an updated register of relief workers/volunteers, previously registered and, if possible, trained.
2. Call the relief workers in order of their training and experience.
3. Call them at short notice over telephone or by sending special messengers.
4. Develop and encourage a formal practice of briefing of first in/relief/emergency operational workers.
5. Prepare and distribute an instruction sheet.
6. Keep a copy of the instruction sheet readily available.
7. Make all the instruction sheet as clear and specific as possible as to what to do, how to do, details of operations, conditions under which they have to work, approximate period for which they are sent out, their entitlement, etc.
8. If possible, have the Chief Executive Officer address the workers.
9. Organize/prepare kit bags/boxes before the event.
10. The Guidelines/Instructions for First-in worker or Emergency team Members is shown below .
 - Try to acquire sufficient knowledge about the plan of operation
 - Collect area and communication maps
 - Make acquaintance with your team leader/team members
 - Collect emergency kits, life jackets and other emergency equipments from your office
 - Collect necessary forms, format and other stationeries for survey, distribution and record keeping
 - Draw funds from the Accounts with receipt
 - Start for the operation area preferably with some relief goods
 - Conduct survey
 - Try to reach the most distressed and remotest area
 - Make communication/contact directly with the beneficiaries, local teachers/community leaders/voluntary organizations
 - Make contact with local Administration
 - Select beneficiaries on specific criteria
 - Identify local resources and procurement centres
 - Know the procurement system and place and specify the place of receiving the supply
 - Set up base Camp
 - Identify all local modes of transportation
 - Select the best possible modes of transport and arrange transportation with the help of administration
 - Start operation as per your capacity, e.g., fund, materials, manpower, experience etc
 - Open Bank Account for operation funds

- Keep accounts up to date
- Check fund position regularly
- Check stock position regularly
- Use uniform measuring pots
- Make packets of the relief material, if possible and necessary
- Try to hire local labour from the beneficiaries/ distressed people
- Always keep relations with local community
- Attend regularly local co-ordination meetings for liaison
- Appraise the operation at field meetings
- Select volunteer, if necessary from the community, if necessary
- Maintain regular contact with Head office/Regional office
- Maintain contact with government counterparts
- Maintain muster roll properly and have it countersigned by Local official
- Keep and maintain vouchers and accounts properly
- Settle staff travel and daily allowances
- Settle all local transactions and payments
- Dispose all undistributed supplies before leaving the area
- Never sell the undistributed supplies
- Check and prepare final accounts
- Close Bank Accounts
- All the necessary documents should be countersigned by the local Govt. Authority and/or Community Representative
- Submit interim reports to Head Office
- Settle with Dhaka store and Administration section
- Submit Final Report in due time

Who should do it ?

- DMU
- Regional/local offices

Who should be kept informed ?

- CEO
- Personnel Department
- Field personnel

Questions to ask

- Is the register maintained an updated one ?
- Have we called the relief workers in order of their training and experience ?
- Have we made sure that the call has reached the relief workers ?
- Has the instruction sheet been prepared following a checklist to ensure that no important instruction has been left out ?
- Do we have sufficient number of instruction sheets ready ?
- Have we double checked that all specified items have been included in the kit bags/boxes ?

CHAPTER - II : H

TRANSPORT

Obtain Transport

What should be done ?

1. Use organisation's own transports, if available, preferably 4 wheel drive ones, to go to the field.
2. If necessary, borrow transport from other agencies/ individuals, or try to use government ones.
3. Hire temporary transport for first-in/survey/relief workers.
4. Alternatively, use public transport.
5. For carrying of relief goods, use the organization's own trucks.
6. Hire trucks for shipment of relief goods/supplies.
7. Also consider for shipment, transports provided by government/defense services (**Navy, Air force**).
8. Consider despatching relief goods/supplies through carrying contractors.
9. Use suppliers' transports as a last resort.
10. Make a list with names, addresses and contact telephone numbers of companies/agencies and/or individuals from whom trucks, jeeps, micro-buses and pick-ups can be hired.

The list of carrying contractors/transport agencies and rent-a-car companies in Dhaka/Chittagong is given as Annexure - II : H. 1

11. For river routes, consider using the following water transports, arranged in order of preference :
 - Trawlers
 - Engine boats
 - Motor launch
 - Country boats
 - Hired speed boat
 - Cargo boat
12. Make a list with names, addresses and contact phone numbers of sources from which speedboats with engines, engine/cargo boats and trawlers can be hired ?

The list of agencies from which River transport can be hired in Dhaka and Chittagong is given as Annexure - II : H. 2

13. Make sure that carrying charges are not inflated.

Who should do it ?

- LO
- DMU
- Regional/local offices

Who should be kept informed ?

- DMU
- ADAB/Other NGOs

Questions to ask

- Are the Organisation's own transports in order, and in the sound and best conditions mechanically and technically ?
- Have we double checked the type and the number of transports required for movement of workers and shipment of relief goods/supplies ?
- Are there sufficient funds in the budget to allow quick hiring of transports ?
- Were sources already alerted as to the possibility of hiring of transports later ?
- Do we maintain a list of NGOs/agencies from which transports could be borrowed in time of emergency ?
- Do we maintain an updated list of sources of hiring road and river transports ?
- Do we maintain an up to date list of carrying contractors ?
- Do we maintain the most up to date information regarding public transport : availabilities, schedules, terminals, frequency of operations, etc ?
- Do we have loading and unloading staff ready for the shipment job ?
- Is there a need for a small security staff to accompany the shipped goods/ supplies, especially through river routes ?



Transportation of Relief goods to disaster affected areas
Courtesy : Red Crescent Society

PART - II : Annexures

**N.B. All the formats could be easily available on order from
Bangladesh Disaster Preparedness Centre (BDPC),
9/23 Iqbal Road, Mohammadpur, Dhaka-1207, Telephone : 317092**

Format for Damage Assessment at National level (Overall record Picture)

Name of the Organisation :
Nature of Disaster :

Time :
Date :
Source :

Name of the Districts affected	No. of Thana affected	No. of Union affected	No. of village affected	Total area affected (acres)	People affected				House damaged	
					Dead	injured	Total	No. of family	Totally	Partially

Crop damaged (In Acres)		Loss of Livestock	Water Source damage			Other Assests damage					Educational Institutions Affected			Remarks
Totally	Partially		DTW	STW	Pond	Boat	Net	Loom	Small shops	Others	School	College	Madrasa	

Name of the Authorised Officer, DM
Signature
Date

Format for Damage Assessment Survey for Field

Name of the Organisation :

Nature of Disaster :

Date :

Thana :

District :

Name of Union affected	No. of Villages affected	Area affected (acres)	People affected				House damaged		Crop damaged (in Acres)	
			Dead	Injured	Total	No. of Family	Totally	Partially	Totally	Partially

Loss of	Water Source damage			Other Assets damage					Educational Institutions Affected			Remarks
	DTW	STW	Pond	Boat	Net	Loom	Small Shups	Others	School	College	Madrassa	
Livestock												

Name of the Surveyor :

Designation :

Signature :

Date :

Need Assessment Survey form for Emergency Relief (Thana Based)

Name of the Organisation :

Nature of Disaster :

Thana :

Date :

District :

1	2	3				4				5					
Name of Union	No. of Villages	Estimated Number of People Affected				Estimated Number of Beneficiaries				Survial Food and Water					
		People			Families	People			Families						
		Adult	Minor	Total		Adult	Minor	Total		Chira (kg)	Muri (kg)	Gur (kg)	Rice (kg)	Ata (kg)	
1	2	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	5.4	5.5	
Total															

		6					7					8					9	10		
Relief Items Needed																				Estimated Cost in Taka
			Clothings				Utensils					Medicine					Others			
Khichuri	Others	Dinking Water	Saree	Lungi	Baby Wear	Others														
5.6	5.7	5.8	6.1	6.2	6.3	6.4	7.1	7.2	7.3	7.4	7.5	8.1	8.2	8.3	8.4	8.5	9	10		

Name of the Surveor :

Designation :

Signature :

Date :

A list of Radios/Telecommunications Network

Mode of Operation	Name of the organistaion	Network Details
HF/SSB	BDRCS (CPP)	Dhaka- Amtali, Barguna, Barisal, Charfession, Chittagong, Chakoria, Companyganj, Cox's Bazar, Dashmina, Daulatkhan, Galachipa, Hatia, Kalapara, Kutubdia, Lalmohan, Mirsarai, Moiscal Monpura, Noakhali, Patherghata, Ramgati, Sandwip, Sitakundu, Sonagazi, Sudharam (Char Bata), Tajumuddin, Teknaf
HF/SSB	MOR	Dhaka-Barisal, Bogra, Chittagong, Comilla, Dinajpur, Faridpur, Feni, Jamalpur, Jessore, Khulna, Kustia, Mymensingh, Pabna, Patuakhali, Rajshahi, Rangamati, Rangpur, Sylhet, Tangail
HF/SSB	BMD	Dhaka- Barisal, Bogra, Chittagong, Comilla, Cox's Bazar, Dinajpur, Faridpur, Feni, Ishurdi, Jessore, Khepupara, Khulna, Kutubdia, Maizdi, Mymensingh, Rajshahi, Rangamati, Rangpur, Satkhira, Sitakundu, Srimangal, Sylhet, Tangail, Teknaf
	CAAB	Dhaka- Chittagong, Cox's Bazar, Jessore, Rajshahi, Saidpur, Sylhet
	FSCD	Dhaka- Bhola, Chittagong, Cox's Bazar, Khulna, Maizdi, Patuakhali, Rajshahi.
	BP	Dhaka Hqs - 64 District Hqs Battalion Hqs - 9 Battalions, Uttara, Dhaka
VHF/FM	BDRCS (CPP)	Amtali - Atharo Gashia, Bara Bagi Barguna-Baliatoli, Naltona Chakoria - Magnama, Rajakhali Charfession-Char Kukrimukri, Char Motahar, Dhal Char Companyganj-Gangchil Kalmi, Musapur Cox's Bazar- Jaliapalang (Ukhia), Khurushkul

		Galachipa - Barabaizdia I, II Char Kazal (Char Siba) Rangabli (Char Montaz) Hatia - Char Clerk, Nijhumdwip
		Kalapara - Lalua (Nishan Baia), Latachapli (Khajura)
		Moiscal - Dhal Ghata, Sonadia. Monpura-Char Nizam, Shakuchia (Koralia) Patherghata - Kakchar Sandwip - Urir Char Tajumuddin - Char Zahiruddin Teknaf - Bahar Chara, St. Martin Island
	FSCD	Dhaka - 12 Fire Stations in HQs Dhaka city, 3 Fire Stations at Narayangonj 1 Fire Station at Demra 1 Fire Station at Tongi All Fire vehicles Chittagong - 9 Fire Stations at Chittagong City All Fire Vehicles Khulna - 5 Fire Stations at Khulna City. All Fire Stations Rajshahi - 2 Fire Stations at Rajshahi City All Fire Stations
	BP	64 District Hqs - 512 Thanas Selected Thana - Selected Police Outposts
VHM/AM (Air-GROUND)	CAAB	Dhaka-Chittagong, Cox's Bazar, Ishurdi, Jessore, Rajshahi, Saidpur, Sylhet
GENTEX	BMD	Chittagong, Chittagong CTO, Chuadanga, Dhaka CTO, Dinajpur, Faridpur, Feni, Hatia, Khulna, Kustia, Madaripur Court, Maijdi, Mongla, Patuakhali, Rajshahi, Rangpur, Sylhet

FORM FD - 7

**Proposal/Programme For Emergency Relief Operation
for Disaster Victims**

1. **Name of the NGO** :
2. **Registration No. under the Foreign Donations (VA) Regulations Rules, 1978** :
3. **Address with telephone No, if any** :
4. **Description of material (and their value) the NGO proposes to distribute among the affected people.** :

Item	Quantity	Value	`000 Taka (T1)
1	2		3
Total :			

5. **Overhead cost of the proposed relief operation in `000 taka (T2) showing cost breakup of major items (manpower, transportation etc.)** :
6. **Total cost of the operation in `000 taka (T1 + T2)** :

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7. Source of fund/materials :
- (a) i. In case of own resources please describe how the resources have been generated. :
- ii. In case of foreign donations please enclose message of intent of the donor stating donors, particulars (country, organisation, address etc.) :
- (b) In case of diversion of fund from an ongoing project, please furnish following information. :
- i. Name of the ongoing project with location, the date of Government approval (also a copy of approval) :
- ii. Date of commencement of the ongoing project and the proposed data of completion. :
- iii. Total cost of the ongoing project :
- iv. How this depletion in the ongoing project resources will be met ? :
- v. What will be the effect of the diversion of fund/materials on the ongoing project ? :
- vi. Has the donor of the fund for the ongoing project been consulted on the proposed diversion ? If so, state donor's response. :
8. Area operation :
- District :
- Thana :
9. Plan of operation :

- 10. Duration of operation :

 - i. Proposed date of commencement of operation :
 - ii. Proposed date of completion of operation :

- 11. If the operation is being coordinated with any other NGO :
- 12. Other information relevant to the implementation of the operation including future plans, if any. :

(Signature)

Address

Name

Phone no :

Designation

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LIST OF SUPPLIERS AND WHOLESALERS OF FOOD ITEMS

RICE

DHAKA

Market

Babu Bazar

Wholesaler

Phone

M/s Samata Traders
17/B, Akmal Khan Road
Babubazar, Dhaka- 1100
237598
255182

M/s Nalitabari Rice Agency
19, Akmal Khan Road
Babubazar, Dhaka - 1100
237598
257610

M/s Uttar Bango Rice Agency
6, Gopinathdatta Kabiraj Street
Babubazar, Dhaka - 1100
258879

M/S New Munshigonj Rice Agency
59/1-A, Islampur Road
Babubazar, Dhaka - 1100
258879

M/s Jenri Rice Agency
7, Babubazar
Armanitola, Dhaka-1100
246838
250532

M/S Mahiuddin Brothers
15, Akmal Khan Road
Babubazar, Dhaka
259335

M/S Shubho Rice Agency
5, Gopinathdatta Kabiraj Street
Babubazar, Dhaka
234584

M/S Jewel Rice Agency
7, Babubazar, Armanitola
Dhaka
250532
253222

M/S Mohsin Rice Agency
3/4, Gopinathdatta Kabiraj Street
Babubazar, Dhaka
246512

M/S Poly Traders
3/4, Gopinathdatta Kabiraj Street
Babubazar, Dhaka

Matin Rice Agency
6, Gopinathdatta Kabiraj Street
Babubazar, Dhaka
242510

Badamtali

M/s Mahub Mollah & Sons
7/1, Kazi Ziauddin Road
Badamtali, Dhaka-1100
253825
240556

	M/s Balaka Trading Agency (Al-haj Md. Shah Jalal GS, Rice Stockists' Association) 4/3, Badamtoli, Dhaka-1100	255796
New Market	M/S Asia Enterprise 75, New Super Market (North) Block -D , Dhaka	862942
	MARKET	
	Kawranbazar Municipal Market, Dhaka	
	Mohammadpur Agriculture Market Mohammadpur Dhaka	
Chittagong Market	Wholesaler	
	M/S. Mannan Store 23, New Chaktai, Chittagong	220559
	M/S. Abdur Rahman Sawdagar 23, New Chaktai, Chittagong	222664
	M/S. Amanat Traders 283, Chaktai, Chittagong	
	M/S. Hazi Mir Sahab 279, Chaktai, Chittagong	207729 208147

Bulk purchase can be made from this market. There is a riverghat adjacent to the market from where engine boats, trawler, can be hired. They can also deliver rice to receiving points in the field on request.

DAL (PULSE)

DHAKA Market

	Wholesaler	
Rahmatgonj	M/s Faruk & Brothers 36/37, Devi Das Ghat Road Rahmatgonj, Dhaka-1211	244452 237980
	M/s Abdul Wahed & Sons 12, Water Works Road Rahmatgonj, Dhaka - 1211	241169 257072
	M/s Hazi Abdur Razzak 8/1, Water Works Road Rahmatgonj, Dhaka - 1211	233444 243362
	M/s Elias & Sons 8, Water Works Road Rahmatgonj, Dhaka-1211	257884 255104

Chawkbazar	M/S Munir Hossain & Son's 16/10 Bara Katara Chawkbazar, Dhaka	258753
Begumbazar	M/S Jahangir Stores Begumbazar, Dhaka	
	M/S Hazi Mohammad Salimuddin Store 10/11, Begumbazar, Dhaka	238409
	M/S Kalam Store 10/11, Begumbazar, Dhaka	232849
	Md. Mostafa Kamal 2/1 Begumbazar, Dhaka	251168
	Jahangir Store 9, Begumbazar, Dhaka	
New Market	M/S Asia Enterprise 75, New Super Market (North) Block - D, Dhaka	862942
Chittagong Market	Wholesaler	
Khatunganj	M/S Hazi Abdul Hakim Sawdagar 262, Khatunganj, Chittagong	221178
	M/S Hazi Badsha Mia & Sons 261, Kahatunganj Chittagong	224848 221900
	Matri Bhandar Hamidullah Bazar 165, Khatunganj, Chittagong	222275
	M/S Janata Stores 237, Khatunganj, Chittagong	

SOYABEAN OIL

DHAKA Market

Wholesaler

Narayangonj	M/S A.B. Oil Mills Panchabati, Fatullah Narayangonj	
	M/S Dhaka Vegetable Oil Industries Aligonj, Fatullah Narayangonj	

	M/S Afsar Vegetable Oil Mills Aligonj, Fatullah Narayangonj	
Dhaka	M/S Rupan Oil & Feeds Ltd. Khan Mansion 107, Motijheel C/A Dhaka	242331 242011
Begumbazar	Dhaka Traders 74, Begumbazar, Dhaka New Majid Store 7, Begumbazar, Dhaka Hossain Traders Begumbazar, Dhaka	
	M/S Md. Farooque Uddin Debidas Road, Dhaka	255830
	Madina Vegetable & Oil Refining industries 30/6, A, Debidas Road, Dhaka	

**CHITTAGONG
Market**

	Wholesaler	
Chittagong	Panam Banashpati Sale Centre 254, Haji Sonamia Market Parabhita, Khatungonj, Chittagong	227537 208832
	Rahmania Banashpati Product Ltd. 317, Khatungonj, Chittagong	222882
	Chittagonjg Vegetable Oil 154, Nasirabad Industrial Area Chittagong	211089
	Mostafa Vegetable Oil Industry Ltd. 227, Khatungonj, Chittagong	221890 220703
	T. K. Oil Refinery 83, Khatungonj, Chittagong	221583

SALT

**DHAKA
Market**

	Wholesaler	
Chawkbazar	M/S Milan Salt Factory Factory:- Muslimbagh Office-16/10, Bara Katara Chawk Bazar, Dhaka	258753

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	M/S Suruchi Salt Industries 29/7, Sawarighat Dhaka	253200
	M/S Meghna Salt Industries Office - 6/A, Champatali Lane Sawarighat, Dhaka Factory:- Kamrangir Char, Dhaka	233862 283398
Narayangonj	M/S Amirabad Salt Plant Amirabad, Narayangonj	72785 74128
	Office: 6, Motijheel C/A Dhaka	863624 245599
	M/S. A.B. Refined Salt Industries Kazempur, Enayet Nagar Fatulla, Narayangonj	73114 75397
CHITTAGONG	Amirabad Iodised Salt Industries Six Star Building 413/B, Agrabad C/A, Chittagong	502181 504073

FLOUR AND ATTA

DHAKA

Market

Wholesaler

Mowlovi Bazar	M/S Bikrampur Khadya Bitan 3/1, Ali Aossain Khan Road Mowlovibazar, Dhaka	231199
New Super Market (North)	M/S Asia Enterprise 75, New Super Market (North) Block-D, Dhaka	862942
Tejgaon	M/S Samata Flour Mills 13, Station Road Tejgaon, Dhaka	315597

N.B. Bulk purchase can also be made from different mills at Kawran Bazar and Postogola, Narayangonj.

CHITTAGONG

Market

Wholesaler

Chittagong	Fouzi Flour Mill Hathazari Road Jalalabad, Chittagong	212053
	Diamond Food Industries Ltd. 290/291, Nasirabad Industrial Area Chittagong	210425

CHIRA, MURI AND GUR

DHAKA

Market	Wholesaler	Phone
Kawranbazar	M/S Mostafa Traders Shop No. 23 Municipal Market Kawranbazar, Dhaka	
	M/s Abdul Jalil Miah Shop No.. 30/31 Kawranbazar, Dhaka	
	M/s Jahangir Stores 166, Kawranbazar Super Market Kawranbazar, Dhaka	
Mowlovibazar	Moh. Mainuddin 10/11, Kamal Market Mowlovibazar, Dhaka	233666
	Moh. Abul Hossain Kamal Market Mowlovibazar, Dhaka	
	Market	
	Kawranbazar Municipal Super Market Kawran Bazar, Dhaka	
	New Super Market, Newmarket Dhaka	
	Kaptanbazar Market Nawabpur, Dhaka	

NB: Bulk purchases may also be made from Captain Bazar, Dhaka. There are plenty of chira factories in Fatulla & Tongi.

Chittagong	Mallick Store Bhanga Pole 380/381, Chaktai Chittagong	225124
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* Muri & Mollases are not available in plenty in Chittagong.
Flour, Ata, Salt, Edible Oil, etc. also can be purched in bulk from Chaktai, Khatunganj market.

BISCUIT AND LOAF

DHAKA Market

	Wholeseller	Phone
Sawarighat	M/s Baby Biscuit Co. 6/3, Champatali Lane Sawarighat, Chawk Bazar, Dhaka-1211	238278
	Balaka Biscuit Factory 6/7, Champatali Lane Sawarighat, Chawk Bazar, Dhaka-1211	230369
	Producer	
	Nabisco Biscuit & Bread Factory 262, Tejgaon Industrial Area, Dhaka	600281-3
	AB Biscuit Company Ltd. Sales office 69, Chawk Circular Road, Dhaka	257480 250401
	Bengal Biscuit Ltd. 345, Segunbagicha, Dhaka	401590
	Mona Food Industries Ltd. 146/4, Green Road, Dhaka-1215	815530 327550
	Orient Food Company 17, Umesh Datta Road Bakshibazar, Dhaka	502530 864477
	Modern Bakery BSCIC, Tongi	690495 691445

NB: These producers produce biscuits, loafs and other bakery items for general consumers. Their products are of high price. They may supply their products on request.

N.B: Biscuits and Loafs may be purchased in bulk from factories in Jurain areas on order 48 to 72 hour before the delivery.

CHITTANGONG

Model Bread 236/A, Dewan Hat, Chittagong	503828
The Milton Biscuit Factory 46, North Nalapara, Chittagong	221019
Savoy Confectionery Station Road, Chittagong	202276 227676
Dynasty Confectioneries 86, Station Road, Chittagong	206816

List of Suppliers of Clothing

SARI & LUNGI

Market

Baburhat Market
Narsingdi
(30 Miles from Dhaka on Dhaka Sylhet Road)

Shahjadpur Market
Sirajgong

DHAKA

Markets

Sadarghat Hawkers Market
Sadarghat, Dhaka

Sadarghat Ladies Park Market
Sadarghat, Dhaka

Dhanmondi Hawkers Market
Mirpur Road, Dhaka-1205

Bakku Shah Hawkers Market
Babupura, Nilkhet, Dhaka-1205

Gulistan Hawkers Market
Gulistan, Dhaka-1000

Islampur Market
Islampur, Dhaka

DHAKA Market

Wholesaler

Phone

Islampur

M/s Surair Textiles
78, Islampur Road
Kader Mansion
Dhaka - 1100

243642
238133
238564

M/s Sukhi Print
38/12, Islampur Road
Dhaka - 1100

255360

M/s Miran Corporation
61/2/4, Hakim Mansion
Islampur Road, Dhaka - 1100

281835
244929

Chittagong

Matri Bitan
38, Bakshirhat, Chittagong

M/s. Shree Krishna Bastralaya
32, Bakshirhat, Chittagong

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Hat Hazari Cloth Store
2, Najer Mia Lane
Bakshirhat, Chittagong

BABY GARMENTS

DHAKA

Market

Sadarghat

Wholesalers

M/S Bilkis Garments
688/89, Hawkers Market
(Laskar Patti)
Sadarghat, Dhaka - 1100

M/s Yama Fuji Garments
690, Hawkers Market
(Laskar Patti)
Sadarghat, Dhaka - 1100

Phone

Market

Sadarghat Hawkers Market
Sadarghat, Dhaka-1100

Haranath Ghosh Road Market
Begumbazar, Dhaka

Islampur Market
Islampur
Sadarghat, Dhaka

Dhanmondi Hawkers Market
Mirpur Road, Dhaka

Gulistan Hawkers Market
Gulistan, Dhaka

Bangabazar
Hawkers Market
Fulbaria, Dhaka

Ramna Hawkers Market
Ramna, Dhaka

Bangabandhu Hawkers Market
Bangabandha Avenue, Dhaka-1000

NB: Low cost baby garment factories are in Keranigonj

Chittagong *

These can be purchased from **Teribazar Market & Jahur Chowdhuri Market**. But they suggested that since they procure Baby garments from Dhaka. So it would be wise to purchase or procure it from **Dhaka Market**.

