



### RAHUL MAJUMDAR, WBCS (Exe.)

District Magistrate& Collector Purulia

### **PREFACE**

Purulia is the western most district of West Bengal with all India significance because of its tropical location. The district is between 22<sup>0</sup>42'35" and 23<sup>0</sup>42'0" north latitude and 85<sup>0</sup>49'25" & 860 54'37" east longitude. The district is characterized by undulating topography with

rugged hilly terrains in the Western and Southern parts. General elevation of the land surface ranges from 150 m to 300 m, the master slope being towards the east and south east. Three types of soils have been recognized in this district viz.(1) residual types derived from weathering of granites, gneisses and schist (2) Lateritic soil in the upland area (3) Clay loam to clay in the valleys. Almost entire district soil is acidic.

Purulia is well known as a drought prone district and falls within the semi—arid region of the state. The district is situated within the agro-climatic region of Eastern plateau and Hills and sub-region Chhotonagpur South and West Bengal Plateau. The district has a sub tropical climate and is characterized by high evaporation and low precipitation. Average annual rainfall varies between 1100 and 1500 mm.

The relative humidity is high in Monsoon season being 75% to 80%. But in hot summer its comes down to 25% to 35%. Temperature varies over a wide range from  $7^0$  Celsius in winter to  $46.80^0$  Celsius in the summer.

Following the natural slope of the district all the rivers have easterly or south easterly courses. Only the Subarnekha flows south and receives West and South west flowing tributaries. The Kangsabati is master stream of the district, draining more than three fifth of the district. All the tributaries of the Damodar, Kangsabati, Kumari, Darakeshwar, Subarnarekha, Bandhu & Silajit are non perennial and subject to flash flood:

As per satellite Imagery data total geographical area of this district is 6257.78 sq. km. out of which 52.47 % are used for agriculture. 29.69% are under forest coverage (including social forestry) and 14.11% are identified as wasteland.

I am glad that Multi Hazard District Disaster Management Plan for 2019 has been prepared with good effort from the Disaster management Officials led by the District Magistrate.

I hope all the departments and public representatives will put up a co-ordinate effort to effectively implement the plan.

Rahul Majumdar, WBCS (Exe.)

District Magistrate Purulia PURULIA



### District Disaster Management Plan

2019 - 2020

S T R I C

D

Office of the District Magistrate, Purulia Disaster Management Section

### <u>Index</u>

Chapter	Page
District Disaster Management Plan 2019	3 -126
Action Plan of Dy. Dir Agri and UNICEF	Annexure – I
Action Plan of RAIL (Adra Division)	Annexure - II
Action Plan of DVC & CISF and Irrigation Dam Safety	Annexure - III
Action Plan of Police, DI and ARD	Annexure - IV
Profile of Chemical Industries	Annexure - V
Different Mela in Purulia	Annexure - VI



### RAHUL MAJUMDAR, WBCS (Exe.)

District Magistrate& Collector Purulia

### PREFACE

Purulia is the western most district of West Bengal with all India significance because of its tropical location. The district is between 22<sup>0</sup>42'35" and 23<sup>0</sup>42'0" north latitude and 85<sup>0</sup>49'25" & 860 54'37" east longitude. The district is characterized by undulating topography with

rugged hilly terrains in the Western and Southern parts. General elevation of the land surface ranges from 150 m to 300 m, the master slope being towards the east and south east. Three types of soils have been recognized in this district viz.(1) residual types derived from weathering of granites, gneisses and schist (2) Lateritic soil in the upland area (3) Clay loam to clay in the valleys. Almost entire district soil is acidic.

Purulia is well known as a drought prone district and falls within the semi —arid region of the state. The district is situated within the agro-climatic region of Eastern plateau and Hills and sub-region Chhotonagpur South and West Bengal Plateau. The district has a sub tropical climate and is characterized by high evaporation and low precipitation. Average annual rainfall varies between 1100 and 1500 mm.

The relative humidity is high in Monsoon season being 75% to 80%. But in hot summer its comes down to 25% to 35%. Temperature varies over a wide range from  $7^0$  Celsius in winter to  $46.80^0$  Celsius in the summer.

Following the natural slope of the district all the rivers have easterly or south easterly courses. Only the Subarnekha flows south and receives West and South west flowing tributaries. The Kangsabati is master stream of the district, draining more than three fifth of the district. All the tributaries of the Damodar, Kangsabati, Kumari, Darakeshwar, Subarnarekha, Bandhu & Silajit are non perennial and subject to flash flood:

As per satellite Imagery data total geographical area of this district is 6257.78 sq. km. out of which 52.47 % are used for agriculture. 29.69% are under forest coverage (including social forestry) and 14.11% are identified as wasteland.

I am glad that Multi Hazard District Disaster Management Plan for 2019 has been prepared with good effort from the Disaster management Officials led by the District Magistrate.

I hope all the departments and public representatives will put up a co-ordinate effort to effectively implement the plan.

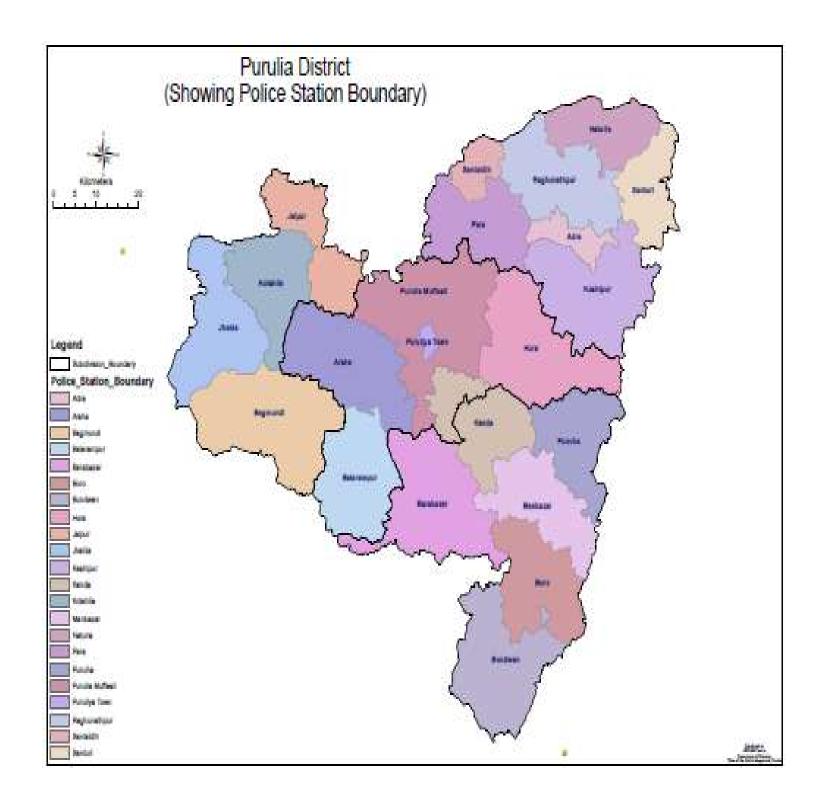
Rahul Majumdar, WBCS (Exe.)

