

**DISTRICT DISASTER MANAGEMENT PLAN
BANKURA
(2020-2021)**

Prepared by:

**DISTRICT DISASTER MANAGEMENT CELL, BANKURA
WEST BENGAL**

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CHAPTER-1

INTRODUCTION

Bankura though being a rain fed district, it is widely known as the drought prone district of the State. Drought is a regular feature in the North-West part of the district covering Chhatna, Saltora, Gangajalghati, Barjora, Bankura-I, Bankura-II, Mejia, Indpur, Hirbandh & Ranibandh Blocks.

Though this district receives good amount of rainfall, around 1400 mm. annually, is received per year yet cultivation and production of crop primarily depends on constricted period of erratic rainfall. About 80% to 90% rainfall is generally received by the district from June to September depending on the onset of monsoon.

A conspicuous feature of this district is the absence of significant rainfall in the month of September and October. High runoff rate of rain water, inadequate storage facilities of the surface – runoff and low water holding capacity of the soil accelerate the drought situation.

High run off because of undulating terrain and lack of proper water-harvesting & micro watershed developments makes situation more pre-carious.

After the arrival of monsoon the district registers many cases of flash-flood and inundation of many low-lying areas of the district like a part of Mejia, Barjora, Patrasayar, Kotulpur, Indus, Sonamukhi, Raipur, Sarenga Blocks adjoining the major rivers & tributaries flowing through the district like Damodar, Dwarakeswar, Kangsabati, Shali and others.

There is no drainage problem in the district due to its undulating topography, yet the incidence of flood is not uncommon, due to siltation of rivers resulting in overflowing in case of heavy rain.

However, heavy rainfall in the district & in the upper catchment areas of Damodar River, coupled with breaches of river embankments and release of excess water from Kangsabati and D.V.C Irrigation Project inundate Khariff Cropped areas in different parts of the district specially, in the Bishnupur Sub-division. That results in loss of crops, damage of houses and other properties.

Flood or flood like situation has attributed a new dimension to soil erosion by formation of “GULLY” due to tendency of the river (specially Shali at Sonamukhi & at Patrasayer block) to change its course of direction. This problem may interfere with the livelihood and habitat of the people, in the downstream areas in a severe manner in future.

Apart from drought and flood, hail storm, thunderstorm, Road accident etc. are also of common occurrence in this district, although the extents of damage in these cases are not as expensive as it caused by draught or flood.

The depredation caused by wild elephant is a common phenomenon in the district of Bankura. In the present scenario, elephant depredation in few places of this District causing a great deal of loss of life and properties.

With a view to mitigate the problems through adequate well-in-advance preparedness, this action plan is drawn to boost the management works in course of relief and rescue operation.

Well-in-advance preparedness with definite chain of command would certainly shorten the reaction time at the time of disasters and invariably mitigate the colossal damage by drought, flood and other such devastating natural catastrophic as well as other disasters.

DISTRICT PROFILE

• Geography

The District Bankura is bounded by latitude 22°38' N to 23°38' N and longitude 86°36' E to 87°47' E. It has an area of 6,882 square Kilometres (2,657sq. mile). River Damodar flows along the north and north-east boundary of the district. The adjacent districts are Bardhaman in the north, Paschim Medinapore in the south, Hoogly in the east and Purulia in the west.

Bankura is located in the south western central part of the State of West Bengal interfaced between the [plains of Bengal](#) on the east and [Chhota Nagpur plateau](#) on the west.” It is a part of Midnapur Division of the State and included in the area known as “Rarh” in Bengal. The areas to the east and north-east are low lying [alluvial](#) plains, known predominantly rice bowl of Bengal. . The western portion, with [ferruginous](#) soil and hard beds of [laterite](#), marks the gradual descent from the table land of Chhota Nagpur to the delta of lower Bengal, consisting largely of [spurs](#) projecting from the western tableland and of low swelling ridges. However, there is no marked ridge of hills. Much of the area is covered with jungles. In the northern portion of the district the alluvium contains seams of coal belonging to the Raniganj system.

The climate, especially in the upland tracts to the north-west, is much drier than in eastern or southern Bengal. From the beginning of March to early June, when the [monsoon](#) sets in, hot westerly winds prevail. During the long dry season large extents of [red soil](#) with hardly any trees lend the country a scorched and dreary appearance. In the eastern part the eye constantly rolls on vary expanding rice fields, green in the rains but parched and dry in summer. The monsoon months, June to September, are comparatively pleasant, as the weather is not as sultry as in other parts of Bengal.

1. **District Location:-** Between 22°38' N & 23°38' N Latitude
&
Between 86°36' E & 87°45' E Longitude
2. **Geographical area:-** 6882 Sq. Km
3. **Climate:-** Tropical, dry and sub-humid.
4. **Soil type:-** (i) Red (ii) Alluvial (iii) Laterite
5. **Soil structure:-** (i) Sandy ,(ii)Sandy loam ,(iii) Loamy , (iv) sandy clay loam,

(v) Clay loam (vi) Clay etc.
6. **Important rivers:-** Damodar, Dwarakeshwar, Kangsabati
(Other rivers:- Silai, Sali & Gandheswari)
7. **Forest area:-** 1337 Sq. Km. (19.4 %)

Administrative Set up

1	Block		22
2	Police Station		23 + 2 female PS
3	Gram Panchayat		190
4	Village		5187
5	Mouza	Total	3828
		Inhabited	3543
		Un-inhabited	285

Sub-Div.	Police Station	Blocks	Municipality	Panchayet
Bankura Sadar	9	8	1	75
Khatra	10	8	0	59
Bishnupur	6	6	2	56
Total	25	22	3	190

Urban Area:

1. Bankura Municipality under Bankura Sadar Sub-Division
2. Notified Area – Gouripur under Bankura Sadar Sub-Division
3. Bishnupur Municipality under Bishnupur Sub-Division
4. Sonamukhi Municipality under Bishnupur Sub-Division

Rural Area :

Bankura Sadar Sub-Division	Sl. No	Name of the Block	No. of GP	Name of Police Station
	1	BANKURA-I	6	BANKURA SADAR
	2	BANKURA-II	7	BANKURA SADAR & BELIATORE
	3	CHHATNA	13	CHHATNA
	4	SALTORA	8	SALTORA
	5	MEJIA	5	MEJHIA
	6	GANGAJALGHATI	10	GANGAJALGHATI
	7	BARJORA	11	BARJORA & BELIATORE
	8	ONDA	15	ONDA
	TOTAL		75	
Bishnupur Sub Division	1	BISHNUPUR	9	BISHNUPUR
	2	JOYPUR	9	JOYPUR
	3	KOTULPUR	8	KOTULPUR
	4	INDUS	10	INDUS
	5	PATRASAYER	10	PATRASAYER
	6	SONAMUKHI	10	SONAMUKHI
	TOTAL		56	
Khatra Sub Division	1	KHATRA	7	KHATRA
	2	HIRBANDH	5	HIRBANDH
	3	INDPUR	7	INDPUR
	4	RANIBANDH	8	RANIBANDH & BARIKUL
	5	RAIPUR	10	RAIPUR & BARIKUL
	6	SARENGA	6	SARENGA
	7	SIMLAPAL	7	SIMLAPAL
	8	TALDANGRA	9	TALDANGRA
	TOTAL		59	

• **Demographic Profile (as per 2011 Census)**

Population	Male	1838095
	Female	1758579
	Total	3596674
SC Population	Male	593440
	Female	581007
	Total	1174447
ST Population	Male	183467
	Female	185223
	Total	368690
Literates		2232992
Percentage of rural population		91.67 %
Percentage of urban population		8.33 %
Sex Ratio (per 1000 male)		957
Density of Population (per Square Km.)		523
Literacy rate (excluding 0-6 population)		70.26 %

Demographic Details (as per 2011 Census)

Total Number of HH	Population			Category		
	Adult	Children <6 yrs	Total	SC	ST	GEN
766902	3178024	418650	3596674	1174447	368690	2053537

• **Geographical Area (in Hect.)**

Sl.No	Name of the Sub-division	Agricultural Land (ha)			Grazing land	Forest Land (ha)	Others	Total area
		High	Medium	Low				
1	Bankura Sadar	63833	47699	18218	6923	29095	94062	259830
2	Khatra	48380	42954	26465	2602	36202	41396	197999
3	Bishnupur	176446	226395	81328	20171	125259	236252	865851

(Source : Deputy Director of Agriculture, Administration, Bankura)

RAINFALL OF BANKURA DISTRICT FROM JANUARY 2016 TO DECEMBER, 2019 (IN MM.)

	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Total
Normal	18.00	29.00	27.00	35.00	94.00	258.00	336.00	319.00	197.00	88.00	18.00	4.00	1423.00
2016	9.7	5.9	21.6	2.0	101.5	154.0	280.4	443.26	217.2	44.46	0	0	1280.02
2017	0.0	0.0	25.31	33.41	136.78	204.23	570.9	271.2	191.6	232.46	15.13	3.55	1684.57
2018	0.0	0.11	10.19	125.57	58.81	219.83	321.63	242.63	143.41	27.28	0	36.98	1186.44
2019	0.0	48.43	21.37	56.22	159.49	97.92	199.7	258.63	259.46	153.44	14.7	12.13	1281.49

(Source: Deputy Director of Agriculture, Administration, Bankura)

List of Embankments

Sl. No.	Name of the Block	Name of the River	Name of the Embankment And Name of the Mouza	Type of Embankment
1	Sonamukhi	Damodar	Ranga Metiya	Earthen
2			Nityanandapur	Earthen
3			Belua	Earthen
4			Rupaisar	Earthen
5			Amritpara/Beria	Earthen
6			Bara	Earthen
7			Palshara	Earthen
1	Patrasayer	Damodar	Uttar Patasapur	Earthen
2			Deul Para	Earthen
3			Tasuli	Earthen
4			Ghoradanga	Earthen
5			Uttar Gobindapur	Earthen
6			Panch Para	Earthen
7			Mamudpur	Earthen
8			Salkhara	Earthen
9			Kanthata Ghata	Earthen
10			Mura para Khanpara	Earthen
1	Mejia	Damodar	Damodar Mohan	Earthen
2			Debagram	Earthen
3			Talenda	Earthen
1	Barjora	Damodar	Pratappur	Earthen
2			Sitarampur	Earthen
3			Paharpur	Earthen

1	Onda	Dwarekeshwar	Onda-II G.P.	Earthen
2			Majdiha G.P.	
3			Nikunjapur G.P.	
4			Santore G.P.	
1	Onda	Birai khal	Chingani G.P.	Earthen
2			Ramsagar G.P.	
3			Churamonipur G.P.	

DAM:

Sl. No	Name of Embankment	Type of Embankment	Length	Cultivation in Hect.
1	Kangsabati Dam	River Dam	11.30 Km	6 Lac (nearly)

• Infrastructure (Nos.)

PDS Outlets	Post Offices	Police Station / Outpost	BPHC	PHC	Educational Institutions						Livestock centers	Cottage Industries
					Pry	MP	HS	Madrasa	College	University		
1151	432	43	22	69	3560	134	294	15	15	1	48	5021

• Transport and communication network

 **VHF station/ Telecommunication links/IMD system/ other**

 **Road network –**

National Highway : 289.75 K.M

State Highway : 393 K.M


District Roads : 851 K.M

Village Roads : 632 K.M

Total : 2165.75 K.M

 **Waterways:** On Damodar

 **Railways :** Bankura to Purulia, Bankura to Kharagpur, Bankura to Masagram

 **Internet facilities:** Yes, internet facility in all Gram Panchayet Office by BSNL, Vodafone, Airtel etc.

 **HAM** amateur radio stations : Nil

Aims and Objectives of the DDMP

- **Aims**

The overall aim of this plan is to facilitate actions by different stakeholders to prevent / mitigate disaster, climate risk, to enhance preparedness and to develop capacities for effective disaster management in the district. It further seeks to identify and clarify the roles and responsibilities of the internal and external stakeholders throughout the entire cycle of disaster management i.e. pre-disaster, during disaster and post disaster management phases.

- b) To identify the areas vulnerable to major types of the hazards in the district.
- c) To adopt proactive measures at district level by all the govt. departments to prevent disaster and mitigate its effects.
- d) To define and assign the different tasks and responsibilities to stakeholders during the pre-disaster and post-disaster phases of the disaster.
- e) To enhance disaster resilience of the people in the district by way of capacity building.
- f) Reduce the loss of public and private property, especially critical facilities and infrastructure, through proper planning.
- g) Manage future development to mitigate the effect of natural hazards in the district.
- h) To set up an Emergency Operations Centre at the District level to function effectively in search, rescue, response.
- i) To develop the standardized mechanism to respond to disaster situation to manage the disaster efficiently.
- j) To set up an early warning system so as to prepare the community to deal with the disaster and responsive communication system based upon fail-proof proven technology.
- k) To prepare a response plan based upon the guidelines issued in the State Disaster Management Plan so as to provide prompt relief, rescue and search support in the disaster affected areas.
- l) To adopt disaster resilient construction mechanism in the district by way of using Information, Education and Communication for making the community aware of the need of disaster resilient future development.
- m) To make the use of media in disaster management.
- n) Rehabilitation plan of the affected people and reconstruction measures to be taken by different govt. departments at district level and local authority.

The District Disaster Management Plan (DDMP) is the guide for achieving the objective i.e. mitigation, preparedness, response and recovery. This Plan needs to be prepared to respond to disasters with sense of urgency in a planned way to minimize human, property and environmental loss.

- **Objectives of the DDMP :**

The specific objectives of the DDMP are:

- To identify and map disaster risk,
- To strengthen institutional arrangements in the district by identifying roles and responsibilities of different stakeholders,
- To facilitate enhanced level of preparedness of different stakeholders and develop their capacities, preparation and implementation of action plan for disaster risk mitigation, strengthen mechanism for early warning, response & relief, guide rehabilitation & recovery and facilitate mechanism for monitoring, evaluation, revision and updation.
- To clarify Authority, Responsibility and Relationships as to who is responsible for ensuring that the work gets done, distributing and decision making authority among the team members and the existing organizational units, and establishing formal lines of communication.
- To facilitate mobilization of resources, funds, personnel, supplies and equipment necessary for doing the required activities.
- To establish communication and information management system
- To facilitate Monitoring, Evaluation and updation of the plan from time to time

The District Disaster Management Plan (DDMP) is the guide for achieving the objective related to disaster mitigation, preparedness, response and recovery. This Plan will help in disaster response in a planned way to minimize human, property and environmental losses.

Stakeholders and their responsibilities

The District Collector has the following duties:

To facilitate and coordinate with local Government bodies to ensure that pre and post disaster management activities in the district are carried out.

To assist community training, awareness programmes and the installation of emergency facilities with the support of local administration, non-governmental organizations and the private sector.

To function as a leader of the team and take appropriate actions to smoothen the response and relief activities to minimize the adverse impact of disaster.

To recommend the Commissioner of Relief (CoR) and State Government for declaration of disaster.

❖ DISTRICT CONTROL ROOM

- Vulnerability map of the district.
- Resource Inventory, Capacity analysis.
- List of cut off areas with safe route map for communication.
- List of storage facilities, dealers of food.
- Control room setup/assignment of control room duty.
- Pre-positioning of staff for site operation centers.
- Arrangement of alternative communication /generator sets etc.
- Arrangement of vehicles/boats of for evacuation.
- Dissemination of warning/coordination with District Control room.

❖ **BLOCK DEVELOPMENT OFFICE**

- Vulnerability map of the Block.
- List of cut off areas with safe route map.
- List of storage facilities, dealers of food.
- Control room setup/assignment of control room duty.
- Pre-positioning of staff for site operation centers
- Arrangement of alternative communication/generator sets etc.
- Arrangement of vehicles/boats for evacuation.
- Dissemination of warning/coordination with District control room.

❖ **IRRIGATION DEPARTMENT**

- Communication establishment with District and Block Control Rooms and departmental offices within the district.
- An officer to be appointed as nodal officer.
- Activation of flood monitoring mechanism.
- Methods/communication arrangement of alerting officers on various sites established.
- Mechanism evolved for forewarning settlements in the downstream/ evacuation/ coordination with other dam authority.
- Identification of materials required for response operations.
- Repairs/ under construction activity are well secured.
- Water level gauges marked.
- Inlet and outlet to tanks are cleared.
- Watch and ward of weak embankments & stock piling of repair materials at vulnerable points.
- Guarding of weak embankments.
- All staff informed about the disasters, likely damages and effects.

❖ **AGRICULTURE DEPARTMENT**

- Communication establishment with District and Block /Tahasil Control Rooms and departmental offices within the division.
- An officer to be appointed as nodal officer.
- Information provided about the disaster and likely damages to crop and plantation.
- Organized transport, storage and distribution of seeds/ fertilizers / pesticides.
- Cleaning operation carried out to avoid water logging and salinity.
- Surveillance for pests and diseases being carried out.
- Establishment of public information centers requirements for salvage or re-plantation assessed damage.
- Identification of different areas to be affected by different hazard.
- Listing of irrigation sources with status.
- All staff informed about the disasters, likely damages and effects.

❖ **POLICE ADMINISTRATION**

- Communication establishment with District and Block Control Rooms and departmental offices within the division.
- An officer to be appointed as nodal officer.
- Overall Traffic Management and patrolling of all highways and other access roads to disaster sites.
- Identification of antisocial elements.
- Provision of security in transit camps/feeding centers/ relief camps/ cattle camps/ cooperative food stores and distribution centers.
- Assistance from district authorities for taking necessary action against hoarders, black marketers and those found manipulating relief material.
- Coordination with military service personnel in the area being carried out.
- Officers made available to inquire into and record of deaths.
- All staff informed in-formed about the disasters likely damages and effects.

❖ **DEPARTMENT OF HEALTH**

- Communication establishment with District and Block Control Rooms and departmental offices within the division.
- An officer to be appointed as nodal officer.
- Stockpiling of life saving, anti-diarrhea drugs, de-toxicants, anesthesia and adequate drinking water.
- Arrangement of ambulance/ generators.
- In-house emergency medical teams to ensure that adequate staff available at all times to handle emergency casualties.
- Listing of private health facilities
- Strengthening of disease surveillance.
- Formation of mobile units and ensure communication with them
- Identification of sites in probable disaster areas for site operation areas.
- Awareness generation.

❖ **PUBLIC WORKS DEPARTMENT**

- Communication establishment with District and Block Control Rooms and departmental offices within the division.
- An officer to be appointed as nodal officer.
- Arrangement of extra vehicles/ heavy equipments, such as front end loaders/ towing vehicles/ earth moving equipments / cranes etc.
- Inspection and emergency repair for roads/ road bridges/ underwater inspection/ piers/ concrete and steel work.
- Emergency inspection by mechanical engineer of all plant and equipments.
- Route strategy for evacuation and relief marked.
- Clearance of blocked roads.
- Community assistance mobilized for road clearing.

❖ **DEPARTMENT OF TELECOMMUNICATION**

- Communication establishment with District and Block Control Rooms and departmental offices within the division.
- An officer to be appointed as nodal officer.
- Standby arrangements for temporary electric supply or generators.
- Inspection and repair of poles etc.
- Identification of materials required for response operations.

❖ **PUBLIC HEALTH ENGINEERING DTE.**

- Communication establishment with District and Block Control Rooms and departmental offices within the division.
- An officer to be appointed as nodal officer who will coordinate rural water supply and sanitation matters.
- Arrangement of water tankers and other temporary means of distribution and storage water.
- Adequate arrangement to provide water to relief camps / affected villages, alternate water supply arranged in feeding centers/cattle camps etc.
- Disinfections of water bodies.
- Identification of appropriate potable water supply

Approval Mechanism of DDMP: Authority for implementation (State Level /District level orders)

As defined in Section 30 of DM Act 2005, DDMA shall act as the district planning; coordinating and implementing body for disaster management and take all measures for the purpose of disaster management in the district in accordance with the guidelines laid down by the National Authority and the State Authority.

DDMP review and updation :

- **Plan review and updating:** Periodicity Plan is reviewed every six months and updated every year before onset of monsoon i.e. in the month of May. Following activities have been involved during DDMP review and updation.
 - **Training**-After developing a plan it must be disseminated and managers must be required to train their personnel so that they have the knowledge, skills and abilities needed to perform the tasks identified in the plan. Personnel should also be trained on the organization of specific procedures necessary to support those planned tasks.
 - **Exercise of the Plan** - Evaluating the effectiveness of plan which involves a combination of training events, exercises and real-world incidents to determine whether the goals, objectives, decisions, actions and timing outlined in the plan lead to a successful response. The purpose of an exercise is to promote preparedness by testing policies plans and training personnel.
 - **Revise and Maintain** - Planning teams should establish a process for reviewing and revising the plan. Reviews should be a recurring activity. Review on an annual basis is considered minimum. It should be mandatory to consider reviewing and updating the plan after the following events:
 - a. A major incident.
 - b. A change in operational resources (e.g., policy, personnel, organizational structures, management processes, facilities and equipment).
 - c. A formal update of planning guidance or standards.
 - d. Each activation and major exercises.
 - e. A change in the district's demographics/hazard or threat profile.
 - f. The enactment of new or amended laws or ordinances.

Chapter - 2

Hazard Vulnerability Capacity and Risk Assessment (HVCRA)

Hazard Profile of District Bankura

Lightening:

In this district there are intermittent incidents of the lightening and many lives have been lost in such incidents. Many times it has caused the damages to the livestock's as people generally rear animals and for grazing them they have to the field where the lightening is a common event.

Drought:

In the year **2014**, drought was declared in **818 Mouzas** out of total 3828 Mouzas **under 16 Blocks** out of total **22 Blocks** of the district. By the end of the financial year 2015-16, the district had to face with the problem of acute shortage of drinking water. Although departments like P & RD, PUP and PHE have allotted funds for repairing, renovating or dysfunctional tube wells / hand pumps and sinking & re-sinking of new drinking water sources, but all these measures are not sufficient to prevent severe drought like situation in Bankura.

Land Erosion:

Bankura district witness flash flood especially during rainy season. The flash floods are caused by the incessant rain confined within a period of 7 days and lead to disruption of major arterial road. It also causes severe erosion of the river embankments.

The low lying agricultural land in swampy like condition, particularly around Mukutmanipur Dam and its major arterial canal sites requires removal of silt. The silting causes mainly due to seepage of water from the dam and through artisan-flow. Desiltation also required for selected stretch of Darkeswar, Gandheswari, Damodar rivers.

Elephant Depredation:

In simple terms "Disaster" is defined as 'a sudden accident or a natural catastrophe that causes great damage or loss of life'. The depredation caused by wild elephant is a common phenomenon in the district of Bankura. Wild elephant causes immense damage to the standing crops & in extreme cases colossal loss of human life. Not only that, large herds of elephants, now-a-days also causing damage to infrastructure, like house property, etc. Earmarked fund to address the issues like, prevention of elephant depredation, reconstruction of damaged infrastructure, compensation to crop-loss and loss of human life, may be allocated from SDRF. Further, the fund may also be used to meet up contingent expenditure, like remuneration of trained Civil Defense Volunteers or Civic Volunteers, who are engaged in the "*Hula Party*".

Storm / Cyclone:

Hazards like cyclone and hail storms occurred many a times in the district during the summer and in other season causing severe damage.

Floods:

Bankura is not defined as a flood prone district, but after the arrival of monsoon the district registers many cases of flash-flood and inundation of many low areas of the district, adjoining the major rivers & tributaries flowing through the district like Damodar , Dwarakeswar , Kangsabati and others .

Moreover due to occasional heavy rainfall in the district & in the upper catchments areas of Damodar River, flood water is released from the D.V.C Barrage and sometimes from Kangsabati reservoir cause flood in several parts of the District resulting in loss of crops, house and other properties.

Projected inundation map data showing Tagging with Flood Shelter

Inundation projection information for river- Kangsabati, Silabati									
Name of the Dam- Mukutmanipur, Kadamdeuli									
Block	Name of village/mouza/Ward	Mouza with JL No.	Population	Whether likely to be partly flooded or fully	Population likely to be affected	Population projected to be shifted to flood shelter	Location of flood shelter/cyclone shelter tagged for evacuation	Within inundation prone village/mouza/ list of offices/health centre/school etc. etc. likely to be flooded. If any.	Remarks
Raipur	Dhanara	Dhanara-279	1832	Partly	1832	183	Penchakola High School	Nil	
	Penchakola	Penchakola-298	1590		1590	159			
	Dubli	Dubli-299	1181		1181	118			
	Tikarpara	Tikarpara-359	410		410	41	Dumurtore High School		
	Mamuria	Thakurbadha-360	556		556	56			
	Nehilya	Nehilya-277	219		219	22	Penchakola High School		
	Dhulapara	Dhulapara-231	232		232	23	Chandpara High School		
	Katalda	Katalda-343	384		384	38	Penchakola High School		
	Simli	Simli-201	2147		2147	215	Raipur High School		
	Sobuj Bazar(partly)	Raipur Bazar-139	350		350	35			
	Mailidanga	Dhobasole-107	250		250	250			

Block	Name of village/mouza/Ward	Mouza with JL No.	Population	Whether likely to be partly flooded or fully	Population likely to be affected	Population projected to be shifted to flood shelter	Location of flood shelter/cyclone shelter tagged for evacuation	Within inundation prone village/mouza/list of offices/health centre/school etc. likely to be flooded. If any.	Remarks
Khatra	Kumarbahal	Kumarbahal-159	50	Partly	50	50	Gorabari High School	Only Kumarbahal Mouza	
Ranibandh	NIL		NIL	NIL	NIL	NIL	NIL	NIL	
Taldangra	Koli	Koli-15		Partly		150	Koli Primary School	NIL	
			934		934				
	Pattentul	Panchmura-104	364		364	200	Panchmura High School		
	Khalagram	Khalagram-11	1192		1192	200	Vendra Upper Primary School		
Hirbandh	NIL		NIL	NIL	NIL	NIL	NIL	NIL	
Simlapal	NIL		NIL	NIL	NIL	NIL	NIL	NIL	
Indpur	NIL		NIL	NIL	NIL	NIL	NIL	NIL	

Sarenga	Gargaria, Rusna, Belepai, Baishpatra, Deuli, Bramhandiha, majura, Lalbazar, tal diha, Dharampur, Jetpara, Choutar, gurepara, gangnala, fulberia, guniada, chiltore, sidi, banpur	Gargaria-349, Rusna-347, Belepai-368, Baishpatra-367, Deuli-369, Bramhandiha-358, Majura-372, Tal diha-345, Dharampur-281, Jetpara-282, Choutar-297, Koyerpara-206, Gangnala-230, Fulberia-199, Guniada-024, Chiltore-109, Sidi-137, Banpur-174	23148	partly	7000 Approx	7000 Approx	1. Gargaria Subhas Hish School, 2. Bikrampur High school, 3. Sarenga High School, 4. Tapta Damdi High School, 5. Basudebpur High School	NIL	
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Block Name :- Kotulpur Dev. Block
Inundation Projection information for River : Dwarkeswar

Block	Name of Village/	Mouza with JL No.	Population	Whether to be partly flooded or fully	Population likely to be affected	Population projected to be shifted to flood shelter	Location of Flood Shelter/Cyclone Shelter Tagged for evacuation	Weather inundation prone village/health centre/school /power station rail station/bus stand factory likely to be effected	Remarks
Kotulpur	Sahas	Sahas 81	6000	partly	1780	745	Sahas R.G. H.S		
		Shyampur 82							
	Shyampur								
		Sriampur 82							
	Sriampur	Poduma 94							
	Poduma	80							
		Sahas							
	Bagpukur	81							
		Krakberia							
	Krakberia	Panna 3							
	Panna								
		lowgram 75							
	lowgram								
		78							
	Amdohi	Amdohi	4500	Fully	1600	1400	Amdohi H.S		
		70							
	Chanparui	Amdohi 70							
	Ghantipara	Amdohi 70							
	Chhotpagla								
		Amdohi 70							
	Lakshanhati								
	Kalaberia	Kalaberia 3	115	Partly	80	80	Kalaberia Pry School		

Purodighi	Saintara 19			60	60			
		167	Partly					
Gopalpur Malik Para	Gopalpur Malik Para 34	157	Partly	80	80	Gopalpur Pry school		
	Kotaldighi							
Raibaghi ni								
	35	138		115	115			
Mathurat opal	Mathurat opal 7	2003	Partly	612	612	Mathurat opal Pry school	Primary school	
Baidanga	Baidanga 9	638	Fully	524	524	Baidanga Pry school	Primary school	
Goura	Goura 8	589	Partly	521	521	Goura Pry Schpool	Primary school	
Guracolon y	Guracolon y 8	220	Fully	220	220	Gouracolon y Pry School		
Lalki	Lalki 10	537	Fully	537	537	Lalki Pyy. School		
Nanagar	Nanagar 54	420	Fully	420	420	Napukur Pry School	Primary school	
Sonarpur	Goura 8	840	Fully	625	540	sonarpurP ry School		
Bhagalpur	Bhagalpur 55		Fully	1558	1558	Bhagalpur Pry school		
Hati	Hati 61	605	Fully	844	844	Hati Pry school		
Malakarp onta	Malakarp onta 62	730	p	604	604	Malakarp ota Pry school	Primary school	
Chuadanga	Chuadanga 63	632	p	596	596	Chuadanga Pry School	Primary school	
Madhuban	Madhuban 64	1206	Fully	938	846	Madhuban Pry School		
Balarampur	Balarampur 65	1103	Partly	449	449	Balarampur Pry School	Primary school	
Jhero	Jhero 24	Partly	Partly	235	235	Jhero ICDS	Primary school	
Kankra	Kankra 56	650	Fully	318	318	Kamarberi aPry School		
Kantashi	Kantashi 28	687	Fully	560	560	Kantashi Pry school		

	Tangra khali	Tangra khali 13	809	Partly	501	501	Tangra khali Pry School		
	Kanchune	Chakraghu 12	732	Partly	342	342	Bankajeth e Pry School		
	Patrabandh	Patrabandh 60	538	Partly	401	401	Balarampur Pry School		

Projected Innundation Map data showing tagging with flood shelter of Bankura Sadar Sub-Division.