BLANKET

**DHAKA
Market**

Gulistan

Wholesaler

M/s Liton Store
Gulistan Adarsha Hawkers Market
5th Lane (Row), Shop No. 1
Gulistan, Dhaka

M/S Lucky Fashion Garments
Gulistan Adarsha Hawkers Market
5th Lane (Row)
Gulistan, Dhaka

M/s XL Challenger
Gulistan Adarsha Hawkers Market
5th Lane (Row)
Gulistan, Dhaka

Market

Sadarghat Market
New Market

Phone

List of suppliers of utensils

DHAKA Market	Wholesaler	Phone
Mitford	M/s Aluminium Centre 5, Wahed Market 2, Rajani Bose Lane Mitford, Dhaka - 1100	280594
	M/s Selim Aluminium Store Kalibari Market Mitford, Dhaka - 1100	259829
	M/s Sanowar Aluminium Store Kalibari Market Mitford, Dhaka - 1100	281670
	M/s Agrani Bitan Kalibari Market Mitford, Dhaka - 1100	230597
	M/s Aluminium Centre 2, Rajani Bose Lane Mitford, Dhaka - 1100	280594

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**List of Wholesalers/Distributor of
TUBE-WELL MATERIALS**

DHAKA Market	Wholesaler/Distributor	Phone
Alu Bazar	M/s Khaleda Filtre & Iron Industries 14, Haji Osman Gani Road Dhaka - 1000	251192 236724
	M/s Islam Traders 17/1, Haji Osman Gani Road Dhaka - 1000	234597 257253
	M/s Kum Kum Enterprise 6/8, Dhaka City Corpr. Market North South Road Alu Bazar Dhaka - 1000	258268 242557
	M/S Rashid Sanitary 11/1, Siddiquebazar Northsouth Road Dhaka	282003
	Saudia Sanitary 20/25, Northsouth Road Siddiquebazar Dhaka	239862
	Popular Hardware & Sanitary Store 6/1, Northsouth Road Siddiquebazar Dhaka	238446
	N.S. Company 30, Northsouth Road Siddiquebazar Dhaka	236566
	Islam & Brothers 29/1, Northsouth Road Siddiquebazar Dhaka	234307
	B.K. Tubewell Corporation 9, Northsouth Road Siddiquebazar Dhaka	283978

Chittagong**Wholesaler/Distributor**

Lima Sanitation
205, Jubilee Road
Chittagong

S.M. Trading
42. Jubilee Road
Chittagong

Jubilee Sanitation
59, Jubilee Road
Chittagong

Mahbule Brs. & Industries
38, Jubilee Road
Chittagong

Shaon Enterprise
183, Jubilee Road
Chittagong

A. Hakim & Brs.
778, Jubilee Road
Chittagong

208804

208105

205782

207565

202781

**List of Wholesalers of
Water Purification Tablets(WPT)/Water Disinfection
Tablets(WDT) and Fitkiri**

DHAKA		
Producer	Sale centre	
	Sonia Laboratories Ltd. 11/2, Toyenbee Circular Road Motijheel C/A Dhaka	243761
Market	Wholesaler	Phone
Mitford Babu Bazar	M/s Pansia Drugs 54, Islampur Road Mitford, Dhaka - 1100	256968
	M/s S.M. Drug 51, Islampur Road Babu Bazar, Dhaka- 1100	252555
	M/s Roman Enterprise 56/57, Babu Bazar Reaz Medicine Market, Dhaka - 1100	259200
	M/s Sony Drug 56/57, Babu Bazar Reaz Medicine Market, Dhaka - 1100	259590
	M/s Anwar Medical Store 48, Islampur Road, Dhaka - 1100	250001
FITKIRI		
DHAKA Market	Wholesaler	Phone
Mowlovibazar	M/s Hedayet & Brothers 2, Makim Katara Mowlovibazar, Dhaka - 1100	257763 240849
Armanitola	M/S Harun Chemical Industries 87, Sharat Chandra Chakraborty Road Armanitola, Dhaka	247117 240721
Chittagong	Royal Dyes Ratan Baleer Bakshirhat, Chittagong	220511

**List of Wholesalers of
PLASTIC BUCKET, CONTAINER, BOTTLE, ETC.**

DHAKA Market	Wholesaler	Phone
Mitford	M/s Shamim Store 144, Mitford Road, Dhaka - 1100	257195
	M/s Haji Shamsheer Uddin & Sons 81, Mughaltuli Dhaka - 1100	235889 253215 252630
	M/s Amin Trading Corporation 156, Mitford Road, Dhaka - 1100	233290
	M/s Maya Store 158, Mitford Road, Dhaka - 1100	
Nizamuddin Road	M/s Raja Plastic Industries Show Room Nizamuddin Road Dhaka	234278
Mitford Road	Red Crescent Market Mitford Road Dhaka	

List of Companies and Wholesalers of Medicine

DHAKA	Sale Centre/Depot	Phone
**	Square Pharmaceuticals Ltd. 50/A, Toyenbee Circular Road Dhaka	251653 259283 233899
	BEXIMCO I & I House No. 19, Road No. 7 Dhanmondi R/A, Dhaka - 1205	500046-7
**	Fisons 6/2/A, Segunbagicha, Dhaka - 1000	865019-25
	Opsonin Regional Sales Office 1, New Eskaton Road, Dhaka	413356
**	Hoechst 96/97, New Eskaton Road Dhaka	415331
**	ICI Pharmaceuticals 9, Motijheel C/A, Dhaka-1000	236254-8
	Aristopharma Ltd. Obaidi Market (3rd. Floor) 37, Mitford Road, Dhaka	236642 230736
**	Gonoshasthya Pharmaceuticals 148, Abeddhali Road Kalabagan, Dhaka	328817
	SK & F 52, Motijheel C/A Dhaka-1000	231065 231068 255918
Chittagong	Sale Centre/Depot	Phone
	Square Pharmaceuticals 15, Shaheed Mirza Road Mehedibag, Chittagong	207296
**	ACME House No. 1334, Road No. 4 O.R. Nizam Road, Chattagong	207225 209261
	BEXIMCO 33, Mohedibag Road Chittagong	209261

**	Pfizer 107, Agrabad Commercial Area Chattagong	501935
	Opsonin Regional Sales Office Keya Manson 6, Monin Road, Chittagong	204433 204524
	Premier Pharmaceutical Ltd. 74, Shaheed Safiuddin Khalid Road (Ashkerdighi North), Chittagong	207841
	Therapeutics Pharmaceutical Ltd. 18, Mehedibag Chittagong	204856

** Companies approved by UNICEF

**DHAKA
Market**

	Wholesaler	Phone
Mitford Babu Bazar	M/s Panasia Drugs 54, Islampur Road Mitford, Dhaka - 1100	256968
	M/s S.M. Drug 51, Islampur Road Babu Bazar, Dhaka- 1100	252555
	M/s Roman Enterprise 56/57, Babu Bazar Reaz Medicine Market Dhaka - 1100	259200
	M/s Sony Drug 56/57, Babu Bazar Reaz Medicine Market, Dhaka - 1100	259590
	M/s Anwar Medical Store 48, Islampur Road, Dhaka - 1100	250001

CHITTAGONG

Market	Wholesaler	Phone
Chittagong	Gahira Medical Store 114, Hajari Lane Chittagong	221342
	Popular Medical Hall 65/6, Hajari Lane Chittagong	221473

Shen Pharmacy 220271
170, Hajari Lane, Chittagong

M/S, Jafar Traders 221129
139/4, Old Telegraph Road
Hajari Lane, Chittagong

M/S, Masud Brothers 228851
139/5, Old Telegraph Road
Hajari Lane, Chittagong

ORAL REHYDRATION SALINE (ORS)

Social Marketing Company 815090
House No. 38 814570-77
Road No. 13 A (New)
Dhanmondi R/A, Dhaka-1205

Gonoshasthya Pharmaceuticals 328817
148, Abeddhali Road
Kalabagan
Dhaka

Square Pharmaceuticals Ltd. 251653
50/A, Toyenbee Circular Road 259283
Dhaka 233899

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List of Wholesalers of Shelter Materials**POLYTHENE SHEET**

DHAKA Market	Wholesaler	Phone
Moulavi Bazar	M/s Shaheen Polythene Industry 79, Begum Bazar (Peara Bhavan) Moulavi Bazar, Dhaka - 1100	239581
	M/s New Star Polythene Supply 79, Begum Bazar (Peara Bhavan) Moulavi Bazar, Dhaka - 1100	233223
	M/s Poly Tube Traders 22/23, Makim Katara Moulavi Bazar, Dhaka - 1100	258591 253798
	Arif Brothers 16, Makim Katara, Dhaka	257597
	Kamal Polythene Store 21/11 Makim Katara, Dhaka-1100	242087
	Bismillah Polythene 19, Makim Katara, Dhaka	253964
	Chittagong	M/S Progati Polythene Mart 25, Jail Road, Chittagong
G.B. Commercial Industries 228 Jubilee Road, Chittagong		
Barnali Plaslic House 220/A, Jubilee Road, Chittagong		

* These wholesalers purchase plastic from Dhaka. So it would be wise to procure plastic sheetings from Dhaka wholesale market.

C.I. SHEET AND RIDGING

DHAKA Market	Wholesaler	Phone
Naya Bazar	M/S Bikrampur Traders 65, French Road Naya Bazar, Dhaka - 1100	244676 238653
	M/s Mirza Shamsuddin Beg & Sons 55, French Road Naya Bazar, Dhaka - 1100	255171 236000

M/s Zaman & Sons	230531
1/2, French Road	
Naya Bazar, Dhaka - 1100	

N.B: Roofing screw and washers are available in bulks at Bangshal Road and in Chittagong

CHITTAGONG	Asif Steel Mills Ltd.	226549
	Asif Sale Centre	222459
	950, Osman Manjil	226997
	Asadgonj, Chittagong	
	N.G. Shah Steels Private Ltd.	222928
	952, Asadgonj, Chittagong	
	Elias Brothers Pvt. Ltd.	220013-4
	100, Khatongonj, Chittagong	
	Chittagong Steel Mills Ltd.	505055-9
	Patenga, Chittagong	

NAILS, WIRES & BOLTS

DHAKA

Market

	Wholesaler	Phone
Imamgonj	M/S Karim Kadir Stores 25, Imamgonj Bazar Lane, Dhaka-1211	282698
Nayabazar	M/S Siddique & Sons 29/9, Nawab Yusuf Road Nayabazar, Dhaka	238581
	M/S Nazim Hardware Stores 29/8, Nawab Yusuf Road Nayabazar, Dhaka	233756
	M/S Mozammel & Co. 23, Nawab Yusuf Road Nayabazar, Dhaka	

CHITTAGONG	Mirza Abu Wire Manufacturer & Industries Ltd.	212481 210364
	239, Nasirabad Industrial Area, Chittagong	
	Kazi and Brothers 15, Terry Bazar, Chittagong	226056
	Lucky Hardware Supply 345/5, Asadgonj, Chittagong	221238
	M/S, S. Rahman Hardware Store 10, Asadgonj, Chittagong	204801
	M/S, Al-Amin Hardware Store 10, Asadgonj, Chittagong	226695

ROPE (NYLON)

Market	Wholesaler	Phone
Chawkbazar	M/S Abdul Kader Tradings 100/113 Chawk Mogultuli Ruihatta, Dhaka	
	M/S Kala Chand Mia 102/103, Chawk Mogultuli Ruihatta, Dhaka	
	M/S Al Islam Enterprise 83, Chawk Mogultuli Ruihatta, Dhaka	
Chittagong	M/s Amin & Sons 40/A Jail Road, Chittagong	
	Fazal Ahmed & Brs. 697, Badarpathi, Chittagong	223050

JUTE PRODUCTS AND JUTE ROPE**DHAKA**

Market	Wholesaler	Phone
Imamgonj	M/S Premier Trading Corporation 2/1, Imamgonj Dhaka	239365
	M/S. A. K. M. Rezaur Rahman 50, Imamgonj Dhaka	252249

CHITTAGONG

Shahed Traders 39, Jail Road Chittagong	221414
Hazi Badshah Mia Saodagar 39 Jail Road, Chittagong	222433
Khan Brothers 40 Jail Road Chittagong	225171
M/S, Al Faiz Trading 50, Jail Road Chittagong	221155

BAMBOO MATS AND FENCING

	Market
Dhaka	Kallyanpur Bamboo Market Kallyanpur, Dhaka Sadarghat Bamboo Market Sadarghat, Dhaka Aminbazar Market, Dhaka Tongi Diversion Road, Dhaka
Gazipur	Kaliakoir Bazar Gazipur
Chittagong	Firingi Bazar Chittagong
Rangamati	Kaptai, Rangamati
Feni	Korerhat, Feni

**List of wholesaler of Life Jackets and
ITEMS RELATED TO KIT BAG AND FIRST-AID BOX**

DHAKA Market	Wholesaler	Phone
Mitford	M/s Continental Drug House 33, Mitford Road Dhaka-1100	254615 254423
	M/s National Surgical Mart 35, Mitford Road Dhaka- 1100	234742
	M/s New Surgical Mart 33, Mitford Road Dhaka - 1100	234656 313531
	M/s Salimullah Medical Hall 35, Mitford Road Dhaka - 1100	234656
Life Jacket	Producer/Distributor	
	M/S Rahman & Brothers 180, Siddiquebazar 2nd Lane Dhaka	280804
	United Business Ltd. 30/1, Shantinagar Dhaka	406178 417920

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LIST OF CARRYING CONTRACTORS/AGENTS**DHAKA**

	Phone
1. M/S Abdul Halim & Company 8/14, Block B, Lalmatia Mohammadpur, Dhaka-1207	318542
2. M/S Ismail & Brs. 7/4, F.D.C Road Tejgaon, Dhaka	815509
3. Al Hafiz Enterprise 7/4, South Begun Bari Tejgaon, Dhaka	314962
4. M/S Muniruddin Ahmed & Sons. 13/1 West Nakhhalpara Tejgaon, Dhaka	311587
5. M/S Tuhin Enterprise 151/2 Tarabag Tilpapara, Dhaka	419335
6. M/S Mostaque Khan House No. 311, Road No. 2 Baitul Aman Housing Society Mohammadpur, Dhaka	314226
7. M/S Shahan & Sons Ltd. Tejgaon Railgate, Dhaka	314398 314155
8. Sunbeam Enterprise East Mothertek, Dhaka	411957
9. Hena Enterprise 120/5 North Shahjahanpur, Dhaka	408953
10. M/S Chowdhury Brs. 274/4, Sultangonj Rayerbazar Dhanmondi, Dhaka	315568
11. Maola Transport Co. 46, Imamgonj (Mostafa Mansion) Dhaka	242470 244647
12. Suktara Transport & Trading Agencies 91, Ahiullah Road Armanitola, Dhaka	230254

- | | | |
|-----|---|------------------|
| 13. | Chowdhury Paribahan Sangstha
18/1, Gobinda Prashad Lane
Armanitola, Dhaka | 251082 |
| 14. | Dowel Paribahan Sangsta
103, Ahiullah Road
Armanitola, Dhaka | |
| 15. | Showkat Transport
1, Gobinda Dash Lane
Armanitola, Dhaka | 251050 |
| 16. | Chanda Transport Company
7, D. C. Roy Road
Armanitola, Dhaka | 252282
282020 |
| 17. | M/S. Shewly Transport Agency
Dholai Khal
Raishabazar More, Dhaka | |

N.B. Trucks may also be hired from Armanitola, Gabtali Truck Stand, Tejgoan Railgate & Sayedabad Truck Stand.

Chittagong

- | | | |
|----|--|----------------------------|
| 1. | Bangaraj Transport and Trading
376, Dhaka Trunk Road
Kadamtali, Chittagong | 502545
502712 |
| | Bangaraj Transport and Trading
12, A.C. Roy Road
Armanitola, Dhaka | 258618
280929 |
| 2. | M/S. Shewly Transport Agency
500, Dhaka Trunk Road
Kadamtali, Chittagong | 503318 |
| 3. | Progati Transport & Trading
366, Dhaka Trunk Road
Kadamtali, Chittagong | 505682
504373 |
| 4. | New Heaven Transport
Jahangir Markat
Kadamtali, Chittagong | 502644 |
| 5. | Showkat Transport Agencies
271, Kadamtali
Dhaka Trunk Road, Chittagong | 503817
505419
504796 |
| 6. | Suktara Transport Agencies
91/1, Darogahat Road
East Madarbari, Chittagong | 207478
208552 |

- | | | |
|----|--|------------------|
| 7. | Chowdhury Paribahan Sangstha
295, Kadamtali
Dhaka Trunk Road, Chittagong | 502772
503910 |
| 8. | Maola Transport Co.
633 Kadamtoly Chittagong
(Near Pora Masjid) | 501167 |

Car/Microbus

RENT-A-CAR SERVICES

Dhaka

- | | | |
|----|---|------------------|
| 1. | Bangladesh Tours
Kawranbazar
DIT Road, Dhaka | 313094 |
| 2. | HOTEL DHAKA SHERATON | 861191 |
| 3. | BANGLADESH PARJATAN CORPORATION | 509479 |
| 4. | Dalts International
212, Central Bashaboo, Dhaka
Near Bashaboo Rail Gate
Over Bridge | 414314 |
| 5. | Time Tour
302/1, Mirpur Road
Shamoli, Dhaka | |
| 6. | Max-Taxi
82, Motijheel C/A
Dhaka

22/3, Block-B, College Gate
Mirpur Road, Dhaka | 258581
238594 |
| 7. | Tour Bangla Timited
5/A, Eskaton Garden Road | 831186 |

Chittagong

- | | | |
|----|--|--------|
| 1. | Agrabad Tours
Hotel Agrabad
Chittagong | 500361 |
|----|--|--------|

- * Cars and Micro-buses also can be hired from Laldighir par or from the Railway station and in front of Agrabad Hotel.
- * Engine boat and Trawler also can be hired from Kalurghat and Chaktai ghat.

List of River Transport Agencies

Dhaka

- | | | |
|----|---|------------------|
| 1. | Janata Transport Agency
4/2 - C, Simson Road
Sadarghat, Dhaka-1100 | 238211
254206 |
| 2. | M/S Jalpath Shipping Lines
155, Ladies Park Market
(First Floor)
Sadarghat, Dhaka - 1100 | 242291 |
| 3. | Karnafuli Shipping Lines
151, Ladies Park Market
(First Floor)
Sadarghat, Dhaka - 1100 | 253131 |
| 4. | Jham Jham Shipping Lines
3, Simson Road
Mahmudia Market, Dhaka - 1100 | 237399 |
| * | River transport can also be hired from Sadarghat, Narayangonj riverports in Dhaka. | |

Chittagong

- | | | |
|----|---|----------------------------|
| 1. | Madhumati River Service
379 Strand Road
Chittagong | 223195
206841
226640 |
| 2. | Rahman Trading Agency
383, Strand Road
Majhirghat
Chittagong | 506140
Res: 208382 |
| 3. | M/s Jogajog Paribahan Sangstha
43, Strand Road
Majhirghat, Chittagong | 203869 |
| 4. | Progati Jal Paribahan Sangstha
550, Strand Road
Majhirghat, Chittagong | 206911
226583 |
| 5. | M/s Lusai River Service
383, Strand Road
Chittagong | 204359
206738 |
| ** | River transport can also be hired from Sadarghat, Kalurghat, Chaktai in Chittagong. | |

BIBLIOGRAPHY

1. Disaster Preparedness Manual, ADAB/PRIP
2. African Disaster Handbook
World Health Organisation
Pan-African Centre for Emergency preparedness and Response, 1990
3. Aim and Scope of Disaster Management.
Frederick C. Cuny,
Asian Institute of Technology, Bangkok, Thailand
4. Comprehensive Disaster Preparedness
Action Plan For Flood Control, UNDP, January 1990.
5. Cyclone affected Area Survey Guideline/Directives - CODEC
6. "Cyclone '91" - An Environmental And Perceptual Study
Bangladesh Centre for Advanced Studies (BCAS)
7. Cyclone in Bangladesh
Dr. M. A. Choudhury
Dhaka, 1991
8. Cyclone Disaster - 1991
A First Hand Aerial Survey Report and Recommendation for Emergency
Intervention
- Md. Saidur Rahman - OXFAM.
9. Cyclone Relief Programme, 1991
The BRAC Response, September, 1991
10. "Cyclone '91, A cry for effective co-ordination among NGOs"
- Md. Saidur Rahman, Oxfam.
11. Directory of NGOs in Bangladesh, 1992 - ADAB
12. "Disaster Programming Guide Tools"
CONCERN Bangladesh
13. Disaster Management Guidelines,
Save the Children Fund (UK)- Reviewed October 1990
14. Disaster Management : A Disaster Managers Handbook
Carter W. Nick - Manila : Asian Development Bank (ADB) 1991
15. Disaster Mitigation In Asia and the Pacific
Asian Development Bank, Manila, Philippines

16. Disaster Relief Manual
Caritas International - September, 1977
17. Emergency Services in the Event of a Disaster
Bangladesh Disaster Preparedness Centre, BDPC
18. Emergency Standing Orders for Flood
Govt. of the Peoples Republic of Bangladesh
Relief and Rehabilitation Division
Ministry of Food, February, 1984.
19. Emergency Flood Relief Programme - 1988
- Md. Saidur Rahman - OXFAM
20. Families and Floods : ADAB/PRIP/RDRS/BNELC/IVS/PRIP
21. Flood in Bangladesh : Community Development Library (CDL), April, 1989
22. Floods in Bangladesh : Bangladesh Views
23. Flood Policy Study (Inception Report)
To the Govt. of Bangladesh, UNDP, November, 1988
24. Flood Response (Inception Report)
Flood Action Plan 14
Flood Plan Coordination Organisation
Irrigation Support Project for Asia and the Near East (ISPAN).
Ministry of Irrigation, Water Development, and Flood Control. August, 1991.
25. Food Value of the common Country Food Items
Institute of Nutrition and Food Research
Dhaka University
26. Guidelines for Cyclone
Cyclone Preparedness Review Committee, August, 1977
27. Guidelines for Health Care in Refugee Camps
Refugee Health Unit, Somali Ministry of Health.- OXFORD 1983
28. Human Response to Natural Disasters : Issues Involved
- Atiur Rahman, BIDS - January, 1990
29. Inception Report
Disaster Co-ordination and Monitoring Unit
Ministry of Relief and Rehabilitation
30. Joint BDRCS/IFRCS Relief Operation in Aid of Myanmar Refugees, 1992

153

31. "Lessons Learnt During Cyclone" - April 1991
Ministry of Health and Family Welfare
Govt. of Bangladesh (In joint Collaboration with World Health Organisation)
32. Managing Disaster Response - Three Computer Programs which will help
(i. Disaster Information System -DIS, ii. Disaster Preparedness Information System - DPIS, iii. Disaster Response Tracking System - DRTS)
PACT/PRIP, Aug.'92, Dhaka, Bangladesh
33. Management of Severe Protein-Energy Malnutrition at Children's Nutrition Unit.
Dhaka
- Dr. Sultana Khanum - SCF (UK)
34. Map of GEODESEC, July, 1991
35. Maps of Bangladesh
- Graphosman, Dhaka
36. NGO Guide to Disaster Assistance Agreements
USAID, Dhaka, Bangladesh, May, 1992
37. Operation SHEBA, M. Mokammel Haque
June, 1991
38. Patterns, levels, Trends in Mortality and Regional Life Tables For Bangladesh.
Bangladesh Bureau of Statistics
39. Practical Guide to Refugee Health Care, OXFAM Health Unit
(OXFAM Practical Guide No. 2), Second Edition February, 1986.
40. Preliminary Report-Population Census, 1991
Bangladesh Bureau of Statistics
41. Readings in Disaster Management (June, 1983)
Dr. Aqueil Ahmed
Administrative Staff College of India
42. Report of the Child Nutritional Status Survey 1989-90
Bangladesh Bureau of Statistics April, 1991
43. Red Cross Disaster Relief Handbook, League of Red Cross Societies 1970
44. Recommendations for : "A Program Strategy To Enhance Disaster Preparedness and Emergency Response in Bangladesh"
Mr. Erlins Dessau, Mr. David Read Barker
UN. Systems Operational Activities for Development in Bangladesh.
45. Research on the Fallout of Cyclone
(A.M.R. Chowdhury & A.Y. Choudhury)

154

46. Report of The Cyclone Disaster Preparedness Review Committee
Govt. of The Peoples Republic of Bangladesh - 1985
47. Seasonal Dimensions to Rural Poverty :
Analysis and Practical Implications
Robert Chambers, Richard Longhurst
Institute of Development Studies
University of Sussex
United Kingdom.
48. Selective feeding Programme, OXFAM Practical Health Guide No. 1
- Dr. Tim Lusty, Pat Diskett.
49. Small Atlas of Bangladesh
- Bangladesh Bureau of Statistics, 1991
50. Standing Orders For Cyclone
Govt. of the People's Republic of Bangladesh, Ministry of Relief and
Rehabilitation, 1985.
51. Statistical Pocket Book of Bangladesh, 1991
Bangladesh Bureau of Statistics
52. Sun-cleaned Drinking Water
Professor David Morley
Tropical Child Health Unit, London
53. The Flood of 1988 in Bangladesh : "An Assessment of Damages and Losses"
- Monowar Hossain
Multidisciplinary Action Research Centre. September, 1989
54. The Local Govt. Engineer in Disaster Recovery
- Australian Counter Disaster College
Snowy Mountains Engineering Corporation Limited
55. UNHCR Handbook for Emergencies
Part One : Field Operations
United Nations High Commissioner for Refugees, Geneva, December, 1982

RECEIVED AUG 31 1993

DISASTER MANAGEMENT HANDBOOK FOR BANGLADESH

PART - III OPERATIONAL RESPONSE FOR UP TO FIRST THREE WEEKS



DISASTER MANAGEMENT HANDBOOK FOR BANGLADESH

P A R T - III OPERATIONAL RESPONSE FOR UP TO FIRST THREE WEEKS

MD. SAIDUR RAHMAN
Director
Bangladesh Disaster Preparedness Centre

SPONSORED BY PACT-BANGLADESH

DHAKA, February 1993

DISASTER MANAGEMENT HANDBOOK FOR BANGLADESH (PART - III)

First Edition
February 1993

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Publication Consultant
S M Akhtaruzzaman

Cover Design
Muzharul Haque

Computer Compose
Azim Haider

Computer Design
Daniel Talukder

Published by
PACT Bangladesh/PRIP
House 56, Road 16 (New)
Dhanmondi R/A
Dhaka-1209
Bangladesh

Printed by
Modern Printers &
Advertising Co.
238, Outer Circular Road
Bara Moghbazar
Dhaka

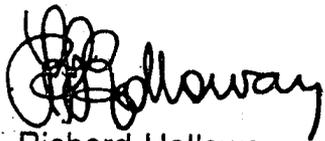
This Handbook has been produced with assistance from PACT Bangladesh/PRIP as part of a grant from the United States Agency for International Development (USAID) Bangladesh.

Introduction

Bangladesh is a country with more than its fair share of disasters. It also has many public spirited citizens who volunteer their time to help others who have been struck by a disaster. It also has many citizens' organizations, often called NGOs, who play a leading role in relief and rehabilitation work when a disaster has struck.

What it does not have, surprisingly, is a system of training, or manuals, or guidelines for what to do at the time of a disaster. And good disaster response needs good preparation - simply a desire to help is not enough.

This Hand book will help people and organizations prepare themselves for what to do when a disaster strikes. It will also be a ready reference during the disaster response period. Please use it. Your help will be better with the aid of this book. PACT/PRIP is proud to be associated with it.



Richard Holloway
Director, PACT/PRIP

Author's Note

Thanks to Allah, we have been able to produce the "Disaster Management Handbook for Bangladesh". It is the first publication of its kind ever to be produced in the country and it is not the product of one man's, the author's, wisdom but is the distillation of the collected experience of hundreds of people, who have either been the victims of disasters or have been involved in the management of relief and recovery from them.

A team of eight selfless people dedicated themselves for nine months to the production of our handbook. They interviewed three hundred and forty-seven inhabitants of areas prone to different types of disasters and twenty-six managers from government and non-government organisations, whose responsibility is to respond to disasters, when they occur. Fifty percent of those interviewed were women. A large number of publications on disaster management were also studied. Finally, the draft of the handbook was discussed with international disaster relief experts and their views incorporated.

Our handbook aims simply to be a guide for managers of disaster relief at all levels - from Chief Executive Officers to field workers. Those using it may adapt it, to suit the size and capacity of their organisations, and to fit it with their chosen role in the management of relief.

Whether our handbook is a success and can be used effectively by such organisations, will only truly be measured in terms of a reduction in the number of deaths, a lessening of damage to property, and a substantial alleviation in the sufferings of disaster victims.

I should like to thank PACT-Bangladesh for sponsoring this project and to express my undying gratitude to those who worked so devotedly with me on it. Lastly, we should like to acknowledge our collective indebtedness to all those who gave us the invaluable benefit of their experience.



Md Saidur Rahman
Director
BDPC



Member

D.O. No.

Planning Commission
Government of the People's Republic of Bangladesh
Dhaka

Date..... Jan 28, 1993.....

Preface

Because of its geographical location and character of the terrain Bangladesh is a disaster prone country. It is affected by natural disasters almost every year. The Deltaic nature of the land contributes further to the loss of human lives and severe damage to property. These disasters also affect the economy badly and development programmes are also disrupted. The government for a long time, and non-governmental organisations in the recent past, have responded to cope with the situation, trying to mitigate sufferings of the people. This handbook is intended to help them deal with the situation more efficiently and effectively.

In presenting the "Disaster Management Handbook for Bangladesh", the author, Mr. Md. Saidur Rahman has combined his theoretical knowledge with his practical experience in disaster management within and outside Bangladesh for more than 25 years.

I hope the handbook will be useful for those involved in disaster response activities. Proper use of this manual will not only reduce loss of human lives but also alleviate sufferings of the people affected by natural disasters.

M. Mokammel Haque
Member
Planning Commission
Government of People's Republic of Bangladesh

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How to use this Book

This book contains five sections, grouped in four volumes as follows :

- VOL 1** : **Pre-Disaster Stage**
- VOL 2** : **Planning A Disaster Response**
- VOL 3** : **Operational Response for up to First Three Weeks**
- VOL 4** : **Communication/Record Keeping**
: **Finishing and Leaving**

Each volume contains many chapters, all of which are organized according to the following questions :

What should be done ?

Who should do it ?

Who should be kept informed ?