District Magistrate Purulia

Page 3 of 126

### Intruduction

AIM, Objectives, Stakeholders & and their Responsibilities



### Introduction

Purulia came into being as a district of West Bengal in 1956. Purulia is the westernmost district of West Bengal with all-India significance because of its tropical location, its shape as well as function like a funnel. It funnels not only the tropical monsoon current from the Bay to the subtropical parts of north-west India, but also acts as a gateway between the developed industrial belts of West Bengal and the hinterlands in Orissa, Jharkhand, Madhya Pradesh and Uttar Pradesh.

### Location and extent

This district is between 22°42'35" and 23°42'0" north latitude and 85°49'25" and 86°54'37" east longitude. Midnapore, Bankura and Burdwan district of West Bengal and Dhanbad, Bokaro, Hazaribagh, Ranchi, West Singbhum, East Singbhum district of Jharkhand State bound this district.

### Geography

The district is characterized by undulating topography with rugged hilly terrains in the western and southern parts. Purulia is well known as a drought prone district and falls within the semi-arid region of the state. The district is situated within the agro-climatic region of Eastern Plateau and Hills and sub-region Chhotonagpur south and West Bengal plateau. The district has a sub-tropical climate and is characterized by high evaporation and low precipitation. Average annual rainfall varies between 1100 and 1500 mm. The relative humidity is high in monsoon season, being 75% to 85%. But in hot summer it comes down to 25% to 35%. Temperature varies over a wide range from 7° Celsius in winter to 48.50° Celsius in the summer. Soil erosion is the most prominent phenomenon of the district resulting huge deposition of fertile soil in the valley region. Vast areas of land remained uncultivable wasteland.

### Administrative Divisions

The total geographical area of the district is 6259 sq. kms. Out of which the Urban and Rural areas are 79.37 sq. kms (1.27%) (Municipalities & Non-Municipalities) and 6179.63 sq. kms (98.73 %) respectively. The district headquarter is situated at <u>Purulia town</u> (23°20' north latitude and 86°22'30" east longitude) having three administrative sub-divisions viz. Purulia Sadar East, Purulia Sadar West and Raghunathpur.

### There are 24 Police Stations:

1. Purulia Town	13.Jhalda
2. Purulia Muffasil	14. Manbazar
3. Hura	15. Kenda
4. Puncha	16. Boro
5. Joypur	17. Para
6. Arsha	18. Santaldih
7. Baghmundih	19. Raghunathpur
8. Balarampur	20. Kashipur
9. Barabazar	21. Neturia
10. Bandwan	22. Santuri
11. Adra	23. Kotshila
12. Purulia Sadar Woman PS	24. Raghunathpur Sub Divisional Woman PS

### Sub-Division wise detail of 20 Community Development Blocks:

Purulia Sadar	Manbazar	Jhalda	Raghunathpur
1. Purulia –I	1.Puncha	1. Baghmundi	1. Kashipur
2. Purulia -II	2. Manbazar-I	2. Jhalda-I	2. Neturia
3. Hura	3. Manbazar-II	3. Jhalda-II	3. Santuri
4. Balarampur	4. Bandwan	4. Joypur	4. Raghunathpur – I
5. Arsha	5. Barabazar	XX	5. Raghunathpur -II
XX	XX	XX	6. Para.

3 Municipalities (Purulia, Raghunathpur, Jhalda), 8 non-municipal towns, 170 Gram Panchayats, 2683 mouzas (2468 inhabited villages) and 1911 Gram Sansads.

### Purulia local milieus & ethos

Jaina Bhagavati-Sutra of circa 5th century A.D. mentions that Purulia was one of the 16 Mahajanapadas and was a part of the country known as Vajra-bhumi in ancient times. However, little is known about Purulia before the East-India Company obtained the 'Diwani' of Bengal, Bihar, Orissa in 1765. By Regulation XVIIII of 1805, a Jungle Mahals district composed of 23 parganas and mahals including the present Purulia (known as 'Purulia' those days) was formed. Regulation XIII of 1833 broke up the Jungle Mahals district and a new district called Manbhum was constituted with headquarters at Manbazar. The district was very large in size and included parts of Bankura, Burdwan of present West Bengal and Dhanbad, Dhalbhum, Saraikela and Kharswan of present states of Jharkhand and Orissa. In 1838 the district headquarters was transferred to Purulia of today. Since the formation of the district it was withdrawn from regular administration and placed under an officer called Principal Assistant to the agent to the Governor-General for South-Western Frontier. The title of the officer Principal Agent was later changed to Deputy Commissioner by Act XX of 1854. Finally in 1956 Manbhum district was partitioned between Bihar and West Bengal under the States Reorganization Act and the Bihar and West Bengal (Transfer of Territories) Act 1956 and the present district Purulia was born on 1st November 1956.