Innundation Projection Information for River Gandheswari

Name of the Block	Name of Village/Mouza/Ward	Mouza with JL No.	Population	Whether likely to be partly flooded or fully	Population likely to be affected	Population projected to be shifted to flood shelter	Location of flood shelter/cyclone shelter tagged for evacuation	within inundation prone Village/Mouza/Ward list Offices/health centre/schools/power station/bus-stand/factory etc. likely to be flooded if any	Remarks
1	2		3	4	5	6	7	8	9
BANKURA-II	Lapuria		950	Partly	200	100	Lapuria Pry. School	No	
	Kantaboni		500	Partly	250	150	Kantaboni	No	
	Bagapatal		1200	Partly	150	100	Bagatapal	No	
	Bhangahira		300	Partly	200	150	Bhangahira	No	
	Sonarekh		650	Partly	200	150	Sonarekh	No	
	Junbedia		800	Fully	800	200	Junbedia	No	
	Kesiakole		2500	Partly	350	250	Kesiakole	No	
	Mithila		1700	Partly	250	200	Kesiakole	No	
CHHATNA	CHAMKARA		1132	Partly flooded	200	200	Chamkara Primary School	Chamkara	
BANKURA-II	Innundation Projection Information for Canal of River Kana								
	Janda		500	Partly	150	150	Janda	No	
	Namo Sirsara		650	Partly	150	150	Sirsara	No	
	Musuria		300	Partly	150	150	Musuria Pry. School	No	

MEJIA	Tarapur		4611	Partly Flooded	Nearly 500		Tarapur Jr Basic School	NA	Report of Villages under Mejia Gram Panchayat area
	Namo Mejia		3123	Partly Flooded	Nearly 400		Namo Mejia Prathamik Vidyalaya	NA	
	Shyamapur		3362	Partly Flooded	Nearly 400		Shyamapur Nimna Buniyadi Vidyalaya	NA	
	Ramchandrapur		1129	Partly Flooded	Nearly 400		Ramchandrapur Nimna Buniyadi Vidyalaya	NA	Report of Villages under Ramchandrapur Gram Panchayat area
	Telenda		980	Partly Flooded	Nearly 400		Telenda Purunia High School	NA	
	Purunia		1031	Partly Flooded	Nearly 300		Telenda Purunia High School	NA	
	Char Mana		252	Fully Flooded	252		Ramchandrapur GP Office	NA	
	Nagardanga		912	Partly Flooded	Nearly 200		Nagardanga Prathamik Vidyalaya	NA	
	Banjora		1529	Partly Flooded	Nearly 400		Banjora GP Office	NA	Report of Villages under Banjora Gram Panchayat area
	Debagram		620	Partly Flooded	Nearly 200		Debagram prathamik Vidyalaya	NA	
	Jalanpur		982	Partly Flooded	Nearly 250		Jalanpur Prathamik Vidyalaya	NA	
	Sonaichandipur		180	Partly Flooded	Nearly 100		Sonaichandipur Community Hall	NA	
	Matabel		709	Partly Flooded	Nearly 100		Kustore GP Office	NA	Report of Villages under Kustore Gram Panchayat area
	Nabasan		193	Partly Flooded	Nearly 100		Kustore GP Office	NA	
	Jujghati		494	Partly Flooded	Nearly 150		Jujghati Prathamik Vidyalaya	NA	
	Natshala		395	Partly Flooded	Nearly 100		Natshala Prathamik Vidyalaya	NA	

	Kustore		2458	Partly Flooded	Nearly 250		Kustore GP Office	NA	
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Inundation projection information for River Shali/Gangdua Dam at Amarkanan

GANGAJALGHATI	Marwa (Sikdardang a, Marwa, Rajarbaid)		638	Partly	48 person	48 person	Marwa Pry.School	NIL	
	Bhairabpur (Goramara)		4669	Partly	NIL	NIL		NIL	
	Kesiara (Rajaramb aid, Balidiha)		6922	Partly	12 person	12 person	Kesiara Gobindo Prasad Vidyapith	NIL	
	Sirsa (Taljhodka)		Depop ulated	Partly	NIL	NIL		NIL	
	Taljhodka (Taljhodka)		709	Fully	120 person	120 person	Ekchala Pry. School & Kesiara H.S.	NIL	
	Ranbahal (Ranbahal)		736	Partly	NIL	NIL		NIL	
	Saliara (Saliara)		1170	Fully	200 person	200 person	Saliara Pry. School & Amarkanan Pry. School	NIL	
	Pankua (Saliara)		172	Partly	NIL	NIL		NIL	
	Gurachand a (Gurachan da)		716	Partly	80 person	80 person	Gurachanda Pry. School & Mukundapur Pry. School	NIL	
	Khyerboni (Khyerboni)		970	Partly	NIL	NIL		NIL	
	Thumkoro (Thumkoro)		623	Partly	NIL	NIL		NIL	
	Bhiringi (Bhiringi)		320	Partly	NIL	NIL		NIL	
	Moutora (Moutora)		744	Partly	NIL	NIL		NIL	
	Malkoro (Malkoro)		758	Partly	NIL	NIL		NIL	
	Koro (Koro)		1231	Partly	NIL	NIL		NIL	

	Jambedia (Jambedia)		843	Partly	NIL	NIL		NIL	
GANGAJALGHATI	Balijora (Balijora)		860	Partly	NIL	NIL		NIL	
	Kantaboni (Kantaboni)		774	Partly	NIL	NIL		NIL	
	Gopalpur (Gopalpur)		538	Partly	NIL	NIL		NIL	
	Bhattapara (Bhattapar a)		1152	Fully	80 person	80 person	Bhattapara Pry. School & Raniara Kangsa SSK	NIL	
	Raniara (Kangsa)		680	Fully	08 person	08 person		NIL	
	Gopinathp ur (Gopinath pur)		616	Partly	NIL	NIL	Bhattapara Pry. School & Raniara Kangsa SSK	NIL	

Inundation Projection Information for River Gandheswari

BANK URA-I	Patakola		900	Partly	120	50	Jagadalla-I G.P. Office	No such Instituti on	No such situation arise till date
	Banshi		1000	Partly	170	90	Aral-Banshi Pry. School	No such Instituti on	

❖ Risk Assessment:-

Risk has been defined as the total loss as expected from the hazard on the elements at risk as per the prevailing vulnerability at that point of time. It is therefore the function of the probability of occurrence of the hazard of the particular magnitude and the vulnerability prevailing at that point of time regarding the elements at risk.

Therefore risk = probability of hazard magnitude * vulnerability

(22)

Assessment of Risk for Multi-Hazards in District

- Risk Assessment of Bankura in Context of Various Hazards and Associated Vulnerabilities

Risk is a measure of expected losses due to a hazardous event of particular magnitude occurring in given area over a specific time period. It is a function of probability of particular occurrence of activation of any hazard and losses each would cause. Risk is the potential that a chosen action or activity including the choice of inaction will lead to a loss. The notion implies that a choice having an influence on the outcome exists. Potential losses themselves may also be called "risks". Almost any human endeavour carries some risk but some are much more risky than others. Risk in itself exists only theoretically unless the hazard got activated and it gets an exposure with the vulnerability. Considering the situations of Bankura as there are different types of hazards with multi facet vulnerabilities, the risks are also multi-dimensional.

- Impact vs. Frequency of Disaster in Bankura District

Sl. No	Disaster	Low Impact Low frequency	Low impact High frequency	High Impact Low frequency	High impact High frequency
1	Drought				Y
2	Cyclone	Y			
3	Storm				Y
4	Flood			Y	
5	Boat Capsize	Y			
6	Earthquake	Y			
7	Forest Fire	Y			
8	Fire				Y
9	Snake Bite				Y
10	Lightning				Y
11	Heat Wave				Y
12	Cold Wave				Y
13	Elephant Depredation	Y			

- Ranking of Risk of Disaster

Sl. No.	Disaster
1	Drought
2	Flood
3	Storm
4	Fire
5	Snake Bite
6	Lightning
7	Heat Wave
8	Cold Wave

(23)

- Seasonality of Risk of Disaster :

[illegible]

3	Storm				Y	Y	Y	Y	Y				
4	Flood							Y	Y	Y			
5	Boat Capsize							Y	Y	Y			
6	Forest Fire				Y	Y	Y						
7	Fire	Y	Y	Y	Y	Y	Y					Y	Y
8	Cold Wave	Y											Y
9	Snake Bite				Y	Y	Y	Y	Y	Y	Y		
10	Lightning				Y	Y	Y	Y	Y	Y			
11	Heat Wave					Y	Y						

Chapter: 3

Institutional Arrangement for Disaster Management

India has integrated administrative machinery for management of disasters at the National, State, District and Sub-Division levels. The basic responsibility of undertaking rescue, relief and rehabilitation measures in the event of natural disasters at present is that of the concerned State Governments. The Central Government supplements the efforts of the States by providing financial and logistic support. The district administration is the focal point for implementation of all governmental plans and activities. The actual day-to-day function of administering relief is the responsibility of the District Magistrate who exercises, coordinating and supervising powers over all departments at the district level. The 73rd and 74th constitutional amendments recognize Panchayati Raj Institutions as 'Institutions of Self-Government'. The amendment has also laid down necessary guidelines for the structure of their composition, powers, functions, devolution of finances, regular holding of elections and reservation of seats for weaker sections including women. These local bodies can be effective instruments in tackling disasters through early warning system, relief distribution, providing shelter to the victims, medical assistance etc. Other than the national, state, district and local levels there are various institutional stakeholders who are involved in disaster management at various levels in the country. These include the police and para-military forces, civil defence and home-guards, fire services, ex-servicemen, non-government organizations (NGOs), public and private sector enterprises, media and HAM operators etc. The institutional and policy mechanisms for carrying out response, relief and rehabilitation are well-established in the district. These mechanisms have proved to be robust and effective so far as response, relief and rehabilitation are concerned. This section gives a brief overview of the institutional mechanism for disaster management in National level, State level and in details at the district and sub-district Level.

3.1. Institutional Framework

District Disaster Management Committee:

1. Sabhadhipati, Zilla Parishad	Chairperson
2. District Magistrate	Executive Chairperson
3. Additional District Magistrate (Disaster Management)	Member
4. Additional District Magistrate (General)	Member
5. Additional District Magistrate (Zilla Parishad)	Member
6. Superintendent of Police	Member
7. Chief Medical Officer of Health	Member
8. Superintending/Executive Engineer, P.W.D /P.H.E I&W.D/Minor Irrigation Deptt.	Member
9. Principal Agricultural Officer	Member
10. Divisional Engineer, WBS&EDCL	Member
11. District Controller, Food & Supply	Member
12. Deputy Director, ARD	Member
13. Engineer, Pollution Control Board	Member

14. District Level Officer, Forest Deptt. / Fisheries Deptt. / Horticulture Deptt.	Member
15. District Level Authority of Railway Ministry	Member
16. District Level Authority of Army/ Air force/ Navy/B.S.F/Coast Guard	Member
17. District Level Representative of Indian Oil Corporation	Member
18. District Telecom Officer	Member
19. District Disaster Management Officer /Officer in Charge of Disaster Management	Convener /Member
20. Chairperson of Municipal Body	Member
21. Chairperson, Development Authority	Member
Members of Legislative Assembly	Member

Sub Divisional Disaster Management Committee:

1. Sub divisional Officer	Chairperson
2. Sub Divisional Disaster Management Officer	Convener /Member
3. Sub Divisional Controller of Food & Supplies	Member
4. Sub Divisional Police Officer	Member
5. Sub Divisional Officer (Irrigation)	Member
6. Secretary, Red Cross Society	Member
7. Sub Divisional Agriculture Officer	Member
8. Assistant Engineer (PWD)	Member
9. Assistant Engineer (PWD Roads)	Member
10. Assistant Chief Medical Officer of Health	Member
11. O/C Civil Defence	Member
12. Members of Legislative Assembly	Member
13. Chairperson of all municipality	Member
14. All B.D.Os & All Sabhapaties	Member

Block level Disaster Management Committee:

1. Sabhapati, Panchayat Samity	Chairperson
2. Block Development Officer	Secretary
3. Block Disaster Management Officer	Member
4. Agriculture Development Officer	Member
5. Block Medical Officer of Health	Member
6. O/C of Police Station	Member
7. Karmadhakshya of Tran Styae Samity	Member
8. All Pradhans	Member
9. All M.L.A in the block area	Member
10. All block level Officers of line departments	Members

- **Emergency Operation Centre (EOC) Setup and Facilities Available in the District**

It has been observed that at the time of a calamity/disaster communication services are the first to go out of order. Emergency Operation Centre plays a vital role in emergency operation activation and place multi-mode and multi-channel communication system for pre, during and post emergency situation. It coordinates the flow of information with respect to activities associated with relief operations.

- Receive appropriate proposals on preparedness, risk reduction and mitigation measures from various departments/agencies.
- Monitor preparedness measures undertaken at the district levels including simulation exercises undertaken by various departments.
- Ensure from each line departments that all warning, communication systems and instruments are in working conditions. Upgrade the Disaster Management Action according to the changing scenario.
- Monitor preparedness measures and build the capacity on the disaster risk management through training, workshops and awareness generation programme.
- Providing information at district level, local level and to disaster prone areas through appropriate media. Brief the media of the situations and prepare day to day reports during the disasters and report the actual scenario and the action taken by the District Administration.
- Maintain a data base of trained personnel and volunteers who could be contacted at any time.

3.3.5. Incident Response System (IRS)

Incident Response System is a combination of facilities, logistic, personnel, finance, operation and communication operating within a common organizational structure with responsibility for the management of assigned resources to accomplish the objectives effectively pertaining to an incident. The IRS organization functions through Incident Response Team (IRTs) in the field. The District Magistrate (DM) as the chairman of the DDMA is a Responsible Person (RO) as overall in charge of the incident response management. If needed, he can delegate his functions to any other responsible officer or appoint another senior officer as an incident commander. On activation of the incident response system all line departments/ organizations/ individuals shall follow the directions of the Incident Commander as condition demands. He can divert all mechanisms and resources in the district to fight against a scenario leading to disaster/calamity in the district. On activation of IRS, an operation section with a chief and associates, planning section with a leader and associates, logistic section with a leader and section chief and finance section with a leader and associates shall assume their roles. This is the sole discretion of the Incident Commander to appoint the Section Chief. These section chiefs are vested with commanding authority and logistic assistance to deliver the concerned responsibility .The chief and associates for the different sections are as nominated below:

1. All team leaders will be in the rank of ADM / Line Department Heads in the district who are senior level officer.
2. The SDMs shall not be given any responsibility in the incident command chain since they have to look after the onsite EOC in their territory or as assigned to the affected areas as well as they are the Team Leaders of Incident Management Teams (IMTs) in each Onsite Emergency Operation Centre

Chapter: 4

Prevention and Mitigation Measures

4.1 Prevention Measures:-

Prevention can be defined as an action taken to avoid an incident or stopping an incident from occurring. It basically includes deterrence operations and surveillance. Whereas, Mitigation refers to measures that prevent an emergency, reduce the chance of an emergency happening or reduce the damaging effects of unavoidable emergencies. Moreover, Disaster Mitigation contributes to lasting improvement in safety and is essential to integrate disaster management in mainstream planning.

Risk mitigation measures are typically designed to reduce or limit the adverse impacts of already existing risks of disasters through various structural or non-structural measures or a combination of both. For example, risks of drought can be reduced through measures of water conservation and drought proofing. Risks of earthquake can be reduced by retrofitting life line structures in seismic zones. Risks of every type of disasters can be reduced with proper strategic action plans for risk reduction as well as development of capacities at all levels.

It is good to have long term mitigation goals in place and connect these goals with measures that district has planned and implemented. These goals may include:

- Provide better early warning methods for flood, storms, cyclone
- Reduce the destruction and loss of life within buildings
- Provide for safer environments for transportation systems
- Eliminate flooding in populated areas
- Ensure redundant water supply systems
- Reduce environmental degradation and restoration of livelihood
- Reduce effects of the natural environment on the infrastructure
- Ensure redundant power systems on critical facilities
- Ensure adequate materials available for road maintenance

Mitigation, with its focus on the impact of a hazard, encompasses the structural and non-structural approaches taken to eliminate or limit a hazard's exposure; impact on people, property and the environment. Besides flood proofing, river desiltation, change in land use pattern and shelter belt plantation, examples of mitigation activities also include:

1. Planning, adopting and enforcing stringent building codes, flood-proofing requirements, seismic design standards and cyclone wind-bracing requirements for new construction or repairing existing buildings.
2. Undertaking retrofitting work on public buildings to withstand ground shaking or cyclone-strength winds.
3. In areas prone to cyclones, critical infrastructure, school and other community buildings to be built at elevated places. Keep trees and shrubs trimmed. Remove damaged and decayed parts of trees to make them resist wind and reduce the potential for damage. Removal of hoardings before specified period of cyclone.
4. Planning and building community shelters and cyclone safe rooms to help protect people in their homes, public buildings and schools in hurricane and tornado-prone areas.
5. Steps taken for human resource development and capacity building for effective disaster mitigation at District Level.
6. Awareness generation on disaster mitigation.

▪ **Identification of Temporary Cyclone / Flood Shelters:**

Sl. No	Block	Pucca building identified as cyclone/flood shelter	Capacity (Room and Plinth Area)	Location (G.P.)	Facilities Available	Single/ Double Storied	Distance from G.P. Office
1	Hirbandh	Hirbandh High School	Rooms: 14	Hirbandh	Drinking water and sanitation	Double	
2		Tilaboni High School	Rooms: 07	Tilaboni	Drinking water and sanitation	Double	
3		Gopalpur High School	Rooms: 16	Gopalpur	Drinking water and sanitation	Double	
4		Moshiara High School	Rooms: 16	Moshiara	Drinking water and sanitation	Double	
5		Baharamuri High School	Rooms: 10	Baharamurui	Drinking water and sanitation	Double	
6	Bankura-I	Kapista Primari School	Rooms : 6	Anchuri	Drinking water and sanitation	Single	5 Km.
7		Natungram Ahmedia High Madrasah	Rooms : 11	Andharthole	Drinking water and sanitation	Double	4 Km.
8		Jagadalla-Gorabari M.G.S. Vidyalaya	Rooms : 21	Jagadalla-I	Drinking water and sanitation	Double	2.5 Km.
9	Onda	Nikunjapur High School	Rooms : 25	Nikunjapur	Drinking water and sanitation	Double	5 Km
10		Sahapur New Pry. School	Rooms : 3	Santore	Drinking water and sanitation	Single	Around 2-3 Km.
11		Majdiha High School Bhetiara Milani Bidyapith	Rooms : 20	Majdiha	Drinking water and sanitation	Double	Around 2-3 Km.
12		Chabra Board Pry. School	Rooms :3	Onda-II	Drinking water and sanitation	Single	0 Km.
13	Gangajalghati	Chousal H.S. School	Rooms :4	Barshal	Drinking water and sanitation	Double	3 Km.
14		Nityanandapur H.S. School	Rooms :6	Nityanandapur	Drinking water and sanitation	Double	½ Km.
15		Lotiaboni H.S. School	Rooms :6	Lotiaboni	Drinking water and sanitation	Double	100 Mtr.
16		Gangajalghati H.S. School	Rooms :8	Gangajalghati	Drinking water and sanitation	Partly Double	½ Km.
17		Banashuria H.S. School	Rooms :4	Banashuria	Drinking water and sanitation	Partly Double	1 Km.
18		Lachhmanpur H.S. School	Rooms :4	Lachhmanpur	Drinking water and sanitation	Partly Double	½ Km.
19		Khata-Kshuderdanga H.S. School	Rooms : 8	Gobindadham	Drinking water and sanitation	Double	2 Km.
20		Ukhradihi H.S. School	Rooms :5	Bhaktabandh	Drinking water and sanitation	Partly Double	1 Km.
21		Salbedia H.S. School	Rooms :6	Kapista	Drinking water and sanitation	Single	½ Km.

Sl. No	Block	Pucca building identified as cyclone/flood shelter	Capacity (Room and Plinth Area)	Location (G.P.)	Facilities Available	Single/ Double Storied	Distance from G.P. Office
22		Pirraboni H.S. School	Rooms :5	Pirraboni	Drinking water and sanitation	Double	200 Mtr.
23	Bankura-II	Mankanali High School	Rooms: 5	Mankanali	Drinking water and sanitation	Double	2 km
24		Mogra High School	Rooms: 6		Drinking water and sanitation	Double	0.5 km
25		Kanchanpur High School	Rooms: 6	Purandarpur	Drinking water and sanitation	Double	2 km
26		Mayakanan High School	Rooms: 6		Drinking water and sanitation	Double	1.5 km
27		Bankati High School	Rooms: 6	Junbedia	Drinking water and sanitation	Double	4 km
28		Bikna KPS High School	Rooms: 7	Bikna	Drinking water and sanitation	Double	0 km
29		Banki-Sendra High School	Rooms: 6		Drinking water and sanitation	Double	4 km
30		Bhadul Chatterjee Para Pry. School	Rooms: 4	Sanbandha	Drinking water and sanitation	Single	1 km
31		Shyamdaspur BJ Pry. School	Rooms: 4		Drinking water and sanitation	Single	1 km
32		Narrah High School	Rooms: 8	Narrah	Drinking water and sanitation	Double	0.5 km
33		Pratappur DJ High School	Rooms: 8		Drinking water and sanitation	Double	2.5 km
34		Chuagara-Sammilani High School	Rooms: 7		Drinking water and sanitation	Double	4 km
35		Nikunjapur High School	Rooms: 8	Kosthia	Drinking water and sanitation	Double	4 km
36		Kalaberia Pry School	Rooms: 4		Drinking water and sanitation	Sngle	4 km
37		Namo-Sirsara Pry. School Attached CRC Office	Rooms: 3		Drinking water and sanitation	Single	6 km
38		Maitha-Gopinathpur Pry. School	Rooms: 3		Drinking water and sanitation	Single	4 km
39		Musuria Pry. School	Rooms:3	Kosthia	Drinking water and sanitation	Sngle	3.5 km
40		Mukundapur Pry. School	Rooms: 3		Drinking water and sanitation	Sngle	2.5 km
41	Saltora	Illambazar Primary School,	Rooms : 4	Salma	Drinking water and sanitation	Double	
42		Bakulia High School,	Rooms: 10	Salma	Drinking water and sanitation	Double	
43		Bamuntore High School,	Rooms : 10	Bamuntore	Drinking water and sanitation	Double	

Sl. No	Block	Pucca building identified as cyclone/flood shelter	Capacity (Room and Plinth Area)	Location (G.P.)	Facilities Available	Single/ Double Storied	Distance from G.P. Office
44		Shirpura MSK,	Rooms: 10	Bamuntore	Drinking water and sanitation	Double	
45		Krishnanagar Junior High School	Rooms : 8	Bamuntore	Drinking water and sanitation	Double	
46		Gourbera Pry. School	Rooms: 10	Bamuntore	Drinking water and sanitation	Double	
47		Na-Para Flood rescue Centre	Capacity : 400	Bamuntore	Drinking water and sanitation	Double	
48		Bara Mana MSK & Pry. School	Rooms: 6	Bamuntore	Drinking water and sanitation	Double	
49	Mejia	Banjora Pry. School	Rooms: 4	Banjora	Drinking water and sanitation	Double	
50		Ramchandrapur Pry. School	Rooms: 3	Ramchandrapur	Drinking water and sanitation	Double	
51		Mejia Pry. School	Rooms: 4	Mejia	Drinking water and sanitation	Double	
52		Ardhagram Pry. School	Rooms: 4	Ardhagram	Drinking water and sanitation	Double	
53	Joypur	Hetia High School	Rooms : 16	Hetia	Drinking water and sanitation	Double	0.05 Km
54		Routhkhanda Pry. School	Rooms : 4	Routhkhanda	Drinking water and sanitation	Single	0,5 Km
55		Shyamnagar Pry. School	Rooms : 3	Shyamnagar	Drinking water and sanitation	Single	0.5 Km
56	Indas	Bhagabtipur Pry. School	Rooms : 4	Rol	Drinking water and sanitation	Single	10 Km
57		Somsar High School	Rooms : 16		Drinking water and sanitation	Double	8 Km
58		Nagatentul Pry. School	Rooms : 6	Dighalgram	Drinking water and sanitation	Single	2.5 Km
59		Bhakuda High School	Rooms : 16		Drinking water and sanitation	Double	3 Km
60		Betalan Colony Pry. School	Rooms : 4	Mangalgram	Drinking water and sanitation	Single	6 Km
61		Khatnagar High School	Rooms : 15		Drinking water and sanitation	Double	6 Km
62		Rajkhamar High School	Rooms : 16	Karisunda	Drinking water and sanitation	Double	2 Km
63		Bhabapur Pry.School	Rooms : 3		Drinking water and sanitation	Single	4 Km
64		Kalagram Pry. School	Rooms : 6	Amrul	Drinking water and sanitation	Single	5 Km