Questions to ask

("Questions to ask" is a checklist for you to check whether you have done everything suggested in that chapter)

Annexures :

In many chapters there are references to **Annexures**. These are reference materials on yellow paper at the end of each section which are available for you to photo copy as needed.

Please use this book as a reference book according to your needs. The materials can also become the basis for training courses.

We suggest that the Head Office of an organization should keep Vol 1 and 2 and the field workers should keep copies of Vol 3 and 4.

Best of luck in using this book - we hope it helps you.

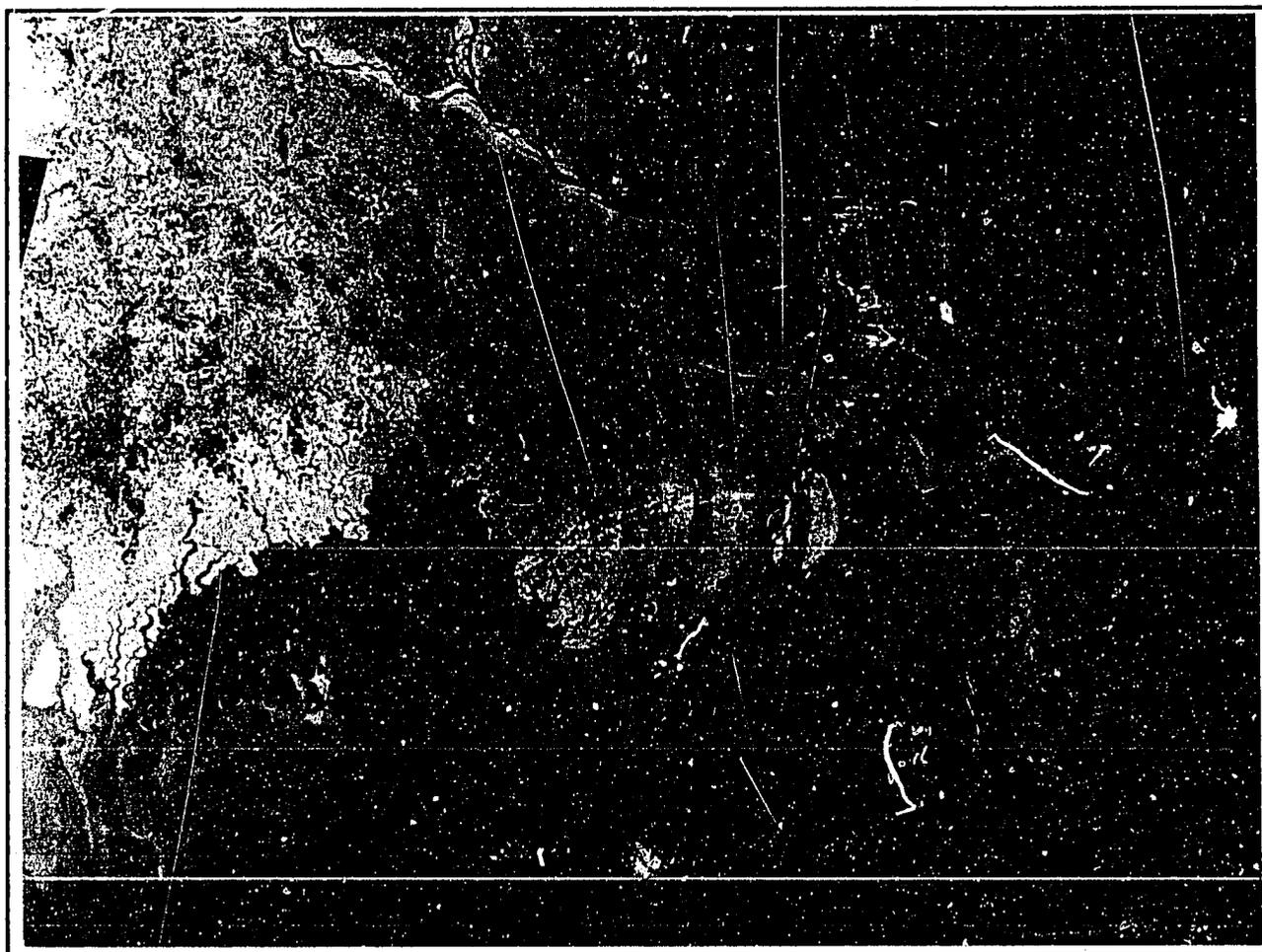
ABBREVIATION

ADAB	Association of Development Agencies in Bangladesh
ADPC	Asian Disaster Preparedness Centre
AIS	Advanced Information Systems
AIT	Asian Institute of Technology
AODRO	Australian Overseas Disaster Response Organisation
BBC	British Broadcasting Corporation
BDPC	Bangladesh Disaster Preparedness Centre
BDR	Bangladesh Rifles
BDRCS	Bangladesh Red Crescent Society
BMD	Bangladesh Meteorological Department
BP	Bangladesh Police
BRAC	Bangladesh Rural Advancement Committee
Brs	Brothers
BSS	Bangladesh Sangbad Sangstha
C/A	Commercial Area
CAAB	Civil Aviation Authority of Bangladesh
Cap	Capsule
CARE	Cooperative for American Relief to Everywhere
CEO	The Chief Executive Officer
CHO	Carbohydrate
CI	Corrugated Iron
cm	Centi-metre
CPP	Cyclone Preparedness Programme
CSM	Corn-Soya Milk
CV	Curriculum Vitae
DCMU	Disaster Coordination and Management Unit
DMC	Disaster Management Centre
DMU	Disaster Management Unit
DPHE	Department of Public Health & Engineering
DPIS	Disaster Preparedness Information System
DRC	Delivery Receiving Challan
DRC	Disaster Resource Cell
DRU	Disaster Resource Unit
DSM	Dried Skim Milk
e.g	as for example
ENA	Eastern News Agency
F.A.Box	First-aid box
FAO	Food and Agriculture Organisation
FEMA	Federal Emergency Management Agency
FSCD	Fire Service and Civil Defence
FWC	Family Welfare Centre
FWV	Family Welfare Visitor
gm	Gram
GOB	Government of Bangladesh
Govt.	Government
HDP Bag	High Density Polythene bag
HF	High Frequency

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Ht	Height
i.e.	That is
I.V.fluid	Intra-venous fluid
ICDDR,B	International Centre for Diarrhoeal Disease and Research, Bangladesh
ICRC	International Committee of Red Cross
IUBAT	International University of Business Agriculture & Technology
IVS	International Voluntary Services
Kg	Kilo-gram
LO	Logistics Officer
LRCS	League of Red Cross Societies
Ltd	Limited
LTI	Left Thumb Impression.
MCH	Mother and Child Health
ml	Millilitre
MOH	Ministry of Health
MOR	Ministry of Relief
MRN	Material Receiving Note
MRR	Material Received Receipts
MUAC	Mid-Upper Arm Circumference
NCHS	The US National Centre for Health Statistics
NGO	Non-Governmental Organisation
No	Number
ORS	Oral Rehydration Saline
PACT	Private Agencies Collaborating Together
PEM	Protein Energy Malnutrition
PO	Project/Programme Officer
PRIP	Private Rural Initiatives Project
Pvt	Private
Qty	Quantity
R/A	Residential Area
RCY	Red Crescent Youth
RTI	Respiratory Tract Infection
SADMC	South Asian Disaster Management Centre
SENA	Servicio Nacional de Aprendizaje (National Training Service of Colombia)
SL	Serial
SPARRSO	Space Research and Remote Sensing Organisation
SRR	Supply Replenishment Request
SSB	Single Side Band
T & T	Telephone & Telegraph
Tab	Tablet
THC	Thana Health Complex
Tk	Taka
TNO	Thana Nirbahi Officer
Tr.Benzyne	Tincture Benzyne
Tr.Iodine	Tincture Iodine
TV	Television
UK	United Kingdom

UNCHS	United Nations Commissioner for Human Settlement
UNEP	United Nations Environmental Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USA	United States of America
VDP	Village Defence Party
VHF	Very High Frequency
VHSS	Voluntary Health Services Society
Vr.	Voucher
WAPDA	Water and Power Development Authority
WDT	Water Disinfection Tablet
WFP	World Food Programme
WHO	World Health Organisation
WMO	World Meteorological Organisation
WPT	Water Purification Tablet
Wt	Weight



Digital mosaic map of costal area of Bangladesh.
source : SPARRSO

PART - III

OPERATIONAL RESPONSE FOR UP TO 3 WEEKS

- This manual is produced to assist/help NGOs and agencies to respond with emergency relief assistance immediately after the disaster has struck. Time is the essence of all emergency relief operations. NGOs should make all efforts to intervene into the situation as fast as possible.

CHAPTER - III : A

ENTERING THE DISASTER AFFECTED AREA

What should be done ?

1. If a project already exists in the affected area, utilize the project staff to initiate operations.
2. If there is no on-going project in the affected area, send a first-in survey team for surveying, establishing local contacts and arranging operation camps before starting relief operations.
3. Send the survey team in liaison with local administration or/and locally operating NGOs.
4. Take assistance from local people after arriving at some point of the intended operational area.
5. If the disaster is a very devastating one, send teams to the affected area with Emergency Survival Relief materials and cash, and then start survey work and establish contacts with local people.
6. Try to find out temporary shelters/relief camps and use these centres for further contacts.
7. Let Central/Dhaka Office contact other operating agencies, and establish telephonic contact with local administration for entering an area for relief operations.
8. If possible, collect sufficient information and establish reliable contacts before going for operation through personal connections.
9. Take several area maps if available, especially those showing transport and communications networks.
10. Take the statistics on population of the area from the Statistical Handbook published by Bureau of Statistics of GOB.
11. Report your entry to an area to the concerned public and local govt. authorities i.e. DC, TNO, OC and UP Chairmen through a standard letter.

Specimen of a standard letter is annexed as III : A. 1

Who should do it ?

- Survey personnel
- First-in /relief/emergency operational workers
- DMU

Who should be kept informed ?

- DMU
- Other NGOs

- ADAB/VHSS
- D C/TNO
- Local Govt. (Union/pourashava)

Questions to ask

- Have we got map of the affected area showing communication, transport network, shelters, Govt buildings, NGO establishments etc.?
- Have we got the detailed population statistics of the area ?
- Do we already have an on-going program in the affected area?
- What is the distance of the affected area from the nearest regional/local office of the organisation ?
- Have we made sure that all pre-requisites have been completed for entering the affected area?
- Have we cross-checked the latest developments, if any, in the affected area with other organisations/Govt.?
- Are there any special information that we need to know about the affected area?
- What the other organisations are doing and for how many days?
- Did we prepare a standard letter beforehand during pre-disaster phase for reporting the arrival of the relief/survey team to all concerned in the affected area ?



Men and animal surviving together : Goats being carried on shoulders by small children
Courtesy : UNICEF

CHAPTER - III : B

CONTACT WITH LOCAL PEOPLE

Establish contact with local people

What should be done ?

1. Establish contact with local people in operational area immediately by finding out reliable and reputable local community workers/teachers/volunteers/religious leaders and by seeking help/assistance from them.
Be careful that you are not working through local vested interests whose chief concern may not be relief but may be local control, or local patronage. At the same time try to avoid confrontation between local community leaders and vested interests, unless it cannot be avoided.
2. Also consider establishing contact with local people through other agencies operating in the area, or through administration officials.
3. Consider also the following additional means of establishing contact, if necessary (in order of preference):
 - Through own survey/operational teams
 - Dealing directly with affected/local people after entering the area by house to house visits
 - Holding discussion meetings at local/village level
4. If relief camps already exist, identify sources from these camps.
5. In establishing contact with local people, pay special attention to women.
6. Establish contact with local women through female workers or local women volunteers.
7. Include some female workers in relief teams.
8. In establishing contact with local women, also consider the following additional means (in order of preference):
 - Through family members
 - Through local women health workers
 - Through children
 - Through neighbours/relations

Who should do it ?

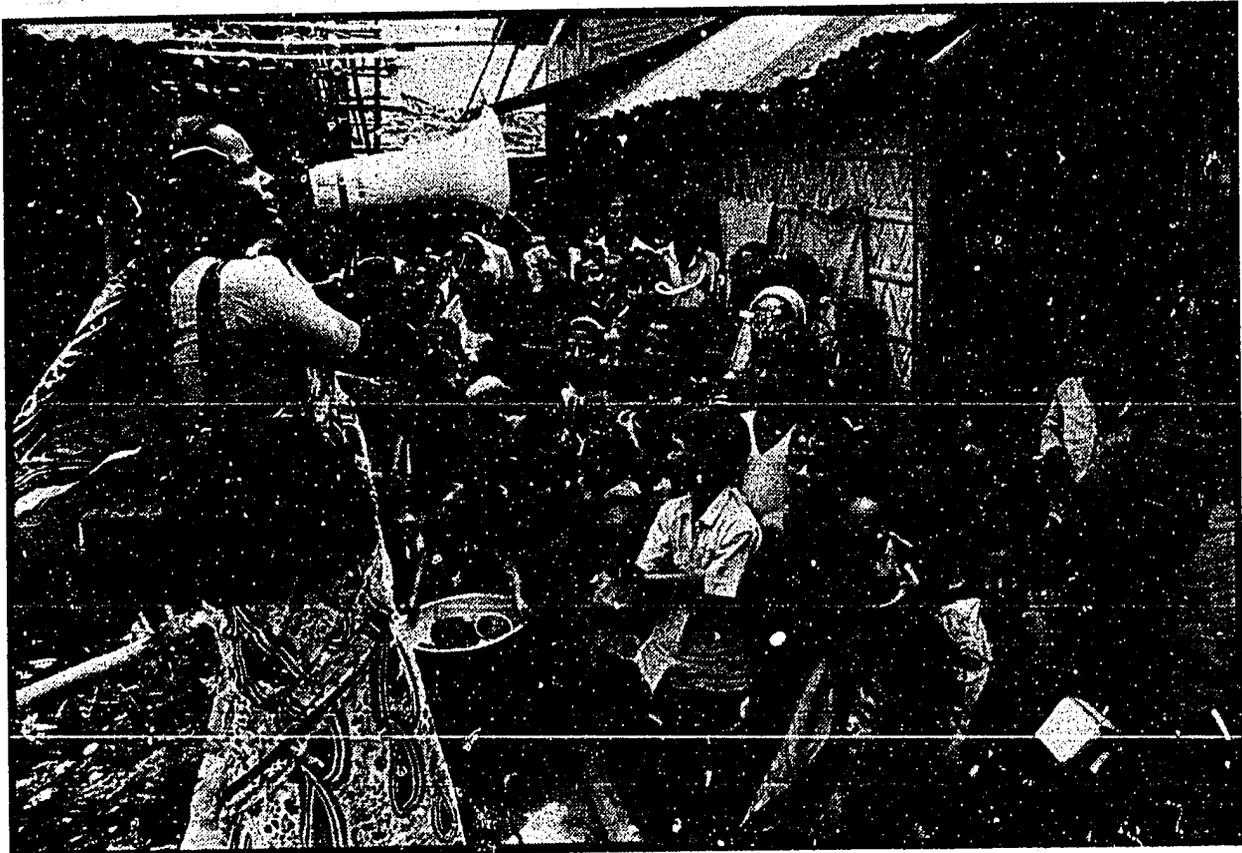
- Survey personnel
- First-in/relief/emergency operational workers
- Staff members of existing programs in the operational area.

Who should be kept informed ?

- DMU
- Regional/Field personnel

Questions to ask

- Have we identified the right persons to establish contact with the community ?
- Do the persons enjoy the respect and confidence of the local people ?
- In contacting local community leaders, are we avoiding local vested interests ?
- Are we encouraging local community leaders to go for a confrontation ?
- Is there already established contact with local administration officials ?
- Are we contacting some disaster victims also ?
- Are the survey team/first-in/relief/emergency workers comparing available information brought from the headquarters with the actual situation as it now prevails in the affected area and making necessary addition/alteration to the programme ?
- Are we effectively contacting all vulnerable groups such as women and children?
- Have we made effective and direct contact with the women beneficiaries ?



A volunteer attempting to organize relief distribution by directing the crowds
Courtesy : UNICEF

CHAPTER - III : C

SECURITY AND HIJACKING

Dealing with Security and Hijacking

What should be done ?

1. Be prepared to face incidents of stealing of cash/looting of relief materials and/or attacks on relief teams.
2. Expect such incidents from organized criminal gangs .
3. Expect occasional isolated incidents involving attacks by needy people.
4. Expect incidents partly because of lack of prior planning and preparation from the survey/relief teams.
5. Be prepared to face looting and attack incidents.
6. Expect such incidents also because organisation workers lack knowledge about the area or haven't established effective contacts with local people/ administration and other agencies.
7. Based upon past experiences also expect theft, robbery in isolated areas, looting of abandoned properties, and the stealing of ornaments and other valuables from dead bodies.
8. Keep effective liaison with local administration and other operating agencies to avoid or minimize looting or/and attack incidents.
9. Use local volunteers in the operational area to avoid such incidents.
10. Also promote and encourage reinforced patrol by law enforcing agencies.
11. Give special attention to security of cash and do not keep all cash in one place.
12. Never handle cash in large amounts in public.
13. Plan and arrange proper storage facilities for the relief goods and consider the following in order of preference : Thana food godowns, Union Parishad Offices, school buildings, other office buildings in Thana complex, temporary sheds made of C.I. sheet and bamboo, UCCA auditoriums etc.
14. Be innovative in designing and arranging storage facilities in the severely disaster-ravaged areas.
15. Provide for adequate security guards.
16. Keep local administrations and law enforcing agencies at vital points informed about transportation of relief goods.
17. Avoid movement of relief goods during the night.
18. Ensure establishment of adequate local contacts before bringing in relief materials, if possible by sending an advance team for prior communication with local community and administration.

Who should do it ?

- Survey personnel
- First-in/relief/emergency/worker
- Local volunteers

Who should be kept informed ?

- D M U
- Regional/Local Offices
- Local law enforcing staff (Police, Ansars, VDPs)

Questions to ask

- Have we briefed the first-in/relief/emergency workers about possible crime in and the known past history of the affected area ?
- What is the strength of the law enforcement agencies in and around the affected area, and what are the points of their deployment ?
- Are we conducting frequent, short but effective review meetings to review security situation ?
- Is the current liaison with local community leaders and local administration officials adequate and effective ?
- Are storage facilities satisfactory and frequently checked to detect pilferage/ theft ?
- Are there enough security guards ?
- Have we ensured proper security for cash ?
- Are we avoiding movement of relief goods in the night ?
- What are the distances of the distribution points from the camps, storage facilities, law enforcement deployment points, etc. ?

CHAPTER - III : D

RESCUE OPERATIONS

What should be done ?

1. Remember that, in order of importance, the following people are involved in rescue and search operations:
 - Affected people themselves
 - Neighbours/relatives/friends
 - Local community
 - Workers/volunteers engaged by local administration
 - Red Crescent volunteers
 - VDP/Ansars/Fire Service & Civil Defence.
 - Defense service personnel- Army/BDR/Navy/Air Force

2. Be prepared to take part in rescue operations.

3. Adopt the following preparatory measures during the pre-disaster phase for post-disaster rescue operations :

- Procurement/mobilization of necessary equipment
- Ensuring trained and organized rescue teams
- Arrangement of transports and other logistics support
- Organizing and training local volunteers
- Organizing medical teams

4. For rescue operations, have assembled, if possible, the following equipment in order of importance :

- Country boats
- Rubber boat/Dingi
- Engine boats
- Ambulance, if available
- Stretchers
- Spade
- Axe
- Big saw
- Iron bars
- Rickshaw vans
- Banana Rafts
- Bamboo logs
- Torch light/flash light
- Life jacket/ropes
- Knife/Dao
- Shovel
- First-aid kit bag/box



Rescuing the flood affected people by boat
Courtesy : UNICEF

5. To the extent feasible, associate or be associated with the following agencies/people in rescue missions :
 - Local community/people
 - VDP/Ansar
 - Red Crescent volunteers/CPP Volunteers

- Local administration officials
- Other NGO workers
- Defense personnel

6. In rescue work, expect the following important problems, arranged in order of importance :

- Lack of initiatives/interest/plan of agencies for rescue operations
- Lack of available and/or trained manpower
- Lack of proper equipment
- Inadequate number of transports and other logistics problems
- Inadequate resources and employment
- Bad weather
- Disrupted communication network
- Inadequate shelter/safe place for relocating affected people

Who should do it ?

- Rescue teams
- First-in/survey/relief/emergency workers

Who should be kept informed ?

- Local Community
- Local Administration officials
- Regional/Local Offices
- D M U
- Other NGO's

Question to ask

- Do we know who are the people/organisations responsible/involved in rescue operations ?
- Are we keeping in touch with them ?
- Are we prepared with equipment and trained people to conduct rescue operations?
- Are we aware of the problems that might be faced in time of conducting rescue operations ?

CHAPTER - III : E

FIRST-AID

What should be done ?

1. Be prepared to face the following injuries/cases requiring first-aid services:
 - Cuts/wounds
 - Bruises
 - Fractures
 - Dislocated joints
 - Drowning
 - Snake-bites
 - Shock/unconsciousness/fainting
2. Have adequate number of first-aid kit boxes/bags ready .
3. Ensure training of first-aid workers beforehand so that in operations later they don't betray a lack of necessary knowledge, preparation and efficiency.
4. Ensure that the subjects covered by first-aid training courses as follows :-

First-Aid Training Courses:

First aid can be defined as "the emergency and on the spot treatment/management of sudden sickness or injuries in accident before coming of a physician or sending the victim(s) to the hospital".

Subjects usually covered by first aid courses are as follows :

- How to re-establish normal respiration artificially, i.e. Artificial Respiration ?
- How to stop excessive bleeding ?
- What should be done in case of a sudden change of normal physiological condition of a human body i.e. in Mental/Psychological shock/trauma ?
- What should be done in case of Fainting Senselessness Hom excessive pain, mental shock or sun heat ?
- What should be done in the cases of different degrees of burn ?
- What should be done in different cases and degrees of poisoning ?
- What should be the immediate task in case of poisonous snake bite ?
- What should be done in case of drowning ?
- What should be done in case of fracture/dislocation of joint ?

A List of organisations which impart first-aid training is given below :

(A) Bangladesh Red Crescent Society.

Contact Person :

Mr. Abdul Aziz
Youth and Training Officer
Bangladesh Red Crescent Society RCY
684/686, Bara Moghbazar
Dhaka-1217
Phone : 400188-9

(B) Bangladesh Fire Service and Civil Defence.

Contact Person :

Md Nurul Islam

Deputy Assistant Director

Fire Service and Civil Defence

Kazi Alauddin Road, Fulbaria , Dhaka

Phone : 233333/ 375 (PABX)

(C) Bangladesh Disaster Preparedness Center (BDPC)

Contact Person:

Md. Saidur Rahman

Director

9/23, Iqbal Road

Mohammadpur, Dhaka-1207, Phone : 317092

5. In first-aid service operations, co-ordinate your activities with those of the following organisations/groups arranged in order of preference:
 - NGO medics/medical teams
 - THC doctors/teams
 - Defense medical teams
 - Red Crescent volunteers
 - Local practitioners
 - Neighbours/friends/relatives
6. Actively promote more co-ordination/co-operation among first-aid workers/ teams/squads of government agencies, NGOs and other agencies.
7. Ensure the inclusion of more trained and efficient people in operational teams.
8. Ensure knowledge and availability of necessary materials and equipment.

Who should do it ?

- medical teams
- First-in/relief/emergency workers
- survey team members
- defense medical personnel

Who should be kept informed ?

- Medical teams/Survey/relief Teams
- First-in/relief/emergency/rescue teams
- THC/District hospitals
- NGO field offices
- TNOs/DCs.
- D M U

Questions to ask

- Do we know what are the cases/injuries that would require first-aid ?
- Have we got adequately stocked F.A. boxes ?
- Are our workers trained in first aid ?
- Are we co-ordinating our activities with those of other NGOs and organisations?
- Are we using the trained people available in the area ?

CHAPTER - III : F

BURIAL OF BODIES/CARCASSES

What should be done ?

1. Prepare teams and engage them for taking part in burials of human dead bodies and animal carcasses.
2. Let the team members get acquainted with the basic information and facts about burial of bodies/carcasses:
 - Organized burials/disposals are common practice.
 - Most dead bodies and carcasses are buried, although some are thrown away in water/river/sea, some get rotted down, some are taken away by sea waves.
 - Most dead bodies are buried in individual graves. However, a large percentage are buried in mass graves. Burial takes place formally in traditional religious way.
 - Most burials occur in local graveyards, although other common practices include burials on deceased person's home-stead, on high-raised graveyard, on embankments, on sea shores, on uninhabited chars/"khas" lands, on nearby fields, and sometimes on floated rafts made of banana trees.
 - In case of Hindu religion, normally the dead body is burnt.
3. In burial work, associate or get associated with relatives of the deceased, local community, Red Crescent volunteers, government agencies/government hired workers, VDP/Ansars, NGO workers, defence personnel, and outside volunteers.
4. If necessary, consider hiring paid professional sweepers.
5. Procure/organize and arrange the following equipment/ materials for burial activities :
 - Spade
 - Hoe
 - Bamboo/Bamboo mat
 - Knife/Dao
 - "Khatia"
 - Shovel
 - Ropes
 - Polythene sheeting
 - Bamboo basket
6. Maintain a list of source of supply of these materials.
7. Ensure adequate availability and supply of these equipment and materials.
8. Conduct burials immediately after the disaster.
9. Ensure that the burial team has the following materials for burial of human bodies :
 - Coffin cloth
 - Bamboo and bamboo mats
 - Used clothes in absence of new/coffin cloth
 - Fire wood and Kerosine oil

10. In the task of quick burial/disposal of deadbodies and/or carcasses, always encourage community based organisation including local administrations agencies.
11. Promote, and ensure to the extent feasible, more co-ordination amongst concerned agencies, in order to expedite burials.
12. Allocate fund for burial work.
13. Don't allow deadbodies and carcasses to be unburied/kept exposed to environment.
14. In special cases, if required, consider formation and use of special teams particularly responsible for burials.
15. In case of decomposed dead bodies, aluminum foil, polythene sheetings, jute hessians and old clothes may be used to move the body. Burial workers may need face cloths against smell.
16. Consider that the workers/volunteers engaged in burial/disposal work might face psychological problem.

Who should do it ?

- Local people/Local administration
- Burial teams
- First in/relief/emergency workers
- VDP/Ansar/Red Crescent Volunteers/Religious groups

Who should be kept informed ?

- Relatives/friends
- Local community/Local government agencies
- Organisation's Headquarters
- Regional/local offices

Questions to ask

- Have we included the 'burial' component in the organisation's management plan and budget in the pre-disaster preparedness phase ?
- Have we arranged the equipment and materials needed for burial activities ?
- Have we ensured/encouraged maximum participation of local people ?
- Are we informing relatives/friends of the dead before the burial ?
- Have we organized adequate training of workers ready to undertake burial work during or after a disaster ?
- Have we emphasized all necessary information and knowledge regarding burial work in our training modules ?
- Have we developed a co-ordination mechanism at the local level to co-ordinate burial work ?
- Are we guided by our most recent experiences in our present burial activities ?
- Are we looking after the state of mental health of our workers ?

CHAPTER - III : G

DISTRIBUTION OF FOOD

III. G. 1 PLACE OF DISTRIBUTION

What should be done ?

1. Consider existing NGO offices in the affected area.
2. Identify secured schools/mosques/youth clubs etc.
3. Consider door to door distribution within the worst affected area.
4. Consider flood/cyclone shelters.
5. Identify and consider temporary relief camps.
6. Locate one or more distribution centres, which are known and are convenient to intended beneficiaries.
7. Locate/consider villagewise distribution centres, if feasible. Take advice of local people in this respect.
8. Consider other mobile distribution mechanisms.
9. Avoid proximity with distribution centres of other agencies.
10. Distribution centre should not be very far from the place of residence of the beneficiaries.
11. Never locate the distribution point in the house of an elite who may make political or social gains later.
12. Consider distribution centre for women which should also be run by the women.