### Demographic Profile

Particulars	1991 Census	%	2001 Census	%	2011 Census(P)
Total Population	2224577		2536516		2927965
Male Population	1142771	51.37	1298078	51.18	1497620
Female Population	1081806	48.63	1238438	48.82	1430309
Other Population					36
Rural Population	2014571	90.56	2281090	89.93	2554584
Urban Population	210006	9.44	255426	10.07	373381
0-6 years Population	413603	18.59	408803	16.12	393562
Scheduled Caste	430513	19.35	463956	18.29	535544
Scheduled Tribe	427765	19.23	463452	18.27	534963
Households	384419		449895		752652
Sex Ratio	947		954		955
Population Density (sq.KM.)	355		405		468
Decadal Growth Rate	20.00(1981-91)		14.02(1991-01)		15.43
Literates	783925	43.29	1182284	55.57	1656940
Female Literates	204096	23.24	378790	36.50	635485
Rural Literate Total	658624	40.32	1014101	53.24	1404686
Urban Literate Total	125301	70.58	168183	75.40	252254

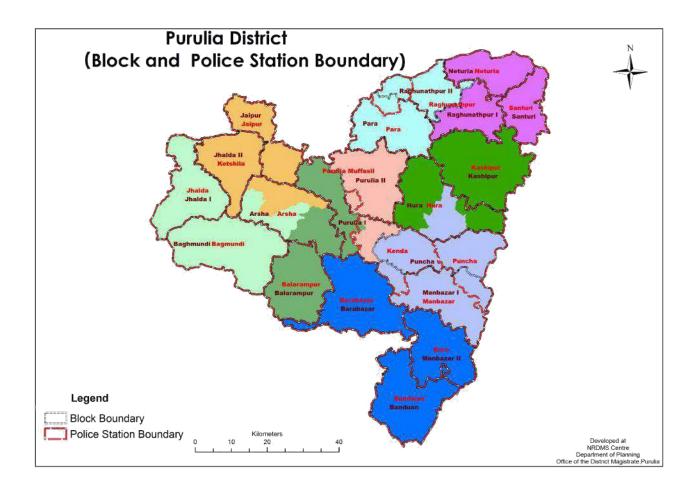
Out of the 2468 rural inhabited mouzas of this district 994 mouzas has been declared as backward i.e. 40.28 % of the inhabited mouzas are backward.

### Railways

The District is served by good Rail connections provided by the S.E.R. One Line runs from Tatanagar in the South through the District upto Asansol passing through Purulia and Adra. Another Line runs between Bankura and Dhanbad via Adra, Santaldih. One line connects Purulia with Bokaro on north and Muri/ Ranchi on west. Major cities and towns like Ranchi, Tatanagar, Patna, Howrah, Dhanbad, Asansol, Bhubaneswar, Delhi, Mumbai, and Chennai etc. are now connected with Purulia by direct mail/express trains.

### Roads

The road transport network is almost adequate in terms of availability of bus and flow of goods carriage. National Highway 32 connects this district with Jamshedpur, Bokaro, Chas and Dhanbad. National Highway 60A and State Highway 2 connects Purulia with Bankura District. State Highway 4 and 4A connects Purulia with Ranchi in one side and South Bankura on other side. State Highway 5 connects Purulia with Industrial and Coal field area of Burdwan District. State Highway 8 connects Northern part of Bankura on one side and Chas-Chandankiary-Bokaro on other side.