Sl. No	Block	Pucca building identified as cyclone/flood shelter	Capacity (Room and Plinth Area)	Location (G.P.)	Facilities Available	Single/ Double Storied	Distance from G.P. Office
65		Patraganti Pry.School	Rooms : 4		Drinking water and sanitation	Single	4 Km
66		Nunduri High School	Rooms : 16		Drinking water and sanitation	Double	3 Km
67		Santashram GDBV	Rooms : 21		Drinking water and sanitation	Double	2.05 Km
68	Kotulpur	Damanchak High School	Rooms : 12	Mirjapur	Drinking water and sanitation	Double (Part)	2 Km .
69		Saintara Jr. High School	Rooms : 5	Madanmohan pur	Drinking water and sanitation	Single	3 Km.
70		Bhagalpur High School	Rooms : 21		Drinking water and sanitation	Double	5 Km
71		Madanmohanpur High School	Rooms : 21		Drinking water and sanitation	Double (Part)	2 Km
72		Amdohi High School	Rooms : 15	Lowgram	Drinking water and sanitation	Double	4 Km
73		Jalitha Pry. School	Rooms : 4	Kotulpur	Drinking water and sanitation	Single	1 Km
74		Tajpur High School	Rooms : 13	Desra Koalpara	Drinking water and sanitation	Double	5 Km
76		Deopara Chamoani High School	Rooms : 17		Drinking water and sanitation	Double (Part)	3 Km
77		Chatra Jr. High School	Rooms : 4	Lego	Drinking water and sanitation	Single	3 Km
78		Darapur High School	Rooms : 11		Drinking water and sanitation	Double	3 Km
79		Balitha High School	Rooms : 13		Drinking water and sanitation	Double	2.5 Km
80		Sihar A.M.High School	Rooms : 18	Sihar	Drinking water and sanitation	Double	2 Km
81	Patrasayer	Ramdiha High School	Rooms : 13	Gopinathpur	Drinking water and sanitation	Double (Part)	2 Km
82		Gopinathpur High School	Rooms : 16		Drinking water and sanitation	Double	3 Km
83		Hadalnarayanpur High School	Rooms : 10	Narayanpur	D/W & sanitation	Double	0.5 Km
84		Panchpara Pry. School	Rooms : 3		D/W & sanitation	Single	12 Km

Sl. No	Block	Pucca building identified as cyclone/flood shelter	Capacity (Room and Plinth Area)	Location (G.P.)	Facilities Available	Single/ Double Storied	Distance from G.P. Office
85		Panchpara Uttar colony Pry. School	Rooms : 3		D/W & sanitation	Single	11 Km.
86		Patashpur High School	Rooms : 10		D/W & sanitation	Double	7 Km
87		Chargobindapur Pry. School	Rooms : 2		D/W & sanitation	Single	10 Km
88		Hamirpur Pry. School	Rooms : 2	Hamirpur	D/W & sanitation	Single	0.5 Km
89		Rasulpur Pry. School	Rooms : 3	Belut-Rasulpur	D/W & sanitation	Single	3 Km
90		Belut-Rasulpur G.P. Office	Rooms : 5		D/W & sanitation	Double	0 Km
91		Salkhanra Uttar Colony Pry. School	Rooms : 3		D/W & sanitation	Single	3 Km
92		Kabirchak Pry. School	Rooms : 2	Balsi-I	D/W & sanitation	Single	4 Km
93	Sonamukhi	Kenety Milan Tirtha	Rooms : 20	Dhipara	Drinking water and sanitation	Double	1 Km
94		Rangamati UCM	Rooms : 5		Drinking water and sanitation	Single	3 Km
95		Radhamohanpur High school	Rooms : 20	Radhamohan pur	Drinking water and sanitation	Double	0.5 Km
96		Belowa Pry. School	Rooms : 3	Radhamohan pur	Drinking water and sanitation	Single	3 Km
97		Dubrajpur Pry. School	Rooms : 3	Dhansimla	Drinking water and sanitation	Single	2 Km
98		Ranpur Pry. School	Rooms : 3	Purba Nabasan	Drinking water and sanitation	Single	1 Km
99		Uttar Bensia Pry. School	Rooms : 4	Radhamohan pur	Drinking water and sanitation	Single	0.5 Km
100		Sonamukhi BJ High School	Rooms : 20	Sonamukhi	Drinking water and sanitation	Double	0.5 Km
101		Sonamukhi Girls High School	Rooms : 20	Sonamukhi	Drinking water and sanitation	Double	0.5 Km
102		Bhagabanpur Pry. School	Rooms : 4	Dhansimla	Drinking water and sanitation	Single	3 Km
103		Baharpur Pry. School	Rooms : 2	Dhansimla	Drinking water and sanitation	Single	2 Km

Sl. No	Block	Pucca building identified as cyclone/flood shelter	Capacity (Room and Plinth Area)	Location (G.P.)	Facilities Available	Single/ Double Storied	Distance from G.P. Office
104		Nabason High School	Rooms : 15	Purba Nabasan	Drinking water and sanitation	Double	0,5 Km

CHAPTER-5

PREPAREDNESS MEASURES

Disaster preparedness is a broad concept that describes a set of measures that minimizes the adverse effects of a hazard including loss of life and property and disruption of livelihoods. Disaster preparedness is achieved partially through readiness measures that expedite emergency response, rehabilitation and recovery and help in providing timely assistance and also community-based approaches and activities that build the capacities of people and communities to cope with and minimize the effects of a disaster on their lives. Disaster causes sudden disruption to the normal life of society and causes damage to the properties and lives to such an extent that normal social and economic mechanism available to the society get disturbed. If community is not aware and unprepared then the people are affected more due to disaster or calamity. Hitherto, the approach towards coping the effects of disasters have been post-disaster management, involving many problems related to law and order, evacuation, communications, search and rescue, firefighting, medical and psychiatric assistance, provisions of relief and shelters etc. After initial trauma next phase starts with long-term reconstruction planning which takes about 5 to 6 years to normalize the life-style in a particular area. In view of these problems the district administration Bankura has prepared a comprehensive plan. The plan basically detailed preparedness strategy under which communities and district authorities would be prepared so that level of destruction and unnecessary delay in relief and response can be reduced. The preparedness measures that is mentioned in this chapter include setting up of disaster relief machinery, formulation of community preparedness plans, training to the specific groups and earmarking funds for relief operations.

Preparedness by different departments / agencies of the district

Disaster preparedness is a multidisciplinary function and hence different departments of the district have to play a role. The following table captures the details of the roles of different departments of the district.

Department Wise Preparedness Checklist and their Tasks and Responsibilities

1.	District Administration/ DDMA	<ul style="list-style-type: none">• Prepare, Coordinate and monitor overall district response.• Review, readiness to respond to any disaster or threatening disastrous situation.• Advise, assist and coordinate the activities of the other Departments.• Establish stockpiles of relief and rescue materials.• Ensure communication systems are in order.• Mock drills are carried out periodically.• Ensure preparedness and response plans are in place for all Departments of the Government.• Ensure enforcement of the codes, bylaws and act such as National Building Code, Bureau of Indian Standards, etc. in the upcoming development projects, construction work, and commercial complexes.
2.	DEOC	<ul style="list-style-type: none">• Ensure proper functioning of the DEOC including hunting line 1077.• Prepare and maintain inventory of maps, information and contact

		<p>details.</p> <ul style="list-style-type: none"> • Prepare and maintain contract agreements for procuring different goods and services. • Identify, list and maintain vendors of critical goods and services. • Ensure functioning of Satellite phones. • Track stock piling of multi –hazard emergency equipment and maintenance.
3.	Block Administration	<p>a) BDO will review stock position of food grains and relief materials in every week and will send report to the District Magistrate and the Sub-divisional Officer</p> <p>b) BDO will ensure formation of Team for emergency Rescue and Relief operations at each G.P. level to combat emergency due to flood, Cyclone etc.</p> <p>c) Identify Country Boats with name and contact nos. of owner and boat man BDO will organize, monitor and co-ordinate activities of rescue and relief operations by Rescue Teams / Voluntary Organizations / Local Club / NGOs etc. for efficient management.</p> <p>d) BDO will identify some Grocers Shop especially in vulnerable areas. These Grocers would be requested to keep sufficient quantity of Chira, Gur, Muri, Sugar, Baby Food etc as rolling reserve stock so that in case of necessity these commodities can be purchased</p> <p>e) BDO will send Report of damage due to natural calamities if any, in Form CA-II</p> <p>f) Form necessary Four Member Inspection Team for enquiry into the matter of damage to residential houses, distribution of relief and sending Proposal of H.B. Grant quickly.</p> <p>g) Up-date Disaster Management Plan</p> <p>h) Prepare resource inventories for rescue and relief operations</p> <p>i) Arrange for round the clock control room for sending warning message and monitoring of rescue and relief operations.</p> <p>j) Identify vulnerable areas, rescue shelters, alternative evacuation plan.</p> <p>k) Take measures for intensive community awareness programme regarding dos and don'ts of various disasters with the help of Panchayats.</p>
4.	Fire Services	<ul style="list-style-type: none"> • Ensure proper functioning of all firefighting equipment's, appliances and respiratory equipment's. • Ensure important buildings should have sketched maps and marked evacuation routes with growing sign. • Ensure regular evacuation drills as per evacuation plans in all important buildings, malls, hospitals, etc. • Make a database of existing firefighting services and facilities provided with private agencies. • Be aware of potential hazardous installations and level of possible emergency required. • Prepare to deal with leakage of flammable toxic substances. • Ensure, at disposal, the list of adverse effects of chemicals and antidotes/ methods to deal with emergency involving each chemical. This is prepared by Department of Industrial Safety and Health. • Review the adequacy of existing fire prevention arrangements in hazardous units before and after the installations. Share the report with Department of Industrial Safety and Health. • Identify roads and routes of access and escape to potential hazardous units.

5.	Health Department	<ul style="list-style-type: none"> • Prepare trained team of paramedics. • Develop dos and don'ts and IEC materials regarding health and hygiene. • Organise awareness camps with help of CHC/PHCs and Development and Panchayat Department for hygiene promotion and public health issues. • Ensure availability of trained mobile medical teams at disposal. • Prepare psychological and psychosocial care teams. • Ensure availability of generator sets and buffer stock of fuel at disposal. • Ensure availability of adequate supply of life saving equipment's and stock of medicines, portable supplies including portable oxygen cylinders, portable X-ray machine, portable ultrasound machines, triage tags, etc. • Ensure availability of adequate space with suitable facilities for storage of medicines. • Prepare a database of private hospitals and nursing homes with services and facilities available. • Prepare a database of doctors registered with Indian Medical Association (IMA). Prepare a database of available ambulance services from government, private agencies and District Red Cross Society, if any. • Ensure, at disposal, list of hazardous chemicals stored in them. • Ensure, at disposal, the list of antidotes for various hazardous chemicals. This list is prepared by Department of Industrial safety and Health. • Ensure availability of adequate supply of blood units. • Prepare database of blood donors in the district and update the same. • Prepare a database of providers of refrigerated vehicles for transportation of vaccines, blood, blood products, etc. • Train drivers and attendants of ambulance and mobile medical units in first aid and basic life saving techniques. • Prepare a decontamination ward in view of any possible chemical or industrial hazard. • Prepare for prompt establishment of temporary hospital, mobile surgical unit, etc. at short notice, near the affected area. • Ensure proper and safe mechanism for medical waste disposal. • Prepare for proper disease surveillance system. • Make proper arrangement and mechanism for mass casualty management.
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6.	Agriculture Department	<ul style="list-style-type: none"> • Prepare Agriculture Contingency Plan. • Constitute a Crop Weather Watch Group at district level (as per 'A Model Manual for Drought Management', GOI) with representatives from Meteorological Department and concerned officers dealing with agricultural inputs, credit extension, etc to keep a close watch on the monsoon situation, extreme temperature, hail and wind storm. • Identify vulnerable areas prone to pest infestation, drought, flood and other hazards. • Ensure awareness generation in farmers regarding various plant diseases, alternate cropping practices in disaster-prone areas, crop insurance, provision of credit facilities, proper storage of seeds, etc. • Provide training to farmers in alternate cropping techniques, mixed cropping and other agricultural practices which minimise crop losses during future disasters. • Ensure surveillance for pest infestation and crop diseases. • Ensure availability of stock for immediate replacement of broken/non-functioning gadgets/equipments. • Ensure availability of adequate stock of seeds and other agro inputs particularly for areas vulnerable to hazards. • Prepare trained and equipped team for assessment of damage to soil, crop, plantation, drainage, embankment, other water bodies and storage facilities that might impact agricultural activities. • Prepare for establishment of public information booths, with appropriate and modern means of communication, to assist farmers in providing information regarding insurance, compensation, repair of agro equipment's and restoring of agricultural activities at the earliest. • Identify sources of feed and fodder.
7.	Animal Husbandry	<ul style="list-style-type: none"> • Ensure solation/ separation of sick and healthy animals and prepare for arrangements for keeping, feeding and watering of animals suffering from contagious diseases. • Sensitize farmers/ owners for above problems. • Ensure separate transportation of animals suffering from contagious diseases. • Ensure proper disinfection of space, vehicle and manpower involved in transportation of sick/ infected and dead animal from contagious diseases. • Ensure fully functional mobile veterinary unit at disposal. • Prepare a database of veterinary hospitals/ clinics and agencies working for animal care. • Ensure availability of stocks of mineral and feed supplements, lifesaving drugs, electrolytes, vaccines, etc. • Ensure sensitization of farmers about protection of their feed and

		<p>fodder prior to the onset of monsoon.</p> <ul style="list-style-type: none"> • Ensure filling feed banks before the scarcity period. • Prepare for the feed of the poultry birds for drought situation. • Locate feed and fodder banks in view of submergence situation during the monsoon. • Identify source for procurement of fodder. • Identify safe locations for fodder depot and cattle camps within the district. • Ensure assured source of water or canals for drinking and growing fodder along with the above locations. • Prepare for necessary arrangements of tatties, gunny bags and tarpaulin sheets to cover the sheds during heat and cold waves. • Ensure availability of sprinklers/ foggers in shed/camp during heat waves period. • Prepare for special care for productive, lactating and pregnant animals; also supplement them with additional concentrates and fodder. • Ensure proper administration of deworming and vaccinations for cattle, sheep and goats, pigs and other relevant measures for disease management. • Prepare for arrangements for transportation of critically injured livestock. • Identify space for burial of animals and ensure proper disposal of dead animals.
8.	BSNL	<ul style="list-style-type: none"> • Procure recovery plans from private communication Service Providers for their recovery time objectives. • Prepare for alternate communication System
9.	Development and Panchayat	<ul style="list-style-type: none"> • Prepare mechanism for proper solid waste management, disposal of waste and removal of debris in shelter and relief camps, feeding centres and affected rural areas. • Prepare for sanitation operations in view of post flood situations. • Ensure availability of tractor trolleys and other required equipments for the same. • Plan to provide building/guest house at different locations to establish control room, first aid and medical post or shelters during emergency. • Prepare a database of catering services providers. • Prepare mechanism for proper solid waste management and disposal of waste in shelter and relief camps, feeding centres and affected villages. • Prepare for prompt provision of temporary toilets/ trench latrines in the affected area and relief camps in rural area.
10.	Education Department	<ul style="list-style-type: none"> • Organise awareness generation programs in schools and colleges for students, teachers, administrative staff and other helpers. These programs should focus on dos and don'ts for various hazards and

		<p>safe evacuation in case of any emergency.</p> <ul style="list-style-type: none"> • Conduct hygiene promotion activities as per direction issued by the Health Department on a regular basis. • Ensure preparation of first aid and disaster management kit in each school and college. • Ensure preparation of school and colleges disaster management plan. • Identify safe schools and colleges to serve as relief shelter in case of any emergency within that area, only for short period of time.
11.	Electricity Department	<ul style="list-style-type: none"> • Ensure transmission map at disposal. • Prepare a database of critical and lifesaving infrastructure in the district and prepare for providing uninterrupted power supply to them. • Prepare for providing continuous power supply to the affected area. • Prepare to provide electrical connections and system at short notice in affected areas for purpose of pumping flood water and illumination of the area. • Prepare for prompt replacement/ re-commissioning of affected power supply system. • Ensure availability of adequate stock of important equipments like transformers, poles, conductors, cables, insulators, etc for prompt action whenever required. • Ensure trained construction and maintenance staff at disposal.
12.	Food & Supplies Department	<ul style="list-style-type: none"> • Prepare a database of godowns and cold storage facilities in the district. • Prepare a database of catering services providers. • Prepare for safety of stored food grains in godowns against inundation and water logging, fire and other possible hazards. • Prepare for out-movement of food grains to a pre-decided safer location, if required. • Ensure availability of adequate food grains storage in godowns in view of the scarcity or emergency period. • Prepare a database of kerosene depots, petrol pumps, gas agencies, etc and update the same in DDMRI. • Ensure availability of adequate stock of gas cylinders, kerosene, etc. • Prepare database of private retailers and wholesalers of edible food items. • Prepare a database of providers of refrigerated vehicles for transportation of perishable food items. • Prepare for large scale movement of food grains, their transportation, expeditious unloading, proper storage and prompt distribution through fair price shops, if required. • Prepare a database of private providers of tents, tarpaulin sheets, poles, kanats, cooking utensils, polythene bags, shrouds and other essential items that could be used for community kitchen and cremation and burial.

13.	Forest Department	<ul style="list-style-type: none"> • Ensure proper functioning of all equipments and vehicles. • Prepare a database of Ara machine holders, carpenters. • Prepare team for catching wild animals to prevent infiltration in habituated areas, relief camps, etc. • Prepare for supply of wood for cremation.
14.	Transport/ Road ways	<ul style="list-style-type: none"> • Ensure proper functioning of filling station, vehicles and equipments including fire extinguishers, first aid kits, etc. • Prepare for prompt deployment of vehicles at short notice for various purposes like mass evacuation, transportation of response teams, relief items, victims, etc. • Prepare mechanical team for prompt repair of equipment and vehicles. • Train drivers and conductors in first aid and basic life saving techniques. • Identify the vehicle for rescue operations. • Be well familiar with routes of potential hazardous installations and follow incident traffic plan.
15.	Irrigation Department	<ul style="list-style-type: none"> • Ensure proper early warning mechanism in place for flood by monitoring water level of surface water bodies. • Ensure proper and timely inspection of conditions of bunds, siphons, regulators, embankments, inlet and outlets of lakes and reservoirs, etc. • Ensure timely de-silting and dredging of rivers and canals, if required. • Ensure prompt repair of channels, if required. • Ensure proper functioning of all equipments including dewatering pumps. • Prepare for the arrangements of clean drinking water for affected livestock and poultry. • Ensure availability and well-functioning of all equipments and vehicles. • Prepare for distribution of water purifying tablets, bleaching powder and chlorination of public water resources, if required. • Prepare for arrangement of safe drinking water supply for surviving community in the affected areas and also in relief camps and shelters. Also prepare for provisioning of water for other purposes. • Prepare a database of suppliers and distributors of packaged drinking water. • Prepare for prompt repair of pipelines supplying potable water. • Prepare for prompt repair of sewerage systems and water works. • Make standby arrangements of generators for running the water pumps. • Ensure availability of adequate number of water tankers, drums, jerry cans or identify their private suppliers to prepare for supply of water, in scarcity period and in emergency. • Ensure availability of water supply/ filling points for fire tenders,

		<p>water cannons, hospitals and other necessary lifesaving infrastructure.</p> <ul style="list-style-type: none"> Ensuring filling of water ponds/ lakes in the district with canal water/tube wells prior to summer or whenever required in coordination of Irrigation Department.
16.	Municipality	<ul style="list-style-type: none"> Prepare for sanitation operations in view of post flood situations within jurisdiction of the area. Ensure cleaning of drains before the monsoon season. Prepare mechanism for proper solid waste management and disposal of waste in shelter and relief camps, feeding centres and affected area. Ensure availability of tractor trolleys and other required equipments for the same. Prepare mechanism for proper solid waste management, disposal of waste and removal of debris in shelter and relief camps, feeding centres and affected areas in their jurisdiction. Plan to provide building/ guest house at different locations to establish control room, first aid and medical post or shelters during emergency in coordination with HUDA.
17.	PHE DEPARTMENT	<ul style="list-style-type: none"> a) Raising of tube-well to prevent submerge by flood water b) Plugging of those stand post which may be submerged in flood water to prevent contamination of drinking water c) Maintenance squad have to be formed for each Block and Municipality d) Repairing and disinfection of stand post, pipeline & tube-well just after recedes of flood water e) Specific repairing of civil structures of water supply schemes would have to be taken up on emergency basis after assessment of the type and extent of damage due to flood f) Maintenance squad would be deployed in flood affected areas to disinfect water bodies g) Arrange for supply of Drinking water to flood affected areas. h) Arrange for supply of pouch water, if necessary i) Stockpile materials for emergency repairing of tube wells pipeline water supply and Bleaching powder and lime stone for disinfection of water sources .
18.	Public Works Department	<ul style="list-style-type: none"> Ensure availability and functioning of all equipments like cranes, JCB, etc. Prepare a data base of availability of heavy equipments like cranes, JCB with private agencies also. Ensure, at disposal, the list of MAH units and other vulnerable buildings. Prepare for prompt clearance of debris. Prepare the demolishing squad for prompt demolition of unsafe buildings. Prepare for prompt clearing and repairing of damaged roads, culverts,

66		<p>bridges and flyovers.</p> <ul style="list-style-type: none"> • Prepare for construction of new temporary roads at short notice for diverting traffic from the affected area. • Prepare for construction of temporary facilities like that of medical post,temporary shelters, etc at short notice. • Prepare for prompt establishment of helipad near the affected site for VVIP visits. • Prepare for restoration of government buildings damaged during disaster.
19.	Disaster Management Department	<ul style="list-style-type: none"> • Ensure regular monitoring of rain gauge and regular updation of database for distribution and variation in rainfall. • Ensure proper mechanism in place for early warning of different hazards to village level through tehsildars, patwaris, DDPO. • Prepare Flood Control Order by 31st May of each year. • Ensure proper functioning of district Flood Control Room during monsoon period and otherwise, if required. • Identify villages vulnerable to flood and drought. • Prepare a database of critical and lifesaving infrastructure in the district • Prepare a database of safe locations for evacuation. • Identify possible safe sites for temporary shelters, relief camps and staging area. • Ensure availability of fully functional boats, life jackets and oars in view of flood condition of the district. • Prepare a database of voluntary organizations and service they offer. Ensure the authenticity of the same. • Identify competent persons/experts from various required fields for carrying out damage and need assessment post disaster. • Prepare proper mechanism for disbursement of compensation to victims or families of deceased. • Prepare a database of safe locations for relief distribution site for mass care and housing. • Identify site(s) for temporary burial.

20.	Police Department	<ul style="list-style-type: none"> • Ensure proper functioning of all equipments. • Ensure proper mechanism in place for early warning of different hazards through police stations and police posts. • Arrange for public address system and siren. • Prepare for temporary installation of wireless systems between district and sub-divisions in case of any damage to existing wireless system with the department. • Train the communication wing of police in setting up control room at short notice at a required site. • Prepare Contingency Plan for response to bomb blast, riots, terrorist attack and other law and order emergencies. • Prepare deployment plan of home guards and other volunteers for protection of property of affected community. • Prepare for proper arrangement for custody of recovered belongings and property from dead bodies and affected sites. • Police personal and staff of PCR vans should keep basic first aid box and ensure proper functioning of equipments. • Train police personnel and staff of PCR vans in first aid and basic life saving techniques. • Prepare for proper protection to women, girls and children to avoid cases of human trafficking. • Prepare for protection of dead bodies to avoid their theft and false claims. • Prepare for safety and security of food and other commodities. • Prepare for protection against hoarding, black marketing of relief material. • Prepare for safety and security arrangements for evacuated area, affected area, transit camps, relief camps, hospital, medical centre cattle camps and feeding entrees. • Ensure traffic plan of Police at disposal. • Keep updated telephone Nos. and databases of reserved battalions of police and Dog Squad in police control Room.
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- **Search & Rescue**

Search & Rescue Team

Designation of Trained Search & Rescue Team member	
<p>The Search & Rescue team is formed as and when required and the members & equipment's are taken according to the nature of the disaster (and also on their availability)</p> <ul style="list-style-type: none"> • Police Officers (2 or more) • QRT Civil Defence Volunteers (8 or more) • Swimmers (In case of flood) • A construction engineer (From P.W.D.) • Driver (For Every vehicle) • Any person with the prior experience of the disaster (From Home Guard/Police Dept.) • A doctor or nurse or at least a person having first aid training 	

Present status of rescue equipment

SI No.	Name of Equipment	Preasent Equipment of Bankura Head Quarter	List of equipment on Khatra SDO	List of equipment on Bishnupur SDO	Preasent status
1	Rubber Speed Boat	3	1	0	working
2	Oar	3	2	0	working
3	Foot Pumper	5	2	0	5 nos. foot pumper are damage in bankura head quartetr
4	Life bouya	26	0	0	
5	Life line	2	0	0	
6	Life Jacket	36	0	0	10 nos.life jackat are damage in bankura head quartetr
7	Petrol tank	3	1	0	
8	OBM	3	1	0	
9	FRP Sefty Helmet	2	2	0	1 nos.FRP helmet are damage in bankura head quartetr
10	FRP Industrial sefty helmet	50	4	0	6 nos.FRP helmet are damage in bankura head quartetr
11	Heavy duty working gloves	18	2	0	4 pcs heavy duty working gloves are damage
12	Ladder(35 fit)	3	0	0	
13	Circular saw 350 mm	4	1	0	2 chain are damage
14	Bullet chain saw	4	1	0	
15	Life Jacket with reflective	7	0	0	

16	Kernamental rop 10.5 mm	2 bundal	1	0	1 bundal are damage
17	Sefty herness	3	0	0	
18	Fire axe	5	1	0	
19	Crowbar (5 fit)	5	1	0	
20	Spade 5 fit	7	0	0	
21	Shovel	7	0	0	
22	Hammer	2	1	0	
23	FRPF helmet with visor	5	2	0	
24	Screw caradiner	10	2	0	
25	Quick drow	10	2	0	2 quick are damage
26	Tape Sling 150 cm.	6	0	0	
27	Ascender new left & right	3	0	0	
28	Stop lock desender	3	0	0	
29	Grigri	3	0	0	
30	Tandampully	4	0	0	
31	Fixtpullay	5	0	0	
32	Blanket	6			4 nos.Blanket are damage in bankura head quartetr
33	Fast Aid Box	2	0	0	First aid are equipment are expaired
34	Canvasstretcher	4	1	0	
35	Search Light 50 mt.	3	1	0	
36	Dispossable Mask Use & through	30	10	0	20 nos. are damage in bankura head quartetr
37	Megaphone	3	0	0	
38	Sefty net	1	0	0	
39	10 ton hydollic jacket	1	0	0	
40	Fibre revcul strether	3	0	0	
41	Harnessch chair	2	0	0	
42	Rope through GUN	1	0	0	
43	Power asender with battery	1	0	0	Battery not functioning
44	Protable Genareter	1	0	0	
45	Halogen light	1	0	0	
46	Mtton glovous	6	0	0	
47	Come alon	0	0	1	
48	Rotarry hammer drill machin	2	0	0	
49	BA Set	4	0	0	
50	Compressor machin	1	0	0	
51	Manilarop	50 kg			
52	Iron Kanta	8	1	0	
53	search Camp	1	0	0	Not working
54	Fire entry shuit	1	0	0	
55	Cutting saw	1	0	0	

56	Tirpol	2	0	0	
57	Rescue uniform 24 set	24	0	0	
58	Portable inflatable emergency lighting system	2 (DDMO Section)	1	1	
Scuba set					
1	Scuba tank	13	4	4	
2	HP Compaser Machin	1	0	0	
3	Smorkel	6	2	2	
4	Sinker(20 kg)	3	1	1	
5	Sinker(10 kg)	3	1	1	
6	Facemask	4	2	2	
7	Cable set	5	2	2	
8	Diving Knife	4	0	0	
9	Fins(set)	4	2	2	
10	Weight belts	5	2	2	
11	Lead weight	34	8	8	
12	Manila rope	1	1	1	
13	Alumainioum tank	4	2	2	
14	Open spanner	1	0	0	
15	Sly. Range	1	0	0	

As soon as the warning of an impending calamity is received, the EOCs at the State, District and Block levels will be on a state of alert. The Incident Commander will take charge of the EOC and oversee the dissemination of warning to the community. The District Collector will inform the District Disaster Management Committees who will alert the local and Village level SDMCs to disseminate the warning to the community. On the basis of assessment of the severity of the disaster, the State Relief Commissioner (Incident Commander) shall issue appropriate instructions for the actions to be taken including evacuation. District Collector, will then supervise evacuation. In situations of emergency, the District Collector will use his own discretion on the preparedness measures for facing the impending disaster. At the village level members of the SDMCs will coordinate the evacuation procedures to the pre-designated relief centers, taking special care of the vulnerable groups of women, children, old people etc. according to the plans laid down earlier.