Who should do it ?

- Relief teams in co-operation with local volunteers/Govt. officials.

Who should be kept informed ?

- Beneficiaries
- Volunteers
- Local Government authorities/Camp Committees
- Other locally operating organisations
- Local/regional offices
- D M U



Courtesy : Red Crescent Society

Questions to ask

- Have we involved the community members/beneficiaries/women in planning ?
- Is the distribution point close to the beneficiaries ?
- Is access to the place easy and convenient for the enlisted/intended beneficiaries?
- Is the devastated or existing communication still good enough for the intended beneficiaries to come to the distribution centre and receive the food?
- Will it help minimize food wastage ?
- Will the location ensure a good control ? safe ? secured ?
- Is carrying/delivering food stuff to the selected location very difficult?
- What is the distance between the assembling/cooking place if any and the distribution point?
- Are we covering all eligible recipients still hovering and drifting around or still isolated/marooned in their villages/homes?
- Are we able to reach the women, children, aged, sick and the disabled?
- Have we made sure that the distribution centre we are using does not belong to local elites ?

III. G. 2 DISTRIBUTION CARDS

What should be done ?

1. Ensure the use of distribution cards for distribution of relief items to all the enlisted/ intended beneficiaries.

The card should contain the following information :

- Name of the organisation
- Address
- Name of the operation
- Name of the distribution centre
- Card no.
- Name of the beneficiary
- Father's/Husbands name
- Address : Village, Union, Thana, Zila
- Number of family members
 - adult and minor
 - male and females
- Types and quantity of relief items distributed
- Date of distribution
- Signature of person issuing the card
- Signature/LTI of the card Holder
- The card should preferably be of the size 18 cm x 14 cm and printed on 260 gm art paper. It may be put in a simple polythene packet to protect from water.

A specimen of the distribution card is annexed as -III : G. 2

2. Do not distribute food to/among non-card-holder(s)
3. Mark the card indicating each distribution

Who should do it ?

- Relief team members
- Survey team members

Who should be kept informed ?

- Local government authorities
- Other agencies
- Local/regional offices
- D C /TNO
- D M U

Questions to ask

- Have we checked well in advance that distribution cards are ready in sufficient quantities for use ?
- Have we made sure that the cards are properly filled in and recorded in registers ?
- Have we distributed cards to all intended beneficiaries during survey/ enlistment?
- Can we track families who have or have not received food in a particular round/or on a particular day?
- Have we cancelled the distribution cards of families dropped from the list?
- Have we cancelled the cards of families who have left/migrated ?
- Have we issued cards to newly enlisted families/ beneficiaries?
- Have we taken measures against missing cards?
- Can we readily identify cards issued by the relief teams ?
- Can we detect unauthorised uses of lost or missing cards by arranging identification of beneficiaries by local volunteers ?

III : G. 3 MUSTER ROLL

What should be done ?

1. From the distribution card, record on a muster roll the particulars of each family receiving food and kind of food distributed.
2. The muster roll should contain the following information.
 - Name of the organisation :
 - Address :
 - Name of the operation :
 - Name of the village/distribution centre :
 - Address : Village, Union, Thana, Zila :
 - Card No.
 - Name of the beneficiary :
 - Father/husbands name :
 - Types/Quantity of relief items distributed .
 - Signature (LTI) of the beneficiaries :
 - Date of Distribution :
 - Signature of Distributor and team leader/supervisor
 - Counter signature of local Govt./Local Community Representative.

- The muster roll should be of size 34 cm x 21 cm and printed on karnaphuli white print paper.

A specimen of the Muster Roll is annexed at - III : G. 3

3. Get signature/Left Thumb Impression (L.T.I) of the beneficiary/family head on the muster roll at the time of disbursing the food
4. Keep muster rolls in a safe place and preserve them for later use in accounting.
5. The muster rolls should be signed by the person responsible for distribution and countersigned by his/her supervising official.

Who should do it ?

- Relief workers
- Volunteers

Who should be kept informed ?

- Local government authorities
- NGO offices at local/regional and D M U levels
- TNOs/DCs

Questions to ask

- Are muster rolls being recorded and maintained at the time of distribution?
- Are we properly keeping records of each distribution through muster rolls?
- Is there any need for modification of the muster roll?
- Have we got enough blank muster rolls ?
- Have we got enough ball pens/ink and stamp pads to take signature/L.T.I. of beneficiaries ?
- Are the muster rolls kept in a safe place ?

III : G. 4 DISTRIBUTION NOTE

In a place/situation where use of cards and muster rolls are not possible, the distribution note should be used as record of distribution of relief items.

What should be done ?

1. Write a note on a piece of paper mentioning the number of people fed/given food, and the approximate quantity of food used.
2. Get the note signed by all members of the team/ distribution group.
3. Get the note signed by some community/beneficiary leaders/volunteers, if possible.
4. Get the note countersigned by any government official, if possible.
5. Try to involve at least one local government administration official in the distribution work, if possible.

A specimen of distribution note is Annexed as - III : G . 4

Who should do it ?

- Relief workers/distribution group

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Who should be kept informed ?

- Local administration officials
- Local/zonal offices
- D M U

Questions to ask

- What should be the ideal size and format of records that we can keep of such distribution?
- Can we really involve one/some local administration official(s) in the distribution?
- Can we involve local volunteers/teachers/beneficiaries ?
- Have we signed the distribution notes?
- Can we get the notes countersigned by local leaders/local Govt. officials ?

III : G. 5 VOLUNTEERS

What should be done ?

1. Identify volunteers, irrespective of sex, through community organisations/ teachers/local social workers, from among the beneficiaries at the village level.
2. Identify local community volunteers/religious leaders.
3. Find out some volunteers from amongst the residents of a camp/shelter.
4. Use volunteers for measuring/counting/food packeting/ security etc.
5. Use them in managing the rush and in maintaining discipline and order.
6. Use them for porting/handling/distribution of food stuff and for informing beneficiaries, if left out.
7. Brief the volunteers about the program in general and their job in particular.
8. Train the volunteers in different disciplines of relief operation, if possible.
9. Put effort into developing team spirit among the volunteers.

Who should do it ?

- Team leader/Relief team/distribution group
- Relief camp/shelter authorities

Who should be kept informed ?

- Local/zonal offices
- Camp/shelter authorities/Local Govt. authorities

Questions to ask

- How can we get the local community involved in the distribution of food?
- Are we remunerating the volunteers for their job with relief goods/cash/ presents?
- Is there any wrong selection of volunteers?
- Is there any irregularity being done by the volunteers?
- Are the volunteers capable of carrying out the task/assignment?
- Are we supervising the work of the volunteers ?
- Have we briefed/trained the volunteers ?
- Are we able to recruit women volunteers ?

III : G. 6 PACKETING OF DRY FOOD

Assemble and make packets of ready/dry food for distribution

What should be done ?

1. If the food consists of countable items like loaf, chapati and packeted biscuits, count it.
2. Assemble the counted food in cartons/stacks of equal quantity.
3. In case of chira and gur or similar likewise loose item, weigh and packet in High Density Polythene (HDP) bags, jute bags in accordance with the intended allocation per family/person.
4. Assemble the packets in bags/cartons in equal quantity for taking to the distribution point.

Who should do it ?

- Relief workers
- Volunteers
- Suppliers

Who should be kept informed ?

- Store keeper
- Relief Teams.
- Logistics Officer/D M U

Questions to ask

- Have we arranged and assembled materials to make distribution easier and quicker?
- Have we arranged scales with weights/standard pots for weighing/ measurement ?
- Have we taken measures to maintain the standard weight/quantity of material for the beneficiaries?
- Have we assembled food items according to the number of beneficiary groups to go to the field?
- Are the cartons or bags or packets strong and easily transportable/portable?
- Will it be easier to weigh the food at the distribution point rather than where it is being stored?
- Can loose food items be weighed and distributed from boats on the spot (may be required for flood affected marooned people) ?

II : G. 7 COOKING

What should be done ?

1. Ensure collection of cooking pots and other relevant utensils.
2. Arrange hearth/stove.
3. Arrange fuel/fire woods.
4. Erect a shed for cooking place.

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5. Decide quantity to be cooked based upon the intended number of people to be fed. (See Chapter III : K, page III - 50 for estimating quantities).
6. Arrange cooking in batches/turns.
7. Engage skilled local people/labour/volunteer for cooking.
8. Arrange safe storage of dry food.
9. Quantity of food stored should be sufficient for at least three days.

Who should do it ?

- Relief team/workers/leaders
- Store keeper

Who should be kept informed ?

- Store keeper
- Feeding centre/Distribution groups
- Local authorities

Questions to ask

- Do we have the skilled people to cook ?
- How many people are to be fed and at what places?
- Do we have enough food items?
- Do we have the needed utensils, equipment, fire wood, kerosine oil etc. ?
- Have we ensured sufficient supply of water for cooking and washing utensils ?
- Have we made all arrangements for cooking?
- Do we know the distribution schedule?
- Do we know per capita allocation of food by volume, weight and/or calories?
- Are cleanliness and hygiene principles being followed at cooking places ?

III : G. 8 MEASURING POTS FOR WET FOOD DISTRIBUTION

What should be done

1. Collect mugs, pots, buckets, etc. of different sizes for measuring different standard weights.
2. Get containers of different sizes or/and different standard weights/measures to distribute wet/cooked food.

Who should do it ?

- Relief team workers

Who should be kept informed ?

- Beneficiaries
- Camp/shelter/Feeding Centre authorities
- Local administration officials

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Questions to ask

- Are the beneficiaries happy with the measurement and distribution practice ?
- Have we adjusted, through trial and error, the right quantity to cook vis a vis the number of recipients?
- Are we satisfied with our measurement pots and measurement practice ?
- Have we arranged sufficient number of mugs/pots/buckets for distribution ?

III : G. 9 RUSH CONTROL

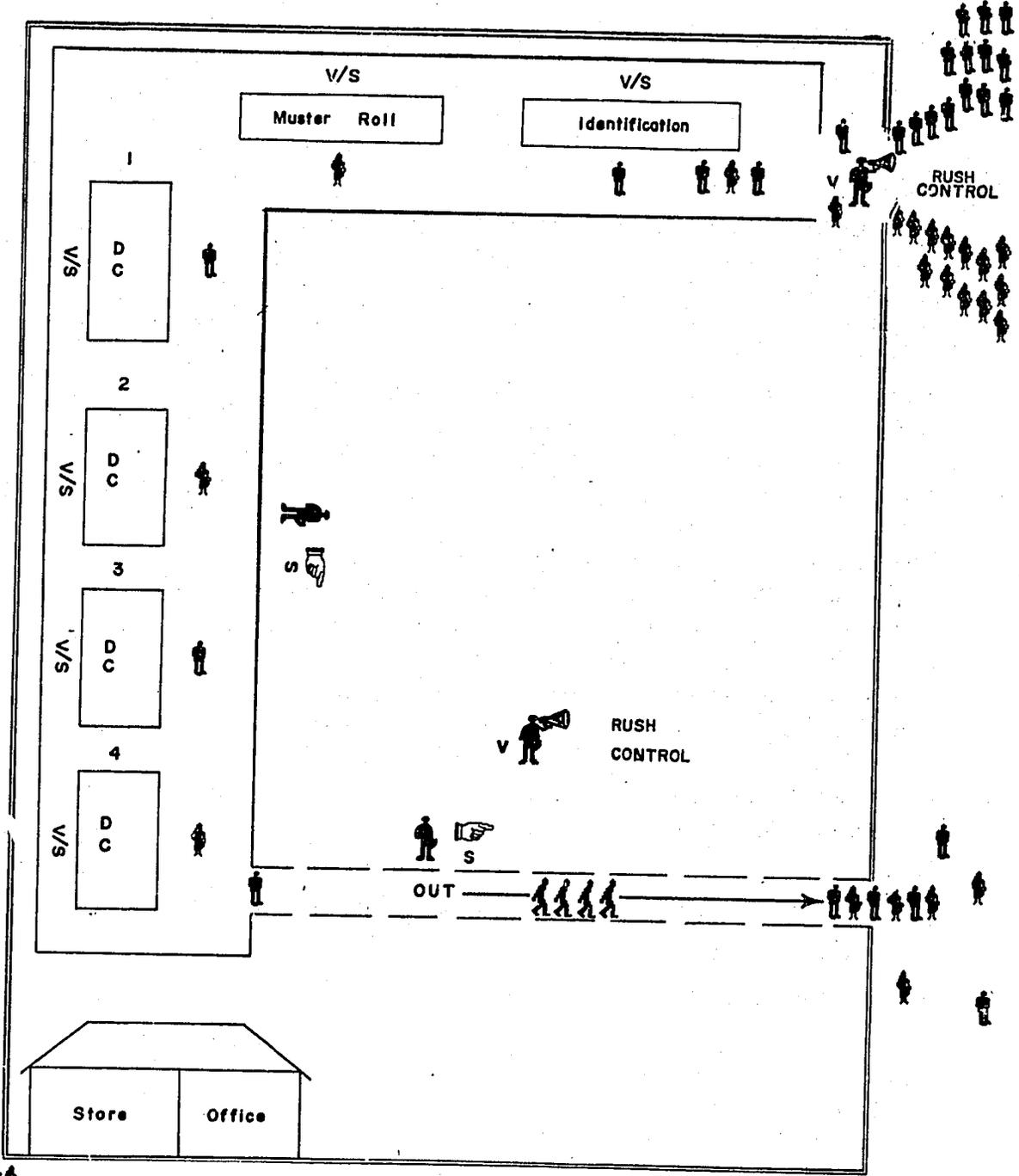
Control Rush in distribution of relief items

What should be done ?

1. Mark/close the distribution place by bamboo/rope fencing.
2. Prohibit entrance of unauthorised people in the distribution compound.
3. Use separate tables/booths for checking cards, recording in muster rolls and handing out of different types of relief goods.
4. Divide beneficiaries into batches based upon category block, village, etc.
5. Get the beneficiaries into line/queue through volunteers.
6. If necessary, use bamboo/wood-made railings/panels in order to keep the queue in shape.
7. Distribute food by batches.
8. Make special arrangement/queues for women/children/aged, sick and disabled.
9. Ensure that volunteers engaged in the distribution operation and in rush control have the patience and behave well and politely with the beneficiaries.
10. The volunteers must consider and treat the beneficiaries as their equals.
11. Keep the waiting people informed of the progress at the distribution centre by megaphone.
12. If women are not prepared to stand in line, make sure that distribution is organised specially for them. Women distribution workers must search out where women are located.
13. Beneficiaries should be informed about the time and distribution system very clearly at the time of handing over the cards.

The diagram of an ideal distribution centre is shown in page III - 21

Ideal Distribution Centre At School/UC Office/Community Building



 = BENEFICIARIES
 = WOMEN
 = MEN
 = VOLUNTEER
 = SUPERVISOR

D.C = DISTRIBUTION COUNTERS
 D.C 1, 2, 3, 4, ETC - DIFFERENT D.Cs FOR
 DIFFERENT ITEMS S.G. DRY FOOD, RICE, DAL, ATA,
 CLOTHINGS ETC.
 — = BAMBOO/JUTE ROPE FENCING.

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Who should do it ?

- Relief team/workers
- Local volunteers/leaders
- Camp/shelter/Feeding Centre authorities

Who should be kept informed ?

- Beneficiaries
- Local authorities

Questions to ask

- Is the distribution place protected/marked by bamboo/rope fencing ?
- Have the volunteers been briefed and trained of how to deal and behave with the beneficiaries ?
- Have we made special arrangement for the women, children, aged, sick and the disabled?
- Have we given priority to the worst affected people ?
- Have we given priority to the people coming from a long distance?
- Are we keeping the waiting people informed of the progress ?
- Do we have arrangements for enough food for all the enlisted/intended beneficiaries?
- Will it be a continuous distribution or distribution with intervals?
- If with intervals, what is the time gap between two distributions ?
- Is there any organised gang intentionally trying to create indiscipline ?
- Are we in contact with local administration ?
- Are we in contact with local law enforcement agencies ?
- Have we made sure that women who will not stand in line are receiving distributed goods ?
- Have all the volunteers involved in distribution been well briefed about the whole distribution process ?

III : G. 10 DISTRIBUTION IN CAMPS AND AT FEEDING CENTRES

What should be done ?

1. Divide enlisted/intended beneficiaries into batches based upon category, block and/ serial numbers of the cards.
2. Get them into queues.
3. Make special arrangement for the women, children, aged, sick and the disabled.
4. Follow the rush management techniques as explained in chapter - III:G.9 .
5. Distribute as you get the supply from kitchen source.

Who should do it ?

- Relief team workers/volunteers

Who should be kept informed ?

- Beneficiaries
- Camp authorities
- Local administration
- NGO local/regional offices

Questions to ask

- Have all the enlisted/intended beneficiary families / persons received food/relief goods ?
- Is there any family/person who has left the camp ?
- Is there any family/person who has arrived ?
- Is there any duplication of cards ?
- Are we prepared to feed all the intended people within a set time frame ?
- Have we got enough manpower to manage the distribution?
- Have we made all arrangement for maintaining discipline/rush control at the distribution place ?
- Have we made special arrangement for women, children, aged, sick and the disabled?

III : G. 11 DISTRIBUTION AT FIELD SPOTS/SUB-CENTRES/ VILLAGE CENTRES

What should be done ?

1. Mark/close the distribution place by bamboo/rope fencing.
2. Prohibit entrance of unauthorised people in the distribution compound .
3. Use separate tables/booths for checking cards, recording in muster rolls and handing out of relief goods.
4. Divide beneficiaries into batches based upon category, block, village, etc.
5. Get the beneficiaries into line/queue through volunteers.
6. If necessary, use bamboo/wood-made railings/panels in order to keep the queue in shape.
7. Distribute relief goods by batches.
8. Make special arrangement/queues for women/children/aged/sick/disabled. If women will not queue openly, find a way to distribute to them.
9. Ensure that volunteers engaged in the distribution operation and in rush control have the patience and behave well and politely with the beneficiaries.
10. The volunteers must consider and treat the beneficiaries as their equals.
11. Keep the waiting people informed of progress at the distribution centre by megaphone.
12. Follow first come first served policy.
13. Distribute quickly as you get supply from the source.
14. Arrange safe storage of supply.

Who should do it ?

- Relief team worker/volunteers

Who should be kept informed ?

- Beneficiaries
- Local authorities
- Local/zonal offices

Questions to ask

- Has adequate publicity been done ?
- Are we prepared to ensure timely supply of required food stuff ?
- Is the distribution place protected/marked by bamboo/rope fencing ?
- Have the volunteers been briefed/and trained of how to deal and behave with the beneficiaries ?
- Have we made special arrangement for the women, children, aged, sick and the disabled?
- Can we get supplies to women who will not queue openly ?
- Have we given priority to the worst affected people ?
- Have we given priority to the people coming from a long distance?
- Are we keeping the waiting people informed of the progress ?
- Do we have arrangements for enough food for all the enlisted/intended beneficiaries?
- Will it be a continuous distribution or distribution with intervals?
- If with intervals, what is the time gap between two distributions ?
- Is there any organised gang intentionally trying to create indiscipline ?
- Are we in contact with local administration ?
- Are we in contact with local law enforcement agencies?

III : G. 12 DOOR TO DOOR DISTRIBUTION OF FOOD

What should be done ?

1. Follow the survey/beneficiary list.
2. Check and mark the cards.
3. Use muster roll.
4. Include new families properly identified.
5. Exclude previous duplication, if any.
6. Start from the worst affected area/location and/or from one corner of the village.
7. Involve local people/beneficiaries as volunteers/guides.
8. Include some women volunteers.
9. Try to distribute the food directly to the women members in the family.
10. Make sure that ready food is distributed before it becomes non-eatable.
11. Use local transports like boats, bullock carts and/or porters/volunteers to carry the supplies.

Who should do it ?

- Relief team workers/volunteers

Who should be kept informed ?

- Beneficiaries
- Local authorities/local law enforcing authorities
- Local/regional offices

Questions to ask

- Is the intended area/village accessible along with the supplies ?
- Have we arranged supply of enough food stuff to cover all the enlisted/intended beneficiaries in the locality/area ?
- Have we divided workers and volunteers into distribution groups for covering maximum number of beneficiaries within a set time frame ?
- Is the food pre-weighed/packeted/assembled ?
- Are we using distribution cards and muster rolls ?
- Is the food eatable ?



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III : G. 13 MOBILE DISTRIBUTION

What should be done ?

1. Take a reasonable and manageable amount of food stuff with you.
2. Try to reach the worst affected, remotest, hardly accessible, unserved and/or overlooked areas/locations.
3. Distribute food as long as you have stock.
4. Try to use this opportunity during the first survey immediately after a serious disaster.
5. Try to use cards and muster rolls as far as practicable.
6. Have a statement of distribution signed by some beneficiaries /local people/UP Chairman/UP Member, if possible.
7. Use local transports e.g. country boat/bullock carts/porters/volunteers to carry the supplies.

Who should do it ?

- Relief team workers/volunteers

Who should be kept informed ?

- Local authorities
- Local/regional offices

Questions to ask

- Is it really possible at this stage to ask people for signing the muster roll?
- Is it possible to organise the affected people into a camp/shelter ?
- Is it possible to serve these people in the future ? If so, how long and how ?
- Can we request these people to contact certain centres for necessary services ?
- How long these people are going to live in the present conditions ?
- What security measures have been taken for protection of relief workers/ supplies ?
- Do the relief workers know how to swim (in flood situation)?

III : G. 14 DISTRIBUTION OF FOOD : GENERAL GUIDELINES

What should be done ?

1. Involve beneficiaries at all stages of the operation which will help them to recover from trauma and in psychological rehabilitation.
2. Distribute 'Chira'/Muri and 'Gur' immediately following a disaster.
3. Distribute high protein biscuits or local biscuits right after the disaster.
4. Consider local food habits before foreign food items are distributed.
5. Consider also the following food items, arranged in order of preference, for distribution to the affected people :
 - Flat bread chapati and gur
 - Cooked 'khichri'
 - Loaf
 - Skimmed/canned milk (please see warning at III : G. 15)
 - Boiled rice and 'curry'/dal'

6. Whenever possible buy food locally or from nearby areas in order to put money back into the local economy.
7. For these ready to eat food items, consider the following distribution points in order of preference:
 - Relief camps
 - Cyclone/flood shelters
 - Distribution centres in selected areas
 - Door to door in selected villages in severely affected/almost inaccessible areas
 - Mobile distribution to needy people
8. For preparing cooked/wet food and flat breads, consider the following alternative means/venues in order of preference :
 - In camps/shelters using beneficiaries/local volunteers
 - At base camps in the field and then transporting to villages/camps
 - At central headquarters/regional/ other suitable locations and then transporting to the operational areas, if you have easy access to the affected areas.
 - Engaging voluntary/paid groups
9. For distribution of food, consider the following alternative groups in order of preference :
 - Beneficiaries
 - Volunteers/others directly under supervision of organisations workers/ staff
 - Local/village level volunteers
 - Selected volunteer groups in camps/shelters
10. Always keep records of food items distributed.
11. If distribution records are not available or missing, justify expenditures based upon procurement and other records.
12. Continue distribution of ready to eat/cooked food for any period depending upon situation and need, but ideally it should be for a period of three days to one week. It may be for up to three weeks. Before discontinuing feeding, talk to other NGOs, Govt officials about the situation.
13. Unless called for by immediate post-disaster circumstances, avoid the risks/wastage involved in distribution of cooked wet/quickly perishable food items, mainly due to the time gap between arrangement, preparation and distribution or mishandling of such food during transportation.
14. If ready to eat food items are to be packeted, engage volunteers or beneficiaries for the job under the supervision of staff members/volunteer leaders.



Courtesy : UNICEF

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15. Transport loose food items to the field by using big pans/pots, gunny bags or bamboo baskets.
16. If hearth/stove has to be used for preparing foods, preferably use round hearths, or long/tunnel hearth or gas stove.
17. Prefer local market for purchase of all materials required.
18. In the distribution of the prepared/ready to eat food, always associate local NGOs or/and local youth groups, administration etc.
19. In the distribution of the prepared/ready to eat food coordinate such distribution with that of the following one or more agencies, listed in order of preference:
 - Neighbors/friends/relatives
 - Local community
 - Bangladesh Red Crescent Society
 - Other relief teams
 - Other agencies/parties/groups
 - Defence service personnel
20. Arrange immediate feeding for people with no cooking arrangement/facilities.
21. If necessary, also target the following groups in order of preference, for immediate feeding :
 - Marooned people
 - Evacuees
 - Aged/Disabled/Children/Pregnant/Lactating mothers
 - People in self-made shelters on roads and embankments
 - People in flood/cyclone shelters
 - People in relief camps
 - Other dislocated people
22. Arrange for feeding twice daily, if possible.
23. In food distribution, minimize as far as practicable, the following regular problems :
 - Improper identification and selection of beneficiaries
 - Neglect to remote areas
 - duplication of relief distribution by several agencies in one area
 - Wastage

Who should do it ?

- First-in/relief/emergency workers
- Relief camps/shelter personnel
- Local volunteers

Who should be kept informed ?

- D.M.U./regional/local offices
- Other Operating agencies
- Local authorities

Questions to ask

- What is the calorie or food values of the foods distributed vis-a-vis physiological requirements ?
- Has any significant affected group been excluded ?
- Have we reached the affected women, children, sick, and the disabled ?
- Are we sure that we are not serving areas which are already covered by other organisations ?
- Are the distribution points the best logistically ?
- How are we maintaining liaison and co-ordination with other agencies ?
- Are we involving beneficiaries in all stages to help smooth the operation and their recovery from trauma ?
- Are we considering the food habits of the people ?

III : G. 15 DISTRIBUTION OF MILK POWDERS IN EMERGENCY SITUATIONS

Distribution of Milk powder is not encouraged in disaster situation. Details of the problems of distribution of milk powder and preparation of Milk are shown in the following UNICEF information leaflet :

UNICEF requests all agencies involved in relief and rehabilitation to consider the risks associated with the distribution of milk powders (both dried skim/full cream and infant formula) to disaster-affected people.

Powdered milk is not a normal part of the diet of rural Bangladesh, and therefore their familiarity in using this product safely is limited. Safe storage facilities do not exist in present circumstances. For adults this product in liquid form is of limited benefit - but the real danger of distribution of milk powders is for children particularly small babies.

The best possible way of feeding a 0-5 monthly old baby is exclusive breast feeding. Breast feeding not only provides perfect balanced nutrition but protects a child from diarrhoea and other diseases. For a baby over 5 months, breast milk still provides a good degree of protection, even after weaning foods are introduced.

While malnourished women can provide adequate breast milk, available food should be given preferentially to the mother to maintain her nutritional status.

Milk powders (either infant formula or dried skim/full cream powder) that are distributed to disaster-affected people are likely to be misused and consumed under dangerously unhygienic conditions. It also encourages bottle feeding - and bottle feeding kills babies.

A baby that is bottle-fed is 25 times more likely to die of diarrhoea than a baby that is exclusively breastfed.

Distributing milk powders, may

- * Inadvertently cause babies' deaths. Parents who cannot use it safely under normal hygienic condition in Bangladesh will certainly not be able to use it properly under post-disaster conditions.
- * Encourage the belief that milk powder is superior to breast-milk.

* If availability of milk powders encourages a mother to bottle-feed, with the consequence of halting breast-feeding, she has become dependent on a dangerous method of child feeding that she cannot afford.

- Distribution of milk powder in dry form is totally discouraged in disaster situation for the following reasons:
- Lack of availability of pure water at beneficiary level
- Lack of information and knowledge about the process of preparation and use of the prepared milk.