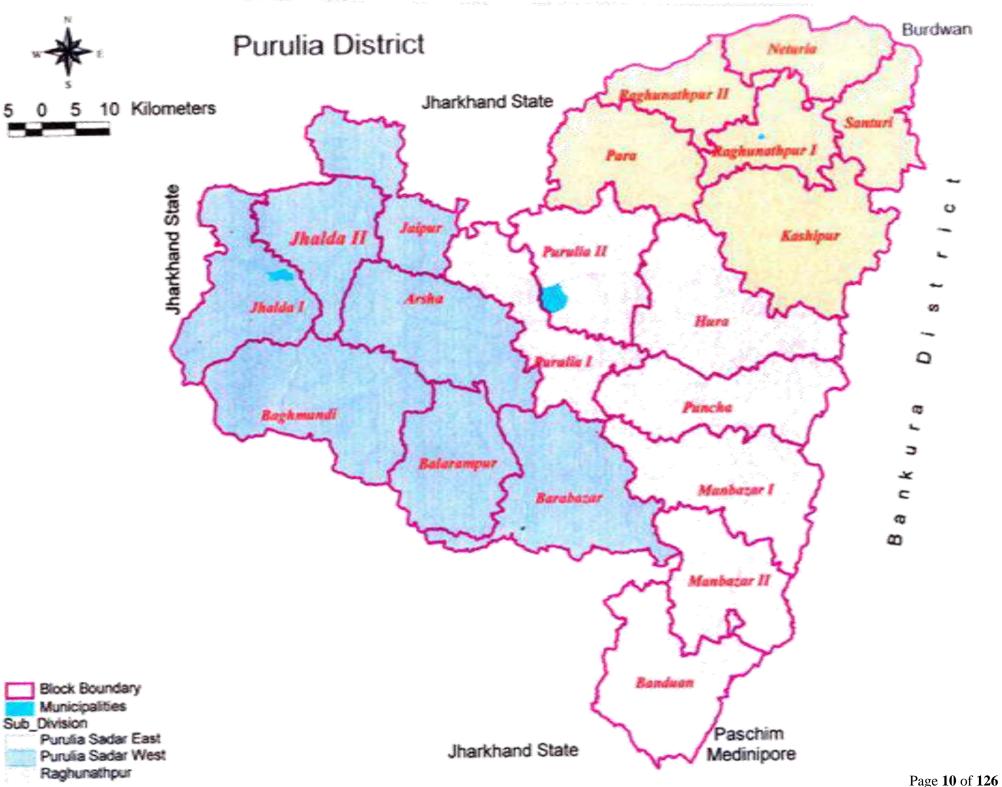


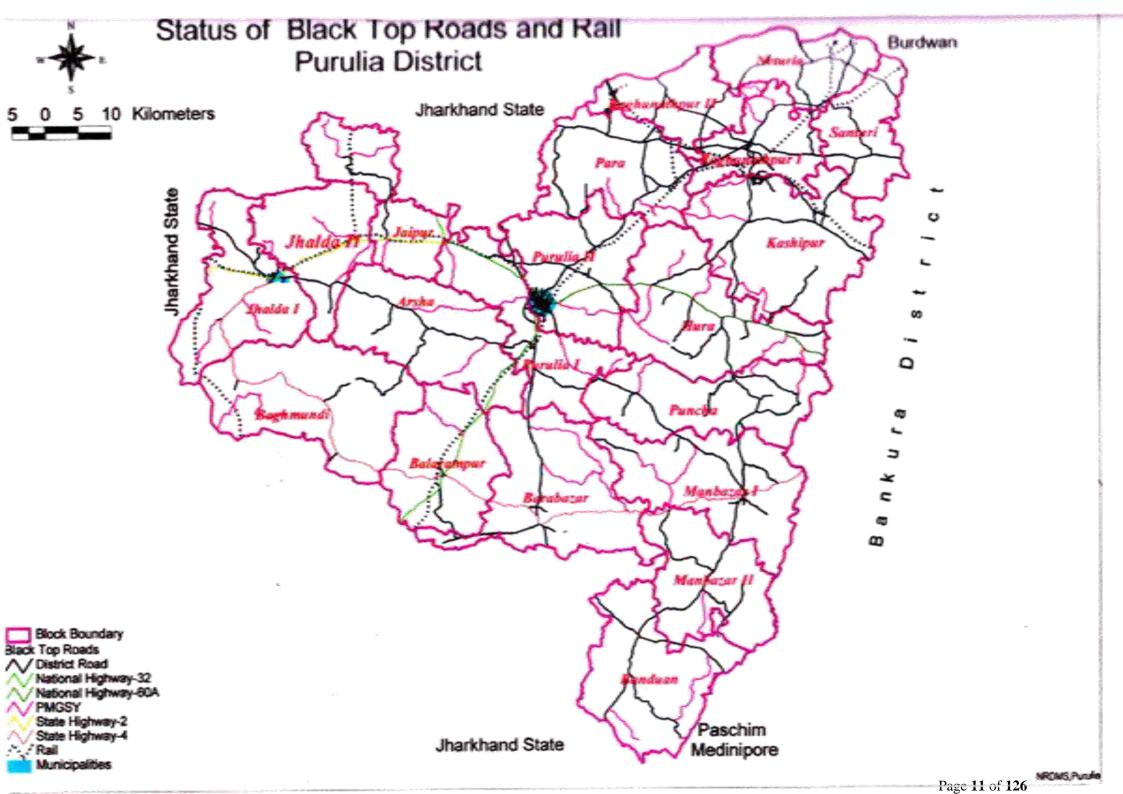
### Electricity

Purulia district has one Thermal Power Station at Santaldih (STPS). Another Power generation unit i.e. P.P.S.P. at Bagmundi with generation capacity of 4x 225 MW also started functioning. The district however receives power from the provincial grid through Purulia 132/33 KV Sub-Station of WBSEB (connected with STPS and Purulia DVC Sub-Station). Besides that, 33 KV Sub-Stations are serving each and every block area.

### Communication

The total number of Post Offices in the District is 443 and numbers of combined (Post & Telegraph) are 10. There are 20 Electronic Telephone Exchanges connecting the District to the outer World.





### Details of District Magistrate & Addl. District Magistrates

Name	Contact No	E-mail ID
Shri Rahul Majumdar, WBCS(Exe), District Magistrate, Purulia	9434001122	dmpuruliawb@gmail.com
Shri Naba Kumar Barman, WBCS(Exe), Addl. District Magistrate (Gen), Purulia	9434246605	admgpurulia@gmail.com
Shri Indranil Mukherjee, WBCS(Exe), Addl. District Magistrate (Dev), Purulia	9434246606	admd.prl@gmail.com
Shri Dinesh Ch. Mandal, WBCS(Exe), Addl. District Magistrate (ZP), Purulia	9434018455	aeozp.prl@gmail.com
Shri Amit Kr. Nath WBCS(Exe), Addl. District Magistrate (LR), Purulia	8373068604	dllroprl9@gmail.com

### Details of Superintendent of Police, Addl. Superintendent of Police & others

Name	Contact No	E-mail ID
Superintendent of Police, Purulia	9083269400	sppla7@gmail.com
Addl. S.P. (Operations), Purulia	9083269584	addlspopspla@gmail.com
Addl S.P.(HQ), Purulia	9083269401	adlsppla@gmail.com
S.D.P.O., Raghunathpur, Purulia	9083269402	sdpornpur@gmail.com
S.D.P.O.,,Jhalda, Purulia	9083269444	sdpojhalda@gmail.com
S.D.P.O., Manbazar, Purulia	9083269478	sdpomanbazar@gmail.com
Dy. S.P.,(HQ)., Purulia	9083269403	dysphqpla@gmail.com
Dy. S.P.(D&T), Purulia	9083269404	dyspdntpla@gmail.com
Dy.S.P, (DIB), Purulia	9083269406	dspdibpurulia@gmail.com
Dy.S.P., (DEB), Purulia	9083269405	dspdebpurulia@gmail.com
Dy,S.P.,(Traffic), Purulia	9143475363	dysptrafficpla@gmail.com
A.C.Commando, Purulia	7407665947	
Dy. S.P. (Operations), Purulia	9851068377	

	Contact No of Sub-Divisional Officers							
Sl. No.	Name I Tel No I Moh No I Kmail II)							
1.	Sub-Divisional Officer ,Purulia Sadar , Purulia	03252-223266	9434009585	sdosadareas2015@gmal.com				
2.	Sub-Divisional Officer , Jhalda, Purulia	03254255002	8373068610	sdojhalda6417@gmail.com				
3	Sub-Divisional Officer, Manbazar, Purulia	03253255666	8373068630	sdomanbazar@gmail.com.				
4.	Sub- Divisional Officer, Raghunathpur, Purulia	02351255255	8373068608	sdoraghunathpur@gmail.com				