Operational check-up of Warning System

Warning systems are checked periodically like, Satellite phone, Hot Line, Telephone connection, connectivity etc. In Pre-Monsoon meeting District Administration also give direction for checking warning system like, port signals.

Evacuation

The plan allocates responsibility for management of each of the elements of shelter. Considering the wide range of services, agencies and issues to be managed, it becomes essential for 'shelter' to be managed within a structure, which facilitate the coordination of agencies and services and support of emergency workers. The following factors will be taken under consideration:

- Identification of appropriate shelter areas based on safety, availability of facilities, capacity and number of victims
- Approaches to the shelter location in light of disruption due to hazard impact and traffic blockades
- Temporary accommodation
- Provision of essential facilities like drinking water, food, clothing, communication, medical, electrical and feeding arrangements, etc.
- Security
- Financial and immediate assistance
- First-aid and Trauma counselling

Damage & Loss Assessment

Immediately after the disaster, there is an urgent need of damage assessment in terms of loss of life, injury and damage to property. The objectives of damage assessment are to mobilize resources for better rescue and relief, to have detailed information extent of damage due to disaster and to develop strategies for reconstruction and restoration facilities. Damage is assessing with regard to building stock, standing crops, agricultural area, livestock lost, forest cover decimated, vital installations etc. In damage assessment of building stock, generally three types of flags are used; green, yellow and red. The green colour is given to the buildings that are safe and require 2-3 days to return to their original function. Yellow flags depict the considerable damage to the buildings and considered unsafe for living, as they require proper structural repairs and careful investigation. The red flag is assigned to buildings that are partially or completely collapsed. Immediately after a disaster event, damage assessment will be conducted in 2 phases viz. Rapid Damage Assessment and Detailed Damage Assessment

NGOs and other stakeholders coordination – identification of their strengths and allocation of responsibilities in area/sector/duty/activities – Activate NGO coordination cell

NGO and Voluntary group are doing very important activity and response during disaster. DDMA also organized capacity-building programmers, awareness programmers on Disaster Management for NGO and Voluntary group. For arrangement of water supply, temporary sanitation facilities, search and Rescue activity, Relief distribution can be sought with help of special agencies, NGOs and CBOs.

Awareness Generation

As a part of Preparedness Awareness, generation among community will be continuous process. From District to Block, Village level awareness programme must be conducted with the help of Print Media, Electronic media, folk media authority can create awareness among community.

Awareness Activity and Responsible Department

Task	Activity	Responsibility
Information, education And communication	Advertisement, hording, booklets, leaflets, banners, shake-table, demonstration, folk dancing and music, jokes, street play, exhibition, TV Spot, radio spot, audio-visual and documentary, school campaign, Rally, - Planning and Design -Execution and Dissemination	<ul style="list-style-type: none">• Information Dept.• Education Dept.• All line dept.• Dist. Collectors• Other Dist. Authorities

Media Management

The role of media, both print and electronic, in informing the people and the authorities during emergencies becomes critical, especially the ways in which media can play a vital role in public awareness and preparedness. Media through educating the public about disasters; warning of hazards; gathering and transmitting information about affected areas; alerting government officials, helping relief organizations and the public towards specific needs; and even in facilitating discussions about disaster preparedness and response. During any emergency, people seek up-to-date, reliable and detailed information. The District Authority has established an effective system of collaborating with the media during emergencies. At the District Emergency Operation Centre (DEOC), a special media cell will be created which is made operational during emergencies. Both print and electronic media will be regularly briefed at predetermined time intervals about the events as they occur and the prevailing situation on ground.

Documentation

Documentation is very important activity in disaster management. DDMA also appoint duty for Documentation to the information department. Documentation should be in good manner. It should be reliable and authentic. It can be detailed or summarized form.

General Preparedness Checklist for the District Bankura

- District Magistrate, Bankura shall ensure that preparedness checklist is duly followed by each line department and status of the same is discussed in monthly meetings.
- Head of department of each line department shall ensure that the departments are prepared to meet the challenges of any emergency/ disaster by duly following the preparedness checklists.
- Nodal officers of each of the frontline departments shall ensure quarterly updation of District Disaster Management Resource Inventory and submission of the same to District Magistrate, Bankura by:

a) Adding to it any changes in the human resources of their department along with their updated contact numbers, if any.

b) Adding to the equipment list, relevant resources for response activities from both the government and private sector.

- DDMO shall ensure that the same has been updated and uploaded on website of District Administration on quarterly basis with the help of District Information Officer (DIO).
- Nodal officers of each of the line department shall also report to Head of Department and/or District Magistrate, Bankura about requisition of any relevant resource/equipment, not available with the Government and/or private sector, for disaster management activity.
- District Disaster Management Authority (DDMA), Bankura shall ensure the establishment of Emergency Operation Centre, Bankura with the following:

a) Proper space for Planning and Logistics Section Chief and staff.

b) Proper space for control room with adequate communication equipment's including landline telephones, mobile phones, satellite phones, computer/ laptop with printer facility, email facility, television, etc.

c) Ensure power backup facilities along with availability of generator set.

d) Ensure proper space for meeting, conference, media briefing along with LCD, computer and video conferencing facilities.

- Availability of District Disaster Management Resource Inventory, Bankura and also of the neighbouring districts. Disaster Management Resource Inventory of the state and also of critical national resources.
- Availability of District Disaster Management Plan, Bankura.

CHAPTER 6

Capacity Building and Training Measures

Developing a DDMP without building capacity or raising awareness amongst stakeholders can be detrimental to the development of a successful and sustainable plan. Stakeholders and communities are critical components to a successful, long-term, sustainable disaster management plan. Capacity Building develops and strengthens skills, competencies and abilities of both Government and non-government officials and communities to achieve their desired results during and after disasters, as well as preventing hazardous events from becoming disasters. Following training cum Orientation Programme may be organised by DDMA , Bankura:

- One day sensitization programme for school teachers and students on School safety management at each Sub-division
- One day Training Programme for Hazard, Vulnerability and Risk Assessment (HVRA) at each Block for Block and Gram Panchayat Level Officials.
- Two days Comprehensive Capacity Building Programme on basic Disaster Management for Civil Defence Volunteers at District Level
- One day Training on each of the following topics : i) Early Warning ii) Search & Rescue iii) First aid iv) water, sanitation and Hygiene for the concerned Task force at District level
- Two days training on Flood and Storm/Cyclone Management for line department officials at District level
- Two days Training for drought Management Course for Concerned line department Officials.
- Two days District level engineers and masons sensitization Training programme on safe construction practices at District level
- One day training on Community based emergency response to the elected members of Gram Panchayat and Panchayat Samiti at Block level
- One day Community based disaster preparedness orientation programme for NGOs/CBOs, Civil Defence Volunteers at Block level
- Two days District level basic and intermediate course on Incident Response System for District level officers
- Two days Training for drought Management Course for members of Panchayati Raj Institutions at Block level
- Mock drill on search and rescue operation with QRT Civil Defence Volunteers & Fire Brigade at District level during June and September

Training & Capacity Building

To enhance organizational and capability skills to deal with emergency situations requires trainings and capacity building exercises of the various linked government and non-government officers. Since disaster management is a multi-organizations effort, it emphasizes on trainings in execution and coordination as well. Therefore wide ranges of trainings related to management skills are highly required for potential officers in order to equip them for specialized disaster related tasks. They require orientation of various aspects of crisis management such as :-

- Skill training,
- Planning,
- Trainings on Emergency Response Functions such as first-aid, search and rescue, emergency operation center, emergency feeding and welfare, communication and damage assessment etc.
- Trainings for coordinated disaster management activities and response operations are highly required especially for the persons engaged in emergency services, government – line departments, non-government organizations and important private sector groups
- Training requirements are likely to comprise of core activities of emergency management such as Incident Response System, Emergency Response Functions and basic management skills. Persons to be trained shall be:
 - Government Officers at par with the rank requirement under Incident Response System
 - Team leaders and members under Emergency Support functions
 - Quick Response Teams at headquarter and field level
 - Community level task forces including Civil Defence Volunteers, NGOs

District Administration can organize seminars and workshops with the help of State disaster management authority, Civil Defence and Home Guard, Fire fighting department, Health departments etc. A record of trained manpower shall be maintained by each department and their representation shall be noticed during mock-drill.

Level-1 Capacity-Building

1 Agriculture / Horticulture Department

- Formation and training of a Weather Watch Group for the purpose of monitoring crops in the district.
- Putting in place disaster management protocols for the hazards of drought, flood, hailstorm, etc.
- Provision of training to farmers in alternate cropping techniques and mixed cropping.
- Formation of Rapid Damage Assessment Teams who will be capable of assessing the condition of soil, fields, irrigation systems and any other damage to crops and produce in post-disaster situations.

2 Animal Husbandry

- Training of Staff for reducing attacks stray animals and control of their population.
- Formation of Rapid Damage Assessment teams capable of examining and assessing damage caused to livestock, feed and fodder, and other things within the domain of animal husbandry.

3 Civil Defence

- Provision of trainings for volunteers in Search and Rescue (SAR), First Aid, Traffic Management, Dead Body Management, Evacuation, Shelter and Camp Management, Mass Care and Crowd Management etc.
- The purchase of SAR equipment's through the appropriate channels of the District Administration.

5 Education Department

- Formation and training of damage and needs assessment teams within the department.
- Provision of trainings in First Aid and basic survival skills for teachers and students in the district.
- Education and awareness programs should be designed in such a way so that the disaster management education in the school/ college curriculum could be included.
- Capacity-building at the institutional level should be done by carrying out various activities under the School Safety Programme

6 Electricity Department

- The timely purchase of electric equipment's necessary for maintaining state of adequate preparedness and for speedy and efficient disaster response, through the appropriate channels of the District Administration.
- To make the response task force for dealing power problems and provide trainings on electrical safety to departments and community.

7 Forest Department

- Formation and training of teams within the department for catching wild/ escaped animals who pose a threat to human safety.
- To generate awareness among community on Forest Fires.
- To generate awareness on afforestation among communities.

8 Bankura Road Transport Department

- Provision of training to drivers, conductors and staff in First Aid and basic life saving techniques
- Adequate stocking/replenishing of First Aid kits and maintenance of fire extinguishers in all vehicles and depots in the district.

9 Health Department

- Formation and training of damage and needs assessment teams within the department.
- Provision of trainings for Quick Response Medical teams of paramedics, mobile medical teams, psychological first aid teams and psycho-social care teams.
- Timely procurement/purchase of portable equipment for field and hospital diagnosis, triage, etc.
- Provision of trainings for health attendants and ambulance staff in First Aid and life-saving techniques.
- Provision of training to members of local communities in health and hygiene practices.
- Capacity-building at the institution all level should be done by carrying out various activities under the Hospital Emergency Preparedness Programme .

10 Irrigation Department

- Provision of trainings to all human resources with regard to early-warning for flood.
- The timely purchase of early warning and communication equipment through appropriate channels of the District Administration.

11 Development and Panchayat

- Providing Awareness or Trainings among community on Disaster Preparedness.
- Provision of training for formation of teams to engage with the issues of hygiene and sanitation at the village level through the Gram Panchayats.

12 ⁸⁵ Police Department

The efforts of the police go a long way in and avoid or control chaos at affected sites. They also help prevent human trafficking which is increasingly common in the after math of disasters. The trained police personnel should be placed on record within a district-level database of persons trained in disaster management.

Trainings for the police personnel are thus, an important aspect of capacity-building in the district. District Police , Bankura will organize such training for the police personnel.

13 Fire Services Department

- For capacity-building, Fire Services in Bankura district should be made responsible for conducting fire-safety trainings for all district officials as well as for societies, shopkeeper associations, etc. from time to time.
- Bankura Fire Services should also be made responsible for conducting safety audit so of various government and civilian buildings in order to check whether they are compliant with fire-safety norms.
- Furthermore, the Fire Services should conduct mock-drills for firefighting and evacuation procedures regularly, following a schedule stipulated by the District Disaster Management Authority, Bankura. Training programs on disaster management that are relevant to the role of the Fire Services are conducted by the Fire Department from time to time, and the District Administration, Bankura should ensure that fire personnel are deputed for such trainings. The trained Fire Services personnel should be placed on record with in a district level database of persons trained in disaster management. Such trainings are thus an important aspect of capacity-building in the district.

In addition to these Disaster Risk Reduction (DRR) specific Capacity Building & Training initiatives of the Line Departments, these departments would include Disaster Mitigation and Preparedness as one of the integral part in the regular trainings conducted by these departments in consultation with DDMA.

Level-2 Capacity Building

a) Civil Engineers (structural capacity-building)

There is strong evidence that appropriate engineering intervention can significantly reduce the risk of disasters. Civil engineers also play an important role in post-disaster conditions – in rescue operations, damage assessment and the retrofitting of structures. Civil engineers need to keep themselves updated about the latest research and developments in construction technology, advances in construction materials and analysis or design procedures. Civil engineers should also take support from other branches of engineering for the better planning, execution and functioning of their building and infrastructure projects. Trainings to Civil Engineers will be provided by Executive Engineer, PWD, Civil, Bankura. Furthermore, at the district level, civil engineers will conduct training of masons for construction of earthquake-resistant structures. Such trainings will be facilitated by the DDMA.

Strengthening of District (EOC)

As mentioned in previous Chapter, the Emergency Operations Centre (EOC) contains important equipment's and resources such as maps and communication equipment's including landline telephones, mobile phones, walkie-talkie, computer/laptop with printer facility, email facility, fax machine, television, etc. In addition, it will also contain printers, power sources and backups, copies of plans, etc. It is crucial to strengthen the district-level EOC.

This can be done by:

- Ensuring regular training of all staff meant to be present in the EOC.
- Video-conferencing equipment
- Satellite Phones with annual subscription
- Wireless Phone Setup in the EOC
- Training and provision of HAM Radios

Capacity-building at the Community Level

Community Disaster Management Planning is one of the vital components of community preparedness. It involves all important parameters related to hazard awareness, evacuation planning, resource inventory, community level taskforces and committees etc. which helps community members in organizing themselves to combat disaster in a pre-planned manner and also focus on vulnerable groups – women, children, aged persons and persons with various kinds of disabilities. Preparation of community plans encourages promoting preparedness planning at community level. District Administration should also impart trainings on regular basis to Non Governmental Organisations (NGOs), Self Help Groups etc. to involve them into community planning. The hazards of the district indicate that there is a vital need of awareness among community through public awareness programs on the following themes of disaster:

- Types of disasters and basic do's and don'ts related to those disasters.
- Post disaster starvation / Health (epidemic) problems
- Mitigation measures such as retrofitting techniques for hazard resistant building construction.
- Communication of information of all possible risks based on vulnerable areas, groups, structures / situations and related response such as evacuation in the district and to solve preparedness problems at community level.

Local residents are likely to be the first emergency responders to such incidents, particularly in remote areas and, therefore, critical to the successful outcome. The capacity building plan should cater to the 'differential capacity building needs' based on the functional responsibilities assigned to stakeholders. It should address –

It is important to consider the special/ specific needs of persons with disabilities in every phase of disaster management and risk reduction.

Mock Drill

1. Mock drill on search and rescue operation will be arranged at District level twice in a year

Budget:

Sl No.	Name of Training / Programme	Approximate no. of participants	Fund required in Rs.
1.	One day sensitization programme for school teachers and students on School safety management at each Sub-division	3x50=150	90,000/-
2.	One day Training Programme on Hazard, Vulnerability and Risk Assessment (HVRA) at each Block for Block and Gram Panchayat Level Officials.	22x50=1100	6,60,000/-
3.	One day Comprehensive Capacity Building training Programme on basic Disaster Management for QRT Civil Defence volunteers at District Level	1x50=50	60,000/-
4.	One day Training on each of following topics : i) Early Warning ii) Search & Rescue iii) First aid iv) water, sanitation and Hygiene to the concerned Task force at Block level	22x50=1100	6,60,000/-
5.	Two days training on Flood and Storm/Cyclone Management for line department officials at District level	30 (for 02 days)	50,000/-
6.	Two days Training for drought Management Course for Concerned line department Officials at District level	50 (for 02 days)	60,000/-
7.	Two days District level engineers and masons sensitization Training programme on safe construction practices at District level	50 (for 02 days)	60,000/-
8.	One day training on Community based emergency response to the elected members of Gram Panchayat and Panchayat Samiti at Block level	22x50=1100	6,60,000/-
9.	One day Community based disaster preparedness orientation programme for NGOs/CBOs, Civil Defence volunteers at Block level	22x50=1100	6,60,000/-

10.	Two days District level basic and intermediate course on Incident Response System for District level officers	30 (for 02 days)	50,000/-
11.	Two days Training for drought Management Course for members of Panchayti Raj Institutions at Block level	22x50=1100	6,60,000/-
12.	Mock Drill on Search and rescue operation with QRT Civil Defence Volunteers & Fire Brigade at Sub-division and at District level during June & September	50 x3x2=300	4,00,000/-
	Total		Rs. 40,50,000/-

CHAPTER-7

RESPONSE AND RELIEF MEASURES

The post disaster phase of Disaster Management looks into relief, rehabilitation, reconstruction and recovery. The effective disaster management strategy aims to lessen disaster impacts through strengthening and reorienting existing organizational and administrative structure from district and state to national level. Relief on the contrary is viewed as an overarching system of facilitation of assistance to the victims of disaster for their rehabilitation in States and ensuring social safety and security of the affected persons. Relief needs to be prompt, adequate and of approved standards. It is no longer perceived only as gratuitous assistance or provision of emergency relief supplies on time. Therefore, Emergency response plan is a first attempt to follow a multi-hazard approach to bring out all the disasters on a single platform incorporating disaster resilient features to 'build back better' as the guiding principle. It provides a framework to the primary and secondary agencies and departments which can outline their own activities for disaster response. Response process begins as soon as it becomes apparent that a disastrous event is imminent and lasts until the disaster is declared to be over. Disaster response is aimed at: Saving Life-Minimize the Loss- Stabilizing the Situation.

Response Planning

The onset of an emergency creates the need for time sensitive actions to save life and property; reduce hardships and suffering to restore essential life support and community systems, to mitigate further damage or loss and to provide the foundation for subsequent recovery. Effective response planning requires realistic identification of likely response functions, assignment of specific tasks to individual response agencies, identification of equipment, supplies and personnel required by the response agencies for performing the assigned tasks. A response plan essentially outlines the strategy and resources needed for search and rescue and evacuation etc.

Response measures are those which are taken instantly prior to and following a disaster aimed at limiting injuries, loss of life, damage to property, environmental losses and rescuing those who are affected or likely to be affected by disaster. Response process begins as soon as it becomes apparent that a disastrous event is imminent and lasts until the disaster is declared to be over. Since response is conducted during periods of high stress in a highly time constrained environment and with limited information and recourses it is by far the most complex of four functions of disaster management. Response includes not only those activities that directly address the immediate needs such as search and rescue, first aid and shelters but also includes systems developed to coordinate and support such efforts. For effective response all the stakeholders need to have a clear perception/vision about hazards, its consequences and actions that need to be taken in the event of it.

Response Planning Phases during Early Warning

Pre-Disaster	Responsible Deptt.	Post-Disaster	Responsible Deptt.
Activate control room if necessary	DDMA will activate the control room at district level. Control room at Sub-Division and Block level will be activated by concerned disaster management authority.	Quick Damage and Need Assessment	Multi-Sectoral committees encompass all line departments constituted by DDMA
Review situation	DDMA will review all the situation on the basis of data and reports provide by the line departments	Search and rescue	Home Guard/Civil Defence/Fire with coordination with Police and NDRF (if required)
Communicate warning (Inform community likely to be affected by the impending disaster, Inform line departments/agencies to mobile resources/teams for quick deployment)	DEOC will communicate the warning to all potential affected areas with support of Police, Fire Brigade and Local Administration.	Activate Line Departments/Agencies to Quick restoration of basic utilities and critical infrastructure e.g. Roads, Life Line Buildings i.e. Hospital, Blood Bank, Schools and Banks, Admin Building, Electricity, Water/Sanitation,	DDMA will coordinate with all line departments for quick restoration
Coordination with all line departments	Officer authorized by DDMA will coordinate	Activate all Quick response Team (QRTs)/ First Responder Team	DDMA will coordinate with all available QRTs in the District
Stocking of essential and basic life line Items and materials	All line departments i.e. Health, Food and Civil Supplies, PHE, PWD etc.	Sharing, reporting and communicating the info to the State and National Level and requisition for assistance to prompt response or relief	Officer authorized by DDMA will coordinate
Identification of temporary shelter	Block will identify the shelter with support of G.P School Education Department	Activate and deploy the Incident Response Teams	DDMA Chairman

Evacuate people to temporary shelter with essential facilities	Police and Home guard and Civil Defence will evacuate the people to safer place or identify temporary shelter in support of Fire Deptt., and Paramilitary Forces in the district	Provide temporary shelter and basic necessitate facilities to people	Block will coordinate with all line departments
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❖ **Disaster Response Functions to be carried out by District Administration**

✓ **Early Warning Phase:**

1. Activation of Control Room/EOC: As soon as Early Warning Message/Information is available through IMD/CWC, DDMA will activate EOC/CR.
2. Inform Community likely to be impacted.
3. Inform Line Departments/Agencies.
4. Hold Meetings of DDMA
5. Requisition of National Disaster Response Force (NDRF)
6. Requisition of Paramilitary Forces

✓ **Immediate Post Disaster Phase**

1. **Search & Rescue:** Home Guard/Civil Defence/Fire will carry search and rescue in coordination with Police and NDRF and the existed Paramilitary Forces within or nearby the district.
2. **Quick Damage Assessments:** DDMA will constitute a multi-sectoral damage and need assessment team which will carry out the process of damage and need assessment and report to the DDMA for further action. The multi-sectoral teams will be constituted and its members having local knowledge and will comes from different expertise to do the synthesis damage and need assessment compressively. The team will conduct damage assessment in the special following sectors

Table 7.3: Damage Assessment in Context to Response

Sr. No	Damages
1	Roads and Bridges
2	Life Line Buildings
3	Food and Civil Supplies
4	Houses
5	Water lines and Tanks
6	Electricity
7	Communication
8	Medical Infrastructure
9	Schools buildings
10	Agriculture Crops and Horticulture
11	Livestock
12	Forest

Quick Need Assessments

Need assessment will be undertaken by a multi-sectoral team with a special focus on the following sectors mentioned below:

Need Assessment in Context to Response

Sr. No.	Sector of Need
1.	Temporary Shelter
2.	Food and Civil Supplies
3.	Medical/health
4.	Drinking water
5.	Special Needs
6.	Psychosocial care
7.	Security needs in context of varying social groups
8	Restoration of essential services like, roads, water facilities, power and communication

Resource Mobilisation

Resource mobilization is one of the most important and crucial activity when any disaster occurs in the district for responding to disaster in an efficient manner. The IDRN portal has information regarding different kind of resources available for multi-hazard with various departments along with their location across district. It can lead to quick and immediate procurement of the required resources from the nearest available site and department for response to any disaster.

Various resources required in damage needs assessment will be mobilized by the concerned departments. Following is the list of the departments which are responsible for mobilizing various needs identified in damages need assessment:

Resource Mobilization and Responsible Department

Sr. No	Identified Need	Action	Nature of resources	Responsibility
1.	Temporary Shelter	DDMA/Revenue will arrange relief camps/shelters. Wherever required Tents will be pitched to accommodate affected people. Departments of Education, Health and Family Welfare will provide support	Tents, sleeping bags, blankets, clothing's, Sanitizer, sanitary pads and stretchers	DDMA/Health/
2.	Food and Civil Supplies	Food and Civil Supplies Deptt. will Provide food, Fuel	Essential food items and fuel	Food and Civil Supplies Deptt.
3.	Health	Health Deptt will arrange the lifesaving medicines, blood, Doctors and Paramedical staff	Medicines, doctors, ANM, nurses, Asha Workers	Health and Family Welfare Deptt./Red Cross
4.	PHE	PHE will provide chlorine tables for water purification, drinking portable water,	Drinking water, sanitation	PHE

		sanitation kits		
6.	Psychosocial care	Health and Family Welfare Deptt./Red Cross will take care of reported Physco and Mental Trauma cases	Psychosocial care	Health and Family Welfare Deptt./Red Cross
7.	Security needs in context to varying social groups	Maintain Law and Order, security of social group and tackle the human trafficking situation	Trained personnel	Police/Home Guard, Civil Defence
8.	Road clearance	To restore the road functions, remove the debris and clearance of any blockage	Earth removers and man power	PWD
9.	Power storage	To restore the power, provide the temporary chargeable generators and batteries	Generator sets, wires, manpower, batteries, search lights,	WBSEDCL
10	Communication	To restore the communication network	Network restoration, v-sets, satellite phones, walkie talkie	BSNL, Police

Response Management

Activation of EOC

The DEOC will function to its fullest capacity on the occurrences of disaster. The district DEOC will be fully activated during disasters. The activation would come into effect either on occurrence of disaster or on receipt of warning. On the receipt of warning or alert from any approved agency which is competent to issue any early emergency warning or on the basis of reports from IMD or any other agencies on the occurrence of a disaster, all community preparedness measures including counter-disaster measures will be put into operation. The Relief Commissioner will assume the role of the Chief of Operations for Disaster Management. The entire line department senior official will be immediately reported to the DEOC. The DDMA will expand the Emergency Operations Centre to include Branch arrangements with responsibilities for specific tasks depending on the nature of disaster and extent of its impact. All the occurrences report would be communicated to the SDOs, BDOs and Supporting Agencies by means of telephone and subsequent fax periodically. The occurrence of disaster shall be immediately communicated to the stakeholders such as NGOs, trained SAR volunteers through SMS gateway (or through telephone in case of communication exist or any available communication network) for which specific provision of group mobile directory would be made.

✓ **Main Roles of DEOC after activation:**

- a. Assimilation and dissemination of information.
- b. Liaise between Disaster site and State Head Quarter.
- c. Monitoring, coordinate and implement the DDMP.
- d. Coordinate actions and responses of different departments and agencies.
- e. Coordinate relief and rehabilitation operations
- f. Hold press briefings.

Incident Command System

As per the report received from the Quick Response Team, DEOC will be activated and the representative from all the nodal departments in the district will send their representative in the DEOC. The District Magistrate shall assume the charge of the Incident Commander at the DEOC level. Immediately the member of the DDMA will prepare the Incident Action Plan and direct the respective departments to execute the plan on the incident site.