(If milk could be prepared at the distribution centre under supervision and guidance of trained volunteers/staffs and feeding on the spot could be arranged, only then milk powder should be used in disaster situation.)

How to Feed Babies in Times of Disaster

1. Encourage women to breastfeed. Inform fathers and relatives that breastfeeding protects a child and their baby is much more likely to live if it is breastfed. **Feed lactating mothers and pregnant women with extra food.**
2. For babies of 0-5 months whose mothers have died, try and find another woman who is breastfeeding and request her to breastfeed a second child. Demand creates supply and after 2/3 days her body will produce enough breastmilk for 2 babies. Give her extra food.

If another lactating mother cannot be found, the baby should be fed infant formula which has been prepared by relief/health workers in a hygienic manner. The baby should be fed by cup and spoon not bottle. Left-overs from a feed must be discarded.

3. For babies over 5 months whose mothers have died, local weaning foods should be prepared and infant formula (prepared by relief/health workers) given by cup and spoon.

How to use donations of Milk Powder

The safe use of milk powder is to make it into biscuits which can then be safely given to adults and children.

RANGPUR DINAJPUR RURAL SERVICE (RDRS)

House No. 62

Road No. 7A

Dhanmondi R/A

Dhaka-1209

has recipes available for this

Composition of Half and Full strength Dried Skimmed Milk (DSM)

A. Half Strength DSM Contents and calories per 100 ml.

Contents				Calories	
1.	DSM	4 gms	Protein CHO	1.525 gms 2.075 gms	6.1 8.3
2.	Oil	3 gms			27.0
3.	Glucose/Sugar	8.375 gms			33.5

75 Calories per 100 ml.

B. Full Strength DSM Contents and calories per 100 ml.

Contents			Calories
1.	DSM	4 gms (Protein 3.5 gms CHO 4.5 gms)	12.4 16.4
2.	Oil	4.91 gm	44.2
3.	Glucose/Sugar	6.75 gms	27.0

100 Calories per 100 ml.

Preparation of ordinary Milk-drink

Take 4 parts of boiled water
1 part of milk
Add sugar as required

Process

Take 1 part of boiled hot water in a pot and add 1 part of skimmed milk to it and stir until it is fully dissolved. Then add more 3 parts of boiled water and add sugar.

For 1 Litre liquid milk.

Add 1 glass of skimmed milk into 4 glasses of water in above mentioned process.

SAFE DRINKING WATER

Providing Immediate Safe Drinking Water

What should be done ?

1. Identify the sources of safe drinking water in the operational area following/ during a disaster. In order of importance, these sources are likely to be:
 - Surviving/workable tube-wells
 - Chemically treated canal/flood water
 - Repaired tube-wells
 - Newly sunk tube-wells
 - Water fetched from nearby villages
 - Green coconut
 - Rain water
2. Contact appropriate agencies and arrange for repair/resinking/improvisation/ installation of hand pumps/deep tube-wells. The individuals/agencies to contact in order of importance, are :
 - Local mechanics
 - Local Department of Public Health Engineering (DPHE)
 - Outside mechanics
 - Tubewell owners
 - Local community
 - Government agencies (BADC)
 - NGOs
 - UNICEF
 - NGO Forum for Water and Sanitation
3. Provide/use water purification machines of different capacities for purification of pond/rever/saline water.
4. Arrange for supply of WPT, 'fitkiri' (Alum) and other disinfectants, if necessary, to the people in the affected area with clear instruction of how to use them. Do not supply WPT if instructions cannot be given effectively.
5. Details of procedure of use of WPT and Fitkiri is given below :

WPTs & WDTs are produced commercially in Bangladesh and available in local market in different trade names and in different composition.

The procedure to use them are described either in leaflets available with the supply or written on the packet of the WPTs/WDTs.

- Make sure that the tablets are not discolored and dissolve completely and easily.
- Dissolve the tablet in the suggested amount of water in container.
- Allow water to stand up for the time suggested on the packet of the tablets.

The following are the usually available brands/types

Water Purification Tablets (WPT) Water Disinfection Tablets (WDT)

I. Contents : 240 mg of Sodium dichloro isocyanurate

Direction for use :

- Put 1 tablet in 10 litres of water in a clean container. Allow to react for 30 minutes and stir up several times.
- Use up chlorinated water within 15 hours.
- Close the opened container of the WPT immediately after every use.
- Protect against humidity.
- Tablets are fully effective for 5 years if stored properly in cool and dry place.

ii. Contents : Micropur MT-5 for 5 litres of water

Direction for use :

- Turbid water to be filtered through a piece of clean cloth.
- Use clean container.
- Add 1 tablet to 5 litres of clean water.
- The water treated can be consumed after a minimum contact time of 1 hour.
- In clean and well-closed containers, the treated water may be stored for upto 2 weeks.
- Micropur is not harmful to health even in case of overdoses.
- Micropur does not alter smell and taste of the water.
- Micropur is a disinfectant based on silver.

iii. Contents : Halotab, Halazone Tablet

Each tablet contains Halazone U.S.P 15 mg.

Direction for use :

- Dissolve 1 Halotab in 1.5 to 3 litres (in order of decreasing degree of contamination) of drinking water.
- Use after thirty minutes to one hour of preparation.
- To remove the smell of liberated chlorine, 1 Thiotab for each Halotab may be used before drinking.

Bleaching Powder: $[Ca(OCl)Cl]$

It is usually used in disinfecting tubewells, ring wells and ponds after disaster (flood/ tidal surge). Pumping out of water for atleast half an hour is the best way of disinfecting tube wells.

Process of disinfecting a ring well (kua)

- Take 500 gm of Bleaching powder.
- Divide it into five parts.
- Dissolve each part into clean water in a bucket and wait for some time.

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- When white sedimentation is silted at the bottom of the bucket, then pour upper part of the water of the bucket into the well and stir the water of the well with a bamboo or stick. Don't mix the sediment into the water of the well.
- Use all the 5 parts of bleaching powder in the same way.
- Don't use the water of well for 24 hours. Then dewater 50 buckets of water from the upper part of the well. Thus the water of the well will be disinfected.

Water disinfectant is also available in the market in liquid chemical form produced by local producers.

As an example, Modern Food Products have produced liquid water disinfectant available in vials.

Use of Bleaching Powder in disinfecting water :

- Powder should be fresh, white, dry and it should be properly chlorinated.
- Mix well 1/4 tea spoonful (600 mg) of bleaching powder into 25 litres of water.
- The treated water will be useable after 30 minutes.
- If the colour of the treated water is not clear then it is also safe for drinking.
- There will be smell of chlorine out of the treated water.
- Don't mix other non-treated water with the treated water.

Purification of water with Fitkiri/ Alum :

Fitkiri is available in the local market in plenty. It can be procured either from the producer or the wholesalers or retail shops.

- Mix well 2 tea spoonful of powdered fitkiri with 25 litres of surface water.
- Mix thoroughly and allow the water to set for at list 1 hour
- Carefully separate the clear top water, put in another clean container with as less movement as possible.
- Discard the residual part.
- Water is now safe but may taste acidic and bitter.
- Before mixing fitkiri, the water should be filtered through a clean piece of cloth.
- Don't mix other non-treated water with the treated water.

Warning

Water disinfectants should not be distributed without any direction of how to use them.

Direction

- The direction can be given verbally as one to one basis or by microphone at the time of distribution.
- The process for purification of water using WDT/WPT, Fitkiri, bleaching powder etc. can be circulated in the form of handbill, leaflet, pamphlet or poster among the affected people. UNICEF have such pamphlets.
- These handbill, leaflet can be distributed through educational institutions such as schools, colleges, madrasas, etc., through clubs/youth organisations etc.
- It can be distributed and/or explained by microphone in markets, huts or any public meeting places such as railway/ steamer/ bus stations, play grounds, cinema halls, etc.

- The information can be circulated through mosques and other places of worship by Imam Shahebs and other religious leaders.

The source of procurement/supply of WPT and Fitkiri in Dhaka and Chittagong is given in Annexure - II : F. 2. 2

6. Co-ordinate this supply activity with those of other NGOs, government agencies, Red Crescent Society, UNICEF and other relief teams.
7. For safe drinking water, also consider the following measures in order of priority:
 - Encourage use of WPT/Bleaching powder for purification of water.
 - Supply piped water in plastic containers
 - Encourage use of 'fitkiri' for purification of water
 - Encourage use of boiled water
 - Supply bottled water
8. In case of limited supply/availability of water, manage distribution by introducing quota per family per camp/area/village.
9. The requirement of water for drinking and washing purpose per person per day varies with each situation and increases markedly with air temperature and physical exercise. As a general indication, the following amounts of water are desirable :

Individuals	:	15-20 litres per person/day
Health centres	:	40-60 litres per patient/day
Feeding Centres	:	20-30 litres per person/day

In disaster situation, calculate on at least 15 litres per person per day plus communal needs and a spare capacity for new arrivals.

Purification of water in Sunlight :

1. Keep in mind that water can be made safe for drinking by sunlight. Teach/encourage people to follow the method for purifying water as described below

Sun - Cleaned drinking water :

Professor David Morley from the Tropical Child Health Unit, Institute of Child Health Hospital for Sick Children, London, has developed a simple way of purifying water by sunlight. According to him exposure of water in a transparent glass or plastic container for at least one and a half hour (90 minutes) can make water safe for drinking. The Ultra-violet 'A' wavelength of sunlight kills many bacteria which contaminate water. Exposure in coloured, except light blue, bottles is much less efficient.

Method/process of purification :

Expose water in transparent glass/plastic container in the sunlight for at least one and a half hour. Let purified water cool overnight to provide the following day's supply of water.

Warning :

Contaminated/polluted water exposed in coloured bottles/containers is not safe for drinking.

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Who should do it ?

- First-in/relief/emergency workers/volunteers

Who should be kept informed ?

- Beneficiaries
- Regional/local offices/D M U
- Other operating agencies
- Local administration
- DPHE/UNICEF

Questions to ask

- Have we provided for adequate budget for installation of new tube-well and repairs and resinking of derelict tube-wells?
- Do we maintain a list of local tubewell mechanics, or/and a list of mechanics from outside the affected area ?
- Do we have sufficient stock of WPT, 'fitkiri' and other disinfectants ?
- Do we maintain a stock of plastic containers ?
- Do we have access to adequate bottled water ?
- As the disaster strikes, are we in touch with other operating agencies or government agencies for co-ordinating safe drinking water supply activities ?
- Are we maintaining liaison with local administration ?
- Have we prepared leaflets/hand-outs on use of WPT and other disinfectants ? Do we have sufficient quantities ?
- Have we trained our own staff in teaching others to use WPT and other disinfectants?
- Have we trained people of purifying water in sunlight ?

CHAPTER - III : I

MEDICAL POSTS/MEDICAL HELP

Warning

Do not supply any medicine, specially antibiotics, without having qualified medical person in the team

SETTING UP MEDICAL POSTS

III : I. 1 MEDICINES, APPLIANCES AND SUPPLIES

What should be done ?

1. Expect the following medical cases during/following a disaster. The cases are arranged in order of their probable perceived occurrences :
 - fatal/grievous injuries
 - infections from cuts and injuries
 - fractures
 - serious cases of snake bite
 - delivery cases
2. Expect the following diseases/epidemics, in order of probability, during/ following a disaster :
 - Diarrhoea
 - Cholera
 - Bacillary and amoebic dysentery
 - Gastro-intestinal problems
 - Influenza/fever
 - Pneumonia
 - Typhoid
 - RTI (children)
 - Conjunctivitis
 - Hepatitis
 - Severe malnutrition
 - Measles
 - Worms
 - Night Blindness (Vitamin A deficiencies)
3. Diarrhoea, the most prevalent disease during/following a disaster can be prevented and easily treated in the following ways :

PREVENTION OF DIARRHOEA

- * Always use tubewell water, rain water or water purified by other means for drinking, cooking and washing utensils.
- * Do not eat rotten food. Always recook left-over food before eating.
- * Always keep all food and water well covered and protected.
- * Wash both hands carefully by rubbing with soap, ash or mud before eating, before preparing food, feeding, after defecating, and cleaning child's bottom.

- * Do not defecate near rivers, ponds and tubewells. Children's stools are as harmful as those of adults.
- * Always bury the stool of a diarrhoea patient in a deep hole.
- * Feed your child only breast milk for the first 4 months.
- * If ORS packets are not available, prepare ORS by mixing half a liter of safe water with a three-finger pinch (up to the first crease) of salt and fistful of molasses (gur).
- * All prepared ORS should be used within 6-8 hours. Discard any that is left after 6-8 hours and prepare fresh ORS.
- * Diarrhoea patients may be given available drinks, such as, coconut water, mashed 'chira' water, rice water (mar) and light tea, in addition to ORS.
- * Do not stop breast-feeding a child with diarrhoea.
- * Consult a qualified health worker if the patient becomes very weak due to repeated attacks of severe diarrhoea or bloody dysentery.
- * Continue to give the patient normal food; mashed foods are more easily digested.

EASY WAYS TO TREAT DIARRHOEA

- * Give Oral Rehydration Solution (ORS) to a patient as soon as diarrhoea starts.
 - * Do not stop giving ORS if the diarrhoea patient starts to vomit. ORS will eventually stop the vomiting.
 - * Give at least half 'poa' of ORS to a child and half 'seer' of ORS to an adult after each time he/she passes a diarrhoea stool. A patient with severe diarrhoea will need more ORS.
 - * When preparing ORS follow carefully the instructions printed on the packet. Dissolve the ingredients in the right amount of safe water.
4. Anticipate that additional field clinics/field hospitals/satellite hospitals, beyond existing facilities, would be required in the operational area.
 5. Plan in advance for five to ten bed field clinic, although the size may also be ten plus.
 6. Recommend the number of beds for field hospitals, based upon the number of doctors/nurses/medical assistants/workers, or the quantity of medical supplies available with you.
 7. As a general thumb rule, anticipate and plan for a field hospital with 10 to 25 beds.
 8. Anticipate and plan for field clinics/hospitals with the following common/life saving medical supplies, arranged in order of perceived need :
 - Bandage gauge
 - Bandage roll
 - Antibiotics
 - Tablets
 - Steriled cotton
 - Injections
 - Capsules
 - Syrup
 - ORS
 - Steriled bandage/gauge

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- Boric Cotton
- Boric powder
- Leukoplast
- I.V. fluid
- I.V. infusion sets
- Tr. iodine
- Tr. benzene
- Analgesics
- Antihistamines
- Metronidazole

9. For a field clinic/hospital, anticipate and plan for the following facilities, materials, equipment and appliances, arranged in order of their need, as perceived by a cross-section of NGO providers :

- Prefabricated house/tent
- Surgical apparatus for minor surgeries
- Bed sheets
- Blankets
- Mosquito net
- Water bucket/tank/drum
- Pressure lamp/hurricane/flash light/candles
- Oxygen cylinder
- Tray/plates/glass
- Bed pan
- Sterilizer/autoclave
- Tarpaulin/ground sheet
- Stretchers
- Urinals
- Toilet/water seal latrine
- Big aluminium pots
- Crockery
- Stethoscope
- Bottled water
- Treated water in plastic containers

10. Also, plan for the following non-medical supplies for a field clinic/hospital, arranged in order of their need, as perceived by a cross-section of NGOs based upon their experiences :

- | | |
|-------------------------|-----------------------------------|
| - Diet/food items | - Dettol/Savlon/Sepnil |
| - WPT | - 'Fitkiri' |
| - Bleaching powder | - Soap/detergent powder/neem soap |
| - Kerosene oil | - Knives |
| - Flash light batteries | - Trays |
| - Spade | - Shovel |
| - Matches/lighters | - Waste disposal bags |

Who should do it ?

- Medical section of the organisation/D M U
- First-in medical teams

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Who should be kept informed ?

- Other Operating Agencies
- UHC/other health complexes in the area, if any
- Local administration

Questions to ask

- Do we maintain information/data of a post-disaster medical operation conducted in the recent past by the organisation ?
- Have we reviewed this information to anticipate probable items and quantities of medicines, and supplies that may be required in future disasters.
- Do our anticipations conform to those perceived by other agencies, as listed in this section ?
- Similarly, do our experiences suggest the same or similar field clinic or hospital needs, non-medical supplies, etc, as perceived or experienced by other NGOs and organisations listed in this section ?
- Do we maintain adequate inventory of items/supplies we may expect to need in our medical operations ?
- Have we made a survey to determine for ourselves the medical needs of the affected area ?
- How does its result compare with that of others ?
- Is there adequate budget provisions in our disaster management plan for the medical inputs anticipated for the operational area ?

III : I. 2 MEDICAL POSTS

What should be done ?

1. Consider the use of existing medical facilities centres in and around the affected area.
2. Make a list of these centres, if such a list is not already available with the D M U /regional/local offices.
3. Consider if the organisation's medical post/posts can be housed in any existing complexes.
4. Consider alternative venues, taking into account the ease of access by potential treatment recipients and proximity to the organization's facilities and supplies.
5. Consider other mobile operations with vans/boats and other means.
6. Consider door to door operations.
7. Determine the size of operations of the post(s), manpower and resources required.
8. Determine the number of medical posts, after thoroughly considering the need and resources available.
9. Assign medical and non-medical personnel to each post with specific duties.
10. Medical personnel should be instructed to give priority to medical cases caused by disaster than to patients suffering from chronic diseases.

11. Earmark equipments, appliances and supplies for the posts. Also ambulance/ engine boat, if possible.
12. Once the venues are determined, inform all concerned including headquarters, other operating agencies, Red Crescent Society, local administration, etc.

Who should do it ?

- Regional/Local Office/D M U
- Medical Team

Who should be kept informed ?

- Other operating agencies
- Local administration
- Local practitioners
- THC/District Health Administration

Questions to ask

- What are the facilities that already exist in and around the affected area ?
- Is a list of existing facilities/complexes readily available from D M U/regional/ local offices ?
- What is the capability of the THCs to treat serious surgical and medical cases ?
- Is the post or posts readily accessible to potential treatment recipients ?
- Are there similar post(s) in the affected area set up by other operating agencies ?
- Are the surgical or/and medical services provided by these posts similar to those offered by us ?
- How do the number and nature of their services compare with those of ours in terms of medical treatments or surgical operations ?
- What are the distances of the post(s) from other existing complexes and similar post(s) set up by other operating agencies ?
- Are the posts manned adequately with the required number of doctors/ surgeons, nurses, and auxiliary staff ?
- Do we have the required personnel, transports, equipment, appliances and supplies to conduct door to door and/or other mobile operations ?
- Are we co-ordinating our medical operations with those of the other agencies, including government agencies, operating in the area ?

III : I. 3 Medical Help : Preparatory Measures

What should be done ?

1. In the disaster management plan of the organisation include preparatory measures which may minimize injuries/diseases/epidemics.
2. In the preparatory measures, include provisions for the following in order of priority, as perceived by several NGOs :
 - Timely arrangement of safe drinking water
 - Timely evacuation
 - Taking care of wounded and sick

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- Quick burial/disposal of deadbodies/carcasses
- Proper sanitation in camps/shelters
- Community level health awareness
- Timely vaccination campaign
- Health education



Women are preparing Oral Saline for disaster affected areas
 Courtesy : UNICEF

3. In order of the needs perceived by several NGOs, plan in advance for getting the services of general physicians, surgeons, nutrition specialists, orthopedics and gynecologists for the affected area during or after the disaster. Coordinate with doctors association, alumni association of medical colleges, student doctors (Sandhani).
4. Recommend the following level of practitioners, arranged in order of perceived need :
 - Paramedics/NGO medics
 - Nurse/midwives
 - Medical graduates
 - Medical assistants
 - FWVS
 - Nutrition workers
5. For improved and better management of clinics/field hospitals and their services, promote the following in order of (perceived) preference :
 - more co-ordination/co-operation among operating agencies
 - combine initiatives with other operating agencies
 - more co-operation between NGOs and government agencies
 - improved logistic support
6. Ensure that in the disaster management plan of the organisation, there are provisions for first-aid, preventive health care training and training on health education, hygiene and environmental sanitation for all relief workers, or at least some workers.
7. For the organisation, have some regular trained health/first aid/medical workers on the pay roll, if possible.

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8. If the organisation can not or do not have regular/permanent health workers, consider the following alternative measures, singly or in combination, in order of priority :
- co-ordinate activities with other NGOs having health workers
 - invite trained volunteers
 - hire temporary health workers
 - co-operate with relevant government agencies
 - seek assistance from Medical Colleges
 - seek assistance from defence medical posts/centres
9. Purchase/collect medical inputs/equipment from the pharmaceutical companies and wholesalers.

A list of suppliers/pharmaceutical companies is annexed in-II : F. 3

Who should do it ?

- Headquarters logistics/medical staff in D M U
- Regional/local offices

Who should be kept informed ?

- CEO
- Regional/local offices
- Other operating agencies
- MOH

Questions to ask

- Do we have a comprehensive disaster management plan?
- Are there provisions of several important preparatory measures in the plan ?
- Are there adequate budget provisions ?
- Have we had any experience with community level health awareness or health education programs ?
- Do we have regular/permanent medical personnel on our pay roll ?
- If we don't have, do we maintain a roster of such personnel by professional specializations and by disaster-prone areas?
- Are these personnel available for the affected area on call?
- Does the medical component of our disaster management plan provide for effective co-ordination with governmental and other agencies at national, regional or local levels ?
- Do we regularly keep track of the medical activities of other operating agencies in the affected area ?
- In our disaster management plan, have we provided for comprehensive and effective training of relief/health workers/volunteers ?
- Are we procuring medical supplies at the cheapest prices ?
- In the disaster management plan are there provisions for continuous refresher medical/health training for relief/health workers/volunteers ?

SHELTER/CLOTHING/UTENSILS

Provide Shelter/Clothing/Utensils : Know the real facts

III : J. 1 Shelter : Background information

What should be done ?

1. In the pre-disaster preparedness stage, collect all basic information about shelters the affected people use during and after a disaster.
2. Based upon this information, incorporate provisions regarding shelters in the organization's disaster management plan.
3. Keep for adequate budget provision for this component of the plan.
4. In shelter planning and provision activities, always remember the following facts. In case of an emergency caused by affected people use the following shelters in order of preference, as the results of a survey show :
 - Nearby school/college/office buildings
 - Raised roads/embankments/grounds
 - High raised house of a neighbor
 - Flood and cyclone shelters
 - Other safer places/ 'Khas' land/chars
 - On roof tops (in floods)
 - On trees (in floods)
 - At camps opened by local authorities/relief agencies
 - At market places
5. Remember that in case of an emergency due to a disaster, most affected people take their cattle and/or movable assets with them wherever they go. Sometimes, they will sell them out, if it is possible, or send them off to safer places, or put them under the care of a neighbor.
6. In the planning and provision of shelters, consider the fact that people hesitate to move out to relief camps/flood cyclone shelters during/following a disaster. Survey result show that, in order of importance, this hesitation is mainly due to :
 - risk of losing assets and properties after leaving home
 - bad communication
 - over populated accommodation in camps
 - lack of accommodation for cattle, poultry and other assets/belongings
 - lack of transport
 - lack of privacy
 - lack of security
 - lack of proper/hygienic sanitation
 - lack of medical support
 - lack of clothing
 - risk of being left out by organisations working in the field
7. Always keep in mind that a large number of people are out there who are landless and homeless.
8. Remember that shelters will be needed separately for men and women with small children.

9. Remember that temporary shelters during/after disasters are generally provided by the government, NGOs, Red Crescent Society and the community.
10. In most cases, temporary make shift shelters are arranged by affected people themselves, out of the remnants of their destroyed houses.

Who should do it ?

- Local/Regional/D M U offices
- First-in/relief/emergency workers

Who should be kept informed ?

- D M U
- Other Operating Agencies
- Local authorities
- D C /TNO

Questions to ask

- In collecting information about shelters are we collecting all necessary information ?
- Have we covered all disaster-prone areas and all sections of people likely to be struck by disaster ?
- Do we conduct random sample surveys ?
- Have we estimated the number and types of the existing shelters, or facilities available which may be used as shelters ?
- Have we provided adequate budget for shelters ?
- Do we maintain for different disaster-prone areas an areawise list of these shelters or facilities for quick reference and use ?
- Are we aware that almost invariably there is the problem of moving with cattle and other assets/belongings ?
- Have we considered this fact in planning or providing for shelters ?
- How do we locate, during an emergency due to a disaster, homeless and landless people and provide for their shelter ?
- How do we survey the landless people at the preparedness phase and trace them later during emergencies ?
- To what extent are these landless/homeless people mobile ?

III : J. 2 Provision of shelter : Measures and Related Issues

What should be done ?

1. Assess needs for shelter. As suggested by the survey results listed below, in order of preference, are the ways through which needs could be assessed.
 - by conducting door to door survey
 - through discussion with local/community workers, teachers, volunteers, leaders
 - by depending on information/data provided by local administration/agencies
 - by delegating responsibility to local volunteers

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2. Select beneficiaries for shelter according to one or more of the following means, as suggested by a survey :
 - by categorizing damages suffered by families
 - by categorizing socio-economic status of families
 - by giving preference to other ongoing project participants/beneficiaries
 - by double-checking category-wise list with emphasis on families headed by women.
3. Provide shelter preferably to selected beneficiaries, or to all affected people in the operational area.
4. Decide the number based upon available resources.
5. If relatively more permanent shelters are not possible to offer, provide in order of preference, polythene sheets/tarpaulins to individual families, or individual tents, or required materials leaving the beneficiary to manage on his/her own. The materials may include Bamboo, thatch, C.I. sheet (not for cyclone area) and other materials as immediate relief for shelter.

C.I. sheets are dangerous to give out in a cyclone area because if they are not anchored well (and most people cannot afford to do this) they will fly around and cause injury in the next high wind
6. Provide shelter to landless families on priority basis by giving shelter materials to them and leaving them on their own to find a place to erect/construct shelter.
7. If there is risk that they might sell the materials out, ask them to bring written permission from government officials or a land owner for using governments/owner's land for construction of shelter.
8. In providing shelters, consider that the effect of the program will contribute indirectly to the following in the area.
 - improved management/handling of food items and water
 - improved management of medical supplies
 - ensuring shelter/space for cattle
 - improved sanitation
 - reinforced order/security
 - improved safety measures for women and children
9. To the extent feasible, provide separate shelters for men and women with small children.
10. To the extent feasible, provide toilet facilities of local types in the shelters.
11. Co-ordinate shelter provision activities with those of other operating agencies and local authorities or/and those under taken by the affected people themselves.
12. Maintain muster rolls/registers for shelters or shelter materials.

Who should do it ?

- Survey/first-in/relief/emergency workers

Who should be kept informed ?

- Local/Regional offices/D M U
- Other operating agencies
- Local authorities
- DCs/TNOs

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Questions to ask

- Have we assessed the need for shelter?
- Have we selected the beneficiaries after proper survey?
- Have we made sure that we have sufficient resources, fund and manpower, for the programme?
- Have we arranged materials for immediate shelter?
- Are we giving priority to women, children, aged and landless families ?
- Are we co-ordinating our programme with those of other agencies ?

III : J. 3 Clothing and Utensils

What should be done ?

1. Get acquainted with the immediate/important needs of people in terms of clothing and utensils. Based upon the results of a survey, these needs, under separate categories and arranged in order as perceived, are as follows :
 - A. **Clothing**
 - Sarees
 - Lungi
 - Children Garments
 - Blankets/Chadar (during winter only)
 - B. **Utensils**
 - Cooking pots for rice and curry
 - Plates
 - Water glass/mugs
 - Hurricane/Cupi/Candles
 - Pitcher/bucket with cover
 - Sauce pans
 - Bowls with cover
 - Spoon
2. Keep a list of sources of supplies of these item.