	Contact No. of Block Development Officers					
Sl. No.	Name	Block	Tel. No.	Mob No.	Email ID	
1	Block Development Officer	Barabazar	03253-258224	9434781100	bdo.barabazar@gmail.com	
2	Block Development Officer	Manbazar-II	03253-252286	9434780600	manbazar2.prl@gmail.com	
3	Block Development Officer	Bandwan	03253-257202	9434780700	bdo.bundwan@gmail.com	
4	Block Development Officer	Purulia-I	03252-202607	8373068634	bdo.purulia1@gmail.com	
5	Block Development Officer	Purulia-Iİ	03252-222790	9434780200	bdoeopurulia2@gmail.com	
6	Block Development Officer	Arsha	03254-258017	8373068636	bdo.arsha@gmail.com	
7	Block Development Officer	Balarampur	03252-244255	9434543672	bdo.balarampur@gmail.com	
8	Block Development Officer	Jhalda-I	03254-255261	9434757412	bdo.jhalda1@gmail.com	
9	Block Development Officer	Baghmundi	03252-250207	9434781000	baghmundi@gmail.com	
10	Block Development Officer	Joypur	03254-252231	9434753756	bdo.joypur@gmail.com	
11	Block Development Officer	Jhalda-II	03254-260555	8373068641	bdo.jhalda2@gmail.com	
12	Block Development Officer	Hura	03252-240223	9434753817	bdo.hura@gmail.com	
13	Block Development Officer	Puncha	03253-259207	8373068643	bdo.puncha@gmail.com	
14	Block Development Officer	Manbazar-I	03253-255209	8373068644	bdo.manbazar1@gmail.com	
15	Block Development Officer	Kashipur	03251-246238	9434781800	bdokashipur@gmail.com	
16	Block Development Officer	Raghunathpur-II	03251-262393	8373068646	bdo.raghunathpur2@gmail.com	
17	Block Development Officer	Para	03251-266234	9434038282	para@nic.in	
18	Block Development Officer	Neturia	03251-264050	9434781900	bdo.neturia@gmail.com	
19	Block Development Officer	Santuri	03251-203090	9434753833	bdo.santuri@gmail.com	
20	Block Development Officer	Raghunathpur-I	03251-255278	9434781500	Bdormp1@gmail.com	

### **EMERGENCY TELEPHONE NUMBERS**

Sl. No.	Name of Department	Telephone No.	Mobile No.
1	DM Purulia	03252-222302	8373068601
2	Superintendent of Police, Purulia	03252-222304	8145500325
3	Chief Meicial Officer of Health,	03252-222480	9434147957
	Purulia		
4	ADM G	03252-223120	8373068602
5	Civil Defence	03251-255234	9832129221
6	SDO, Raghunathpur, Purulia	03251-255255	8373068608
7	S.D.O., Purulia Sadar	03252-223266	8373068640
8	S.D.O., Manbazar, Purulia	03253-255666	8373068630
9	S.D.O., Jhalda, Purulia	03254-255394	8373068610
10	SDPO, Manbazar		9641313349
11	SDPO, Jhalda		9933665045
12	SDPO, Raghunathpur	03251-255338	8145500327
13	OC Disaster Management		7872488802
14	DDMO Purulia	03252-223675	9073937772
15	Exe.Eng. Agri-Irri, Purulia	03252-222482	9474506817
16	Exe.Eng. , Agri-Mech,Purulia Divn.	03252-222046	9732534676
17	Exe.Eng., Purulia Divn.(Civil), PHE Dte	03252-223463	9433487686
18	Exe.Eng., Purulia Divn.(Mech), PHE	03252-222662	9433423807
	Dte		
19	Exe.Eng., PWD (Roads)	03252-223104	9433278748
20	Dy.Director, ARD Deptt., Purulia	03252-222514	7604010041
21	Dy.Director, Horticulture, Purulia	03252-227248	8145504430
22	D.I. Of Schools (SE), Purulia	03252-222438	9477231750
23	D.I. Of Schools (Pry.), Purulia	03252-222970	8670677441
24	Dist.Controller, F & S, Purulia	03252-222213	8373068710
25	Asstt. Director Fisheries, Purulia	03252-222493	9732546294
26	D.F.O, Purulia	03252-222329	7479008170
27	Sup. Engin. WBESDCL,Purulia	03252-222735	7449305650
28	Fire & Emergency Services, Purulia	03252-222202	8820665930
29	BDO, Barabazar	03253-258224	8373068631
30	BDO, Manbazar-II	03253-252286	8373068632
31	BDO, Bandwan	03253-257202	8373068633
32	BDO, Purulia-I	03252-202607	8373068634
33	BDO, Purulia-II	03252-222790	8373068635
34	BDO, Arsha	03254-258017	8373068636
35	BDO, Balarampur	03252-244255	8373068637
36	BDO, Jhalda-I	03254-255261	8373068638
37	BDO, Baghmundi	03252-250207	8373068621

38	BDO, Joypur	03254-252231	8373068609
39	BDO, Jhalda-II	03254-260555	8373068641
40	BDO, Hura	03252-240223	8373068642
41	BDO, Puncha	03253-259207	8373068643
42	BDO, Manbazar-I	03253-255209	8373068644
43	BDO, Kashipur	03251-246238	8373068645
44	BDO, Raghunathpur-II	03251-262393	8373068646
45	BDO, Para	03251-266234	8373068647
46	BDO, Neturia	03251-264050	8373068648
47	BDO, Santuri	03251-203090	8373068649
48	BDO, Raghunathpur-I	03251-255278	8373068650
49	CI Sadar Purulia	03252-223888	8145500359
50	CI Balarampur	03252-244131	8145500345
51	CI Raghunathpur	03251-255386	8145500357
52	CI Manbazar	03253-255237	8145500349
53	CI Kashipur	03251-244251	8145500356
54	IC Santaldih	03251-260235	8145500346
55	RI Purulia	03252-224390	8145500364
56	OC, Barabazar	03253-258235	8145500371
57	OC, Manbazar	03253-255237	8145500367
58	OC, Bandwan	03253-257262	8145500376
59	OC, Purulia (Town)	03252-223202	8145500370
60	OC, Purulia (M)	03252-223205	8145500380
61	OC, Arsha	03252-201190	8145500368
62	OC, Balarampur	03252-244221	8145500374
63	OC, Jhalda	03254-255233	8145500350
64	OC, Kotshila	03254-260565	8145500369
65	OC, Baghmundi	03252-250240	8145500373
66	OC, Joypur	03254-252234	8145500351
67	OC, Hura	03252-240229	8145500379
68	OC, Puncha	03253-259236	8145500382
69	OC, Kashipur	03251-246222	8145500405
70	OC, Raghunathpur	03251-255231	8145500395
71	OC, Para	03251-266330	8145500375
72	OC, Neturia	03251-252340	8145500398
73	OC, Santuri	03251-282040	8145500402
74	OC, Kenda	03252-284279	8145500403
75	OC, Boro	03253-252235	8145500378
76	OC, Jamtaria		8145500381
77	OC, Baglota		8145500401
78	OC, Adra	03251-244251	8145500397

### MULTI-HAZARD DISASTER MANAGEMENT PLAN

### WHY IS IT:

The purpose of preparing District Disaster Management Action Plan (DDMAP) is –

- a) To ascertain the status of existing resources and facilities available with the various agencies involved in the management of disaster in the District.
- b) Assess their adequacies and short falls if any in providing a multi-disaster response.
- Suggest institutional strengthening, technology support, up gradation of information system and data management for improving the quality of administrative responses to disaster at the district level and finally,
- d) To evolve DDMAP as an effective managerial tool.