Establishment of Incident Command Post

To execute the Incident Action Plan, the Incident Command Post shall be established on site to execute the operation under unified command system. Every team will operate under the field incident command that will SDM , BDO, the concerned department if departments involved are PWD, PHE, WBSEDCL, F&S, Civil Defence, ARD, Irrigation, Agriculture and District Fire Officer for fire Department, SP for police department, RTO etc. These field incident commands will monitor the work of all their respective teams and SDM will also work as coordinating command between different departments /agencies involved.

Composition of various Incident Response Teams

To manage the disaster in an effective way every department will constitute Incident Response Teams in the district consisting 3-7 persons along with machinery/equipments which will operate under the supervisory officers who will be designated as leader and who will be reporting to the officer who will be designated as supervisor who will be controlling 3-7 such types of teams ,who will further report to the officer who will be looking after 3-7 such types of divisions finally to the section chief .

Relief distribution

Relief distribution will be coordinated by sub divisional, block and respective disaster management committees. The onsite distribution will be done by incident response team. The updated needs will be communicated to DDMA and it will ensure the regular supply of the required items. The relief distribution will include essential items which serves the basic needs of the affected community like LPG , medicines, clothes, food items, drinking water, soaps, blankets, items of special needs for women's, children's, handicapped and old aged.

Search and rescue management

Search and Rescue activities include but are not limited to locating, extricating, and providing immediate medical assistance to victims trapped in emergency situation. People who are trapped under destroyed buildings or are isolated due to any disaster need immediate assistance. The District Magistrate in conjunction with local authorities will be responsible for search and rescue operations in an affected region. At present, Nodal department for this activity is NDRF and Home Guard/Civil Defence Department. There are other bodies too that help these departments in this work like Health department and Fire department. In doing so, the District Magistrate will be guided by relevant disaster management plans and will also be supported by Government departments including local authorities. Dedicated search and rescue teams from various line departments have been formed to support the search and rescue operations in the district. Team members have to be periodically trained and retrained on the elements of collapsed structure, confined space search & rescue and rope rescue etc.

Information management and media management

Media has to play a major role during disaster. They will aid in information dissemination about help-line, aid-distribution camps, emergency phone number or the needs of the people. Further, they will also help in quashing rumors, for crowd management and prevent panic situation. Media will also help in mobilizing resources from other areas. To disseminate information about various hazards in the district and the relevant dos and don'ts during and after a disaster encompass under the media management. This will be done through various media such as newspapers, television, radio, internet, media, through information van and street theatre etc. The DDMA will establish an effective system of collaborating with the media during emergencies. At the District Emergency Operation Centre (DEOC) a special media cell will be created during the emergency. Both print and electronic media are regularly briefed by some senior official designated from DDMA at pre-determined time intervals about the events as they occur and the prevailing situation on ground.

VIP management

It may be possible that the scale of a disaster may in addition prompt visits of the VVIPs/VIP which further requires the active management to ensure the effortlessly ongoing response and relief work without any interruption. DDMA will designate senior official to handle the VVIPs/VIPs visits to the affected areas and further to brief the VVIP/VIP beforehand about the details of casualties, damage and the nature of the disaster. The Police and Home guard will handle all the security of VVIPs/VIP during their visit. It would be desirable to restrict media coverage of such visits in which case the police should liaise with the government press officer to keep their number to minimum.

NGO Coordination and Management

Non-governmental organizations (NGOs) will play as one of the most effective alternative means of achieving an efficient communications link between the disaster management agencies and the effected community due to their outreach at the grassroots level. As per the section 35 and 38 of the DM Act 2005 stipulates that the DDMA shall specifically emphasize the coordination of actions with NGOs. In typical disaster situation, DDMA will coordinate NGOs/CBO's and further manage their work in prompt response, relief and rescue and also in monitoring and feedback at grassroots level by the agreeable community participation.

Disposal of dead bodies and carcass

District administration will coordinate to arrange the mass cremation burial of the dead bodies with support of police & health department after observing all formalities

- & maintain the video recording of such unclaimed dead bodies after properly handing over the same to their kith or kin. Department of animal husbandry in association with the local administration shall be responsible for the deposal of the animal carcass in case of mass destruction.

Debris Management

- Debris may be the result of natural, human-induced and technological hazards.
- Some or all jurisdictions within Bankura may experience events which result in large amounts of debris that may adversely affect public safety.
- Communities have varying and unique circumstances that could impact the types and amounts of debris and the responses to debris cleanup. These may include types of local business/industry, land use, size of the community, topography, and economics.
- Jurisdictions must be prepared to conduct emergency debris removal on their own during the initial phases of an emergency or disaster and must consider public safety as their first and top priority.
- Individuals will be responsible for removal and disposal of debris on private property.
- Debris management activities can be a major burden on the time and resources of everyone affected.
- Extraordinary demands will be placed on public and private resources for debris management following a disaster event.
- A coordinated community effort will be required to effectively collect, remove, and dispose of debris following a disaster.
- In order to combine local resources (personnel, equipment, supplies) various jurisdictions like District Administration, Municipalities, Panchayats may join together to establish a local area of operations for collecting and handling the debris.
- Mutual aid from adjacent jurisdictions will be coordinated with pre-disaster planning.
- Temporary debris storage and reduction sites will be located in each of the local jurisdictions area of operations in order to provide a close by site thus reducing transportation time and costs.
- Pre-disaster planning will provide the jurisdictions knowledge of debris management and how to organize locally to conduct debris removal operations thus ensuring that cost effective and environmentally sound practices will be used.
- During major emergencies requests for state and central assistance may be necessary.

✓ **Deployment of Search and Rescue Teams**

- As an immediate measure District and Block Administration would deploy local SAR teams of Civil Defence/Home Guards, Police and Local Volunteers etc.
- The police force will also be deployed to undertake different types of search and rescue activities.
- Requirement of Armed Forces – Army, Air Force, CPMFs, NDRF etc. would be worked out and demand for the same shall be placed by the DDMA to the Deptt. Of Disaster management & Civil Defence
- The Transport Department/District Administration shall arrange for local transportation (from airport/railway station to affected site) of NDRF teams and supplies for their equipment/vehicles of NDRF.
- The police department shall control traffic to ensure that NDRF teams/other SAR and relief teams could reach the earthquake affected areas without delay.
- Transport Department/District Administration shall provide access routes for transportation of NDRF, other SAR and Relief Teams to the affected sites. If needed, roads and bridges will be repaired or reinforced even on a temporary basis or emergency detours be provided.

✓ **Emergency Medical Relief**

- The District Hospitals , primary health centers, health department etc. would activate their respective emergency medical plan forthwith.
- NDRF teams are also trained in Emergency Medical Services (EMS) such as Medical First Response techniques with basic knowledge of life saving of disaster victims. NDRF teams shall provide EMS to the areas of their deployment during post disaster phase.
- If needed the State Government would be requested to provide mobile field hospitals, Heli-ambulances. They will be activated to reach the disaster affected areas immediately along with dressing material, splints, portable X-ray machines, mobile operation theatres, resuscitation equipment and life-saving drugs, etc.
- The Department of Health and Family Welfare at the state Level would coordinate with its counterpart at District level for medical assistance required for the District.

✓ **Supply of Relief Materials to affected States**

- The District Disaster Management Authority would assess requirement of relief items and material required for the affected areas. It would also project its demand to the State Government.
- The departments responsible for emergency supply at district level would arrange to supply relief material to the affected locations.
- The District would consolidate demands received from the Block and would coordinate with the Relief Commissioner for State assistance, if any.
- The District Disaster Management Authority would appoint Nodal Officers at airports/helipads to coordinate, receipt and channelization of relief material. Adequate arrangement would be made for the transportation of relief material to different parts of the affected areas of city.
- A mechanism would be put in place for proper accounting for and distribution of the relief material received in the District.

✓ **Establishment and Running of Relief Camps**

- Block and Municipal administration would establish relief camps as per requirement.
- The departments responsible for emergency supply would arrange for all basic amenities in these camps.
- These relief camps would be run and managed by the Municipality/ Gram Panchayat.
- Temporary shelters would be constructed as per requirement by the Municipality/ Gram Panchayat .

✓ **Repair and Restoration of Roads, Communication, Electricity and Water Supply**

- The Public Works Department (PWD) would undertake repair, build temporary bridges, access ways and other temporary structures for restoration of National and State Highways and other roads.
 - The PWD would also repair damaged helipads and make temporary helipads as per requirement.
 - Communication network would invariably be damaged .The BSNL and other service providers would take immediate steps to restore communication in the affected areas.

✓ **Damage Assessment of Public Building and Infrastructure and Individual Houses**

- All Departments would constitute teams of officers/technical persons to:-
 - Inspect buildings and structures that are critical to emergency service operations and mass care activities. Designate those that may be occupied and identify/mark those that are unsafe.
 - Inspect buildings and structures that may threaten safety. Identify/mark those that are unsafe and may not be occupied.
 - Inspect less critical damaged structures. Designate those that may be occupied and identify/mark those that are unsafe to occupy.
- Block / Municipal Administration shall constitute teams of qualified technical personnel for damage assessment of individual houses. These teams shall also identify/certify those houses that are unsafe and may not be occupied.

✓ **Information Management and Helpline**

- District Disaster Management Authority and Block Administration shall set up Emergency Information Centre (EIC) at the EOC level or other suitable location for release of consolidated information to all stakeholders including Media .
- Helpline would be established at EOC or other suitable location for providing information about victims to the next of kin, friends and others.
- EIC shall maintain all records and document of all major actions taken in managing the incident.

Relief Measures & Management

✓ **Food & Nutrition**

People affected by disasters may be deprived of food and therefore food aid shall be provided to sustain life. The following measures will be taken:

- Where necessary free distributions of food shall be made to those who need the food most.
- The food distribution will be discontinued as soon as possible.
- Wherever possible dry rations shall be provided for home cooking.
- Community kitchen for mass feeding shall be organized only for an initial short period following a major disaster particularly where affected people do not have the means to cook.
- While providing food assistance local food practices shall be kept in mind and commodities being provided must be carefully chosen in consultation with the affected population.
- Food must be of good quality, safe to consume and appropriate and acceptable to recipients.
- Rations for general food distributions shall be adopted to bridge the gap between the affected population's requirements and their own food resources.
- Food distribution should be of appropriate quality and fit for human consumption.
- Food should be stored, prepared and consumed in a safe and appropriate manner at both household and community levels.
- Food should be distributed in a responsive, transparent and equitable manner.
- NGOs, CBOs and other social organizations should be involved for supplementing the efforts of Government.
- The nutritional needs of the population should be met and malnutrition and micronutrient deficiencies of identified at risk groups addressed.

✓ **Water**

Water supply is invariably affected in natural disasters. Safe drinking water might not be available particularly in hydro-meteorological disasters. The following measures shall be taken by the District Administration:

- The District Administration shall identify alternative sources of water and make necessary arrangements for supply to the affected population.
- The District Administration shall ensure that affected people have adequate facilities and supplies to collect, store and use sufficient quantities of water for drinking, cooking and personal hygiene.
- It shall be ensured that drinking water supplied conforms to the prescribed quality standards
- It shall be ensured that water made available for personal and domestic hygiene should not cause any risk to health.

✓ **Health**

During post disaster phase many factors increase the risk of diseases and epidemics. These include poverty, insecurity, overcrowding, inadequate quantity and quality of water, poor environmental and sanitary conditions, inadequate shelter and food supply.

✓ **Medical Response**

Medical response has to be quick and effective. The execution of medical response plans and deployment of medical resources warrant special attention at the State and District level in most of the situations. The following measures shall be taken by the District Administration:

- A mechanism for quick identification of factors affecting the health of the affected people shall be established for surveillance and reporting.
- An assessment of the health and nutritional status of the affected population shall be done by experts with experience of emergencies and if possible local knowledge.
 - The voluntary deployment of the nearest medical resources to the disaster site, irrespective of the administrative boundaries will be warranted.
 - Adequate supply of medicines, disinfectants etc. shall be made.
 - Where necessary inoculation shall be done.
 - Vaccination of the children & pregnant women shall be undertaken.
 - Vector-borne diseases are a major cause of sickness and death in many disaster situations. Vector control measures shall be undertaken.
 - Water borne diseases may cause sickness and deaths and therefore adequate measures shall be taken to prevent such outbreaks.

✓ **Psychosocial Care**

Disasters cause tremendous mental trauma to the survivors. Psycho- social support and mental health services should be made available immediately in the aftermath of disaster so as to reduce the stress and trauma of the affected community and facilitate speedy recovery. The following measures shall be undertaken by district:

- A Nodal Mental Health Officer shall be designated for the District.
- Rapid needs assessment of psycho-social support shall be carried out by the Nodal Officer/ Health Department.
- Trained man power for psycho-social and mental health services shall be mobilized and deputed for psycho-social first aid and transfer of critically ill persons to referral hospitals.
- Psycho-social first aid shall be given to the affected community/ population by the trained community level workers and relief and rescue workers.
- Psycho-social first aid givers shall be sensitized to local, cultural, traditional and ethical values and practices.
- Psycho-social support and mental health Services shall be arranged in relief camps set-up in the post disaster phase.
- Where large number of disaster victims have to be provided psycho-social support a referral system for long term treatment shall be followed.
- The services of NGOs and CBOs may be requisitioned for providing psycho-social support and mental health services to the survivors of the disasters
- Community practices such as mass prayers and religious discourse etc. should be organized.

✓ **Shelter**

In a major disaster a large number of people are rendered homeless. In such situations shelter becomes a critical factor for survival of the affected people in the initial stages of a disaster. Further, shelter becomes essential for safety and security and for protection from the adverse climatic conditions. Shelter is also important for human dignity and for sustaining family and community life in difficult circumstances. The following measures shall be taken by District authorities for providing shelter to the affected people:

- Disaster affected people who have lost their dwelling units or where such units have been rendered damaged/useless shall be provided sufficient covered space for shelter.
- Disaster affected households shall be provided access to appropriate means artificial lighting to ensure personal security.
- Disaster-affected households shall be provided with necessary tools, equipment and materials for repair, reconstruction and maintenance for safe use of their shelter.

✓ **Relief Camp**

The following steps will be taken for setting up of relief camps in the affected areas:

- Adequate numbers of buildings or open space shall be identified where relief camps can be set up during emergency.
- The use of premises of educational institutions for setting up of relief camps shall be discouraged.
- One member of the Incident Command Team of the district, trained in running and management of relief camps will be deputed for its management.
- The requirements for operation of relief camps shall be worked out in detail in advance.
- Agencies to supply the necessary stores will be identified in the pre- disaster phase.
- The temporary relief camps will have adequate provision of drinking water and bathing, sanitation and essential health-care facilities.
- Adequate security arrangements shall be made by local police.
- Adequate lighting arrangements shall be made in the camp area at water points, toilets and other common areas.
- Wherever feasible special task forces from amongst the disaster affected families will be set up to explore the possibility of provision of food through community kitchens, provision of education through the restoration of schools and ICDS centres.
- Efficient governance systems like entitlement cards, identification cards, bank accounts for cash transfers etc. shall be developed.

✓ **Sanitation and Hygiene**

Sanitation services are crucial to prevent an outbreak of epidemics in post disaster phase. Therefore a constant monitoring of any such possibilities will be necessary. It should be ensured that disaster affected households have access to sufficient hygiene measures. Soap, detergents, sanitary napkins and other sanitary items should be made available to ensure personal hygiene, health, dignity and well-being. In the relief camps, toilets should be sited, designed, constructed and maintained in such a way as to be comfortable, hygienic and safe to use

✓ **Provision of Intermediate Shelters**

In the case of devastating disasters, where extreme weather conditions can be life threatening or when the period of stay in temporary shelters is likely to be long and uncertain, the construction of intermediate shelters with suitable sanitary facilities will be undertaken to ensure a reasonable quality of life to the affected people. Such shelters shall be designed to be cost effective and as per local needs.

✓ **Management of Relief Supplies**

Speedy supplies of relief materials shall be ensured in relief operations. A supply chain management system shall be developed. Standard Protocols shall be put in place for ensuring the procurement, packaging, transportation, storage and distribution of relief items. A mechanism shall be developed for receiving donations in cash or kind and their distribution. DDMA Bankura shall take all appropriate measures for transparency in the relief operations. Affected people shall be apprised of the nature and quantum of relief admissible to them. Proper formats will be developed to acknowledge the receipt of relief materials and their further distribution.

Chapter 8

Reconstruction, Rehabilitation and Recovery

The District has not faced any major catastrophic disaster in the recent past requiring large scale post-disaster reconstruction of houses, infrastructure and livelihood of people. However it has been regularly facing large number of minor disasters in every part of the State throughout the year. The affected people are being provided humanitarian relief as per the norms of the State Disaster Response Fund. These norms cater to the immediate needs for subsistence but hardly meet the requirements of long term recovery and reconstruction. Therefore the needs of post-disaster reconstruction remain largely unfulfilled even for minor disasters. In case of catastrophic disasters the needs for large scale reconstructions would be much more compelling. Hazard Vulnerability and Risk Analysis of Bankura makes it absolutely clear that the potential risks of catastrophic disasters in the This highlights the need for reconstruction of the multi-dimensional damages due to disasters in planned, systematic and organized manners.

Reconstruction, Rehabilitation and Recovery Process

It demands co-ordinate focus on multi disciplinary aspects of reconstruction and rehabilitation for recovery and is essential to understand disaster reconstruction, rehabilitation under the holistic framework of post disaster recovery. It will be in the form of recommendation rather than the rule. Rehabilitation and reconstruction are primarily carried out by the local bodies (Gram Panchayats, District, Blocks, Municipalities, etc.) and different Government departments . The reconstruction and rehabilitation plan is designed specifically for worst case scenario. Post disaster reconstruction and rehabilitation should pay attention to the following activities for speedy recovery in disaster affected areas. The contribution of both government as well as affected people is significant to deal with all the issues properly. Immediate and Long Term recovery plan includes following broad activities:

- Damage assessment
- Disposal of debris
- Disbursement of assistance for houses
- Formulation of assistance packages
- Monitoring and review
- Relocation
- Town planning and development plans
- Reconstruction as Housing Replacement Policy
- Awareness and capacity building
 - Housing insurance
 - Grievance redressal

Table 8.1: Sector specific approach and processes for Reconstruction, Rehabilitation and Recovery

Sectors	Approach	Process
<p>Public assets:</p> <ul style="list-style-type: none"> Roads and bridges Culverts Public buildings like hospitals and schools 	<p>Multi hazard resistant construction to be followed while reconstruction of public assets. For example</p> <ul style="list-style-type: none"> Hazard resistant buildings to be made with the help of certified engineers. Use of non-shrinking mortar Evacuation plans to be made for the public buildings Non-structural mitigation measures to be taken into consideration <p>Risk sensitive development will be ensured in each of the reconstruction Programme.</p>	<ul style="list-style-type: none"> Detailed damages and needs assessment: Multi sectoral/ multi-disciplinary teams are to be made which can do a detailed damage and need assessment of the entire area. Develop a detailed recovery plan through multi departmental participation. Specific recovery plan through consultative process of different line department are to be made. Arrange for funds from state government Multi sectoral Project Management Unit to be made. The process of monitoring and manipulation is to be done by DDMA.
<p>Utilities</p> <ul style="list-style-type: none"> Water supply 	<p>Multi hazard resistant construction to be followed.</p>	<ul style="list-style-type: none"> Detailed damages and needs assessment: Multi sectoral/multi-disciplinary teams are to

<ul style="list-style-type: none"> • electricity • communication 	<p>For example:</p> <ul style="list-style-type: none"> • Water pipelines, communication equipment used can be of such material which can resist impact of certain hazards <p>Risk sensitive development will be ensured</p> <ul style="list-style-type: none"> • Electric and communication junctions to be installed after considering flood zonation. 	<p>be made which can do a detailed damage and need assessment of the utilities of the entire area.</p> <ul style="list-style-type: none"> • Develop a detailed recovery plan through multi departmental participation including specific line departments and other stake holders. • Arrange for funds from state government • Multi sectoral Project Management Unit to be made. • Monitoring and evaluation: The process of monitoring and manipulation is to be done by DDMA
Housing	<ul style="list-style-type: none"> • Multi hazard resistant construction to be followed. • Risk sensitive development will be ensured • Non-structural mitigation measures to be taken into consideration • Use of non-shrinking mortar • Further loans can be sourced through banks and other financial 	<p>Detailed damages and needs assessment: Multi sectoral/ multi-disciplinary teams are to be made which can do a detailed damage and need assessment of the entire area. Develop a detailed recovery plan through multi departmental participation: Specific recovery plan through consultative process of different line department are to be made.</p> <ul style="list-style-type: none"> -Arrange for funds from state government -Multi sectoral Project Management Unit to be made. -Monitoring and evaluation: The process of monitoring and manipulation is to be done by DDMA

	institutions.	
<p>Economic restoration</p> <ul style="list-style-type: none"> • Agriculture • Horticulture • Industry • Allied sectors • Tourism etc. 	<ul style="list-style-type: none"> • Multi sectoral assessment • Assess direct and indirect losses. • Develop sectoral strategies the sectors that affected the most poor. • the sectors which are most critical for district's economy • Risk sensitive development will be ensured • Owner driven approach will be preferred • Provision of single window insurance claim system • Promote insurance facility for all sectors through government and private institutions 	<p>-Detailed damages and needs assessment: Multi sectoral/ multi-disciplinary teams are to be made which can do a detailed damage and need assessment of the entire area.</p> <p>-Develop a detailed recovery plan through multi departmental participation: Specific recovery plan through consultative process of different line department are to be made.</p> <p>-Arrange for funds from state government</p> <p>-Multi sectoral Project Management Unit to be made.</p> <p>-Monitoring and evaluation: The process of monitoring and manipulation is to be done by SDMA.</p>
<p>Livelihood restoration</p>	<ul style="list-style-type: none"> • Nature, number and types of livelihoods affected • Interim and long term strategies • Focus on livelihood diversification • Issues related to most poor people, women, and marginalized sections • Livelihoods of people without assets (labor) • Role of NGOs 	<p>Detailed damages and needs assessment: Multi sectoral/ multi-disciplinary teams are to be made which can do a detailed damage and need assessment of the entire area.</p> <p>Develop a detailed recovery plan through multi departmental participation: Specific recovery plan through consultative process of different line department are to be made.</p> <p>Arrange for funds from state government, multi lateral</p> <p>Multi sectoral Project Management Unit to be made.</p> <p>Monitoring and evaluation: The process of monitoring and manipulation is to be done by DDMA</p>

Psychosocial restoration	<ul style="list-style-type: none"> • Provisions like trainings from institute like Mental hospitals and other specialized institutes. • Spiritual leaders can help the community to cope up from the trauma. 	Arrange for funds from state government
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CHAPTER 9:

Financial Resources for Implementation of District Disaster Management Plan

9.1 Existing sources of Funds for Disaster Management in the District:

- **State Disaster Response Fund (SDRF):** SDRF is a fund constituted under section 48(1) (a) of the Disaster Management Act, 2005 (53 of 2005), these guidelines are being issued under section 62 of the DM Act, 2005.
 - **Calamities Covered under SDRF:** The SDRF shall be used only for meeting the expenditure for providing immediate relief to the victims of cyclones, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanches, cloud burst and pest attack.
- **National Disaster Response Fund (NDRF):** NDRF is a fund constituted under section 46 of the Disaster Management Act 2005. These Guidelines are issued under section 46 (2) of the Disaster Management Act, 2005 (hereinafter DM Act, 2005), to supplement funds from the State Disaster Response Fund (SDRF) of a State, to facilitate immediate relief in case of calamities of a severe nature.
 - **Calamities Covered under NDRF:** Natural Calamities of Cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, avalanches, Cloud burst and pest attack considered being of severe nature by Government of India and requiring expenditure by a State Government in excess of the balances available in its own State Disaster Response Fund (SDRF), will qualify for immediate relief assistance from NDRF.

9.2 Funds to be created under DM Act 2005

- **District Disaster Response Funds (DDRF)**

DDRF is proposed to be created at the District Level as mandated by Section 48 of the DM Act. The disaster response funds at the district level would be used by the DDMA towards meeting expenses for emergency response, relief, rehabilitation in accordance with the guidelines and norms laid down by the Government of India and the State Government.

Chapter 10

Procedure and Methodology for Monitoring, Evaluation, Updation and Maintenance of DDMP

The District Disaster Management Plan is the sum and substance of the Horizontal and the Vertical disaster management plans in the district. District Disaster Management Plan of Bankura is a public document which is neither a confidential document nor restricted to any particular section or department of administration. The underlying principle of disaster management is that it has to be part of all departments and none can fold fingers against it.

Authority for maintaining & reviewing the DDMP

The District Disaster Management Authority (DDMA), Bankura will update the DDMP annually and circulate approved copies to the entire stakeholders in Bankura District. DDMA, Bankura will ensure the planning, coordination, monitoring and implementation of DDMP with regard to the following mentioned clauses of the DM Act, 2005:

- Preparation of plan is the ultimate responsibility of the District Disaster Management Authority. The first draft plan is to be discussed in the DDMA and later the Chairman of the DDMA shall rectify it.
- The same procedure is to be followed in updating of the plan document. The District plan is to be updated annually by the District Disaster Management Authority. In order to update the document, all Line departments' Plans shall be collected and incorporated to the District Plan.
- A copy of the updated document shall be circulated to each department of Government in district Bankura.
- Section 31, Clause (4) of DM Act 2005, mentions that the District Plan shall be reviewed and updated annually.
- As per sub-section (7) The District Authority shall, review from time to time, the implementation of the Plan and issue such instructions to different departments of the Government in the district as it may consider necessary for the implementation thereof.

Proper monitoring & evaluation of the DDMP

Half-yearly meeting will be organized by the DDMA under the chairmanship of the Chairman, DDMA, Bankura to review disaster management activities in the state and updating the DDMP accordingly. All concerned departments and agencies have to participate and give recommendations on specific issues on Disaster Management and submit their updated reports quarterly.

Post-disaster evaluation mechanism for DDMP

The DDMA Chairman shall make special arrangements to collect data on a particular disaster irrespective of size and vulnerability. This post disaster evaluation mechanism shall be set up with qualified professionals, experts and researchers and the collected data shall be thoroughly cross checked and documented in the EOC for further reference. The DDMA will evaluate the DDMP by conducting meetings and consultation with all stakeholders.

Schedule for updation of DDMP:

Besides the above (2 and 3) procedure of updating the DDMP shall be updated by:

- Regular data collection system from the district Emergency Operations Centre (EOC)
- Analysis of data
- Review by Chairperson, DDMA
- Updating and disseminating the updated plan

The updated data of DDMP will also be maintained at the DEOC website, ready for use in any situation under the supervision of DDMA, Bankura.

The Chairman, DDMA will ensure regular updation of the DDMP by consulting the nodal officers of the line departments will update it on a biannual basis taking into consideration:-

- ❖ Inventory of equipment in the district,
- ❖ Human Resources, their addresses and contact details,
- ❖ Valuable inputs from actual disasters and updating Matrix of past disasters and HVCRA within the District
- ❖ Major change in the operational activities and location through SOPs & Checklists
- ❖ Lessons learnt from training, near-missed incidents
- ❖ Inputs from mock drills/ simulation exercises
- ❖ Changes in disaster profile
- ❖ Technological developments/ innovations in identifying potential hazards
- ❖ Updation of databases using new technologies like GIS
- ❖ Change in demography of surrounding population
- ❖ Changes in geo-political environment

Chapter 11

Coordination Mechanism for Implementation of District Disaster Management Plan

The Coordination between District and State is vital for the proper disaster management. It requires both inter departmental and intra departmental coordination with the entire stakeholder line departments and local bodies. These partnerships recognize that each level of the disaster management arrangements must work collaboratively to ensure the effective coordination of planning, services, information and resources necessary for comprehensive disaster management.