A list of suppliers of clothing and utensils are given at Annexure-III : J. 1 and III : J. 2 respectively
3. Assess the needs for clothing/utensils by conducting door to door survey of the affected people.
4. Alternatively assess these needs, on the basis of any one of the following:
 - a) through discussion with local/community volunteers/ workers/teachers
 - b) information/data provided by local authorities/other agencies.
5. Select final beneficiaries of clothing and utensils by categorizing damages suffered by families, or by categorizing socio-economic status of families.
6. Provide clothing and utensils preferably to selected beneficiaries through survey, or if possible to all affected people in the operational area, based upon available resources.

7. If this is not possible, make the selection through preference given to other ongoing project participants, or by double checking categories with emphasis on families headed by women.
8. If time permits, organize a collection drive for used clothes and utensils in affluent and unaffected areas, especially urban areas, and distribute these collected items in the affected area.
9. Maintain muster rolls/registers for the clothing and utensils distributed.

Who should do it ?

- Survey/first-in/relief/emergency workers
- Local/regional office/D M U

Who should be kept informed ?

- D M U
- Other operating agencies
- Local authorities
- DCs/TNOs

Questions to ask

- Do we maintain stocks of clothing and utensils at headquarters/regional offices?
- Do we have updated list of sources of supplies ?
- Are these inventories regularly checked and verified ?
- Are depletions through distribution replenished on a regular basis ?
- In our inventories, do we have concentration of only limited items, or the inventories are pretty balanced ?
- Are the cooking pots/pans, etc. of most common sizes used in the affected area?
- Are the people used to use the clothing and utensils of standard size ?

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CHAPTER - III : K

DISTRIBUTION OF RATIONS

What should be done ?

1. Consider the following items, in order of perceived priority, as dry food rations :
 - Rice
 - Atta /Flour
 - Dal /Lentil
 - Salt
 - Oil /vegetable oil
2. Consider the food value (calorie, nutrition,etc) in selecting dry rations.

Approximate Kilocalories/Protein values for some common Relief items and Indigenous foods are shown in annexure- Iii : K. 1

3. Remember that potential recipients of dry rations most welcome door to door distribution, and hence distribute dry rations door to door, if practicable.
4. For distribution of dry rations, select area-based or village-based centres, in addition to, or in lieu of, door to door distribution.
5. Undertake mobile distribution of rations as and when required.
6. Consider Union Parishad offices, School/Madrassa building or relief camps as alternative venues for distribution.
7. Expect several problems in the distribution of dry rations. As experienced by relief agencies, in order of importance, these problems are:
 - transportation of ration items to remote areas
 - storage of items in remote areas
 - concentration of distribution from relief camps
 - use of intermediaries/volunteers vis-a-vis capacity of supervisory workers
 - emphasize on distribution from as easily accessible point as possible.
8. Expect that the potential recipients' perception or experience of distribution problems may be different from those of relief agencies. In order of importance, these problems are perceived to be:
 - maldistribution of cards
 - distribution of cards/rations through intermediaries
 - maldistribution of rations
 - lack of standard measuring pots/tools
 - hit and run type operations by relief agencies

9. Consider for distribution the following quantities of dry ration per person per day/week:

A typical daily ration for an adult

Commodity	Quantity	Kilocalories
1. A staple food providing the main energy and protein requirement e.g. cereal (rice, wheat)	350 - 400 gm	1225 - 1400
2. A protein source, e.g. pulses, beans	50 gm	350 (approx)
3. A high calorie food, e.g. oil	20 - 40 gm	180 - 360

Menu for Daily Food Ration for 1000 people (Basic food)

Items	Ration/day/person (in gm)	Total Amount/day (for 1000 people) (in kg)	Total.Amount/week (for 1000 people) (in kg)
Rice	400	400	2800
Lentil/Dal	50	50	350
Edible Oil	20	20	140
Salt	5	5	35
Sub total	475 gm	475 kg.	3225 kg.

The daily ration provides 1880 kcal of energy and 50 gms of protein. The daily food ration per individual is 475 gm. Thus total monthly food ration per individual will be 14.25 kg.

10. Remember that the ideal period of distribution of dry food rations varies with the situation in which the programme is operated.
11. Consider the following groups, in order of priority, for dry food rations extending beyond three weeks :
- Children
 - Pregnant and lactating mothers
 - Disabled and the aged
 - Widows and orphans
 - Sick and injured
12. Consider food value (calorie, nutrition, etc.) in selecting dry ration items. The recommended minimum calories per head per day in post disaster situation is given below :

Recommended Daily Energy requirements

Moderately active adult	Male	-	3000 Kcal
	Female	-	2200 Kcal
Sedentary adult	Male	-	2500 Kcal
	Female	-	2000 Kcal

Pregnant women	-	2500 Kcal
Lactating women	-	2500 Kcal
Child-up to 5 years	Male	1200 - 1900Kcal
	Female	1200 - 1800Kcal
Child-over 5 years	Male	2000 - 3000Kcal
	Female	1900 - 2200Kcal

Survival Energy requirements in Kcal

	Emergency Subsistence	Temporary Maintenance
0 - 2 Years	1000	1000
3 - 5 Years	1250	1500
6 - 9 Years	1500	1750
10 - 17 Years	2000	2500
Pregnant or lactating woman	2000	2500
Normal (Sedentary)	Male	2200
	Female	1800
Moderate labour	2000	2500
Heavy labour	2500	3000
Very Heavy labour	3000	3500

Recommended Daily Protein Requirements

Adult (sedentary)	-	35 gm
Baby	-	3 gm/kg
Child 6 month - 4 years	-	35 gm
Pregnant woman	-	65 gm
Lactating woman	-	65 gm

Ideally 10 - 15% of the protein should be of animal origin.

13. Distribute dry rations weekly, or if practicable, twice a week.
14. Distribute rations in loose forms, and if inconvenient, in packets.
15. Use standard measuring pots e.g. plastic buckets in the measurement of ration items, or alternatively, use scales and weights.
16. Use volunteers, supervised by own workers, for distribution of ration items.
17. If volunteers are not available, consider hiring temporary workers for distribution.

Who should do it ?

- Relief/emergency workers
- Local volunteers

Who should be kept informed ?

- Local /Regional / D M U
- Other operating agencies
- Local administration

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Questions to ask

- Are we distributing the right kinds of dry ration items and in right quantities ?
- Does ration distributed per head meet the minimum requirement standard in terms of nutrition/calorie values ?
- Are we covering all eligible affected people ?
- Have we reached the needy women, children, sick and the disabled ?
- Are we sure that we are not duplicating distribution in areas already served by others?
- Are the distribution points/centres the best for recipients logistically ?
- How are we maintaining liaison and co-ordination with other agencies ?
- Is there a need for mobile distribution of rations for marooned or isolated people?
- How are we associating local administration/locally elected officials in distribution, if needed ?
- Have we selected good volunteers ?
- Have we considered in advance steps/measures to be taken to allay the recipients' fears/experiences involving maldistribution of rations or ration cards, sometimes through intermediaries ?
- In designing the dry food distribution operation, have we drawn upon our own past experiences and lessons we learnt ?
- Are there sufficient stocks of ration items in our regional/local stores ?
- Are these stocks verified regularly in order to remain prepared for anticipated disasters ?

CHAPTER - III : L

SETTING UP CAMPS

III : L. 1 Setting Up Camps : General Guidelines

Warning

Do not go for setting up camps if it is not essentially required

What should be done ?

1. Before setting up camps, review the organization's own past experiences and brief first in/relief/emergency workers.
2. To the extent practicable, utilize existing housing facilities for organizing camps.
3. Anticipate, and plan in advance, measures which are likely to improve the overall management of a relief camp. As perceived by potential recipients, these measures, in order of importance, are the following:
 - improved management of food/medicine
 - improved water supply and sanitation
 - reinforced order/security
 - training of workers/managers
 - participation of local community in management.
4. Plan to set up relief camps in any major disaster.
5. Estimate that about 50% or more of the total relief materials may be required for the relief camp(s) to be setup (especially for the first 7 to 10 days).
6. In setting up of a relief camp, always keep in mind the following elements in order of priority, as perceived by several NGOs :
 - feeding the residents
 - providing water supply
 - providing medical support
 - providing clothings and utensils
 - arranging adequate accommodation
 - providing required lighting
 - arranging first aid
 - arranging sanitation
 - preparing for preventive healthcare and epidemic control
 - anticipating and arranging for maternity and child health (MCH) needs
 - registering/listing residents
 - maintaining peace and discipline
7. Maintain register(s)/list(s) of potential sites for relief camps at headquarters/ regional/local levels.
8. Co-ordinate setting up of camp activities with those of other operating agencies.
9. Always keep local administration informed.

Who should do it ?

- DMU
- Regional/local offices

Who should be kept informed ?

- Local/Regional offices
- First-in/relief/emergency/medical teams
- Other operating agencies
- Local administration

Questions to ask

- Have the past experiences of the organisation been thoroughly analyzed to identify important issues and to draw conclusions/lessons learnt ?
- How is the present disaster different, if at all, from any past one ?
- Are past lessons applicable to the current situation ?
- Have workers been adequately trained to start and manage relief camps ?
- Do we maintain an up to date register/list of potential sites for relief camps in the affected area ?
- Have we considered and given weights to the perceived feelings of affected area people in setting up camps ?
- Are we maintaining proper liaison with other operating agencies and local administration ?
- Have we warned the logistics and storage sections of our organisation or/and regional offices about the likely needs of relief materials for the camps to be set up ?
- Have we anticipated and correctly pre-arranged food, water, first aid and other medical needs of potential camp residents ?
- Are we keeping all concerned informed of our activities ?
- Have we thought about how to maintain registers/lists of camp residents ?
- Are the co-ordination mechanisms in force adequate/effective to ensure co-ordination amongst operating as well as government agencies ?

III : L. 2 Setting up Camps : Decide site/location

What should be done ?

1. Consider the following existing sites, in order of priority, as ideal places for setting up relief camps :
 - school/college/office buildings
 - elevated grounds/places
 - flood/cyclone shelters
2. If it is not feasible or practical to utilize existing sites, consider the following kinds of shelters/ accommodations in order of priority, as ideal relief camps :
 - small tents/bevaucs for individual families
 - partitioned shed/ 'chhapra' made of tarpaulin sheets/straw and bamboo
 - temporary sheds made of polythene sheets
 - big tents for common living
3. Decide on a site/location which is easily accessible to affected people.
4. Avoid setting up relief camps in areas already served by government or other operating agencies.

5. To the extent practicable, decide on a site/location to which relief supplies can be transported relatively easily.
6. To the extent practicable, decide on a site/location which is well-connected for transportation, and which may already have some facilities such as light and working tubewells.
7. Consider and set up mobile camps for severely distressed, marooned or isolated groups, such as sick and aged people, women and children.

Who should do it ?

- First-in/relief/emergency workers
- Regional/local offices
- Local administration

Who should be kept informed ?

- Local administration
- Local /regional offices, D M U
- Other operating agencies

Questions to ask

- Do we maintain register(s)/list(s) of potential camp sites for affected areas ?
- Have we considered all alternative sites in order to select the best one(s) ?
- Have we completed considering all existing sites before deciding on other kinds of temporary shelters/accommodations as relief camps ?
- What is the distance of our camp(s) from those set up and run by government agencies/other operating agencies ?
- Do the selected sites have any facilities such as lighting, water, sanitation, etc. ?
- Do we have building materials for temporary constructions at convenient locations nearby, or at markets close to local/ regional offices ?
- What modes of transport can be used or approaching the camps from regional offices/other supply points ?
- Is there a need for mobile camps ?
- Are water transports available to carry relief materials/to act as mobile camps ?

III : L. 3 Setting up Camps : Manage Camps Efficiently and Effectively

What should be done ?

1. As a principle, employ the organisation's own workers to manage the camps.
2. Associate, if feasible and practicable, the beneficiaries themselves in various management tasks.
3. If necessary or desirable, consider involving local people or Union Parishad officials in the management of camps.
4. Ensure registration of all camp population.
5. Use the field survey list or use separate register books for registration.

6. Consider the following tools in order of priority, as perceived by a sample of NGOs, and adopt one or more tools for keeping records of distribution of food and other relief materials :
 - Muster rolls
 - Resident register/survey list
 - Relief cards
 - Material issue register
 - Material receipt register
7. Set up/install latrines for camp inhabitants in order to maintain hygienic condition in the camp.
8. Arrange for adequate supply of water
9. Plan and organize waste disposal.
10. Organize and run periodic education and training sessions on cleanliness and sanitation.
11. Ensure regular uses of disinfectants for toilets and drains.
12. Keep a rigid control over the number/movement of camp inmates by maintaining registers/lists, and by tracking newcomers or/and outgoers.
13. Anticipate potential disciplinary/security hazards for a camp. Based upon a sample survey of NGOs, these important hazards are identified to be the following in order of importance :
 - unnecessary rush and jostling at times of distribution
 - stealing/theft
 - quarrel/personal conflict
 - disturbance by local "mastans"
 - corruption
 - molesting and abuse of women and children.
14. In order to maintain peace and discipline in the camp, set up a Camp Committee including local leaders and representatives of local administration and camp residents, or set up a disciplinary Sub-Committee .
15. Alternatively consider deputing local/resident volunteers, supervised by own relief workers, to maintain peace and discipline in the camp.
16. Depending upon circumstances, also consider arranging posting of Ansars/VDP members in the camp.
17. In order to ensure security of the camp, or/and its residents, engage local/resident volunteers.
18. If engaging local/resident volunteers is not feasible, consider arranging posting of police or even defence service personnel.

Who should do it ?

- First in/relief/emergency workers
- Local administration
- Local/Regional office

Who should be kept informed ?

- DMU
- Other operating agencies
- Local administration

Questions to ask

- Have we trained our workers properly to manage camps both effectively and efficiently ?
- Are regular duty rosters maintained for own workers/volunteers ?
- What kind of social/political problems we may encounter if we involve UP officials in management ?
- Are our records /registers/lists of camp inhabitants accurate and up to date ?
- Do we have an adequate supply of all forms, such as muster rolls, relief cards, etc. ?
- Does our organisation have a 'standard' model latrine design for such camps ?
- Are any tube wells in working condition in the camp area ?
- Do we have adequate supplies of food, medicines, utensils, and other supplies for the camps ?
- Are we maintaining liaison with government and other operating agencies ?
- Are we keeping our own headquarters/regional offices informed of camp-related activities ?

III : L. 4 Setting up camps : Provide Food and Other Relief Items

What should be done ?

1. As far as practicable, distribute ready food, especially in the initial period.
2. If distribution of ready food is not feasible, provide dry ration for separate cooking by the beneficiaries.
3. Feed camp population two times daily, if possible, or at least once daily.
4. If dry rations are distributed, distribute such rations once or twice a week.
5. Consider the following survival items, in order of priority, in any feeding/food support programme for a camp immediately after a disaster.
 - distribute 'Chira'/Muri' and 'Gur' - provide dry rations
 - distribute high protein biscuit - distribute local biscuit/loaf
 - Provide "khichri" and/or other cooked food
 - provide boiled rice and curry/dal
6. For distribution of prepared wet food, hire cooks/workers, or the organization's own workers, or local volunteers including camp residents.
7. Employ preferably the organization's own workers for distributing food and other relief items in the camp(s).
8. If employment of own workers is not feasible, employ local volunteers, or volunteers from among the camp residents supervised by own workers.
9. Maintain muster rolls of food and other materials distributed.
10. Consider the following in order of priority, to meet the water supply needs of camps :
 - pre-sunk tube wells - newly sunk tube wells
 - piped/treated water in plastic containers - deep tube wells (DTWs)
 - bottled water - treated pond/canal/river/ flood water

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11. For treatment of water use WPT, and if it is not available, use "fitkiri".
12. Consider using bleaching powder for water treatment in some cases.
13. Arrange first aid for the camp residents by engaging own first aid team/workers.
14. If it is difficult to organize own first aid workers, use local practitioners.
15. For providing medical support to the residents of a relief camp, set up own medical team.
16. If setting up own team is not feasible, consider the following in order of priority:
 - asking service from other medical team(s)
 - seeking assistance from THC/FWC
 - asking service from defence service medical team(s)
17. For meeting maternity and child healthcare (MCH) needs of a relief camp, arrange inclusion of female doctors/para-medics/FWVs in the medical team, or if this is not possible, seek assistance from local THC/FWC.
18. Distribute "Sarees" and "Lungis" among the camp residents in order to meet their immediate clothing needs.
19. Consider distributing babywears.
20. For meeting immediate needs of the camp residents for utensils, consider distributing the following in order of importance:
 - plates - saucepans/curry/rice pots
 - bowls - glass
 - buckets/pitchers for water
21. Restore electric supply, if available.
22. Make arrangements for kerosene lamps and kerosene oil distribution for lightning in a relief camp, if there is no electric supply.
23. Alternatively, consider arranging for common pressure lights.

Who should do it ?

- First-in/relief/emergency workers
- Medical team members

Who should be kept informed ?

- Local/regional offices/D M U
- Other operating agencies
- Local administration

Questions to ask

- Do we have ready food to distribute in camps ?
- Do we have adequate supplies of dry food ration items ?
- Have we considered the advantages and disadvantages of supplying wet food?
- How long does it take to cook wet food ?
- How long does it take to distribute wet food among camp residents ?
- Is our medical team ready to provide first aid in camps ?
- Does the medical team have adequate supplies of medicines/other related items ?
- Do we maintain a list of local practitioners in case we need their services for camps?
- Do we maintain liaison with local THC/FWC in the affected areas ?
- Do we have good stocks of Sarees, Lungis babywears etc for distribution in camps?
- Do we maintain adequate stocks of utensils ?

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ENVIRONMENTAL SANITATION

What should be done ?

1. Consider environmental sanitation as a very important post-disaster activity.
2. Be aware that the most important environmental sanitation problems after a disaster is pollution of water or/and destruction/damage of sources of drinking water.
3. Know that the important issues involving environmental sanitation following a disaster are the following in order of importance, as perceived by a sample group of NGOs :
 - decomposition of dead bodies and carcasses
 - inadequate toilet/latrines facilities
 - unhealthy surroundings
 - open air dispersal of waste
4. Initiate, organize and take all important measures to restore and maintain environmental sanitation.
5. As an immediate measure, quickly arrange for immediate repair/re-sinking/sinking of tubewells in the affected area.
6. Arrange for pumping out of polluted water from tubewells which are still in workable condition.
7. Arrange for dewatering of pond/ring wells, as well as treatment of drinking/household water by disinfectants/ chemicals.
8. Consider what can be done for immediate repair of damaged tube wells and disinfecting pond/ring well/tube well water.
9. In any tubewell programme, seek the assistance of Dept. of Public Health Engineering (DPHE), if possible.
10. Undertake proper and quick burial of dead bodies and car- casses.
11. Restore/organize/set up toilet/latrines facilities.
12. Organize and undertake a clean-up operation to clear the surroundings of dangerous structures and networks, debris, ruins, etc.
13. In co-operation with governmental and other operating agencies, initiate and continue mass educational campaigns against open air waste disposal, water pollution and environmental pollution.
14. In all environmental sanitation activities, co-ordinate to the extent practicable, all programmes with those of governmental and other operating agencies.
15. For environmental sanitation work following a cyclone, maintain liaison, and co-ordinate programmes with Government- Red Crescent Cyclone Preparedness Programme volunteers.

Who should do it ?

- first in/relief/emergency workers
- medical team members
- Red Crescent CPP Volunteers
- Local administration
- DPHE officials

Who should be kept informed ?

- Local/Regional offices/D M U
- Local administration
- Other operating agencies
- Dept. of Public Health Engineering (DPHE)

Questions to ask

- Have we reviewed our immediate past experiences of environmental sanitation problems following a disaster and measures taken ?
- Do we have tube-well materials and technicians to repair/resink/sink tube-wells ?
- What is the distance of the supply point of tube-well materials from the affected area?
- Side by side with ensuring drinking water supply, are we taking care for the disposal of the decomposing dead bodies/carcasses ?
- Are we co-ordinating our activities with those of governmental and other operating agencies ?
- Do we maintain proper liaison with the Dept. of Public Health Engineering (DPHE)
- Have we made prior preparation for carrying out an educational campaign for environmental sanitation ?
- Will our educational campaign use audio-visual representations, and do we have them ready ?
- Are our workers adequately trained to motivate the affected people to improve environmental sanitation ?
- Are we involving local volunteers in environmental sanitation work, including the educational campaign ?

PART - III : Annexures

N.B. All the formats could be easily available on order from Bangladesh Disaster Preparedness Centre (BDPC), 9/23, Iqbal Road, Mohammadpur, Dhaka-1207, Telephone : 317092

**Specimen of the Standard Letter
Organisation's Letter Head**

To
Deputy Commissioner (D.C.) _____
TNO, _____
O.C., _____ Police Station
Chairman, _____, UP

Dear Sir,

I have the pleasure to inform you that to alleviate the sufferings of the people affected by the recent disaster in your area, we have decided to conduct Emergency Relief Operation.

_____ No. of relief teams have just arrived. The teams are located at the following addresses.

- a. _____
- b. _____
- c. _____

Your cooperation and assistance in effective implementation of our relief operation programme will be highly appreciated.

Your Sincerely

Name :
Designation :
Address :

Specimen of Distribution Card

Relief Distribution Card

Name of the Organization : _____
 Address : _____

Name of the Operation : _____
 Name of the Distribution Centre : _____
 Card No. _____

Name : _____
 Father's/Husband's Name : _____
 Village : _____
 Union : _____
 Thana : _____
 District : _____

Number of members in the Family :

Age Group	Sex	No.	Total
1 day-12 year	Boys		
	Girls		
12 years-More	Male		
	Female		
Total No. of the Family Members :			

Signature/LTI of the
Card Holder

Signature of NGO worker/volunteer
Date : _____

Date of Distribution	List of Relief Items Distributed									LTI/Signature
	Chira	Rice	Ata	Dal	Oil	Saree	Lungi	Utensils	Others	

N.B: The Card should be of the size 18cm. X 14 cm.
and printed on 260 gm art paper.

'B' should be printed on the overleaf

Specimen of Muster Roll

Muster Roll

Name of the Organisation :

Address :

Name of the Operation :

Date :

Village/Centre :

Union : _____

Thana : _____

District : _____

Sl. No.	Card No.	Name	Father's/Husband's Name	Items (in kg/gm/Nos.)					Signature/LTI
Total									

Counter Signature of Local Govt.

Name

Signature

Date

Local Community Representative

Date : _____

N.B. The muster roll should be of size 34 cm X 22 cm and printed on Karnaphuli White Print Paper.

Specimen of Distribution Note

Name of the operation: _____

District: _____

Name of the Area : _____

Thana : _____

In view of the fact that there was no scope of preparing Muster rolls, we certify that the following items have been distributed in the areas mentioned against them :

Items	Name of the area Centre/Vill/Union	Approx. No of Beneficiaries	Qty
1. Chira			
2. Gur			
3. Chapati			
4. Bottled water			
5. WPT			
6. Sari			
7. Lungi			
8. Baby Garments			
9. Blankets			
10. Utensils			

Distributions

Name	Designation	Signature	Date
1.			
2.			
3.			

Local Representatives/People

Name	Village	Signature/LTI	Date
1.			
2.			
3.			

Approximate Kilocalorie/Protein Values for Some common Relief items and Indigenous foods:

Type	Food	Kcalories/ 100 gm	Protein 100 gm
Cereals	Rice	347	7
	Flour	348	11
	Wheat	346	11
	Atta	341	12
	Chira	346	6
	Muri	325	7
Vegetables	peas	350	20
	Lentils (Dal)	340-372	22-28
	Soyabeans	432	43
Rooted food	Sweet Potato	93	1
	Potato	89	3
	Onion	50	1
Meat/egg	Beef	114 Kcal	22
	Goat	118 Kcal	21
	Eggs	173-181 Kcal	13
Relief Food	Corn-Soya Milk (CSM)	380 Kcal	18.3
	Dried Skim Milk (DSM)	356 Kcal	30.0
	Soy-Wheat- fortified	350 Kcal	12-14
Fats	Vegetable Oil	900 Kcal	-
Sugars	Sugar	400 Kcal	-

BIBLIOGRAPHY

1. Disaster Preparedness Manual, ADAB/PRIP
2. African Disaster Handbook
World Health Organisation
Pan-African Centre for Emergency preparedness and Response, 1990
3. Aim and Scope of Disaster Management.
Frederick C. Cuny,
Asian Institute of Technology, Bangkok, Thailand
4. Comprehensive Disaster Preparedness
Action Plan For Flood Control, UNDP, January 1990.
5. Cyclone affected Area Survey Guideline/Directives - CODEC
6. "Cyclone '91" - An Environmental And Perceptual Study
Bangladesh Centre for Advanced Studies (BCAS)
7. Cyclone in Bangladesh
Dr. M. A. Choudhury
Dhaka, 1991
8. Cyclone Disaster - 1991
A First Hand Aerial Survey Report and Recommendation for Emergency
Intervention
- Md. Saidur Rahman - OXFAM.
9. Cyclone Relief Programme, 1991
The BRAC Response, September, 1991
10. "Cyclone '91, A cry for effective co-ordination among NGOs"
- Md. Saidur Rahman, Oxfam.
11. Directory of NGOs in Bangladesh, 1992 - ADAB
12. "Disaster Programming Guide Tools"
CONCERN Bangladesh
13. Disaster Management Guidelines,
Save the Children Fund (UK)- Reviewed October 1990
14. Disaster Management : A Disaster Managers Handbook
Carter W. Nick - Manila : Asian Development Bank (ADB) 1991
15. Disaster Mitigation In Asia and the Pacific
Asian Development Bank, Manila, Philippines

234

16. Disaster Relief Manual
Caritas International - September, 1977
17. Emergency Services in the Event of a Disaster
Bangladesh Disaster Preparedness Centre, BDPC
18. Emergency Standing Orders for Flood
Govt. of the Peoples Republic of Bangladesh
Relief and Rehabilitation Division
Ministry of Food, February, 1984.
19. Emergency Flood Relief Programme - 1988
- Md. Saidur Rahman - OXFAM
20. Families and Floods : ADAB/PRIP/RDRS/BNELC/IVS/PRIP
21. Flood in Bangladesh : Community Development Library (CDL), April, 1989
22. Floods in Bangladesh : Bangladesh Views
23. Flood Policy Study (Inception Report)
To the Govt. of Bangladesh, UNDP, November, 1988
24. Flood Response (Inception Report)
Flood Action Plan 14
Flood Plan Coordination Organisation
Irrigation Support Project for Asia and the Near East (ISPAN).
Ministry of Irrigation, Water Development, and Flood Control. August, 1991.
25. Food Value of the common Country Food Items
Institute of Nutrition and Food Research
Dhaka University
26. Guidelines for Cyclone
Cyclone Preparedness Review Committee, August, 1977
27. Guidelines for Health Care in Refugee Camps
Refugee Health Unit, Somali Ministry of Health.- OXFORD 1983
28. Human Response to Natural Disasters : Issues Involved
- Atiur Rahman, BIDS - January, 1990
29. Inception Report
Disaster Co-ordination and Monitoring Unit
Ministry of Relief and Rehabilitation
30. Joint BDRCS/IFRCs Relief Operation in Aid of Myanmar Refugees, 1992