### **OBJECTIVE**

In the absence of a defined plan response to a disaster would be arbitrary leading to over emphasis of some actions or other actions, which would be critical. Moreover, due to absence of a defined response structure and responsibilities allocations there would be mismanagement of resources and overlap of actions among various agencies, which may exacerbate the situation there by compounding the disaster effect.

A formal planning for managing disaster is therefore necessary to ensure minimize of hardship. This can be achieved only through: -

- a. Preplanning a proper sequence of response actions
- b. Allocation of responsibilities to the participating agencies
- c. Effective management of resources, and
- d. Developing codes and standard operating procedures for smooth coordination between various departments and relief agencies involved.

The objectives of any DDMAP should be to localize a disaster and to the maximum extent possible contain it so as to minimize the impact on life, the environment and property.

### **DISASTERS**

### (a) Drought:

Drought is the notable disaster in the district prevailing more or less every year causing hazard and miserable condition in agriculture and in supply of drinking water. The District is wholly a drought prone area because of: ---

- (i) Climatic reason: Temparature is very high in summer and low in winter it varies from 3<sup>0</sup> C in winter to 49<sup>0</sup> C in Summe, causing dryness in moisture. Railfall occurs in June, July August and September due to Monsoon but the quantum are not at per at the same in other parts of West Bengal. Uneven, scanty and erratic rainfall in frequent affecting agriculture drought in the khariff season. Crisis of drinking water causes for want of optium rainfall and due to hydrological droughts as well in a year.
- (ii) Physiographic reason: It is located Geographycally within Chotanagpur plateau region having land pattern with undulated hard and rocky soil, barren hillocks and valleys, low ridges, innumerable gulleys, low fertility, poor wate retentaion capacity, large scale soil erosion, poor irrigative and vgeable cover and lack of agril. Expertise, major portion of land about 60% is uncultivatable.
- (iii) Environmental reason: Disorderof monsoon, lack of forestation / de-forestation, pollution in the air, erosion of land etc. ecological imbalances hav made the district as drought-prone area. Drought in Purulia is noticed as (i) Agri-drought and (ii) Hydrological drought.

It is a major disaster, which pervades gradually throughout a year for want of optimum reinfall not less than 1300 mm.

We may encounter drought of three types here-(1) Delayed onset monsoon (2) Normal onset monsoonfollowed by long gap in rainfall and (3) Early cessation of monsoon. Agricultural drought follows due to such disorder of monsoon. Besides, rainfall here is erratic, land situation is undulated, soil is loose with low water holding capacity. Crop productivity activities should be reoriented suitably with better understanding of the rainfall pattern in turms of quamtum spread and period of dependable rainfall for each segment of a particular area. Agriculture department in Block, Sub-Diviison and District lebvel has to shoulder responsibility to prepare area-specific contingency crop plan.

### (b) Heat wave and Sunstroke:

Puurlia is situated in the platue zone of Chhotanagpur region in West Bengal due to its physiographic location. Temparature is increased very high in summer and severe cold in winter.

In Summer a heat wave as 'Loo' is blown throughout the district causing the inhabitants in distress.

Sunstorke may happen causing to death to the human and the cattle.

A relief masure rendering to the poor people may be undertaken as applicable. Clothing, garments, glankets should be kept reserve for providing among the distressed people.

Medical relief may be suggested, relaxation of time in manual labour fixing in the morning before noon and afater noon may attend in summer when heat wave exists.

### District Disaster Management Committee:

Sl. No.	Name	Designation.	Address	Phone 1	number.
SI. INO.	Ivaille	Designation.	Address	Office	Residence
1	Sabhadhipati, Purulia Zilla parishad	Chairman	Purulia Zilla Parishad, Purulia	03252-222255	9434001166
2	District Magistrate & Collector, Purulia	Executive Chairman	Office of the District Magistrate & Collector, Purulia	03252-222302	03252-222301
3	Superintendent of Police, Purulia	Member	SP Office, Purulia	03252-223211	9434001500
4	Addl. District  Magistrate & Collector (Gen), Purulia	Convener	Office of the District Magistrate & Collector, Purulia	03252-223120	9434246605
5	Addl. District Magistrate (ZP), Purulia	Member	Purulia Zilla Parishad, Purulia	03252-226577	9434018455
6	OC, Relief, Purulia	Member	Office of the District Magistrate, Purulia	7872488802	7872488802
7	CMOH ,Purulia	Member	Swastha Bhavan, Ranchi Road, Purulia	03252-222480	
8	Superintending / EE, PWD / PHE/ I&WD / Minor Irrigaiton Div.	Member	Ranchi Road, Purulia		
9	Dy. Director Agriculture (Admin),	Member	Purulia Zilla Parishad, Purulia	9434522356	9434522356
10	Div. Engineer, WBSEDCL, Purulia	Member			
11	Dy. Director, Animal Husbandary, Purulia	Member	Wilcox road, Purulia	9231546077	9231546077
12	Engineer, Pollution Control Board, Purulia	Member			
13	DRM, Adra, Purulia	Member	Adra, Purulia	03251- 244221	03251- 244220
14	District level Authority of Army, Nevy, BSF	Member	Sainik School, Purulia		
15	District level representative, IOC	Member	Durgapur, Burdwan		
16	TDM, Purulia	Member	Deshbandhu Road, Purulia		
17	DDMO, Purulia	Member	Office of the District Magistrate, Purulia		