The arrangements comprises of several key management and coordination structures. The principal structures that make up the Arrangements are:

- (A) Disaster management committees/ Task forces are operational at Village, Block, Sub-Division and district level. The above committees are responsible for planning, organizing, coordinating and implementing all measures required to mitigate, prevent, prepare, respond and recover from disasters the affected area under their jurisdiction.
- (B) Emergency Operation Centers at Sub-Division and district level supports disaster management groups while coordinating information, resources, and services necessary for disaster operations.
- (C) Functional agencies of district administration, DDMA and DEOC, are responsible to coordinate and manage specific threats and provide support to other agencies on and as required.

Intra Departmental Coordination:-

Each stakeholder department i.e., Health and Family Welfare, Fire and Police, BSNL, Food and Supply, Forest, Education, Agriculture, Horticulture, Transport, Irrigation, PHE, Electricity, PWD etc. will constitute departmental level Disaster Management committee headed by a District Level Officer pertaining to that department. The committee will organize quarterly meetings of the committee members to analyze the preparedness level of the department in regard to disaster management. The committee will also decide the measures to be taken for reducing the gaps in their capacities and keep the proper record of the same.

Sub - Division level coordination mechanism:-

As per the institutional mechanism, SDM/Sub Divisional Officer will call for the quarterly meeting the sub division level disaster management committee to review the preparedness level and plan to reduce the gaps identified. The SDO/SDM will further report the situation to the DDMA and send the requisition of resources if required.

Block level coordination mechanism:-

As per the institutional mechanism, B.D.O. will call for the quarterly meeting at the Block level disaster management committee to review the preparedness level and plan to reduce the gaps identified at Block level.

Arrangements at G. P. level:-

It is the G. P. level that manages disasters within their own communities. Block, Sub division and District levels are to provide additional resources, support, assistance and expertise as required. Local government is the key management agency for disaster events at local level. Local government achieves coordinated disaster management approach through Gram Panchayat Disaster Management committees.

Coordination system with inter departments and at district level:-

The District Magistrate/District Collector is the head of the District administrative set up and chairperson of the DDMA as per the DM Act, 2005. She / He has been designated as the responsible officer in the District. The heads of different departments in the District will have separate roles to play depending on the nature and kind of disaster. The roles and responsibilities of the members of the DDMA will be decided in advance in consultation with the concerned members.

- **Pre Disaster coordination:** Annual meeting for review of preparedness and discussion on the roles and responsibilities of the line departments, Blocks and Sub Divisions should be conducted. There should be discussion on the capacity of each department in terms of SAR equipment's and manpower and regular updation of the same.
- ☐ **Disaster phase coordination:** Coordination through phone or any other mode of communication in a disaster phase is not possible hence all the line departments and training institutes in the district should report to the DEOC as soon as the disaster strikes. After loss/damage assessment at the DEOC, the District Magistrate would direct various stake holders to deploy their resources and task forces in the affected areas.
Relief camps would be setup at a pre-defined location.
- **Post disaster coordination:** In the post disaster phase, the District Magistrate would take updates on the conditions of basic amenities like water, food, roads, law and order etc from the respective departments. An assessment of relief given and need of rehabilitation would also be taken in the post disaster phase.

Coordination mechanism with community:-

The community will be coordinated through the Gram Panchayat disaster management committees.

Coordination mechanism with NGOs, CBOs, Self Help Groups (SHGs),

The strong linkages which NGOs, CBOs have with grassroots communities can be effectively harnessed for creating greater public awareness on disaster risk and vulnerability, initiating appropriate strategies for strengthening the capacity of stakeholder groups to improve disaster preparedness, mitigation and improving the emergency response capacities of the stakeholders.

In addressing the emerging concerns of climate change adaptation and mitigation, NGOs can play a very significant role in working with local communities and introducing innovative approaches based on the good practices followed in other countries.

NGOs can bring in the financial resources from bi-lateral and multilateral donors for implementing pragmatic and innovative approaches to deal with disaster risk and vulnerability, by effectively integrating and converging the various government programs, schemes and projects to create the required synergy in transforming the lives of at-risk communities.

The DDMA will maintain a proper record of the NGO's and CBO's working in the district and also map the available resources for them. The DDMA will appoint a Nodal officer for coordination with NGO's, CBO's and SHG's. The DDMA will call annual meeting of NGO's, CBO's & SHG's for mapping their resources. The meeting will be coordinated by the designated Nodal officer.

Chapter 12

Standard operating Procedures (SOPs) and Checklist

The following SOPs are designed to guide and initiate immediate action. The DDMA and the district administration will initiate action and build and expand the scope of these actions based on situation.

Search and Rescue

Search and Rescue: Actions and Responsibilities

Actions	Responsibility
• Activation of the DEOC	In charge DEOC
• DDMA to review disaster situation and make a decision to deploy search and rescue teams in anticipation of a disaster	Chairman DDMA
• Deploy district level search and rescue teams in identified locations	Chairman DDMA
• Deploy Fire & Emergency Service teams for search and rescue	District Fire Officer
• Deploy Home Guards/ QRT Civil Defence rescue teams	District Commandant – Home Guards/ Officer-in-Charge , Civil Defence
• Requisition of NDRF / SDRF	Chairman DDMA
• Establish on site coordination mechanism	ADM / SDM
• Assign area of search and rescue responsibility for different teams deployed on site	ADM/ SDMA
• Establish Staging Area for search and rescue resources	ADM/SDM
• Establish Camps for the responders with adequate food, water, sanitation facilities	ADM/SDM
• Deploy teams for law and order maintenance, traffic management as well as cordoning specific areas	District Superintendent of Police
• Identify nearest helipad and ensure it is in operating condition	ADM/SDM
• Establish triage	CMOH/ MO
• Transport critically injured	CMOH/MO / Ambulance service / Red Cross
• Establish onsite medical camps or mobile camps for first aid	CMOH/MO
• Establish information desk and dead body identification	ADM/SDM
• Evacuating people to safer places	Concerned SDMs and BDOs
• Deploy volunteers for supporting auxiliary functions such as crowd management, route management, first aid, information management	ADM/SDM
• Rescue animals in confined spaces	Deputy Director – Animal Husbandry

Relief Operations: Actions and Responsibilities

Actions	Responsibility
<ul style="list-style-type: none"> Undertake sub division wise / block wise relief needs assessment in terms of food, water, shelter, sanitation, clothing, utensils, medical and other critical items 	ADM/SDM/BDO
<ul style="list-style-type: none"> Identify suitable and safe facilities and establish relief camps 	ADM/SDM/BDO
<ul style="list-style-type: none"> Establish adequate lighting arrangement at the relief camps 	BDO / WBSEDCL
<ul style="list-style-type: none"> Ensure adequate security arrangement at the relief camps and for the affected communities 	District Superintendent of Police
<ul style="list-style-type: none"> Ensure adequate water and sanitation facilities in relief camps and other affected communities 	BDO/PHE/Municipality
<ul style="list-style-type: none"> Set up water purification plants or other suitable facilities for immediate water supply 	PHE
<ul style="list-style-type: none"> Supply, procure and provide food to the affected communities 	DCFS
<ul style="list-style-type: none"> Airdrop dry and un-perishable food to inaccessible location safe drinking water 	DM/ADM/SDM
<ul style="list-style-type: none"> Provide essential items lost due to disasters such as utensils 	ADM/SDM
<ul style="list-style-type: none"> Supply, procure and provide water to the affected communities 	PHE
<ul style="list-style-type: none"> Make required shelter arrangements including temporary camps 	ADM/SDM/BDO
<ul style="list-style-type: none"> Establish medical facilities at relief camps and at communities 	CMOH/MO
<ul style="list-style-type: none"> Ensure suitable vaccination to prevent disease outbreak 	CMOH/MO
<ul style="list-style-type: none"> Arrange for psychosocial support for victims at the camps 	CMOH/MO
<ul style="list-style-type: none"> Ensure child friendly food for the children in the camps 	DPO, ICDS
<ul style="list-style-type: none"> Ensure nutritious food for pregnant and lactating mothers in the camps 	DPO, ICDS
<ul style="list-style-type: none"> Ensure medical care facility for pregnant women for safe delivery 	CMOH/MO
<ul style="list-style-type: none"> Involve and coordinate NGO participation 	SDM / BDO
<ul style="list-style-type: none"> Put in place grievance handling mechanism to prevent discrimination 	SDM/ADM/BDO
<ul style="list-style-type: none"> Ensure adequate availability of daily need items such as food, medicine, consumables etc to ensure their access to affected communities 	ADM/SDM/CMOH/DPO,ICDS
<ul style="list-style-type: none"> Provide adequate , appropriate clothing to the affected communities and especially address the needs of women, children, aged and physically challenged according to weather. 	ADM/SDM/BDO
<ul style="list-style-type: none"> Ensure adequate transportation facility to transport relief items 	District RTO
<ul style="list-style-type: none"> Maintain proper records and documents of beneficiaries and relief distribution 	ADM/SDM/BDO
<ul style="list-style-type: none"> Supply fire wood, cooking gas, POL for the kitchen 	DFO
<ul style="list-style-type: none"> Record and maintain documents of ex-gratia payments 	ADM/SDM/BDO
<ul style="list-style-type: none"> Provide first aid and medical treatment to the injured animals 	DY. Director, ARD
<ul style="list-style-type: none"> Establish animal shelters wherever required 	DY. Director, ARD
<ul style="list-style-type: none"> Arrange fodder for animals 	DY. Director, ARD
<ul style="list-style-type: none"> Wherever required involve Animal Welfare Board and the Civil Society Organizations 	DY. Director, ARD
<ul style="list-style-type: none"> Establish banking facilities for people to withdraw cash 	District Lead Bank



Guidelines for setting up and running of the Relief Camps:

- On receipt of report from Revenue officials, the DM/SDO will order to set up a relief camp at pre-Designated location as per District/ Sub-divisional disaster management plan
- In case new location is to be selected for the camp due to unavoidable circumstances, following points should be considered for arriving at a decision.
 - Camp should preferably be set up in an existing built up accommodation like a community hall.
 - It should be located at a safe place which are not vulnerable to landslides, flood etc.
 - It should be accessible by motor vehicles, if possible.
 - Adequate space for roads, parking, drainage should also be there.
- The area should not be prone to endemic disease like malaria.
 - Wide publicity should be given about the location of the camp and affected people should be evacuated and brought to the camp directly.
 - Emergency relief materials which include drinking water, food, bedding (mattresses, sheets & blankets), baby food, mosquito repellents etc. should be arranged as early as possible.
 - Control room/ help desk should be setup in the relief camp immediately.



Shelter

- The shelter should be such that people have sufficient space for protection from adverse effects of the climate.
 - Ensure sufficient warmth, fresh air, security and privacy for their health and well being.
- Tents should not be constructed too closely together and reasonable distance should be kept between the camps to provide some form of privacy.
- Priority should be given to widows and women headed households, disabled and elderly people in tent/room distribution.



General Administration of the Camp

- One responsible officer preferably an Extension Officer should be designated as Camp Officer by the BDO who will ultimately be responsible for general management of the Relief Camp. He/She will co-ordinate & supervise the works of other officers in the camp.
- One help desk/ control room/ officer room should be designated where inhabitants can register their complaints



Basic Facilities



Lighting Arrangement and Generator Set

- A technical person, preferably from electricity or PWD (E) department should be detailed to supervise the proper lighting arrangement in and around the camp and operation and maintenance of the generator set.
- One big candle and one match box should be provided in every room/tent.
- Petromax or emergency light should be arranged in sufficient numbers in the camp.
- Approach to toilet and water source should properly be illuminated



Water Facilities

- Total requirement of drinking water, water for toilets, bath & washing of clothes and Utensils should be assessed and proper arrangement should be made accordingly One Sr. Officer of PHE Deptt. should be directed for maintaining water supply in the camp.
- Separate bathing units must be constructed for male & female



Sanitation

- Toilet should be minimum 10 mtrs and maximum 50 mtrs away from shelter/tent/room
Sufficient stock of bleaching powder, harpic and others item should be maintained



Food- Storage & Distribution

- As far as practicable and as per available space, cooked food may be served in hall or at one place for convenience of cleaning, hygiene, disposal of waste and smooth arrangement.
- Food should be culture specific and as per food habits of the community. People of rural area may not like bread & butter
- Packed food like biscuit, tinned food, ready to eat meals, noodles etc. should be properly checked that they are not expired before distribution.
- Separate queue may be allowed for women infirm & elderly people to collect relief aid.



Clothing

- People in the camp should be provided sufficient clothing to protect themselves from the adverse effects of the climate
- Culturally appropriate clothing should be made available.
- Women and girls should be provided necessary sanitary protection



Medical Facilities & Psycho-social Support

- One Doctor along with team of paramedical staff should be detailed on roster system round the clock in the camp
- A separate room or tent should be made available for the medical team.
- A rapid health assessment of all the inhabitants in the camp should be done on weekly basis
- Cases of snake bites are also reported from relief camp. Necessary arrangement should be made in nearest health Centre for adequate stock of anti-venom injection.
- Psychological support is best obtained from the family. Therefore, even in abnormal conditions, family should be kept together



Special Arrangement for women, Children, and Physically Challenged and Elderly persons

- Since women are more vulnerable during disaster, their specific needs must be identified and taken care of.
- Female gynecologist and obstetrician should be available at hand to take care of maternity and child related health concern.
- Ensure that children inoculated against childhood disease within the stipulated time period.
- For safety and security of the women and children vigilance committees should be formed consisting of women.
- Women Police Officer should be stationed within the camp to record and redress any complaints made by women.
- Security measures should be taken in the camps to prevent abduction of women, girls and children.



Vermin control

- Insect and rodents are the unavoidable pests in the relief camp. They spread diseases, spoil foods and other material
- Fogging may be arranged to prevent mosquitoes and other flying insects.
- Waste segregation should be promoted and collected on daily basis



Security

- Security, peace and order must be maintained in the relief camp. The youths in the camp may be involved for providing better security environment.
- Police personnel should be detailed on roster basis.
- Adequate employment of force should be ensured on the boundary and gate of the camp.



Entertainment, Recreation & Cultural Programme

- Literary clubs/ Organizations may be promoted to arrange books & magazines for camp populations.
- Camp population may be kept engaged by providing entertainment & recreational facilities to them.
- Temporary Anganwadi centres may be opened in the camp with the help of ICDS project officers for small children.
- Temporary schools may be setup in the camp involving volunteers from the camp inhabitants. SSM may provide free textbook, stationery etc.
- Reputed NGOs may also be allowed to run temporary schools in the camp.

Restoration of Essential Services

Restoration of Essential Services: Actions and Responsibilities

Actions	Responsibility
• Assess, prioritize and develop work plan for debris removal and road clearance	EE –PWD/ Municipality/G.P
• Constitute teams with equipment for debris removal and road clearance	EE –PWD/ Municipality/G.P
• Assess and prioritize and develop work plan for restoration of power supply	WBSEDCL
• Constitute teams / crew to undertake restoration of power supply	WBSEDCL
• Assess, prioritize and develop work plan for restoration of water supply	PHE /Municipality/G.P
• Constitute teams / crew to undertake restoration of water supply	PHE /Municipality/G.P
• Assess, prioritize and develop work plan for restoration of telecommunication services	BSNL
• Constitute teams / crew to undertake restoration telecommunication services	BSNL
• Deploy temporary / portable exchanges in critical locations for immediate restoration of telecommunication services	BSNL
• Assess, prioritize and develop work plan for restoration of road network	PWD
• Constitute teams / crew to undertake restoration of road network	PWD
• Constitute teams / crew to undertake restoration of road network in rural areas	PWD, G.P.
• Coordinate with Army / NDRF for erection of bailey bridges / temporary road links where bridges are washed out	DM/ADM

Dead Body Disposal: Actions and Responsibilities

Actions	Responsibility
<ul style="list-style-type: none"> Establish village / ward level committee for identification of dead bodies 	ADM/SDM / BDO/Municipality
<ul style="list-style-type: none"> Prepare a record of details of the bodies retrieved in the Dead Body Inventory Record Register, allocate individual Identification Number, photograph, and prepare Dead Body Identification Form 	SDM / BDO/Municipality
<ul style="list-style-type: none"> Identification of the dead bodies and handing over to the next of kin 	Village level / ward level committee
<ul style="list-style-type: none"> Transport unidentified dead bodies to the nearest hospital or mortuary at district / sub division / block level 	SDM/BDO
<ul style="list-style-type: none"> Make public announcement for establishing identity 	SDM/BDO
<ul style="list-style-type: none"> Handover the identified dead bodies to the next of kin 	SP/ADM/SDM/BDO
<ul style="list-style-type: none"> In case of unidentified dead bodies – prepare inventory, allocate individual identification number, photograph, finger print, obtain DNA sample if possible and fill Dead Body Identification Form 	SP/ADM/SDM/BDO/CMOH
<ul style="list-style-type: none"> Preserve the information recorded as forensic information 	SP/ADM/SDM/BDO
<ul style="list-style-type: none"> Undertake last rights of unclaimed / unidentified dead bodies as per established religious practices 	SP/SDM/ADM/BDO
<ul style="list-style-type: none"> Coordinate with NGOs and obtain their support 	ADM/SDM/BDO
<ul style="list-style-type: none"> Preserve the bodies of foreign nationals (if any) by embalming or chemical methods and then placed in body bags or in coffins with proper labeling for handing over and transportation of such bodies to Ministry of Extern Affairs, or to the Consular offices of the concerned countries and other actors such as International Committee of the Red Cross 	DM/SP/SDM/BDO/CMOH

Carcass Disposal

Carcass Disposal: Actions and Responsibilities

Actions	Responsibility
<ul style="list-style-type: none"> Prepare a record of details of the animal carcasses retrieved 	ADM/SDM/ARD/BDO
<ul style="list-style-type: none"> Identify owners of the livestock and hand over the animal carcasses 	ADM/SDM/ARD/BDO
<ul style="list-style-type: none"> Photograph all unidentified animal carcasses preferably before transportation for disposal 	ADM/SDM/ARD/BDO
<ul style="list-style-type: none"> Transport unidentified or unclaimed animal carcasses to the designated site for disposal 	Deputy Director, ARD
<ul style="list-style-type: none"> Maintain a record of carcasses buried or handed over 	ADM/SDM/ARD/BDO
<ul style="list-style-type: none"> Follow suggested guidelines for burial of carcasses or composting 	ADM/SDM/ARD/BDO

GUIDELINES FOR DISPOSAL OF ANIMAL CARCASSES



Guidelines for Burial

- Burial shall be performed in the most remote area possible.
- Burial areas shall be located a minimum of 300 feet down gradient from wells, springs and other water sources.
- Burial shall be made beyond 300 feet of streams or ponds, or in soils identified in the country soil survey as being frequently flooded.
- The bottom of the pit or trench should be minimum 4 to 6 feet above the water table.
- Pits or trenches shall approximately be 4 to 6 feet deep. They should have stable slopes not steeper than 1 foot vertical to 1 foot horizontal.
- Animal Carcasses shall be uniformly placed in the pit or trench so that they do not exceed a maximum thickness of 2 feet. The cover over and surrounding shall be a minimum of 3 feet. The cover shall be shaped so as to drain the runoff away from the pit or trench.
- The bottom of trenches left open shall be sloped to drain and shall have an outlet. All surface runoff shall be diverted from entering the trench.



Guidelines for Composting

- Select site that is well drained, at least 300 feet from water sources, sinkholes, seasonal seeps or other landscape features that indicate hydrological sensitivity in the area.
- Lay 24-inch bed of bulky, absorbent organic material containing sizeable pieces 4 to 6 inches long. Wood chips or hay straw work well. Ensure the base is large enough to allow for 2-foot clearance around the carcass.
- Lay animal in the centre of the bed. Lance the rumen to avoid bloating and possible explosion. Explosive release of gases can result in odour problems and it will blow the cover material off the composting carcass.
- When disposing large amounts of blood or body fluid, make sure there is plenty of material to absorb the liquid. Make a depression so blood can be absorbed and then cover, if a blood spill occurs, scrape it up and put back in pile.
- Cover carcass with dry, high-carbon material, old silage, sawdust or dry stall bedding (some semi-solid manure will expedite the process). Make sure all residuals are well covered to keep odours down, generate heat or keep vermin or other unwanted animals out of the window.
- Let it sit for 4 to 6 months, then check to see if carcass is fully degraded.
- Reuse the composted material for carcass compost pile, or remove large bones.
- Site cleanliness is the most important aspect of composting; it deters scavengers, and helps control odours and keeps good neighbourly relations.

Note: Animals that show signs of a neurological disease, animals that die under quarantine and those with anthrax should not be composted.

Information and Media Management

Information and Media Management: Actions and Responsibilities

Actions	Responsibility
• Establish a media centre at EOC	DICO
• Designate Official /Spokes Person	Selected by DM
• Prepare Press releases	DICO
• Decide the time of press releases	DM
• Decide time and frequency of press conference	DM
• Arrange for press conferences at the designated place and time	DM/DICO
• Set up interaction times of media with senior officers	DM
• Provide logistics support to the media during their visits to the disaster sites	DICO
• Scan media reports on disaster response and take necessary action	DICO

✓ Guidelines for Information Management

- flash warning signals on all television and radio networks .
- Coordinate, collect, process, report and display essential elements of disaster-related information.
- Update and feed information to key government agencies.
- Provide accurate information through print and electronic media as well as its website for easy availability and appropriate access to the members of public.
- Provide situation updates to all television and radio networks at regular intervals.
- Keep the public updated and well informed about the status of the disaster
- Develop appropriate graphics and pictures to disseminate useful information among all participating agencies as well as the people.
- Provide ready formats to collect information on different aspects of the disaster from the concerned areas to facilitate accurate communication.
- Document all response/relief and recovery measures.
- Prepare situation reports every 3-4 hours during the initial response phase of a disaster and thereafter twice or once daily.

VIP Visit Management

VIP Visit Management: Actions and Responsibilities

Actions	Responsibility
• Receive information about VIP visits	ADM / Protocol Officer
• Make arrangements for receiving VIPs	ADM / Protocol Officer
• Prepare a detailed plan and minute to minute schedule for VIP visit	ADM/ Protocol Officer
• Prepare latest detailed folder containing detailed information and submit the same to the visiting VIP	ADM / DICO
• Designate nodal officials for each location of VIP visit such as Hospital, Disaster affected communities, Relief	ADM / Protocol Officer

camps etc	
• Organize adequate security	Superintendent of Police
• Activate VIP visit protocols such as Ambulance, Fire tender, Security & Escort,	DM/SP / Protocol Officer
• Hold liaison meetings with Intelligence Department, SPG and NSG based on requirement	Superintendent of Police
• Make appropriate arrangement for rest and stay of visiting VIP and her / his entourage	ADM / Protocol Officer
• Arrange visits to disaster sites along with necessary security arrangement	DM/SP / Protocol Officer
• Ensure availability of helipad if required	DM/SP / Protocol Officer
• Make arrangements for holding press conference	ADM/DICO/Protocol Officer

Suggestions for improvement of working of Hospitals:

Suggestions for improvement of working of Hospitals: Actions and Responsibilities

Actions	Responsibilities
<ul style="list-style-type: none"> Generator sets to be kept functioning w.r.t wiring lines, operation manual and in very good condition. 	Hospital Administration/H.O.D. of the Hospital
<ul style="list-style-type: none"> There should be an arrangement that each and every generator set can supply electricity to ICU and Labor Room. 	Hospital Administration/H.O.D. of the Hospital
<ul style="list-style-type: none"> At least minimum of 200 litres of diesel be earmarked to be kept in reserve so that it can be used during emergency. 	Hospital Administration/H.O.D. of the Hospital.
<ul style="list-style-type: none"> It should be ensured that all the medicines prescribed by doctors of the hospital are made available in hospital medical store. 	Hospital Administration/H.O.D. of the Hospital
<ul style="list-style-type: none"> Test tubes should be made available to all the nursing rooms in the wards and may be provided to the doctors/nurses for taking blood samples. Reports of the sample may be made available to the doctors on their computers. It should be practically implemented. 	Hospital Administration/H.O.D. of the Hospital
<ul style="list-style-type: none"> Food may be provided to the attendants in the hospital mess on payment basis. 	Hospital Administration/H.O.D. of the Hospital

Note: Above mentioned suggestions should be implemented in all the Government as well as private hospitals.

Standard operating procedure for Responding to Train Accident.

Features of Train Accidents.

- They usually happen without warning;
- They may result in loss of life and grievous injuries;
- Loss of railway property
- Disruption of Rail traffic
- They may cause psychological problems for the survivors.

Nature of Train Accidents.

- Collision of trains
- Train derailment
- Fire or explosion in trains
- Miscellaneous

The number of fatalities and injuries is the highest in the collision of passenger trains or in the collision of passenger and goods train.

Difficult problems may occur during protection and rescue operations when train accidents occur in difficult to access terrain or in the event of a train derailling into water. Accidents of goods trains carrying dangerous polluting substances may cause direct and indirect damage to people and environment. Inclement weather may create difficulties in carrying out rescue operations.

OBJECTIVES :

1. Carrying out rescue operation to save life and to minimize further injury to the affected people.
2. Rapid extrication of trapped people.
3. Providing immediate Medical Support to the injured.
4. Evacuation of the dead.
5. To provide relief to the rescued people in the form of food, drinking water, clothing etc.
6. To provide security for the belongings of the dead and injured persons.
7. To maintain Law and Order.
8. To normalize the railway traffic.

Information about the train accident.

Driver or Guard or TTE or RPF will inform the nearest station manager or railway control room regarding the accident mentioning location and nature of the accident. Information may also be received from any passenger or people of the locality.

On receiving the information about the accident from the railway authority seeking assistance the District Magistrate who is the Chairperson of the District Disaster Management Authority will do the following for responding to this incident as Incident Commander. Addl. District Magistrate (Disaster Management) will act as Operation Section Chief. Officer-in-Charge, Disaster management Cell will function as Liaison Officer. NDC will act as Logistic Section Chief. District Planning Officer will function as Planning Section Chief. RTO will make adequate arrangement for providing vehicles for transportation of personnel, equipments and relief articles etc.

1. Open Control Room in the Disaster Management Section. DDMO will be in-charge of the Control Room.
2. Instruct Concerned SDO and BDO to open Control Room at their respective Offices. They will function as per the direction of the District Magistrate.
3. In close co-ordination with Railway Authority following functional Group/Agency will be deployed to the accident site for assistance in rescue and relief operation.
 - a) **QRT trained Civil Defence Volunteers:-** They will provide assistance to rescue and relief operations.
 - b) **Medical Team :-** (i) A medical Camp will have to be set up at the accident site (ii) The team will render medical aid to the injured. (iii) Make timely an adequate arrangement for shifting the injured persons to the suitable hospitals as considered necessary for further treatment. (iv) Alert all nearby hospitals (govt. & private) for taking adequate preparation for treatment of injured. (v) Keep detailed particulars of the dead and injured e.g. their name, address as far as available.