235

31. "Lessons Learnt During Cyclone" - April 1991
Ministry of Health and Family Welfare
Govt. of Bangladesh (In joint Collaboration with World Health Organisation)
32. Managing Disaster Response - Three Computer Programs which will help
(i. Disaster Information System -DIS, ii. Disaster Preparedness Information
System - DPIS, iii. Disaster Response Tracking System - DRTS)
PACT/PRIP, Aug.'92, Dhaka, Bangladesh
33. Management of Severe Protein-Energy Malnutrition at Children's Nutrition Unit.
Dhaka
- Dr. Sultana Khanum - SCF (UK)
34. Map of GEODESEC, July, 1991
35. Maps of Bangladesh
- Graphosman, Dhaka
36. NGO Guide to Disaster Assistance Agreements
USAID, Dhaka, Bangladesh, May, 1992
37. Operation SHEBA, M. Mokammel Haque
June, 1991
38. Patterns, levels, Trends in Mortality and Regional Life Tables For Bangladesh.
Bangladesh Bureau of Statistics
39. Practical Guide to Refugee Health Care, OXFAM Health Unit
(OXFAM Practical Guide No. 2), Second Edition February, 1986.
40. Preliminary Report-Population Census, 1991
Bangladesh Bureau of Statistics
41. Readings in Disaster Management (June, 1983)
Dr. Aqueil Ahmed
Administrative Staff College of India
42. Report of the Child Nutritional Status Survey 1989-90
Bangladesh Bureau of Statistics April, 1991
43. Red Cross Disaster Relief Handbook, League of Red Cross Societies 1970
44. Recommendations for : "A Program Strategy To Enhance Disaster
Preparedness and Emergency Response in Bangladesh"
Mr. Erlins Dessau, Mr. David Read Barker
UN. Systems Operational Activities for Development in Bangladesh.
45. Research on the Fallout of Cyclone
(A.M.R. Chowdhury & A.Y. Choudhury)

46. Report of The Cyclone Disaster Preparedness Review Committee
Govt. of The Peoples Republic of Bangladesh - 1985
47. Seasonal Dimensions to Rural Poverty :
Analysis and Practical Implications
Robert Chambers, Richard Longhurst
Institute of Development Studies
University of Sussex
United Kingdom.
48. Selective feeding Programme, OXFAM Practical Health Guide No. 1
- Dr. Tim Lusty, Pat Diskett.
49. Small Atlas of Bangladesh
- Bangladesh Bureau of Statistics, 1991
50. Standing Orders For Cyclone
Govt. of the People's Republic of Bangladesh, Ministry of Relief and
Rehabilitation, 1985.
51. Statistical Pocket Book of Bangladesh, 1991
Bangladesh Bureau of Statistics
52. Sun-cleaned Drinking Water
Professor David Morley
Tropical Child Health Unit, London
53. The Flood of 1988 in Bangladesh : "An Assessment of Damages and Losses"
- Monowar Hossain
Multidisciplinary Action Research Centre. September, 1989
54. The Local Govt. Engineer in Disaster Recovery
- Australian Counter Disaster College
Snowy Mountains Engineering Corporation Limited
55. UNHCR Handbook for Emergencies
Part One : Field Operations
United Nations High Commissioner for Refugees, Geneva, December, 1982

RECEIVED AUG 3 1 1993

DISASTER MANAGEMENT HANDBOOK FOR BANGLADESH

PART - IV COMMUNICATION/RECORD KEEPING/ FINISHING AND LEAVING

নাম	ঠিকানা	পরিবারের সংখ্যা	বরাদ্দকৃত মাল	স্বাক্ষর
১। মাহমুদ মিয়া	ডৌলতপুর	৬ জন	৪	মাহমুদ
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৩। মনু মিয়া	গন্ডার বন	৮ "	৫	মনু মিয়া
৪। মাজুম	চকোরিয়া	৬ "	৮	মাজুম
৫। নজরুল মিয়া	শিবচর	৪ "	২	নজরুল মিয়া
৬। মতিলাল	মাজুমপুর	১৬ "	১০	মতিলাল
৭। তারিখ মনন	কড়িয়া	৫ "	৬	তারিখ মনন
৮। মতিলাল	শিবচর	৬ "	৬	মতিলাল
৯। মতিলাল	বন্দার বন	৭ "	৪	মতিলাল

জিনিসের নাম	কেজি	গ্রাম	সংখ্যা
মুড়ি	৩৫০০	৫০	৩০.৪০
চিনি	১২০০০	৫০০	১.৫.১০
বিস্কুট	X	X	১০০০
কপোত	X	X	২৫০০
লাঠি	X	X	৩২০০
সুড়	২০০০	৫০	X
দেয়াল	X	X	২০০০
ক্রয়	X	X	৫০০০



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PART - IV COMMUNICATION/RECORD KEEPING AND FINISHING AND LEAVING

MD. SAIDUR RAHMAN
Director
Bangladesh Disaster Preparedness Centre

SPONSORED BY PACT-BANGLADESH

DHAKA, February 1993

DISASTER MANAGEMENT
HANDBOOK FOR BANGLADESH

W. T. R. A. S.
COMMUNITY DEVELOPMENT BOARD
AND
TRAINING AND LEARNING

DISASTER MANAGEMENT HANDBOOK FOR BANGLADESH (PART - IV)

First Edition
February 1993

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Publication Consultant
S M Akhtaruzzaman

Cover Design
Muzharul Haque

Computer Compose
Azim Haider

Computer Design
Daniel Talukder

Published by
PACT Bangladesh/PRIP
House 56, Road 16 (New)
Dhanmondi R/A
Dhaka-1209
Bangladesh

Printed by
Modern Printers &
Advertising Co.
238, Outer Circular Road
Bara Moghbazar
Dhaka

This Handbook has been produced with assistance from PACT Bangladesh/PRIP as part of a grant from the United States Agency for International Development (USAID) Bangladesh.

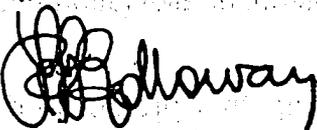
Introduction

Introduction

Bangladesh is a country with more than its fair share of disasters. It also has many public spirited citizens who volunteer their time to help others who have been struck by a disaster. It also has many citizens' organizations, often called NGOs, who play a leading role in relief and rehabilitation work when a disaster has struck.

What it does not have, surprisingly, is a system of training, or manuals, or guidelines for what to do at the time of a disaster. And good disaster response needs good preparation - simply a desire to help is not enough.

This Hand book will help people and organizations prepare themselves for what to do when a disaster strikes. It will also be a ready reference during the disaster response period. Please use it. Your help will be better with the aid of this book. PACT/PRIP is proud to be associated with it.



Richard Holloway
Director, PACT/PRIP

Richard Holloway
Director, PACT/PRIP

Author's Note

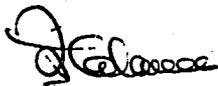
Thanks to Allah, we have been able to produce the "Disaster Management Handbook for Bangladesh". It is the first publication of its kind ever to be produced in the country and it is not the product of one man's, the author's, wisdom but is the distillation of the collected experience of hundreds of people, who have either been the victims of disasters or have been involved in the management of relief and recovery from them.

A team of eight selfless people dedicated themselves for nine months to the production of our handbook. They interviewed three hundred and forty-seven inhabitants of areas prone to different types of disasters and twenty-six managers from government and non-government organisations, whose responsibility is to respond to disasters, when they occur. Fifty percent of those interviewed were women. A large number of publications on disaster management were also studied. Finally, the draft of the handbook was discussed with international disaster relief experts and their views incorporated.

Our handbook aims simply to be a guide for managers of disaster relief at all levels - from Chief Executive Officers to field workers. Those using it may adapt it, to suit the size and capacity of their organisations, and to fit it with their chosen role in the management of relief.

Whether our handbook is a success and can be used effectively by such organisations, will only truly be measured in terms of a reduction in the number of deaths, a lessening of damage to property, and a substantial alleviation in the sufferings of disaster victims.

I should like to thank PACT-Bangladesh for sponsoring this project and to express my undying gratitude to those who worked so devotedly with me on it. Lastly, we should like to acknowledge our collective indebtedness to all those who gave us the invaluable benefit of their experience.



Md Saidur Rahman
Director
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24/2



Planning Commission
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D.O. No.

Date

Jan 28, 1993

Preface

Because of its geographical location and character of the terrain Bangladesh is a disaster prone country. It is affected by natural disasters almost every year. The Deltaic nature of the land contributes further to the loss of human lives and severe damage to property. These disasters also affect the economy badly and development programmes are also disrupted. The government for a long time, and non-governmental organisations in the recent past, have responded to cope with the situation, trying to mitigate sufferings of the people. This handbook is intended to help them deal with the situation more efficiently and effectively.

In presenting the "Disaster Management Handbook for Bangladesh", the author, Mr. Md. Saidur Rahman has combined his theoretical knowledge with his practical experience in disaster management within and outside Bangladesh for more than 25 years.

I hope the handbook will be useful for those involved in disaster response activities. Proper use of this manual will not only reduce loss of human lives but also alleviate sufferings of the people affected by natural disasters.

M. Mokammel Haque
Member
Planning Commission
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SECTION - I

COMMUNICATION/RECORD KEEPING

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How to use this Book

This book contains five sections, grouped in four volumes as follows :

- VOL 1 : Pre-Disaster Stage**
- VOL 2 : Planning A Disaster Response**
- VOL 3 : Operational Response for up to First Three Weeks**
- VOL 4 : Communication/Record Keeping
: Finishing and Leaving**

Each volume contains many chapters, all of which are organized according to the following questions :

What should be done ?

Who should do it ?

Who should be kept informed ?

Questions to ask

("Questions to ask" is a checklist for you to check whether you have done everything suggested in that chapter)

Annexures :

In many chapters there are references to **Annexures**. These are reference materials on yellow paper at the end of each section which are available for you to photo copy as needed.

Please use this book as a reference book according to your needs. The materials can also become the basis for training courses.

We suggest that the Head Office of an organization should keep Vol 1 and 2 and the field workers should keep copies of Vol 3 and 4.

Best of luck in using this book - we hope it helps you.

ABBREVIATION

ADAB	Association of Development Agencies in Bangladesh
ADPC	Asian Disaster Preparedness Centre
AIS	Advanced Information Systems
AIT	Asian Institute of Technology
AODRO	Australian Overseas Disaster Response Organisation
BBC	British Broadcasting Corporation
BDPC	Bangladesh Disaster Preparedness Centre
BDR	Bangladesh Rifles
BDRCS	Bangladesh Red Crescent Society
BMD	Bangladesh Meteorological Department
BP	Bangladesh Police
BRAC	Bangladesh Rural Advancement Committee
Brs	Brothers
BSS	Bangladesh Sangbad Sangstha
C/A	Commercial Area
CAAB	Civil Aviation Authority of Bangladesh
Cap	Capsule
CARE	Cooperative for American Relief to Everywhere
CEO	The Chief Executive Officer
CHO	Carbohydrate
CI	Corrugated Iron
cm	Centi-metre
CPP	Cyclone Preparedness Programme
CSM	Corn-Soya Milk
CV	Curriculum Vitae
DCMU	Disaster Coordination and Management Unit
DMC	Disaster Management Centre
DMU	Disaster Management Unit
DPHE	Department of Public Health & Engineering
DPIS	Disaster Preparedness Information System
DRC	Delivery Receiving Challan
DRC	Disaster Resource Cell
DRU	Disaster Resource Unit
DSM	Dried Skim Milk
e.g	as for example
ENA	Eastern News Agency
F.A.Box	First-aid box
FAO	Food and Agriculture Organisation
FEMA	Federal Emergency Management Agency
FSCD	Fire Service and Civil Defence
FWC	Family Welfare Centre
FWV	Family Welfare Visitor
gm	Gram
GOB	Government of Bangladesh
Govt.	Government
HDP Bag	High Density Polythene bag

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HF	High Frequency
Ht	Height
i.e.	That is
I.V.fluid	Intra-venous fluid
ICDDR,B	International Centre for Diarrhoeal Disease and Research, Bangladesh
ICRC	International Committee of Red Cross
IUBAT	International University of Business Agriculture & Technology
IVS	International Voluntary Services
Kg	Kilo-gram
LO	Logistics Officer
LRCS	League of Red Cross Societies Limited
Ltd	Limited
LTI	Left Thumb Impression
MCH	Mother and Child Health
ml	Millilitre
MOH	Ministry of Health
MOR	Ministry of Relief
MRN	Material Receiving Note
MRR	Material Received Receipts
MUAC	Mid-Upper Arm Circumference
NCHS	The US National Centre for Health Statistics
NGO	Non-Governmental Organisation
No	Number
ORS	Oral Rehydration Saline
PACT	Private Agencies Collaborating Together
PEM	Protein Energy Malnutrition
PO	Project/Programme Officer
PRIP	Private Rural Initiatives Project
Pvt	Private
Qty	Quantity
R/A	Residential Area
RCY	Red Crescent Youth
RTI	Respiratory Tract Infection
SADMC	South Asian Disaster Management Centre
SENA	Servicio Nacional de Aprendizaje (National Training Service of Colombia)
SL	Serial
SPARRSO	Space Research and Remote Sensing Organisation
SRR	Supply Replenishment Request
SSB	Single Side Band
T & T	Telephone & Telegraph
Tab	Tablet
THC	Thana Health Complex
Tk	Taka
TNO	Thana Nirbahi Officer
Tr.Benzyne	Tincture Benzyne
Tr.Iodine	Tincture Iodine

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TV	Television
UK	United Kingdom
UNCHS	United Nations Commissioner for Human Settlement
UNEP	United Nations Environmental Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USA	United States of America
VDP	Village Defence Party
VHF	Very High Frequency
VHSS	Voluntary Health Services Society
Vr.	Voucher
WAPDA	Water and Power Development Authority
WDT	Water Disinfection Tablet
WFP	World Food Programme
WHO	World Health Organisation
WMO	World Meteorological Organisation
WPT	Water Purification Tablet
Wt	Weight



Satellite photo of Cyclone in April 29, 1991.

**SECTION - I
COMMUNICATION/RECORD KEEPING**

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CHAPTER - I : A REVIEW MEETING

Hold Review Meeting Daily

What should be done ?

1. As a general rule, hold meetings daily with your own organisation's staff and volunteers to review responses already made and discuss the operation programme for the next few days.
2. Hold brief but effective meetings in order not to waste valuable time.
3. Ensure that holding of such review meetings are already in the organisation's preparedness plan.
4. As far as practicable, hold the meetings at the same venue and at the same time every day.
5. If practicable, hold review meetings at night or early in the morning.
6. In the meetings, among other items review the following :
 - all phases of the organisation's operational responses up to date
 - goals/objectives achieved
 - important lapses/failures
 - co-ordination/liaison with local government/ administration
 - co-ordination/liaison with other operating agencies
 - involvement of local people/volunteers
 - supply/stock positions of food, medicines and other relief items
 - transport situation
 - activities planned for next 2/3 days

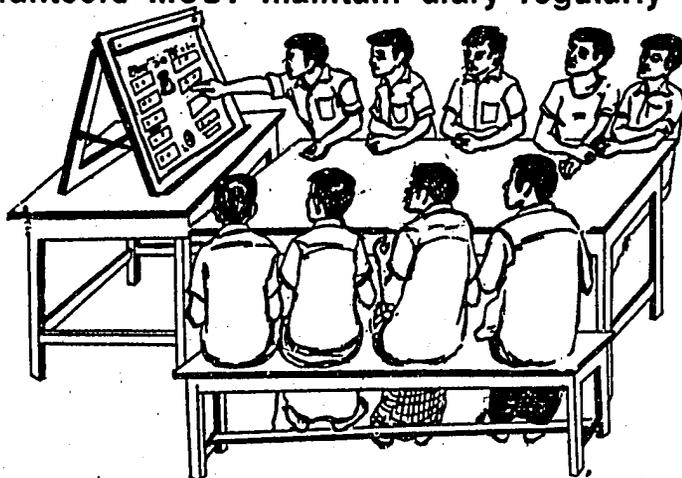
All staff members and regular volunteers MUST maintain diary regularly

Who should do it ?

- First-in/relief/emergency work supervisors/team leader
- D M U/regional/local offices

Who should be kept informed ?

- D M U/regional/local offices
- Govt. at local, district and national levels



Questions to ask

- Are the review meetings taking too much time and hindering emergency work ?
- Is any purpose being served by such meetings, or are these becoming mere routine operations ?
- Are our own workers taking these meetings quite seriously ?
- Have we provided for holding such meetings in our preparedness plans ?
- Should we let any outsider/other agency worker attend our own organisation's meeting ?
- Should we keep the local govt./administration informed of such meetings?
- Are the staff members/regular volunteers maintaining diary regularly?

CHAPTER - I : B COMMUNICATION WITH HEAD OFFICE

Keep in touch with head office

What should be done ?

1. As a general rule, always keep in touch with head office.
2. Maintain effective communication with head office via regular telephone/telegram/wireless/letters.

List of Radios Telecommunications Network available in disaster prone areas have been given at annexure - IV : I : B. 1

3. Set up at the very beginning, time intervals at which such communication will be made.
4. Establish regular correspondence with head office, again preferably at pre-determined intervals.
5. Establish, if necessary, a regular messenger service' between the field station/operation team and the head office via regional office, if there is any.
6. Send/mail regular/periodic progress reports to head office.
7. From time to time, send/mail interim reports to head office.
8. Also send/mail periodically financial and/or distribution reports to head office.
9. Encourage regular field visits by head office staff.
10. Also send operational staff to visit head office as and when required to explain the programme to policy makers.
11. Consider routine messages/reports through an intermediary office at district/divisional level.
12. Use pre-determined prescribed forms for urgent messages for supply replenishment.

A specimen format for Supply Replenishment is Annexed at IV : I : B. 2

Who should do it ?

- First-in/relief/emergency workers
- Medical teams

Who should be kept informed ?

- D M U
- Local/regional level offices

Questions to ask

- Have we explored all alternative modes of communication ?
- Do we maintain effective working relationship with CPP in the coastal belt to use their wireless sets for communication with our head office ?
- Do we keep contact with other agencies in disaster prone areas who have radio facilities ?
- Have we worked out an arrangement with D M U for mutual visits of staff ?
- Which operational staff can we spare to visit the head office ?
- Do we maintain effective working relationship with Police/BDR/Army/Navy and Air Force to use their wireless network for communication with Head Office ?

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CHAPTER - I : C

CO-ORDINATION WITH LOCAL GOVT./OFFICE

Co-ordinate with local government

What should be done ?

1. Co-ordinate your own organisation's activities with those of local government.
2. Keep local government agencies informed of your operations as far as practicable.
3. Co-ordinate with local government officials through personal/individual contact.
4. Encourage formation of co-ordination meetings/forums involving other operating and local government agencies.
5. Regularly attend/participate in these co-ordination meetings/forums.
6. In appropriate cases, co-ordinate with local government officials through co-ordination bodies/agencies.
7. For maintaining co-ordination with local government, visit government offices from time to time.
8. Explore the possibility of timely/regular submission of reports as co-ordination tools.
9. Observe how other operating agencies are co-ordinating with local government and promote a uniform practice.
10. To the extent feasible, always seek the help and co-operation of local government agencies in operations.

Who should do it ?

- First-in/relief/emergency workers
- Medical teams

Who should be kept informed ?

- D M U
- Local/regional offices

Question to ask

- Are we drawing on our immediate past experiences with regard to co-ordination in the present case ?
- Do we maintain a list of all important and relevant local government agencies, especially their specific contact persons ?
- Do we attend all co-ordination meetings/forums regularly ?
- Have all operating agencies set up a co-ordinating body of their own ?
- What more can we do to promote co-ordination ?
- Are we involving local government agencies in these operations in which their participation is useful (e.g. distribution of rations door to door, maintenance of law and order in camps, etc.) ?
- Are we submitting regular reports at co-ordination meetings?
- Side by side of co-ordinating with local government agencies, are we co-ordinating with other operating agencies?
- Do we share the decision of the co-ordination meeting with the Head office?

CHAPTER - I : D CO-ORDINATION WITH OTHER ORGANISATIONS

Co-ordinate with other Locally operating NGOs /Organisations

What should be done ?

1. As a general principle, to the extent feasible, always co-ordinate the activities of your own organisation with those of other operating agencies.
2. Remember that the best results would be achieved if such co-ordination is done at the operational level.
3. Co-ordinate with other operating agencies through personal/individual contact.
4. Co-ordinate through ADAB. Inform ADAB of the work that you are doing through the ADAB DRTS (Disaster Response Tracking System) form. ADAB is used by the GOB and donors as the source of information on NGO activity.
5. Let your organisation also co-ordinate with other operating agencies at the central regional and district levels.
6. Hold co-ordination meetings regularly with other organisations operating in the same area.
7. Involve as many operational organisations as possible in the meeting.
8. Attend these meetings/forums regularly.
9. If practicable, suggest pre-determined dates, times and venues for such meetings.
10. If time permits, visit the offices of other agencies from time to time.
11. To the extent feasible, share information/plan with other operating agencies.
12. Co-operate with other operating agencies in evolving a uniform practice, if practicable, for co-ordinating with local government.

Who should do it ?

- First-in/relief/emergency workers
- Medical teams
- District/local offices
- Disaster Coordination and Monitoring Unit (DCMU)

Who should be kept informed ?

- Headquarters
- District/regional offices

Questions to ask

- Are we maintaining a list of other operating agencies and their contact persons ?
- Are our field level workers in informal close relationship with those of other operating agencies ?
- Have we taken care to maintain a list, and monitor the operations, of other operating agencies ?
- Are we a member of ADAB ?
- Are we sending information on our activities to ADAB ?
- Do we have blanks of ADAB DRTS forms ?
- Are co-ordination activities conducted at the central level quickly sent down below to the field level in order to enable operating staffs to follow directions, and keep themselves informed ?
- Do you know the locations of the field offices of the other operating agencies ?
- Should we request for fixed venue, date and time of co-ordination meetings/ forums?



Courtesy : Image Bank, BRDB

CHAPTER - I : E

ACCOUNTING AND RECORD KEEPING

Keep proper accounts and maintain adequate records

What should be done ?

1. Always remember that whatever may be the magnitude of the disaster, proper accounts and records have to be maintained for internal and external accounting of the organisation.
2. As a general rule, design the accounting and record keeping forms/formats in such a way that they are simple and can be used by even non-professional field workers.
3. Remember that accounting and record keeping are two very essential elements of financial management of the organisation.
4. If accounting and record keeping requirement and procedures are not included in the organisation's disaster preparedness plan, take steps for inclusions of such provisions.
5. For accounting and record keeping always use pre-determined forms as far as practicable for uniformity of procedures throughout the organisation.
6. Keep an adequate supply of these forms at the operational level.
7. For keeping track of distribution of food and other relief items, always use relief/distribution cards.
8. Always maintain stock books/stock cards.

A sample of a Stock Register is provided at Annexure - IV : I : E. 1

9. Always keep survey forms/lists ready.
10. Always use muster rolls to record and maintain records of all relief distributions.
11. Maintain receipt and expenditure vouchers.
12. Always maintain cash book(s) and cheque register(s).

A format for a sample Cash Book is provided at Annexure - IV : I : E. 2

13. Preserve the delivery challans.

A format for Delivery Challan is provided at Annexure - IV : I : E. 3

14. If camps are set up, maintain up to date camp registers.
15. Also maintain material received receipts (MRR).

A specimen of Material Received Receipts (MRR) is provided at Annexure - IV : I : E. 4

16. For financial reporting to head office, use a statement of receipts and payments periodically.

A sample Statement of Material Receipts and Payments is provided at Annexure - IV : I : E. 5

17. Employ one of the field team members to maintain accounts and records at the field level/for operational centres.
18. Also consider, if necessary, if field team members should jointly maintain such accounts and records.

19. Consider another alternative : accountants deputed from head office to manage accounts and records.
20. Employ one of the field team members to maintain the store/ stock at field/operation centres.
21. Alternatively, entrust the maintenance job to the field team leader, or to field team members jointly, or to the staff deputed from headquarters.
22. Make sure that the organisation's disaster preparedness plan specifies the financial authority of the organisation's officials/workers at different levels.
23. For expediting emergency relief work, make the financial authority rules in this plan very flexible, so that field/operational officials can make necessary purchases, or take other emergency actions as and when required.
24. Engage a procurement team comprising at least three members for central/ headquarters purchases of relief items. Ensure the following procedure for such purchases:
 - the team executes purchase orders after justifying the price and quality of commodities quoted and presented by at least three genuine sellers/suppliers.
 - the team must document its findings in a given format.

A sample format for Tender/Quotation summary is provided in Annexure - IV : I : E. 6

- To meet urgent needs, purchase of emergency relief materials from shops in local markets/weekly markets in the operational area may be allowed. In that case **proper Purchase Resolution should be made as per format annexed as IV : I : E. 7**
25. Give the team leader at the field level financial powers to make single purchases not exceeding Tk. 10,000.00 in each case.
 26. Accept the recipient's acknowledgement as a document for the purchase and payment of the purchase price.
 27. For larger purchases at the field level, if required, engage a procurement team comprising at least three members. Let this team follow the same procedure as the one followed in the case of central/headquarters' purchases.
 28. Always keep all accounting and record keeping books/documents in safe custody, and in charge of one or more designated team members.
 29. Let headquarters' designated staff periodically inspect and verify all accounts.

Who should do it ?

- Field team members/D M U
- Accountants/store keepers deputed by headquarters

Who should be kept informed ?

- D M U
- Local/regional offices

Questions to ask

- Are we maintaining accounts and records in the forms required by the Accounts Section at the HQ ?
- Do we need to use English in the accounting and record keeping forms ?
- Does our preparedness plan provide for adequate accounting and record keeping features especially various forms/formats ?
- Do the field offices and D M U have adequate supplies of all accounting and record keeping forms ?
- Have we included all important information in our various cards (e.g., relief/distribution cards) ?
- How do our forms/cards compare with those used by other operating organisations ?
- Are all accounting and record keeping books and documents in safe custody and in charge of one or more designated team members ?
- Who inspects the accounting and record keeping documents ?
- Is cash book verified frequently by the team leader ?
- Who verifies the entries in the camp registers ?
- If one or more team members are to maintain accounts and records, were they trained earlier adequately ?
- Are financial authorities of the organisation's officials, especially the powers of field level officials in emergency, spelt out unambiguously in the organisation's disaster preparedness plan ?
- Have we compared the costs and benefits of central vs. local purchases ?

CHAPTER - I : F

KEEP SUPPLIES COMING

What should be done ?

1. Anticipate supply shortages and ensure steady flows of supplies for uninterrupted relief distribution work.
2. To ensure continuity of supplies, establish an emergency procurement and logistics unit at the central office of the organisation.
3. If possible establish a similar unit at the operational level/the regional/local level.
4. Consider, adopt and implement a procurement plan at all levels of the organisation.
5. From time to time purchase goods and services as needed to replenish or build up stocks.
6. For items which are expensive to transport, or/and are needed for emergencies, encourage local purchases at the field level or regional levels, if available.
7. To ensure continuity of supplies, practice constant two-way communication/reporting/feedback between field and head office about procurement/stock/distribution positions.
8. Also consider setting up base stores at zonal/field level offices.
9. To minimize disruptions in transportation, consider to have permanent/formal carrying contract with transport agencies/carrying contractors.
10. Alternatively, hire trucks for carrying from time to time as per need.
11. Keep all team members always informed about supply positions.

Who should do it ?

- Field team members
- Local/regional offices
- Logistics/supply section at head office.
- D M U

Who should be kept informed ?

- Field Team Leader
- Local/regional offices
- Headquarters Supplies and Logistics section
- D M U

Questions to ask

- Are we constantly keeping track of all supply positions so as to anticipate shortages?
- Does our preparedness plan provide for the establishment of a headquarter's supplies and logistics unit or/and a similar unit at regional/field level ?
- Do we have a procurement plan for all levels of the organisation ?
- Have we reviewed our procurement plan and are we working according to the provisions of this plan ?
- Do we maintain a list of transport agencies, the ones we can call for service if and when needed ?
- What items should we buy in bulk through formal tenders/contracts ?
- Do we have a clear idea or indication of the supplies needed?
- Have we considered the advantages and disadvantages of setting up base stores at zonal/district levels ?

SECTION - II
FINISHING AND LEAVING

CHAPTER - II : A

JUDGING WHEN TO FINISH RELIEF

What should be done ?