18	Chairperson of all Municipal bodies	Member	Purulia Municipality, Purulia		
19	All member of legislative assemblies	Member			
20	DI, Secondary	Member	Purulia		
21	DI, Primary, Purulia	Member	Amdiha, Purulia		
22	Executive engineer PWD, Roads	Member		9434713613	9434713613
23	Executive Engineer, PWD, Construction	Member		9434392236	9434392236
24	Executive Engineer, PHE (Mechanical)	Member	Ranchi Road, Purulia	9434496133	9434496133

### Overview of the District:

### Geographical Location of Purulia district and its headquarters

Name of	Lati	tude	Longitude		Name of district	Latitude	Longitude
the district	North	South	East	West	headquarters	Latitude	Longitude
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Purulia	23º42' 00"N	22º43' 00"N	86º54' 00"E	85°49' 00"E	Purulia	23°20′ 00"N	86º25' 00"E

**Area** : 6259 Sq. Km.

No. of Sub-Division : 4
No. of Blocks : 20
No of Police Station : 24
No of Gram Panchayet : 170

**Preliminary Block Profile** 

OL NIS	Name of Disale	l sastian	Distance	Distance	Phone N	lumber of the BDO.	
SI. No.	Name of Block	Location.	from	from	Office	Residence.	
_	Maulanau I	Manbazar	1 5	1.5	03253-	92720(9(44	
1.	Manbazar-I	Subdiivision	1.5	1.5	255209	8373068644	
	ManhanauII	Manbazar	18.0	10.0	03253-	0.42.4780.600	
2.	Manbazar-II	Subdiivision		18.0	252286	9434780600	
2	Demail: a I	Purulia Sadar	2.5	2.5	03252-	0272070724	
3. Purulia-I	Subdiivision	3.5	3.5	202607	8373068634		
4	Domilio II	Purulia Sadar	4.0	4.0	03252-	0424780200	
4. Purulia-II	Subdiivision	4.0	4.0	222790	9434780200		

5.	Hura	Purulia Sadar Subdiivision	37.0	37.0	03252- 240223	9434753817
6.	Puncha	Manbazar Subdiivision	16.0	16.0	03253- 259207	8373068643
7.	Bandwan	Manbazar Subdiivision	40.0	40.0	03253- 257202	9434780700
8.	Jhalda-I	\Jhalda Subdivision	4.0	4.0	03254- 255261	9434757412
9.	Jhalda-II	Jhalda Subdivision	16.0	16.0	03254- 260555	8373068641
10.	Joypur	Jhalda Subdivision	22.0	22.0	03254- 252231	9434753756
11.	Arsha	Purulia Sadar Subdivision	29.0	29.0	03254- 258017	8373068636
12.	Barabazar	Manbazar Subdivision	35.0	35.0	03253- 258224	9434781100
13.	Baghmundi	Jhalda Subdivision	32.0	32.0	03252- 250207	9434781000
14.	Balarampur	Purulia Sadar Subdivision	35.0	35.0	03252- 244255	9434543672
15.	Kashipur	Raghunathpur	15.0	38.0	03251- 246238	9434781800
16.	Para	Raghunathpur	18.0	33.0	03251- 266234	9434038282
17. .ur-I	Raghunathp	Raghunathpur	1.5	45.0	03251- 255278	9434781500
18. ur-II	Raghunath	Raghunathpur	14.0	48.0	03251- 262393	8373068646
19.	\Santuri	Raghunathpur	22.0	48.0	03251- 203090	9434753833
20. N	eturia	Raghunathpur	21.0	43.0	03251- 264050	9434781900

### Preliminary Sub-Division Profile.

CL No	Name of Sub-	Location	Distance from	Phone Numb	er of the SDO.	
SI. No.	Division	Location.	District H.Q.	Office	Residence.	
1.	Purulia Sadar	DM Office, Purulia	0 KM	03252-223266	9434009585	
2.	Jhalda	Jhalda, Purulia	48 KM	03254-255002	8373068610	
3.	Manbazar	Manbazar, Purulia	55 KM	03253-255666	8373068630	
4.	Raghunathpur	Raghunathur, Purulia	45 KM	03251-255234	8373068608	

Der	nographic Details								
		Total No		Population			Cat	tegory	
SI.No	Name of Block	of HH	Adult	Children 5 years	Total	SC	ST	OBC	GEN
1	Manbazar-I	29645	134902	19083	153985	29257	32337	41576	50815
2	Manbazar-II	19407	85796	11358	97154	18459	20402	26232	32061
3	Purulia-I	24251	130021	21189	151210	28730	31754	40827	49899
4	Purulia-II	28243	140713	23583	164296	31216	34502	44360	54218
5	Hura	24932	125864	17561	143425	27251	30119	38725	47330
6	Puncha	24490	108353	15415	123768	23516	25991	33417	40843
7	Bandwan	17720	83200	11802	95002	18050	19950	25651	31351
8 -	Jhalda-I	22046 -	117557	19967	137524	26130	28880	37131	45383
9 -	Jhalda-II	23376 -	124025	24017	148042	28128	31089	39971	48854
10 -	Joypur	18862 -	112956	20284	133240	25316	27980	35975	43969
11 -	Arsha	25267 -	129151	25391	154542	29363	32454	41726	50999
12	Barabazar	28370 -	148078	22798	170876	32466	35884	46137	56389
13	Baghmundi -	23452 -	114221	21309	135530	25751	28461	36593	44725
14	Balarampur	23297 -	120091	19653	139744	26551	29346	37731	46116
15	Kashipur	31150	176947	22985	199932	37987	41986	53982	65978
16	Para	28617	172200	28421	200621	38118	42130	54168	66205
17	Raghunathpur-I	19316	104461	14037	118498	22515	24885	31994	39104
18	Raghunathpur-II	20531	98601	15084	113685	21600	23874	30695	37516
19	Santuri	14121	68220	10241	78461	14908	16477	21184	25892
20	Neturia	15048	88869	13053	101922	19365	21404	27519	33634
District T	Total	462141	2337226	377231	2714457	515747	570036	732903	895771