- c) **Fire Brigade :-** will extinguish Fire, if there any and will remain stand by during entire operation.
The personnel will render assistance in rescue and relief operations.
- d) **Police :-** Adequate police force will have to be deployed. In co-ordination with RPF and GRP the Police will
- (i) Cordon the area of accident site
- (ii) Control Crowd and maintain Law & Order.
- (iii) Deal cautiously with unlawful assemblies of people
- (iv) Provide assistance in sending injured to the hospitals.
- (v) Provide security to the luggage of the dead and injured and railway property.
- e) **Team of Telecom Department: -** will set up emergency telecommunication arrangement with STD facilities, provide free telephone facility to the passengers and their relatives. Satellite telephone may also be arranged.
- f) **Engineering Department, PWD,Civil :-** They will erect temporary medical camp, temporary shelter for stranded passengers and the relatives, shelter for taking rest of the exhausted rescue personnel and others involved in the operation and any other structure as per necessity. If necessary, arrangement of CCTV may be made. Entire operation should be Video graphed.
- g) **Engineering Department, (Electrical) :-**
- (i) Engineers would make quick assessment of electrical requirement for illumination of accident site keeping in mind the geographical spread of the site.
- (ii) Generator sets, lighting fixtures are to be set up with adequate security arrangement to avoid electrocution .Adequate arrangement of fuel should made.
- (iii) Efforts should be made to tap local power supply from some nearby source.
- (iv) If power supply is not available illumination has to be continued through generator.
- h) **Engineering Department, (PHE) :-** Will arrange for safe drinking water for the passengers, their relatives and others involved in the rescue and relief operation.
- 4) As per the direction of the District Magistrate and in co-ordination with the railway authority, local Municipality or Gram Panchayet will arrange for supply of dry/cooked food to the stranded passengers , their relatives and the personnel involved in the rescue & relief operations.
Concerned SDO and BDO will monitor and supervise the entire rescue and relief operations having Co-ordination with railway authority. Relief articles like clothing should be provided to the affected passengers as per need.

Phase-I

Rescue work on Passenger Train during “Golden Hour”

1. Just before the accident the Driver may experience unusual jerk/sound. He will drop in B.P.Pressure/Vacuum. If Guard experiences unusual Jerk/Sound, he will also drop in B.P .Pressure/Vacuum and will inform to the Driver on walkie talkie.
2. Observes gauges and train formation in rear by the Driver. The Guard observes gauges and train formation in front and informs the driver.
3. Train comes to stop on its own or driver stops the train by A-9 in emergency. Flasher light put ‘on’ and informs to Guard on walkie- talkie.
4. The Driver comes out of Cab, inspects the train formation, receives information from guard and confirms the accident and sounds whistles for accidents.
5. The driver will take out the detonators, ECP set, torch light (during night) & fuse signals. Gives instruction to Asstt. Driver for protection of train from the front by providing Iron Skid/ wooden wedges under the Loco Wheels. Guard will protection rear of the train, note down time, location &Km no. of accident. Apply hand brake of Guard brake van/LV.
6. The Driver/Guard will give information of accident to the control room/station master and assistance required, through mobile/available VHF Set/ECP set
7. Sr. Conductor will start forming rescue team consisting of (i) Sr. Conductor of TTE as leader(ii) Doctor/Nurse(if available in the train from amongst the passenger) (iii) Railway employee available (iv) RPF/GRP staff available (v) 4/5 Volunteers from the locals or from the passengers. As per availability of persons 5 to 6 rescue teams may be formed.

8. AC attendant/AC Mechanic will take out Stretcher, First Aid Box, Blankets, bed sheet, Searched light, Torch etc. and makes available to the team leader of rescue team
9. **Duties of the rescue team** – (i) worst affected coaches to be attended first (ii) consolation to the injured passengers (iii) Arranging bandage/dressing for injured (iv) Removing dead bodies from coaches and securing on blankets (v) RPF/GRP will ensure safety & security of luggage of dead or injured passengers and provides label on luggage accordingly, vi) Arrange drinking water for the injured.
10. Guard/Driver/TTE/Sr. Conductor remains in communication with control room, receives instructions and informs details receive from the rescue team.

Activity of Golden hour

1. Render definite medical care
2. Arrest bleeding and restore blood pressure quickly.
3. Persons under shock shall immediately be relieved of shock.
4. Transport casualties to the nearest hospital.

Diversion, Regulation, Cancellation and Re-scheduling of Mail / Express / Passenger Trains

- The moment information is received about the accident, all mail / express / passenger trains on run towards the accident involved section should be stopped. The trains should not be advanced beyond the last junction station or major stations from where they can be diverted or suitably controlled / terminated.
- The trains should be regulated at convenient stations where food and drinking water can be arranged.
- Too many trains should not be simultaneously brought to a junction station for regulation since it may create law and order problems
- The above decision regarding diversion should normally be taken in about one hour time after ARMVs and ARTs have been started for the accident site.

Some Important Points:

- (a) When the Driver and Asstt. Driver is seriously injured and does not talk to guard on walkie-talkie, the guard shall first protect the train from the front.
 - (b) Senior conductor/Guard shall dispatch injured passengers for medical treatment by train coming from other side or by road vehicles with the help of local people. While sending injured passengers, they shall note down the name, address and details of luggage of the injured and name of the hospital, train number/road vehicle number and the name of volunteer who will accompany the passengers.
 - (c) The RPF shall take care of the belongings of injured/dead passengers and will identify their luggage by sticking a label on the luggage.
 - (d) After protecting the train by placing detonators at 600-600-10-10, the Assistant Driver shall post a competent railway employee with red flag/lamp about 50 meters from the last detonator as per GR 6.03.
 - (e) In case of fire accident, the fire extinguishers available on the train shall be used to put off the fire by train conductors, TTEs and AC attendants and the act of detaching the affected coach shall be done immediately.
- Passenger Helpline will have to be opened with dedicated contact nos. and have to be relayed to the media.
 - Arrangement of immediate Post Mortem of the deceased has to be done. Police will help in this process.
 - U.D.Cases have to be registered in the local Police Station.
 - Arrangements have to be made by the Police for smooth identification of deceased by their relatives.
 - Compensation unit will keep liaison with the Police to get the details of the deceased.
 - Health Department must have a separate SOP for responding to train accident.

Rescue Operations

Purpose: To save life and minimize further injury to people and damage to property.

Common functions:

- * Access, Support and removal of injured and trapped people
- * Evacuating the Dead
- * Provide necessary support on request to other services, authorities or specialist teams.

Spot Planning:

- * List the types of entrapment
- * List the types of release
- * Define structure of Search
- * List out the duties of rescue team members
- * Rescue must be in phases
- * Each phase has to be completed before beginning of the next.
- * Rescue operations must be systematic

Survey of types of entrapment:

- 1) Mechanical entrapment: The train compartment is blocked up or damaged in such a manner that the occupants are unable to normally exit the compartment.
- 2) Physical entrapment :
 - (A) The occupants are injured in such a manner that additional space is required to remove that casualty
 - (B) The casualty is pinned by wreckage either by encasement or by impalement.

Rescue Team

Rescue Team will be comprised of –

- 1) Team Leader
- 2) Technical Personnel/rescuer
- 3) Safety Officer
- 4) Medical Assistants
- 5) General Assistants

Identification of work area

- * Selection of appropriate work area
- * Emergency Vehicles including Ambulance Protective Parking area.
- * Selection of place for dumping of removed and unwanted materials.
- * Equipment and tool staging area.
- * Selection of area for temporary medical camp.
- * Place for Fire Brigade.
- * Cordoning of the area by the police to prevent entry of by standers and unwanted people.

The success of rescue operation depends primarily on the team leader conducting quick and thorough reconnaissance of the situation and then developing a proper workable plan. Each member of rescue team must be trained in rescue reconnaissance.

Ideally, the rescuer will have the following qualities:

1. Attitude and interest in rescue work
2. Must have undergone regular training to maintain professional standard.
3. Dependability:- lives of victims rely upon dependability of rescuer
4. Initiative -everybody must be able to see what needs to do, set priorities and do the task at hand.
5. Versatility – An individual must be able to apply his wide range of skills and knowledge to different situations.
6. Ability to work as a team.
7. Physical and mental fitness.

8. Control over fears (a) Fear of the sight of blood
(b) Fear of heights.
(c) Fear of confined space
(d) Fear of water or drowning
9. Control of emotions: - The rescuer must remain calm and be sympathetic without becoming emotionally involved regardless of the excitement and the severity of the incident.
10. Courtesy: - Giving courtesy to all concerned will help complete the rescue task quickly and effectively.

The team leader's reconnaissance must aim for an accurate assessment of :-

1. Topography and location of casualties.
 2. Weather Conditions
 3. Time and Space
 4. Communication
 5. Dangerous situations such as gas, electricity, overhanging walls, unsafe structural components or anything else which may endanger rescue personnel or survivors.
 6. Access to casualties and priority of task
 7. Extent and type of damage
 8. Support services and agencies
 9. Available resources, both Personnel and equipments.
 10. Time the task will take with available resources.
- During operational briefing, the aim – “to rescue to passenger from the affected coach” will have to be expressed by the team leader in positive terms.

Safety Measures

- *Safety of both rescuers and casualties are of prime importance.
- *Use personal and Protective Equipments (PPE) such as helmet, protective clothing, safety goggles , gloves, safety boots etc. in accordance with the laid practices.
- *Use all equipments in close compliance with manufacturers operating instructions and follow basic safety rules for rescue tools and equipments.
- *Regularly check equipments both before and after use.
- *Compromise must not be done with standard quality of equipments.
- *Make every effort to ensure that casualties come no further harm once a rescue team arrives at the scene.
- *Rescuers will be required to lift, haul or push loads. Incorrect lifting involves serious risk of spinal or abdominal muscle injury.

Armbands

- *Rescue team members must wear armbands and luminous jackets. Armbands of medical staff should bear a red cross.

Cold –cutting

- *Extreme care must be exercised while tackling damaged coaches. Cold –cutting equipments should be used on coaches containing passengers so as to avoid burns to the trapped passengers.
- Hence, proper and periodical training of rescuers must be done.

Heavy Equipments Required

1. Various types of ropes for rescue rigging applications.
2. **Heavy Crane**- Chains and heavy-duty slings for haulage, anchorage and lifting purpose
3. **Electrical Hand Tools and generators**
 - a) Portable generator set
 - b) Power Saber Saw
 - c) Reciprocating Saw
 - d) Tre-Panner
 - e) Angle Grinder
 - f) Panel shear Machine
 - g) Nibbler Machine.

4. Hydraulic Rescue Device
 - a) Hydraulic Power Pack
 - b) Hydraulic Cutter
 - c) Hydraulic spreader
 - d) Control table
 - e) Hydraulic High Power hoses
 - f) Hydraulic Hand Pump.
5. Pneumatic Rescue Device
 - a) Air Compressor
 - b) Air Cylinder
 - c) High pressure lifting air bags
6. Stainless steel cutting machine
 - (a) Plasma cutting Machine
 - (b) Hydraulic Stainless steel Rescue Device
7. Lighting Equipment
 - (a) Inflatable Lighting Tower
8. Other Equipments
 - a) Under water cutting equipments
 - b) Water mist fire fighting equipments
 - c) Breathing apparatus
 - d) Life detector

Phase-II :

Arrival of Crack Team from Zonal Railway/Division

Crack Team shall perform following activities.

1. Extrication/removal of injured Passengers from the coaches.
 2. Render first aid to the injured.
 3. Provide succor and help to the Passengers at site.
 4. Relieve Panic and create sense of confidence among the Passengers.
- Equipments: S & T kit, Lightning kit, Arrangement First Aid kit and Rescue kit etc.

Phase-III :

Arrival of Relief Train (ART) and Accident Relief Medical Van (ARMV)

Site Organization

1. Medical Relief Camp
2. Security of luggage
3. Preservation of clues and evidences' regarding accident
4. Relief, rescue & restoration
5. Co-ordination with Civil & Media
6. Liaison with Control Room
7. Communication network
8. Lighting arrangement
9. Information booth
10. Catering arrangements
11. Evacuation of Passengers.

Handling of dead/injured

1. Dead bodies should be handled with Care & respect
2. Cover dead bodies with white shrouds and they should also be numbered
3. Expeditious issue of death certificates by Local Panchayat /Municipality
4. Photographer shall take coloured photograph of the dead and injured.
5. List of dead and injured shall be passed on to the control room from time to time.

General functions

1. Injured passengers and the relatives of the injured and dead are to be treated with utmost courtesy, concern and sympathy to alleviate their trauma and discomfort.
2. STD equipped telephone facility should be made available to passengers to communicate with their relatives.
3. After arrival of relatives they should first go through the reservation chart and locate the name of the passenger.
4. Thereafter, if details available as to which hospital the injured passenger has been admitted then vehicle should be provided to the relatives send volunteers for accompanying and carrying to the hospital and mortuary.
5. Pass Counter to be opened will issue return journey pass.
6. Return journey facilitation counter will make arrangement for return journey.
7. Arrangements should be made for stay, accommodation and food to the relatives of dead and injured.
8. In many cases like – bodies being mutilated
 - In a state of decomposition
 - Native place being far off
 - Logistic problems of taking the body back.

The relatives decide to perform last rites at the place of accident itself, and then railway/civil administration must render assistance to relatives for performing last rites.

9. Claims counter – Arrangements for payment of Ex-gratia should be made for helping the relatives.
10. To set up helpline enquiry booths: Helpline member should be relayed through electronic and print media.
11. Stranded passengers should be provided with all possible helps like food, drinking water, and accommodation and return journey etc.
12. Date, Time, Place exact location, train name & no, number coaches involved in the accident must immediately be relayed through electronic & print media.
13. (a) Running of 2 passenger special trains for carrying relatives to the site of accident.
(b) These trains will be started from the originating station and will reach to the destination station of accident and will give same stoppages as that of accident involved train for picking up relative en route.
(c) Expected departure time of relatives' special train from originating station should be relayed through electronic media.
14. Refund to the passengers whose journeys have been interrupted.
15. Taking care of uninjured/stranded passengers.
 1. Arrange to provide free food, beverages, drinking water, and temporary accommodation to the unaffected passengers.
 2. Announce expected time of departure of unaffected front position/rear position of accident involved train and its diverted route and likely time of arrival at the destination.
 3. If point(2) is not possible, announce expected time of departure of special train for carrying the unaffected passengers to the destination.
 4. Provide laborers for transshipment of luggage
 - If the accident is of serious nature Services of NDRF and ARMY will have to be requisitioned for speeding up rescue & relief operations.
 - If the accident site is in inaccessible areas, the services of helicopters from Indian Air Force may be requisitioned.

Press Briefing

1. The first press briefing should be done as early as possible regarding factual information pertaining to the accident, telephones of Helpline Enquiry booths, arrangement of special train for relatives.
2. At least 03(three) media briefing at 7:30 hrs, 13:30 hrs and 19:30 hrs regarding updated status of rescue operation, list of dead and injured, arrangement for treatment of injured, identification of dead bodies, payment of Ex-gratia, facility for unaffected passengers, relatives of dead and injured etc.
3. Competent officials should be deployed for press briefing.
4. Only factually correct and confirmed information should be relayed to the media.
5. No criticism or personal opinion or views should be expressed at any point of time.
6. Healthy relationship with press and electronic media should be maintained.

IMPORTANT TELEPHONE NUMBERS

DISTRICT ADMINISTRATION

Designation	Office	Mobile	e-mail
District Magistrate	03242 250304	9475900011	dm-bnk@nic.in
A.D.M.(G)	03242 250355	9475900012	admng.bnk@gmail.com
A.D.M.(Dev.)	03242 250757	9475900013	admd.bnk@gmail.com
A.D.M. (LR)	03242 252715	9475900014	dllrobku@gmail.com
A.D.M. (ZP)	03242 255450	9475900015	aeozp-bnk@nic.in
CMOH, Bankura	03242 250545	9932022393	cmohbankura@gmail.com
CMOH, Bishnupur		9434714890	cmoh.bsnpr@gmail.com
DPRDO	03242 254636	9475900026	dprdobnk@gmail.com
DPLO	03242 250987	9475900027	Dplobankura2018@gmail.com
PD DRDC	03242 251088	9475900016	pddrdcbnk@rediffmail.com
RTO	03242 250591	9475900035	rtobnk@gmail.com
NDC, Bankura	03242 251375	9475900021	ndcbankura@gmail.com
O/C DDMC, Bankura	03242 254735	9475900039	dmd.bankura@gmail.com
Dist. Disaster Management Officer	03242 254735	9475900087	dmd.bankura@gmail.com
Bankura Fire Officer	03242 -243291	9475113335	bankura.101.fire@gmail.com
D.I. of Schools (Secondary)	03242 253305	9153575245	disebankura@gmail.com
D.I. of Schools (Primary)	03242 251310	9933979536	bankura.dispe@gmail.com
Exe. Engineer, PHE, Bankura	03242 250573	9674773270	ee_bank@wbphed.gov.in
Exe. Engineer, PHE(Mech.), Bankura		9851839427	ee_bank_me@wbphed.gov.in
Exe. Engineer, Irrigation, Bankura		9434326615	ee.bankura.irrigation@gmail.com
Exe. Engineer, Right Bank Irrigation, Sonamukhi		9434572682	
Exe. Engineer, PWD(Civil), Bankura		9434144442	bankuradivisionpwd@gmail.com
Exe. Engineer, PWD(Roads), Bankura		6292122033	eebankurahd@gmail.com
Exe. Engineer, PWD(Elect), Bankura		9593900995	eebelectpwd@wb.gov.in
Exe. Engineer, Kansabati Canal Division – II		9382441674	k.c.dic.no.ii@gmail.com
R.M., WBSEDCL	03242 250271 / 250880 / 257447	7449305480	bnkdcircle@yahoo.com
D.M., WBSEDCL, Bankura Division		7449305510	
D.M., WBSEDCL, Bishnupur Division		7449305550	
D.M., WBSEDCL, Khatra Division		7449305600	
Dy. Director, Agri., Bankura		7478401061	ddadmnbnk@gmail.com
Dy. Director, Horticulture, Bankura		9433565126	bankuradho@gmail.com
Dy. Director, ARD, Bankura		9123610192	ddardbankura@darahwb.org
DCFS, Bankura		9123055848	dcfsbnk2.wb@gmail.com

SUB-DIVISION LEVEL

Name of the Sub Division	Office	Mobile	E-mail ID
S.D.O, Bankura Sadar	03242-250260	9475900018	sdosadarbankura@gmail.com
S.D.O, Khatra	03243-255262	9475900020	sdokhatra@gmail.com
S.D.O, Bishnupur	03244-256255	9434081001	sdobsp@gmail.com

ZILLA PARISHAD, BANKURA

Designation	Office	Mobile
Sabhadhipati, Bankura Zilla Parishad	03242 250365	9635788807
A.E.O.(ZP)	03242 255450	9475900015
Secretary, Z.P.	03242 242132	9475900023

BLOCK LEVEL

Block	BLOCK DEVELOPMENT OFFICER		
	Office	Mobile	E-mail
SUB – DIVISION : BANKUR SADAR			
Bankura-I	03242-251330	8373052830	bdo.bankura1@gmail.com
Bankura-II	03242-254627	8373052831	bdo_bankura2@yahoo.co.in
Chhatna	03242-277233	8373052832	bdo.chhatna@gmail.com
Saltora	03242-273224	8373052833	bdosaltora@rediffmail.com
Mejia	03241-250221	8373052834	bdo.mejia2020@gmail.com
Gangajal Ghati	03241-265228	8373052835	gghati@gmail.com
Barjora	03241-257227	8373052836	bdobarjora2018@gmail.com
Onda	03242-266236	8373052837	ondabdo2017@gmail.com
SUB - DIVISION : KHATRA			
Indpur	03242-260222	8373052838	bdo_indpur_bku@yahoo.com
Taldangra	03243-265347	8373052845	bdo.taldangra2017@gmail.com
Simlapal	03243-262222	8373052843	bdo.simlapal@gmail.com
Khatra	03243-255239	8373052840	bdo.khatra@gmail.com
Hirbandh	03243-252332	8373052839	Bdohirbandh2017@gmail.com
Raipur	03243-267224	8373052841	raipur_block@yahoo.com
Sarenga	03243-269243	8373052844	bdosarenga@gmail.com
Ranibandh	03243-250236	8373052842	bdoranibandh@gmail.com
SUB - DIVISION BISHNUPUR			
Bishnupur	03244-252057	8373052846	bdobishnupur@gmail.com
Joypur	03244-249222	8373052847	bdojoypur@gmail.com
Kotulpur	03244-240234	8373052848	bdokotulpur2020@gmail.com
Sonamukhi	03244-275240	8373052849	Sonamukhiblock.2019@gmail.com
Patrasayer	03244-266232	8373052850	bdo.patrasayer@gmail.com
Indas	03244-263231	8373052851	bdo.indas@gmail.com

Contact Number of DDMO, Bankura

Sl. No	District	DDMO	Office	Mobile	e-mail
1	Bankura	District Disaster Management Officer	03242-254735	9475900087	dmd.bankura@gmail.com

Contact Number of SDDMOs and BDMOs, Bankura

Sl No	Sub Division	Block	SDDMOs / BDMOs	Office	Mobile
1	BANKURA	Sub-Division	SDDMO	03242-250260	9434586332
2		Bankura I	BDMO – In - Charge	03242-251330	9679270626
2		Bankura II	BDMO	03242-254627	8016230956
3		Saltora	BDMO – In - Charge	03241-273224	8820329490
4		Barjora	BDMO – In - Charge	03241-257227	8670434928
5		Mejia	BDMO – In - Charge	03242-250221	7603091321
6		Chatna	BDMO	03242-277233	8348900972
7		G.Ghati	BDMO	03241-265228	8670589518
8		Onda	BDMO	03242 266236	9474063239
10	BISHNUPUR	Sub-Division	SDDMO	03244- 252055	9073937678
11		Patrasayer	BDMO	03244-266232	9475726918
12		Sonamukhi	BDMO	03244-275240	8250024276
13		Indus	BDMO	03244-263231	9932516268
14		Kotulpur	BDMO	03244-240234	6294427396
15		Joypur	BDMO – In - Charge	03244-249222	9903550675
16		Bishnupur	BDMO	03244-252057	9073938867
17	KHATRA	Sub-Division	SDDMO	03243-255262	9474734208
18		Simlapal	BDMO	03243-262222	9475166122
19		Hirbandh	BDMO – In - Charge	03243-252232	9609440680
20		Khatra	BDMO	03243-255239	9732280291
21		Raipur	BDMO	03243-267224	9734549878
22		Sarenga	BDMO – In - Charge	03243-269243	9474812255
23		Indpur	BDMO	03243-260222	9474928812
24		Taldangra	BDMO	03243-365343	9474813438
25		Ranibandh	BDMO	03243-250236	9434547549

MUNICIPALITY LEVEL

Name of the Municipality	No of Wards	Office	Fax	Mobile
Bankura	24	03242 -250367	03242 259269	9434115191
Bishnupur	19	03244 -252591	03244 - 256412	9434744949
Sonamukhi	15	03244-275238	03244- 275238	9434866030

RESCUE TEAM UNDER NDMA

National Disaster Response Force (NDRF) under NDMA for all sorts of rescue and evacuation operation, Contact No. control room

033-25875032 (Fax)

e-mail:wb02-ndrf@nic.in

Commandant 2nd Bn. NDRF Haringhata Farm, near RRI Camp, PO - Mohanpur,
Dist. - Nadia. PIN 741246 (W.B.)

Fire Services

Toll free No: 101

Sl. No	Name	Location	Contact Number	Mobile Number
1	Bankura Fire Station	Bankura	-	9475113335
2	Khatra Fire Station	Khatra	(03243) 255014	8100283818
3	Bishnupur Fire Station	Bishnupur	-	9434306270

IMPORTANT TELEPHONE NUMBERS OF BANKURA DISTRICT POLICE.

Sl No	Designation	Mobile No.
1	S.P Bankura	9083269300
2	Addl. S.P Bankura	9083269301
3	Addl. SP (OPs.) Bankura	9083269345
4	SDPO Khatra	9083269302
5	SDPO Bishnupur	9083269303
6	Dy.S.P (ADMN), Bankura	9083269304
7	Dy. S.P (D&T), Bankura	9083269305
8	Dy. S.P (DIB)	9083269306
9	Dy. S.P (DEB)	9083269307
10	DIO (I) DIB, Bankura.	9434001089
11.	Court Inspector Sadar Bankura	8348465436
12	Court Inspector Bishnupur	9830281222
13	R.I Bankura	9083269342
14	Sr. Adjutant HG Bankura.	7797600805
15	C.I Sadar, Bankura	9083269308
16	C.I G.Ghati	9083269309
17	C.I Kotulpur	9083269310
18	C.I Sonamukhi	9083269311
19	C.I Indpur	9083269312
20	I.C Bankura PS	9083269313
21	I.C Barjora PS	9083269314
22	I.C Bishnupur PS	9083269315
23	I.C Khatra PS	9083269316
24	I.C Ranibandh PS	9083269317
25	I.C Sarenga PS	9083269318
26	I.C Raipur PS	9083269319

27	I.C Simlapal PS	9083269320
28	I.C Barikul PS	9083269332
29	O.C Onda PS	9083269321
30	O.C G.Ghati PS	9083269322
31	O.C Beliatore PS	9083269323
32	O.C Saltora PS	9083269324
33	O.C Mejia PS	9083269325
34	O.C Chhatna PS	9083269326
35	O.C Kotulpur PS	9083269327
36	O.C Patrasayer PS	9083269328
37	O.C Sonamukhi PS	9083269329
38	O.C Joypur PS	9083269330
39	O.C Indas PS	9083269331
40	O.C Hirbandh PS	9083269333
41	O.C Taldangra PS	9083269334
42	O.C Indpur PS	9083269335
43	O.C Women PS, Bankura	9083269336
44	O.C Women PS, Khatra	9083269337
45	O.C Traffic	9083269338
46	MTO, Bankura	9083269339
47	R.O, Bankura	9083269340
48	OC Watch, DIB Bankura	9083269341
49	OC C.R, Bankura	9083269343
50	OC Crime Cell	8145900643

List of Events or Melas where large crowds gather with event date and location

Name of Block / Municipality	Name of Mela / Event	Date of event	Location of Mela / Event	Name of Head of organizer	Contact No
BDO, Bankura-II	1.Gajan Mela	13/04/2019	Ekteswar	Jagannath Deoghoria	9474452866
BDO, Saltora	Makar Mela	Poush Sankranti	Saltora	Mela Committee	NA
BDO, Onda	1. Onda Dole Mela 2. Nag Panchami Ramsagar 3. Pir Babar Mela Birsinghpur	1. Every Year Dole Utsav 2. Afrer Rath Yatra Festival 3. Every Year 1st Week of Magh (Bengali Month)	1. Onda 2. Ramsagar 3. Birsingpur	1. Raghunath Chakraborty 2. Bablu Panja 3. Azad Ali Mallick	1. 8759173786 2. 9434520335 3. 9734252615
BDO, Mejia	1 Gajan Mela, 2 Rash Mela, 3 Book Fair	1. April , 2 November, 3. January	1. Each GP area, 2. Ramchandrapur GP area, 3.Mejia GP Area	1. Local People, 2. Local people, 3. Rabilochan Gope, Sohokari Sobhapati Mejia P.S.	9800511195
BDO, G.Ghati	1. Gajan Mela 2.Dolpurnima Mela 3.Kusthol Pous Mela	1.14/04/2019 2.21/03/2019 3.23/12/2018	1.Kesiara 2.Bisinda Pahar 3.Kusthol More	1.Bidhan Singha 2.Bisinda Grammo Soloyana 3.Tarini Sadhu	
BDO, Khatra	Parkul Mela	Poush Sankranti	Parkul Village	Dahala GP	9933134454
	Mukutmanipur Mela	During Jan.- Feb.	Mukutmanipur	Mukutmanipur Dev. Authority	03243-255262
BDO, Hirbandh	1. Makar Mela 2. Ganga Mela	16.01.2019 16.01.2019	River Bank of Shilabati Bahara	Banshidhar Sardar Rabilochan Konar	9635990638
BDO, Simlapal	Simlapal Ganga Mela	Begins in Pous Sankranti and continues 5 days.	Simlapal Nadighat	Anandapur Ganga Mela Committee, Sabhapati, Nityanand	9932048913
BDO, Ranibandh	1. Ras Mela(November)	November	Ambikanagar	Gouri Sankar Narayan Dev.	9547136779
	2. Biplabi Raicharan Mela	January	Ambikanagar	Gouri Sankar Narayan Dev.	9547136779
	3.Paresnath Boul Mela	Every year date of Makar Sankranti. This year 15.1.19	Paresnath under Puddi GP	Swapan Kr.Mallick,Secretary Swapan Bagdi,President.	9434520901 8972361999
	4.Keliapathar Mela and 5. Bamnisini Mela3	Every year date after Makar Sankranti. This year 16.1.19	Kelia Pathar under Rajakata GP.	Rajen Sardar,Keliapathar Santosh Saren,Chilagara	7872647221 9647615964
BDO, Sarenga	Adibasi Mela	Lakshmi Puja	Khayerpahari	Local people	
	Sarenga Gajan Mela	5th Jaistha	Sarenga Mission Maidan	Local People	
	Bikrampur Gajan Mela	5th Baisakh	Bikrampur Pump House Math	Local People	