1. Be aware that the judging when to finish relief is a crucial but complicated decision.
2. Ideally, on the basis of all available information and past experiences, decide when to finish relief at the time of planning the operations.
3. Alternatively, wait for and collect as much information as possible on the effects of the disaster, and then decide when to finish relief depending upon the extent of damages and destitution caused by the disaster.
4. Also consider when to finish relief by observing the speed of recovery by the community itself.
5. Remember several other factors in judging when to finish relief. These factors, in order of importance, as perceived by a sample of NGOs, include:
 - decide when to finish depending upon the nature and the extent of damages caused by the disaster.
 - decide depending upon the speed of restoration of economic activities/employment of the area.
 - decide depending upon the socio-economic condition/background of the area.
 - decide depending upon the decision of operation team.
 - decide depending upon the decision of co-ordination meetings.
 - decide after considering assurances/initiatives from government/large agency with long-term commitment and plan.
 - decide by following instructions of the government.
6. Always remember that a very important principle which should help decide the time to finish relief involves increasing the affected people's actual and potential capacities, and reducing their vulnerabilities to the disaster.

Who should do it ?

- Field team leader
- DMU

Who should be kept informed ?

- Beneficiaries and local people
- Local/district administration
- Other operating agencies and ADAB/VHSS
- DMU

Questions to ask ?

- What factors have we taken into account in deciding when to finish relief ?
- Will any other operating agency also leave at the same time we'll leave ?
- Have we taken our very recent experiences into account in deciding when to finish relief ?
- Are we planning any other activity (e.g. rehabilitation) after we have finished relief ?
- Have we discussed the matter with other operating organisations ?
- Do we need to inform the local or/and district administration ?
- In what conditions the affected community will be, when plan to finish relief is implemented ?
- Have we forewarned the relief recipients/camp dwellers that we would be finishing relief with effect from such and such date ?
- Does the disaster preparedness plan of our organisation provide for operating team's inputs into decision making regarding when to finish relief ?
- Are we planning to finish relief completely on a particular date, or are we planning to phase out the operation gradually ?
- What do the local affected people think about our finishing relief ?
- What do the local leaders/local administration think about our finishing relief ?
- Have we exhausted all supplies of food and other relief items ?
- Have we made a decision to carry out a preliminary survey to assess medium-term and long-term rehabilitation needs ?

CHAPTER - II : B

RESTORING THE PREVIOUS SITUATION OR CHANGING IT

What should be done ?

1. Always remember that the relief operations in the affected area should not end in just restoring the previous situation but in changing and improving it.
2. Remember that, as a principle, in the changed post-relief situation, the desired improvements should be reflected in increased actual and potential capacities of the affected people, and their reduced vulnerabilities to similar future disasters.
3. In order to leave the affected people in a better situation than before, emphasize on institution and leadership building.
4. Incorporate such institution and leadership building provisions in the organisation's disaster preparedness plan.
5. For improving the situation, consider providing long term credit and input support
6. In appropriate cases, consider providing long-term relief support.
7. Also consider infrastructure and communication development.
8. In order to improve the situation of the affected area/people, consider the following additional activities in order of priority :
 - Setting up a credit scheme.
 - adopting and implementing long-term development projects.
 - introducing and maintaining additional income generating activities
 - undertaking awareness building activities
 - providing support to existing institutions
 - providing for additional skill training
 - encouraging health education support and immunization
 - Providing agricultural support
 - improving marketing facilities - building people's organisations
9. Be aware that in deciding whether to restore the previous situation or to change/improve the situation, NGOs tend to consider the following factors :
 - economic condition of the area
 - economic status of individual families
 - land ownership pattern in the area
 - the degree of damages to assets and crops
 - future vulnerability/risk
 - capacity/capability of the operating organisation itself
10. If improving the situation is not feasible for genuine reasons, or for the present time, consider restoring the previous status, at least temporarily by doing the following, arranged in order of priority :
 - help restoring economic activities back to normal
 - help regaining lost assets/crops - replacing lost assets/crops
11. To the extent practicable, co-ordinate mid and long-term activities/programmes with those of governmental and other operating agencies.
12. Make it a point to keep governmental and other agencies informed of your own organisation's mid and long term plans/programmes for the affected area.
13. Introduce and continue a system of monitoring post-leaving situation in order to keep track of developments in the affected area.

14. Consider deputing specific personnel for some time for this purpose, or utilizing your own organisation's regional/local office for the same.

Who should do it ?

- Field team leader and members
- D M U

Who should be kept informed ?

- Beneficiaries and local people
- Other operating agencies
- Local/district administration
- Local/regional offices
- D M U

Questions to ask

- Will the capacity/capability of our own organisation permit improving the situation ?
- What activities will have to be introduced and maintained for improving the situation ?
- For how long shall we have to be in the affected area to improve the situation ?
- What are our concrete goals/objectives for improving the situation ?
- Are affected people's capacity-increasing and vulnerability-reducing programmes/provisions incorporated in our disaster preparedness plan ?
- What is our experience of the most recent such occurrence ?
- How much will it cost the organisation to improve the situation ?
- Do we have adequate budget provisions ?
- Do we have experience in conducting credit and input support programmes ?
- If we do not, can we work with other operating agencies having such experiences ?
- Did we work in the same area before ?
- If we did, what was our programmes and experiences at that time ?
- Do our funds permit any long-term development projects ?
- What projects should we adopt, if at all, with what goals/objectives ?
- Will our projects, if any, tend to substitute or supplement similar ongoing, or recently introduced, projects in the area ?
- Does our organisation currently run any income generating activities at any location, including one or more in the affected area ?
- Do we have programmes/experiences in health education support and immunization ?
- Do we have programmes/experiences in providing agricultural support ?
- Can our programmes really compensate for the damages to assets and crops ?
- Are the governmental agencies undertaking long-term development projects in the affected area ?
- Can our organisation support governmental efforts/plan effectively, and if so, how ?
- To what extent can we really co-ordinate our long-term plans/programmes with those of other operating agencies and the govt. ?
- What mechanism have we thought of to monitor the situation after we leave ?

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CHAPTER - II : C INVOLVING LOCAL PEOPLE

What should be done ?

1. As a principle, always involve local people in all phases of the disaster management cycle : pre-disaster, during disaster and post-disaster phases.
2. Remember that disaster related operations are more likely to succeed if local people are involved than if they are not.
3. Consider involving local people in the pre-disaster phase in many ways, including soliciting their views/opinions on different elements of the draft pre-disaster preparedness plan.
4. Utilize local people in the following ways, listed in order of importance, during a pre-disaster situation.
 - Raising awareness about risk/vulnerability
 - Conveying warnings
 - Evacuating vulnerable people
 - Evacuating and protecting cattle and other assets
 - Guarding assets and properties
 - Fetching water
 - Sharing transports/boats
 - Setting up camps
 - Maintaining liaison with local administration
 - Maintaining liaison with relief agencies
 - Distributing survival needs
5. Consider utilizing local people in the following jobs during or following a disaster arranged in order of importance, as received by the local people themselves :
 - setting up watch teams and guarding assets and properties
 - rescue of affected/marooned people
 - rescue of cattle/poultry or other assets/properties
 - survey work
 - setting up community store
 - communication with beneficiaries
 - liaising with local administration and relief agencies
 - carrying and distribution of relief materials
 - providing first-aid
 - taking injured and sick to clinics/hospitals
 - taking preventive measures against disease
 - burial of dead bodies and carcasses
 - disinfecting tube-wells
 - minor repairs and improvisation of tube-wells
 - building/shifting/repairing houses
 - sharing homestead land
 - sharing houses.
6. In involving local people, to the extent feasible, consult local administration/ leaders, and keep the administration/ leaders informed.
7. Involve both men and women for designated jobs/services.

8. Design and implement a reward/incentive/appreciation scheme to reward/appreciate good local workers/volunteers, both male and female.
9. If house to house distribution is required or undertaken, to the extent feasible, always associate local people in such operations, at least as guides.
10. Use local volunteers for information dissemination.
11. Consider using local volunteers for help in winding up operations.
12. Design and conduct a post-disaster pre-leaving survey to solicit views/opinions of a random sample of local group regarding various phases of operations just completed.
13. Consider and review the results of this survey to improve upon future operations.
14. In any operation which involves/utilizes local people, as a matter of principle, always associate the organisations own field personnel.

Who should do it ?

- Field team leaders/members
- D M U

Who should be kept informed ?

- Beneficiaries and local people
- Local/district administration
- D M U

Questions to ask

- Does our disaster preparedness plan incorporate involvement/participation of local people as an important component ?
- Should we set up a consultative group with local people/leaders ?
- Are we clearly earmarking jobs/tasks for local people in joint work situations ?
- What are our very recent experiences of operations, if any, in which we involved local people ?
- Are we choosing the best local people for the right tasks ?
- Are our own team members sensitive to local people's opinions and beliefs ?
- Do local leaders approve of our involving local people, specially women, in various operations ?
- Which is the best way to involve local women and girls in operations involving females?
- Are local people themselves willing to participate in assigned tasks ?
- Are local people generally supportive of our actions ?
- Do we have a working knowledge of the available local talents and skills ?
- Were we farsighted enough to prepare lists of local teachers, technicians, tube-well mechanics, etc., at an early stage of our operations ?

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CHAPTER - II : D

JUDGING THE NEED FOR REHABILITATION

What should be done ?

1. Before leaving, carry out a preliminary survey to assess medium term and long-term rehabilitation needs.
2. Involve the local people, especially the affected, in such surveys and assessments.
3. To the extent practicable, co-ordinate proposed rehabilitation measures with those of Government and other operating agencies.
4. Assess the needs for rehabilitation for all important sectors : housing, employment creation, agriculture, livestock, fishing, forestry, environment, roads/embankments and other infrastructures, etc.
5. Assess the needs for rehabilitation based upon a freshly conducted detailed survey (before leaving).
6. In your assessment, if necessary, consider also to rely on surveys conducted during emergency relief operations.
7. If co-ordination meetings/bodies are regular and effective, assess the needs for rehabilitation based upon decisions of these co-ordination meetings/bodies.
8. Consider assessing the needs for rehabilitation based upon policy set by headquarters and capacity of the organisation.
9. In assessing needs for rehabilitation, consider also a few other sources :
 - information/list provided by local administration
 - information/list provided by local social leaders/UP members
 - recommendations made by other locally operating agencies.

Who should do it ?

- Field/team leader and members
- Regional/local offices
- D M U

Who should be kept informed ?

- D M U
- Beneficiaries and local people
- Other operating agencies.
- Local/district administration

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Questions to ask

- Is rehabilitation provision included in our disaster preparedness plan ?
- Is our organisation capable of undertaking and implementing rehabilitation programmes?
- Do we have previous experience of such rehabilitation planning and implementation?
- Do we, as an organisation, specialize in any particular sector(s) ?
- In judging the need for rehabilitation, should we consider one or more sectors ?
- How should we involve local people in surveys and assessments ?
- Do we maintain effective liaison with local/district administration and other locally operating agencies in order to remain informed of their proposed rehabilitation measures?
- How can we co-ordinate our proposed rehabilitation efforts, if any, with those of government and other operating agencies ?
- Is it difficult to conduct a fresh survey to assess rehabilitation needs ?
- Do co-ordination bodies work effectively, and do we attend these meetings regularly?
- Before conducting a fresh survey to assess rehabilitation needs, should we involve/associate D M U's some key people in the survey ?
- What are the existing budget provisions for our proposed rehabilitation work ?
- Do we have the necessary staff and expertise to plan and carry out rehabilitation measures ?

CHAPTER - II : E

PLANNING REHABILITATION

What should be done ?

1. In planning rehabilitation, if at all, always take into account the existing constraints of such proposed measures.
2. Always consider, and keep in perspective, human, material and logistic resources available in planning rehabilitation.
3. Remember that rehabilitation planning will not be meaningful or effective without community participation.
4. Design the rehabilitation plan in such a way that it gets as much integrated as possible with your own organisation's social and economic development programmes, if any, for the currently affected area and similar other areas.
5. Aim at integrating your rehabilitation plan with those of government and other operating agencies, if practical, and also with their broad social and economic programmes.
6. Always invariably consider the management capabilities of your organisation in designing a rehabilitation plan for the affected area.
7. In drawing up a rehabilitation plan, review all surveyed needs and then prioritize the vital ones.
8. Always consider utilizing local resources in a rehabilitation plan.
9. In your plan, emphasize those activities/programmes for which your organisation have the necessary manpower and skill.
10. In planning, set the short-term plan in the framework of your organisation's anticipated or planned long-term development activities.
11. Where the government has definite policies, design your rehabilitation plan within the framework suggested by such policies.
12. If desirable or feasible, discuss the outlines of the proposed rehabilitation plan in co-ordination meetings/bodies, if present and working.

Who should do it ?

- Field/team leader
- Local/regional offices
- D M U

Who should be kept informed ?

- Beneficiaries and local people
- Local/district administration
- M O R
- Other operating agencies

Questions to ask

- Are we involving adequately responsible people in the organisation in designing the rehabilitation plan ?
- In what specific ways are we using community members in drawing up the rehabilitation plan ?
- In what specific ways do we plan to ensure community participation in the proposed plan ?
- Before we proceed to draw up a plan, do we have clear and unambiguous picture of what material and logistic resources to expect for the plan ?
- Do we have adequate knowledge of medium-term and long-term social and economic development programmes of government and other operating agencies for the affected area ?
- Is our proposed plan definite, yet flexible enough in terms of resources, targets and time schedules ?
- What local resources can we utilise in our proposed plan ?
- How do we plan to utilise such local resources ?
- Does our organisation have long-term social and economic development plans for different areas, including the affected area ?
- Do we know enough about government policies regarding such rehabilitation ?
- Is any government policy in direct conflict with our proposed rehabilitation programme(s) ?
- Do we have the requisite manpower and skills to plan, and implement the plan later ?
- Will our proposed plan be critically dependent on uncertain donor support ?

Who should be kept informed ?

- Government and local people
- Local level administration
- MOP
- Other operating agencies

Who should be kept informed ?

- Field level
- Local level offices
- UMG

Who should be kept informed ?

- Government and local people
- Local level administration
- MOP
- Other operating agencies

**PART - IV
ANNEXURES**

A list of Radios/Telecommunications Network

Mode of Operation	Name of the organisation	Network Details
HF/SSB	BDRCS (CPP)	Dhaka- Amtali, Barguna, Barisal, Charfession, Chittagong, Chakoria, Companyganj, Cox's Bazar, Dashmina, Daulatkhan, Galachipa, Hatia, Kalapara, Kutubdia, Lalmohan, Mirsarai, Moheskhali, Manpura, Noakhali, Patherghata, Ramgati, Sandwip, Sitakundu, Sonagazi, Sudharam (Char Bata), Tajumuddin, Teknaf.
HF/SSB	MOR	Dhaka- Barisal, Bogra, Chittagong, Comilla, Dinajpur, Faridpur, Feni, Jamalpur, Jessore, Khulna, Kushtia, Mymensingh, Pabna, Patuakhali, Rajshahi, Rangamati, Rangpur, Sylhet, Tangail
HF/SSB	BMD	Dhaka- Barisal, Bogra, Chittagong, Comilla, Cox's Bazar, Dinajpur, Faridpur, Feni, Ishurdi, Jessore, Khepupara, Khulna, Kutubdia, Maizdi, Mymensingh, Rajshahi, Rangamati, Rangpur, Satkhira, Sitakundu, Srimangal, Sylhet, Tangail, Teknaf.
	CAAB	Dhaka- Chittagong, Cox's Bazar, Jessore, Rajshahi, Saidpur, Sylhet.
	FSCD	Dhaka- Bhola, Chittagong, Cox's Bazar, Khulna, Maijdi, Patuakhali, Rajshahi.
	BP	Dhaka Hqs - 64 District Hqs Battalion Hqs - 9 Battalions, Uttara, Dhaka.
VHF/FM	BDRCS (CPP)	Amtali - Atharo Gashia, Bara Bagi. Barguna- Baliatoli, Naltona. Chakoria - Magnama, Rajakhali. Charfession- Char Kukrimukri, Char Motahar, Dhal Char Companyganj- Gangchil Kalmi, Musapur. Cox's Bazar- Jaliapalang (Ukhia), Khurushkul. Galachipa - Barabaizdia I, II Char Kazal (Char Siba) Rangabli (Char Montaz). Hatia - Char Clerk, Nijhumdwip. Kalapara - Lalua(Nishan Baia), Latachapli(Khajura).

		<p>Moheskali - Dhal Ghata, Sonadia. Manpura-Char Nizam, Shakuchia (Koralia). Patherghata - Kakchar. Sandwip - Urir Char. Tajumuddin -Char Zahiruddin. Teknaf - Bahar Chara, St. Martin Island.</p>
	FSCD	<p>Dhaka - 12 Fire Stations in Hqs Dhaka city, 3 Fire Stations at Narayangonj 1 Fire Station at Demra 1 Fire Station at Tongi All Fire vehicles Chittagong - 9 Fire Stations at Chittagong City. All Fire Vehicles Khulna - 5 Fire Stations at Khulna City. All Fire Stations Rajshahi - 2 Fire Stations at Rajshahi City. All Fire Stations.</p>
	BP	<p>64 District Hqs - 512 Thanas Selected Thana - Selected Police Outposts.</p>
VHM/AM (Air-GROUND)	CAA	<p>Dhaka, Chittagong Cox's Bazar, Ishurdi, Jessore, Rajshahi, Saidpur, Sylhet.</p>
GENTEX	BMD	<p>Chittagong, Chittagong CTO, Chuadanga, Dhaka CTO, Dinajpur, Faridpur, Feni, Hatia, Khulna, Kustia, Madaripur Court, Maijdi, Mongla, Patuakhali, Rajshahi, Rangpur, Sylhet.</p>
TITAS GAS	VHF	<p>Habiganj, Brahman Baria, Ashuganj, Narshingdi, Narayanganj, Demra, Manikganj, Tangail, Joydevpur, Tarakandi (Jamalpur), Dhaka (at Kawran Bazar, Shantinagar and Motijheel C/A)</p>
BAKHRABAD GAS Co. LTD.	VHF	<p>Dhaka, Demra, Comilla, Feni, Maijdi (Noakhali), Chandpur, Laksham, Chittagong.</p>
POLICE :		<p>All Police Stations at Thana level are equipped with wireless sets</p>

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Format for Supply Replenishment Request**URGENT**

Name of the Organisation : _____

Location of the Operation Area : _____

Name of the recipient/Team Leader : _____

No. _____

Purpose of the requirement : _____

Date : _____

Sl. No.	Description of item	Qty/Nos.	Remarks

Authorised by :
(At the Head Office)

Name : _____

Designation : _____

Signature : _____

Date : _____

Requisitioned
(From the field)

Name : _____

Designation : _____

Signature : _____

Date : _____

This should be made in duplicate so that if the request goes astray, it can be checked

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A Sample of Stock Register

Name of Item : _____

Place _____

Folio No. _____

Receipt					Issue				Balance	Signature of stock keeper	Checked by
Date	MRR NO.	Source	Qty.	Total	Centre	Centre/Person	Delivery Challan No.	Qty.			

A Sample Cash Book

Debit				Credit			
Date	Vr. No.	Particulars	Amount Tk.	Date	Vr.No.	Particulars	Amount Tk.

Total Payment : _____

Balance : _____

A Sample of Delivery Challan

Name of Organization _____

Original

Name of location of store/purchase _____

Duplicate

Triplicate

No. _____

Date : _____

Destination : _____

By (Transport) : _____

Sl. No.	Name of item	Quantity : bag/carton/unit	Wt.	Remarks

Issued by :

Approved by :

Received by :

Name : _____

Name : _____

Name : _____

Signature : _____

Signature : _____

Signature : _____

Date : _____

Date : _____

Date : _____

Place : _____

Place : _____

Place : _____

* Delivery Challan should be made in triplicate. The original to be kept by the recipient and the duplicate to be returned to source by the transport contactor duly signed by the recipient.

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A Sample of Material Received Receipts (MRR)

Name of the Organisation : _____

Location of the Store : _____

Name and Address of the supplier : _____

Reference of Supply : _____

Sl. No.	Name of item	SR. Folio No.	Qty./Nos.	Remarks

Store-in-charge :

Name :

Signature :

Date :

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A Statement of Material Receipts and Payments

For the period from _____ to _____

Name of the organisation _____

Relief Centre/Operational Area _____

Receipts	Amounts (Tk.)	Payments	Amounts (Tk.)
Opening balance Cash in hand Cash at Bank (A/C. No. _____) Advance from central/head office Loan from Mr. "X"		Purchase Purchase of Rice Purchase of Bread Purchase of Milk Purchase of Pulse Travel/Transport Food/Perdiem Carrying Cost Administrative Cost Advance to Staff/Vols. Total Payment Closing Balance: _____ Cash in hand Cash at Bank (A/C. No. _____)	
Total		Total	

Name _____

Signature _____

Date _____

Cashier _____

Centre Incharge _____

A Sample of Tender/Quotation Summary

Place/Area : _____

Date : _____

Name and Description of item : _____

Time : _____

Sl. No.	Name and Address of supplier	Rate	Remarks

General Remarks/Decisions :

Member (Name) of Purchase and Procurement Committee	Signature	Date
1 _____	_____	_____
2 _____	_____	_____
3 _____	_____	_____

* Seperate sheet for seperate item should be prepared.

A Format for Purchase Resolution

Name of the organisation :

Name of the item :

Location of the Market :

We the undersigned surveyed/visited the market and quality and price of said material with the following seller/supplier.

Sl. No.	Name of the seller/supplier	Unit	Rate	Remarks

We have decided to procure the item from

M/S _____ and/or

M/S _____

at the following rate to which the supplier agreed.

Rate. Tk. _____ per _____

(Rate and unit should be written in words also)

Surveyors :

Sl. No.	Name	Designation	Signature	Date

BIBLIOGRAPHY

1. Disaster Preparedness Manual, ADAB/PRIP
2. African Disaster Handbook
World Health Organisation
Pan-African Centre for Emergency preparedness and Response, 1990
3. Aim and Scope of Disaster Management.
Frederick C. Cuny,
Asian Institute of Technology, Bangkok, Thailand
4. Comprehensive Disaster Preparedness
Action Plan For Flood Control, UNDP, January 1990.
5. Cyclone affected Area Survey Guideline/Directives - CODEC
6. "Cyclone '91" - An Environmental And Perceptual Study
Bangladesh Centre for Advanced Studies (BCAS)
7. Cyclone in Bangladesh
Dr. M. A. Choudhury
Dhaka, 1991
8. Cyclone Disaster - 1991
A First Hand Aerial Survey Report and Recommendation for Emergency
Intervention
- Md. Saidur Rahman - OXFAM.
9. Cyclone Relief Programme, 1991
The BRAC Response, September, 1991
10. "Cyclone '91, A cry for effective co-ordination among NGOs"
- Md. Saidur Rahman, Oxfam.
11. Directory of NGOs in Bangladesh, 1992 - ADAB
12. "Disaster Programming Guide Tools"
CONCERN Bangladesh
13. Disaster Management Guidelines,
Save the Children Fund (UK)- Reviewed October 1990
14. Disaster Management : A Disaster Managers Handbook
Carter W. Nick - Manila : Asian Development Bank (ADB) 1991
15. Disaster Mitigation In Asia and the Pacific
Asian Development Bank, Manila, Philippines

16. Disaster Relief Manual
Caritas International - September, 1977
17. Emergency Services in the Event of a Disaster
Bangladesh Disaster Preparedness Centre, BDPC
18. Emergency Standing Orders for Flood
Govt. of the Peoples Republic of Bangladesh
Relief and Rehabilitation Division
Ministry of Food, February, 1984.
19. Emergency Flood Relief Programme - 1988
- Md. Saidur Rahman - OXFAM
20. Families and Floods : ADAB/PRIP/RDRS/JNELC/IVS/PRIP
21. Flood in Bangladesh : Community Development Library (CDL), April, 1989
22. Floods in Bangladesh : Bangladesh Views
23. Flood Policy Study (Inception Report)
To the Govt. of Bangladesh, UNDP, November, 1988
24. Flood Response (Inception Report)
Flood Action Plan 14
Flood Plan Coordination Organisation
Irrigation Support Project for Asia and the Near East (ISPAN).
Ministry of Irrigation, Water Development, and Flood Control. August, 1991.
25. Food Value of the common Country Food Items
Institute of Nutrition and Food Research
Dhaka University
26. Guidelines for Cyclone
Cyclone Preparedness Review Committee, August, 1977
27. Guidelines for Health Care in Refugee Camps
Refugee Health Unit, Somali Ministry of Health.- OXFORD 1983
28. Human Response to Natural Disasters : Issues Involved
- Atiur Rahman, BIDS - January, 1990
29. Inception Report
Disaster Co-ordination and Monitoring Unit
Ministry of Relief and Rehabilitation
30. Joint BDRCS/IFRCS Relief Operation in Aid of Myanmar Refugees, 1992

31. "Lessons Learnt During Cyclone" - April 1991
Ministry of Health and Family Welfare
Govt. of Bangladesh (In joint Collaboration with World Health Organisation)
32. Managing Disaster Response - Three Computer Programs which will help
(i. Disaster Information System -DIS, ii. Disaster Preparedness Information System - DPIS, iii. Disaster Response Tracking System - DRTS)
PACT/PRIP, Aug.'92, Dhaka, Bangladesh
33. Management of Severe Protein-Energy Malnutrition at Children's Nutrition Unit.
Dhaka
- Dr. Sultana Khanum - SCF (UK)
34. Map of GEODESEC, July, 1991
35. Maps of Bangladesh
- Graphosman, Dhaka
36. NGO Guide to Disaster Assistance Agreements
USAID, Dhaka, Bangladesh, May, 1992
37. Operation SHEBA, M. Mokammel Haque
June, 1991
38. Patterns, levels, Trends in Mortality and Regional Life Tables For Bangladesh.
Bangladesh Bureau of Statistics
39. Practical Guide to Refugee Health Care, OXFAM Health Unit
(OXFAM Practical Guide No. 2), Second Edition February, 1986.
40. Preliminary Report-Population Census, 1991
Bangladesh Bureau of Statistics
41. Readings in Disaster Management (June, 1983)
Dr. Aqueil Ahmed
Administrative Staff College of India
42. Report of the Child Nutritional Status Survey 1989-90
Bangladesh Bureau of Statistics April, 1991
43. Red Cross Disaster Relief Handbook, League of Red Cross Societies 1970
44. Recommendations for : "A Program Strategy To Enhance Disaster Preparedness and Emergency Response in Bangladesh"
Mr. Erlins Dessau, Mr. David Read Barker
UN. Systems Operational Activities for Development in Bangladesh.
45. Research on the Fallout of Cyclone
(A.M.R. Chowdhury & A.Y. Choudhury)

282

46. Report of The Cyclone Disaster Preparedness Review Committee
Govt. of The Peoples Republic of Bangladesh - 1985
47. Seasonal Dimensions to Rural Poverty :
Analysis and Practical Implications
Robert Chambers, Richard Longhurst
Institute of Development Studies
University of Sussex
United Kingdom.
48. Selective feeding Programme, OXFAM Practical Health Guide No. 1
- Dr. Tim Lusty, Pat Diskett.
49. Small Atlas of Bangladesh
- Bangladesh Bureau of Statistics, 1991
50. Standing Orders For Cyclone
Govt. of the People's Republic of Bangladesh, Ministry of Relief and
Rehabilitation, 1985.
51. Statistical Pocket Book of Bangladesh, 1991
Bangladesh Bureau of Statistics
52. Sun-cleaned Drinking Water
Professor David Morley
Tropical Child Health Unit, London
53. The Flood of 1988 in Bangladesh : "An Assessment of Damages and Losses"
- Monowar Hossain
Multidisciplinary Action Research Centre. September, 1989
54. The Local Govt. Engineer in Disaster Recovery
- Australian Counter Disaster College
Snowy Mountains Engineering Corporation Limited
55. UNHCR Handbook for Emergencies
Part One : Field Operations
United Nations High Commissioner for Refugees, Geneva, December, 1982

RECEIVED AUG 31 1993