List of Events or Melas where large crowds gather with event date and location					
Name of Block / Municipality	Name of Mela / Event	Date of event	Location of Mela / Event	Name of Head of organizer	Contact No
	Bardi Mela	Makar Sankranti	Bardi Pahar	Local People	
BDO, Taldangra	Sabrakone Rash Mela	Every Maghi Purnima	Sabrakone	Uttam Koley, Rash Mela committee	8967524053
BDO, Bishnupur	Bishnupur Mela	December	Bishnupur	Govt. of West Bengal	
	Poramatir Hat	Every Saturday	Bishnupur	Sub-Dvn.Office,Bishnupur	
	Sareswar Gajan	End of Chaitra Mas	Dihar, Basantapur	Dihar Gajan Committee	
	Joykrishnapur Gajan	End of Chaitra Mas	Joykrishnapur	Joykrishnapur, Soloana	
BDO, Kotulpur	Samroghat Mela	During Makar sankranti	Nanagar	Madanmohanpur Gram Panchayet	9733851113
	Balitha Mayer Mela	17-19 January	Balitha	Lego Gram Panchayet	9002919080
BDO, Sonamukhi	Kali- emersion	After 4 days of kalipuj (Octo	Sonamukhi Choumatha	Sonamukhi Municipality	3244-275238
	Karti emersion	After4 days of kartick puja (Octo	Sonamukhi Choumatha	Sonamukhi Municipality	3244-275238
BDO, Patrasayer	Danna Kenduli Mela	11.02.2019	Danna, Patrasayer	Satyanarayan Dutta	9126520127
	Rasulpur Mela	22.02.2019	Rasulpur, Patrasayer	Jayanta Batabyal	9732079545
	Kalinjoy Gajan Mela	18.06.2019	Patrasayer	Santi Halder	8001579387
	Balsi Gajan Mela	05.04.2019	Balsi, Patrasayer	Kartick Roy	9474367953
BDO, Chhatna	Basuli Mela (Basanti-Puja)	12 to 14 April 2019 (approx)	Chhatna, near Police Station	Debnath Mukherjee	9734708829
	RANIR GAJAN	11TH JAISTHA	BASULI MANDIR, RAJDARBAR	PRADIP SINGHADEO	9064678377
	KULGORA MELA	16 TH JAISTHA IN BENG CALENDER	KULGORA FOOTBALL GROUND	BISHNU BAURI	7477313424
	MANTUMRA SHIB GAJAN MELA	29TH & 30TH CHAITRA IN BENG CALENDER	MANTUMRA SHIB MANDIR PREMISES	FALGUNI CHATTERJEE	8145530919
	LAXMI MELA	13-14 OCTOBER	GROUND OF JIRRAH GP	RABINDRANATH BANERJEE	9832869920
	1)Baruni Mela,2)Shraboni Mela	1)10-11th april, 2)July	Susunia Pahar Jharnatala	Susunia G.P.	3242234201
BDO, Raipur	Shani Mela	09.02.2019	Matgoda,Raipur	Secy. Ajit Kr. Das	9800897750

List of Petrol Pump

Name of Block / Municipality	Name of Petrol Pump	Location	Name of Owner	Contact No
BDO, Bankura-II	1) M/S Santima Filling Station,	Bhedua	Prasenjit Chatterjee	9475167214
	2) M/S Jit Filling Station	Sankarhati	Abhijit Kundu	9800111779
BDO, Saltora	Saltora Filling Station	Saltora	Biman Bhomik	9800994414
BDO, Saltora	Jyoti Filling Station	Saltora	Himangshu Mondal	9434588655
BDO, Saltora	Maa Shakti Fuel Station	Saltora	Sadhan Mondal	9547862680
BDO, Saltora	Loknath Filling Station	Krishnapur	Dayamoy Mondal	
BDO, Onda	Mallbhum Service Centre	Khamarberia	Subhas Ch. Mandal	9434227056
	Tanisha Filling Station	Kalisen	Tahar Ali	9434000484
	Kisko Service Station	Majdiha	Mantu Pandit	9775802208
BDO, Mejia	3	Mejia, Jemua, Tewaridanga		
BDO, G.Ghati	1. Fuel Centre3. Bankura High	anasuria3. Gobindodham4.	adas Mukherjee3. Biswajit Kundu4.	1.9933903262 2. 3.6294882051 4.8145600560
BDO, Khatra	Soren Filling Station	Kharban	Prativa Soren	9434526091
	Aditya Filling Station	Khatra Rajapara	Aditya Kr. Mandal	9641900132
BDO, Khatra	Rambhagat Hariprasad	Khatra Pump More	Bishnuprasad Bajoria	8697738928
BDO, Simlapal	Simlapal Filling Station	Simlapal	Debaprasad Singha Barathakur	9474188928
BDO, Ranibandh	No	No	No	No
BDO, Sarenga	Giriraj Filling Station	Gobindapur	Manoj Kr. Jha	
	Maa Annapurna Filling Station	Kusumtikri	Jharna Khilari	9434028716
	Mandal Fuel Station	Krishnapur	Madhu Mandal	9933700455
BDO, Taldangra	Maa Vaishna Devi Fuel	Taldangra	Smt. Moumita Chakraborty	9967582304
	Utsab Filling Station	Panchmura	Smt. Sudipta Mondal	7001124893
	Unique Fuel	Shibdanga	Souris Mohan Bisai	9749495906
BDO, Bishnupur	Nigamananda Automobile	Hinjuri	Sibani Bangal	7407690669
	Royal Filling Station	Joykrishnapur	Gopal Dey	7872021000
	Jalan Petrol Pump	Bishnupur	Jalan Brothrs	9434003058
	Rita Filling Station	Bishnupur	K.D. Mohanta	9474198592
	M/S Ma Saradmoni Filling Sta	Bamuniri More	Sudhansu Sekhar Malik	9434110605
	Dwivedi Filling Station	Gopalganj	Rita Dubey	7797564323

List of Petrol Pump				
Name of Block / Municipality	Name of Petrol Pump	Location	Name of Owner	Contact No
BDO, Kotulpur	Mallik Filling Station	Gopinathpur	Debjoti Mallik	
	Baba Burashib Petrol Pump	Deshra	Balaram Pal	9091976244
	Nirupama Filling Station	Khundanga	Sunil Mal	9434202451
	Panchanani Filling Station	Sarisa dighi	Dipak sarkar	9434501966
BDO, Sonamukhi	Sarita Filling Station	Sonamukhi	Biswambhar Mura	9933082690
	Gita Filling Station	Vill. Rapat P.S. Sonamukhi	Geeta rani Mondal	90647937333 / 94343362394
BDO, Patrasayer	Damodar Filling Centre	Kankardanga	Krishna Bhairab Dey	9475982911
	Nandalal Filling Centre	Bamira	Nitish Kundu	9434520140
	Hamida Fueling Centre	Duckbanglo	Md.Amaszol Mondal	9434392005
	Bharat Petroleum	Habibpushkarini	Anuva Basak	7001980180
BDO, Chhatna	Mataji fuel centre	Barabakra-chhatna	Partha Rajak	9474631999
	MAA BASULI SERVICE STATION	VILL- GHORAMULI, P.O	MANISHANKAR KAR	9046967195
	M/S Dipali fuels & Kishan Service	Chinabari(Besides Bankura Purulia Main Road	Dipali Murmu	8145001458
	INDIAN OIL	UPARDIHI VILLAGE	TAPAS NAYEK	9933953247
	Vikram Service Center	Saluni Jhantipahari Bankura	Indian oil Corporation Limited	9434038532 & 9475121780
BDO, Raipur	1. Anjali Fueling Station	Kankarasole	Chandra Shekhar Hembram	9474188373
BDO, Raipur	2 Sony Service Station	Chamtabaid	Sayan Murmu	9732188709

<u>List of LPG go-down</u>				
Name of Block / Municipality	Name of LPG Unit	Location	Name of Owner	Contact No.
BDO, Bankura-II	M/S Belboni Indane Gramin Bitaran	Belboni	Pratima Pal	9732052801
BDO, Saltora	Sathi Bharatgas	Saltora	Bablu Mondal	9434438821
BDO, Onda	Garai Bharat Gas Gramin Vitarak	Onda	Samudra Garai	98511933676
	Radha Krishna HP Gas Gramin Vitarak	Puncha Ramsagar	Mantu Pandit	9775802208
BDO, G.Ghati	1.Maa Manasa LPG Gas 2.G.Ghati Indane LPG	1.Radhamadhabpur2.Gangajalghat	1.Ranjit Maji2.Aparna Das	1.9732367752 6295229144
BDO, Hirbandh	Indane	Hirbandh	Manas Pramanik	9800421344
BDO, Simlapal	Dipali Bharat Gas Gramin Bitarak	Vill + P.O-Simlapal	Jolly Singha Roy	6296389023
	M/s Laxmisagar Indane Gramin Vitarak	Vill-Bankata,P.O-Lakshmisagar	Sonali Ghosh Mandal	8372985717
BDO, Ranibandh	Tulika HP GAS	Kumarpara,Ranibandh	Pranab Prakash Dutta	8944926604
BDO, Sarenga	Annapurna LPG Gas	Sarenga Namopara	Binoy Khilari	8327477878
BDO, Taldangra	Panchmura Indian Gramin Vitrak	Panchmura, Bankura	Sajal Mondal	7797660219
BDO, Taldangra	M/s. Maji Bharat Gas Gramin Vitrak	Taldangra, Bankura	Suchismita Maji	03243-265496
BDO, Bishnupur	LPG Agency	Gumut	Uma Nandi	9647005055
	LPG Agency	Bishnupur		

<u>List of LPG go-down</u>				
Name of Block / Municipality	Name of LPG Unit	Location	Name of Owner	Contact No.
	m/s Rishikesh Bharat Gas GraminBitarak	Thakurpukur	Soumen Pramanik	9732154822
BDO, Kotulpur	Kotulpur Gas Services	Konpa	Suman Ghosh	9732295185
BDO, Sonamukhi	Khajababa Gas Agency	P.O. + P.S. Sonamukhi	Mirza Ali Hossain	9434910786
BDO, Sonamukhi	Panchal Indane Gramin Bitarak	P.O. Panchal, P.S. Sonamukhi	Sirshendu Mishra	9475537852
BDO, Patrasayer	Saha Bharat Gramin Vitarak	Hamirpur	Chandana Saha	8016493397
BDO, Patrasayer	Patrasayer Indane Gramin Vitarak	Danna Dighi	Sumandas Kaibartya	9775397316
BDO, Raipur	Shila Bharat Gramin Gas Bitarak	Raipur Bazer	Jhumarani Nad	9734134190
BDO, Raipur	Mahalakshi Gramin Gas Bitarak	Chamtabaid	Sanjoy Nad	9547503080

List of Inflammable Industry

Name of Block / Municipality	Name of inflammable Industry	Name of Product	Location	Name of Owner	Contact No
BDO, G.Ghati	1.DVC 2.Sale of Fire Works	1..Electricity 2.Storing only patakas	1.Durlavpur (MTPS) 2.Roniara under Pirraboni GP	1.DVC (U/T Govt. of India) 2.Aditya Malakar	1. 2. 8250045301
BDO, Taldangra	Rose Bricks Field	Making of Bricks	Beldangra, Bhalukbasa, B	Pradip Kumar Biswas	
BDO, Taldangra	Seuli Bricks	Making of Bricks	Seuli, Bankura	Goutam Kumar Dangar	
BDO, Bishnupur	M/S MKBK Ltd.	K.Oil Big dealer	Bishnupur, Churamonipur		9476155152
	Mansamata Rice Meal	Rice	Sarisadighi	Tapan Kundu	
	Kamala Rice Meal	Rice	Kotulpur	Swapan Garai	
	Durgamata Food Product	Konpa Rice			
	Sankar Prasad Rice Mill	Rice	Siromonipur	Bhabasindhu Garai-	9434335114
	Krishna Kamala Kali Agro Products			Prasanta Kr. Roy &ors-	9434402056
	Rambhanu Rice Mill	Rice	Konpa	Nilmadhab Pan	8372984595
	Surendranath Rice Mill	Rice	Ankargeria	Ajoy Kr Kundu-	9732351505
	Leelabati Debi Projects Enterprise Pvt.Ltd		Jibtha	Anirban Nath	
	Himghar Udyog Pvt.Ltd	Cold Storage,Patato	Muidara	Rajendra Prasad Agarwal	9474855097
	Nanibala Cold Storage	Cold Storage,Patato	Siromonipur	Chitto Pal	9434015728

List of Inflammable Industry

Name of Block / Municipality	Name of inflammable Industry	Name of Product	Location	Name of Owner	Contact No
BDO, Kotulpur	Mondal Cold Storage	Cold Storage,Patato	Chatra	Niranjan Mondal	9762315376
	Bireswar Cold Storage	Cold Storage,Patato	Kotulpur	Taraknath Pan	9732147172
	Ma Sarada Cold Storage	Cold Storage,Patato	Joyrambati	Satyabrata Mukhopadhaya-94340	9434055179
	Sonar Bangla Cold Storage	Cold Storage,Patato	Jibtha	Ranjit Kr Dandapat	
	Radharani Cold Storage Pvt.Ltd	Cold Storage,Patato	Deshra	Nemai Roy & ors	
	Sreema Soap Factory	Soap	Deshra	Manisha Kaity	
	RamaKrishna Husking Mill	husks	Koalpara	Manjari Ghosh	
	Mondal Husking Mill	husks	Koalpara	Mohan Mondal	
	M/S Pankaj Karak	Kerosine Oil	Netaji More,Kotulpur	Pankaj Karak-	9333941235
	M/S Kshudiram Ghosh	Kerosine Oil	Kotulpur	Kshudiram Ghosh	
	Dey Husking Mill	husks	Gogra	Bijoy Krishna Dey	
	M/S Bholanath Pal	Gopalpur	Gopalpur	Gopalpur	Bholanath Pal- 9475356522
	M/S Nandi Agro Service Cen	Fertilizar	Saintara	A. Nandi	9474498088
	M/S Abul Kalam Khan	Kerosine Oil	Kotulpur	Abul Kalam Khan-	9732087085

List of Inflammable Industry

Name of Block / Municipality	Name of inflammable Industry	Name of Product	Location	Name of Owner	Contact No
	M/S Mala Karmakar	Fertilozar	Ganti	Mala Karmakar-	9333941236
	M/S Kartick Ch Ghosh	Baidanga	Baidanga	Kartick Ch Ghosh-	9475229321
	M/S Panchanan Mallik	Kotulpur	Kotulpur	Madan Mohan Mallik-	967918961
	Biswanath Kundu	Saintara	Saintara	Biswanath Kundu-	9434526510
	Nemai Chandra Roy	Ramdiha	Ramdiha	Ramprasad Roy	
	Uttam Kumar Guin	Kerosine Oil	Si har	Sasanka Sekhar Guin	943458955
	Samabay Saw Mill	Electric Wood Log	Kotulpur	Annada Prasad Karmakar	
	Saw Mill	Electric Wood Log	Ramdiha	Niranjan Nandi	
	Sree Sree santinath Saw Mill	Electric Wood Log	Si har		
	Mukherjee Saw Mill	Electric Wood Log	Kotulpur	Tapan Kr. Mukherjee	
	Sreedhar Enterprise	Electric Wood Log	Kankabati	Sandip Mondal	9635703460
	GM Cold Storage	Cold Storage,Patato	Siromonipur	Sankar Prasad Garai	9434004718
BDO, Patrasayer	Dudhepukur Cold Storage Pvt.L	Himghar	Dudhepukur	Uttam Dawn	9434178038
BDO, Patrasayer	Patrasayer Thana Co-operative	Himghar	Patrasayer	Nabakumar Pal	8145140302

List of Inflammable Industry

Name of Block / Municipality	Name of inflammable Industry	Name of Product	Location	Name of Owner	Contact No
BDO, Patrasayer	Masarada Rice Mill	Rice	Jamkuri	Uttam Dawn	9434178038
BDO, Patrasayer	Nabaratna Rice Mill	Rice	Dudhepukur	Lalu Prasad Manna	9434740970
BDO, Patrasayer	Jagadiswar Cold Storage Pvt. Ltd	Hinghar	Jamkuri	Nabakumar Kundu	9732255038

<u>VULNERABILITY</u>									
Name of Block / Municipality	If prone to flood, mention number of people in Vulnerable Zone	If vulnerable to Cyclone, mention number of people likely to be affected in case of Cyclone	If vulnerable to Tsunami, mention number of people likely to be affected in case of Tsunami	If vulnerable to Land Slide, mention number of people likely to be affected	If vulnerable to Chemical / Industrial Disaster, mention number of people likely to be affected	People likely to be affected by other Disaster if any (Mention name of Disaster and Number of people)	Total number of the people given in columns 2 to 7	Earthquake Vulnerability Zone	Priority Ranking as per Vulnerability to Multiple Disasters
1	2	3	4	5	6	7	8	9	10
BDO, Bankura-II	2108	0	0	0	0	0	2108	Zone - III	1) Flood
BDO, Mejia	3500	0	0	0	0	0	3500	Zone - III	
BDO, G.Ghati	548	65	0	0	180	Draught1200	1993	Zone - III	
BDO, Simlapal	2131	0	0	NO	0	0	2131	Zone - III	
BDO, Taldangra	4980	0	0	0	0	0	4980	Zone - III	
BDO, Kotulpur	11207	0	0	0	510	250 Mela at balitha and Samroghat	11207	Zone - III	
BDO, Sonamukhi	11829	0	0	0	0		11829	Zone - III	Flood Prone
BDO, Patrasayer	11124	0	0	0	0	0	11124	Zone - III	Flood Prone
BDO, Chhatna	200	0	No	No	No	No	200	No	Mouza- Chamkara
BDO, Raipur	9151	0	0	0	0	0	9151	Zone - III	1 Flood

EVENT WHERE GATHERING OF LARGE CROWD TAKES PLACE					
Name of Block / Municipality	Large Crowd events	Location	Estimated Crowd Strength as per past year record	Organizing Body	Resources deployed by District Administration manpower/equipment/vehicle etc.
BDO, Bankura-II	1. Gajan Mela	Ekteswar	15000	Mela Committee	
BDO, Saltora	Poush Mela	Saltora	12000	Mela Committee	
BDO, Onda	Dol Mela	Onda		Raghunath Chakraborty 8759173789	
Do	Nag Panchami	Ramsagar		Bablu Panja 9434520335	
Do	Pir babar mela	Birsinghpur		Azad Ali Mallick 9734252615	
BDO, Mejia	1. Makar Mela 2. Mejia Boimela	1. Riverside of Damodar at Mejia 2. Mejia High School		1. 2. Mejia Boimela Committee	
BDO, G.Ghati	1. Gajan Mela 2. Dol Purnima Mela 3. Kusthol Pous Mela	1. Kesiar2. Bisinda Pahar3. Kusthol	1. 12000 2. 7000 3. 25000	1. Bidhan Singha 2. Bisinda Grammo Soloyana 3. Tarini Sadhu	
BDO, Khatra	Prkul Mela	Left bank of Kangsabati river near Parkul village	10000	Village committee	NIL
BDO, Khatra	Mukutmonipur Mela	Near Kangsabati Dam at Mukutmonipur	15000	Mukutmonipur Dev. Authority	Speed Boat, Life Jacket, Vehicle and Manpower
BDO, Simlapal	Simlapal Ganga Mela	Simlapal Nadi Ghat, Anandapur	6000	Anandapur Ganga Mela Committee, Sabhapati Nityananda Pain No. 9932048913	Police deployment made by the I.C, Simlapal
BDO, Ranibandh	Biplabi Raicharan Mela (January)	Ambikanagar	20000	Biplabi Raicharan Mela Committee Gouri Sankar Narayan Deo	
BDO, Ranibandh	Rash Mela (November)	Ambikanagar	5000	Ras mela Committee	
BDO, Ranibandh	Paresnath Boul Mela	Every year date of Makar Sankranti. This year 15.1.19	Paresnath under Puddi GP	Swapan Kr. Mallick, Secretary Swapan Bagdi, President.	9434520901 8972361999
BDO, Bishnupur	Sareswar Gajan Mela	Dihar, Basantapur	20000	Sareswar Gajan Committee	
	Bishnupur Mela	Bishnupur	100000	Bishnupur Sub-Dvn. Officer	
	Joykrishnapur Sib Mela	Bishnupur	5000	Joykrishnapur Sib Mela Committee	

<u>EVENT WHERE GATHERING OF LARGE CROWD TAKES PLACE</u>					
Name of Block / Municipality	Large Crowd events	Location	Estimated Crowd Strength as per past year record	Organizing Body	Resources deployed by District Administration manpower/equipment/vehicle etc.
	Poramatir Hat at Bishnupur	Bishnupur	1000 perSaturday	Bishnupur Sub-Dvn.Officer	
BDO, Joypur			100000	Bishnupur Sub-Dvn.Officer	
BDO, Kotulpur			5000	Joykrishnapur Sib Mela Committee	
BDO, Sonamukhi	Kali- emersion	Sonamukhi	25000 approx	Sonamukhi Municipality	
BDO, Sonamukhi	Karti-emersion	Sonamukhi	25000 approx	Sonamukhi Municipality	
BDO, Patrasayer	Danna Kenduli Mela	Danna, Patrasayer	2500	Satyanarayan Dutta	No
BDO, Patrasayer	Rasulpur Mela	Rasulpur, Patrasayer	5200	Jayanta Batabyal	No
BDO, Patrasayer	Kalinjoy Gajan Mela	Patrasayer	6700	Santi Halder	No
BDO, Patrasayer	Balsi Gajan Mela	Balsi, Patrasayer	1800	Kartick Roy	No
BDO, Chhatna	Basuli-Mela	Basuli Mandir, Chhatna	2500	Basuli Trust	
	RANIR GAJAN	11TH JAISTHA	BASULI MANDIR, RAJDARBAR	PRADIP SINGHADEO	9064678377
	1)weekly {Market Every Monday} 2)weekly	1)Bahara 2)Shiulibana Beltal	1)Last week Report 1500 2)Last Week	Village People	NA
	KULGORA MELA	KULGORA FOOTBALL GROUND	2500	KULGORA MELA COMMITTEE	POLICE DEPLOYMENT UNDER CHHATNA P.S.
	MANTUMRA SHIB GAJAN MELA	MANTUMRA SHIB MANDIR PREMISES	2000	MANTUMRA SHIB GAJAN MELA COMMITTEE	POLICE DEPLOYMENT UNDER CHHATNA P.S.
	LAXMI MELA	13-14 OCTOBER	GROUND OF JIRRAH GP	RABINDRANATH BANERJEE	9832869920
BDO, Raipur	Shani Mela	Matgoda, Raipur	10000	Matdoda Shani mela committee Secy. Ajit kr. Das 9800897750	No

DETAILS OF HERITAGE BUILDINGS IN BANKURA DISTRICT

Name of Heritage Building	Address	Significance	Year of Construction	Name of Block/ Municipality	Whether prone to Inundation (Y/N)	Whether located in Landslide/ EQ/ Cyclone/ Tsunami Prone Zone. If so specify	Whether sufficient Fire Fighting Arrangements are there	Any Special measures taken for Disaster Risk Reduction If any	Remarks
Temple of Shyamchand	Dharapat, PS- Vishnupur	Religious importance	1603 AD	Bishnupur	N	No	No	No	Required for Repairing
Temple of Gokulchand	Gokulnagar, PS- Jaipur	Religious importance	1643 AD	Bishnupur	N	No	No	No	Required for Repairing
Temple of Jhagraichandi	Boital (Uttarband), PS- Jaipur	Religious importance	1659 AD	Bishnupur	N	No	No	No	
Temple of Lakshmi-Janardan	Boital (Uttarband), PS- Jaipur	Religious importance	1696 AD	Bishnupur	N	No	No	No	
Temple of Shyamchand	Boital (Dakshinband), PS- Jaipur	Religious importance	1660 AD	Bishnupur	N	No	No	No	
Temple of Radha-Krishna	Vikrampur, PS- Jaipur	Religious importance	Not Known	Bishnupur	N	No	No	No	Required for Repairing
Temple of Radha-Krishna	Muninagar, PS- Vishnupur	Religious importance	1678 AD	Bishnupur	N	No	No	no	
Temple of Hakanda	Mayna, PS- Jaipur	Religious importance	11 th century AD	Bishnupur	N	No	No	No	
Temple of Damodora	Kotulpur, PS- Kotulpur	Religious importance	18 th -19 th Century AD	Bishnupur	N	No	No	No	

MAJOR DISASTER & FINANCIAL LOSS DURING LAST FINANCIAL YEAR
IN BANKURA DISTRICT

Name of Disaster	Cyclonic storm 'FANI'
Date of occurrence	04.05.2019
No. of Block Affected	21
No. of Municipality affected	03
No. of village affected	634
No. of people affected	20344
No. of Human life lost	NIL
No. of livestock lost	06
Crop area damaged	10600 Hec.
Value of crop damaged	Rs. 26,75,00,000/-
No. of house damaged	Fully – 217 (Money Value Rs. 45,57,563/-) Partly – 3249 (Money Value Rs. 1,13,71,500/-)
Damage to properties other than crop & houses	Rs. 12,64,835/-
Total financial loss	Rs. 28,46,93,898/-

LIST OF EQUIPMENTS WHICH MAY BE PROCURED IN THE NEXT YEAR
IN BANKURA DISTRICT

Sl. No.	Name of Equipment	Rate per Piece (Rs.)	No. of equipment to be procured	Requirement of fund (Rs.)
01.	Bullet chain Saw 20"	1,20,000/-	4	4,80,000/-
02.	Cutting Blade 20" for Bullet chain Saw	13,000/-	6	78,000/-
03.	Kernamantle rope 12 mm (100 Ft.)	26,000/-	3	78,000/-
04.	Kernamantle rope 10.5 mm (100 Ft.)	26,000/-	3	78,000/-
05.	Safety Helmet (Without Visor)	600/-	10	6,000/-
06.	Safety Helmet (With Visor)	700/-	10	7,000/-
07.	Gum Boot	500/- per pair	10 Pair	5,000/-
08.	Mitton Gloves	700/- per pair	10 Pair	7,000/-
09.	Heavy duty working gloves	600/- per pair	6 pair	3,600/-
10.	Search light with charger	4000/-	5	20,000/-
Total:				7,62,600/-