### House Hold Details

Sl.N	use Hold Details			No. of AP	L HH		No. of	BPL HH	
0	Name of Block	S T	S C	OBC	GEN	S T	S C	OBC	GE
1.	Manbazar-I	13582	12288	17462	21342	18755	16969	24114	29473
2.	Manbazar-II	8569	7753	11017	13466	11833	10706	15215	18595
3.	Purulia-I	13337	12067	17147	20958	18417	16663	23680	28941
4.	Purulia-II	14491	13111	18631	22772	20011	18105	25729	31446
5.	Hura	12650	11445	16265	19879	17469	15806	22461	27451
6.	Puncha	10916	9877	14035	17154	15075	13639	19382	23689
7.	Bandwan	8379	7581	10773	13167	11571	10469	14878	18184
8.	Jhalda-I	12130	10975	15595	19061	16750	15155	21536	26322
9.	Jhalda-II	13057	11814	16788	20519	18032	16314	23183	28335
10.	Joypur	11752	10633	15110	18467	16228	14683	20866	25502
11.	Arsha	13631	12332	17525	21420	18823	17031	24201	29579
12.	Barabazar	15071	13636	19378	23683	20813	18830	26759	32706
13.	Baghmundi	11954	10815	15369	18785	16507	14936	21224	25941
14.	Balarampur	12325	11151	15847	19369	17021	15400	21884	26747
15.	Kashipur	17634	15955	22672	27711	24352	22032	31310	38267
16.	Para	17695	16010	22751	27806	24435	22108	31417	38399
17.	Raghhunathp ur-I	10452	9456	13437	16424	14433	13059	18557	22680
18	Raghunathpur-	10027	9072	12892	15757	13847	12528	17803	21759
19.	Santuri	6920	6261	8897	10875	9557	8647	12287	15017
20.N	eturia	8990	8133	11558	14126	12414	11232	15961	19508

### **Population:**

SI	Name of Block /	:	5	:	S	C	)B	G	iΕ	То	tal
No	Sub Division	М	F	М	F	М	F	М	F	М	F
1	B.D.O. Purulia –I	15801	12928	17782	13972	22863	17964	28443	21457	84889	66321
2	B.D.O. Purulia –II	17169	14047	19321	15181	24842	19518	30904	23314	92236	72060
3	B.D.O. Hura	14988	12263	16867	13252	21686	17039	26978	20352	80519	62906
4	B.D.O. Arsha	16150	13213	18174	14280	23367	18360	29069	21930	86760	67782
5	B.D.O. Balarampur	14603	11948	16434	12912	21129	16602	26286	19830	78452	61292
	Purulia Sadar Sub Division	78711	64399	88578	69597	113887	89483	141680	106883	422856	330361
6	B.D.O. Manbazar –I	16091	13166	18109	14228	23283	18293	28965	21850	86447	67538
7	B.D.O. Manbazar –II	10153	8307	11425	8977	14690	11542	18275	13786	54542	42612
8	B.D.O. Puncha	12934	10582	14555	11436	18714	14704	23281	17563	69483	54285
9	B.D.O. Bandwan	9928	8123	11172	8778	14364	11286	17870	13481	53334	41668
10	B.D.O. Barabazar	17857	14610	20095	15789	25836	20300	32142	24247	95930	74946
	Manbazar Sub Division	66963	54788	75356	59208	96887	76125	120533	90927	359736	281049
11	B.D.O. Baghmundi	14163	11588	15938	12523	20492	16101	25493	19232	76087	59443
12	B.D.O. Jhalda –I	14371	11758	16173	12707	20794	16338	25868	19515	77206	60318
13	B.D.O. Jhalda –II	15470	12658	17410	13679	22384	17587	27847	21007	83111	64931
14	B.D.O. Joypur	13924	11392	15669	12311	20146	15829	25062	18907	74801	58439
	Jhalda Sub Division	57928	47396	65190	51220	83816	65855	104270	78661	311205	243131
15	B.D.O. Para	20965	17153	23593	18537	30334	23834	37737	28468	112629	87992
16	B.D.O. Raghunathpur-I	12383	10132	13935	10949	17917	14078	22289	16815	66525	51973
17	B.D.O. Raghunathpur-II	11880	9720	13369	10504	17189	13506	21384	16132	63823	49862
18	B.D.O. Santuri	8199	6708	9227	7250	11863	9321	14759	11134	44048	34413
19	B.D.O. Neturia	10651	8714	11986	9418	15411	12108	19172	14463	57219	44703
20	B.D.O. Kashipur	20893	17094	23512	18474	30230	23752	37607	28370	112242	87690
	Raghunathpur Sub Division	84971	69521	95622	75132	122944	96599	152948	115382	456486	356633
	District Total	288573	236104	324746	255157	417534	328062	519431	391853	1550283	1211174

Name of Block	Type of workers.									
	Skilled v	vorkers		Skilled kers		killed kers	Total w	orkers		
	М	F	М	F	М	F	М	F		
Purulia-I	14260	10365	31739	23072	38890	32884	84889	66321		
Purulia-II	15963	11899	35531	26486	40742	33675	92236	72060		
Hura	12125	7717	26988	17176	41406	38013	80519	62906		
Arsha	15102	11579	33613	25772	38045	30431	86760	67782		
Balarampur	13718	10347	30535	23029	34199	27916	78452	61292		
Purulia Sadar Sub Division	71168	51907	158406	115535	193282	162919	422856	330361		
Manbazar-I	12760	8364	28402	18617	45285	40557	86447	67538		
Manbazar-II	8504	8464	18927	18839	27111	15309	54542	42612		
Puncha	9574	6165	21310	13721	38599	34399	69483	54285		
Bandwan	8005	4812	17816	10712	27513	26144	53334	41668		
Barabazar	16228	11304	36119	25160	43583	38482	95930	74946		
Manbazar Sub Division	55071	39109	122574	87049	182091	154891	359736	281049		
Baghmundi	11514	8296	25629	18464	38944	32683	76087	59443		
Jhalda-I	14409	10901	32073	24265	30724	25152	77206	60318		
Jhalda-II	15098	11050	33604	24596	34409	29285	83111	64931		
Joypur	13195	9808	29369	21830	32237	26801	74801	58439		
Jhalda Sub Division	54216	40055	120675	89155	136314	113921	311205	243131		
Para	20689	16560	46051	36859	45889	34573	112629	87992		
Raghunathpur-I	10908	8842	24278	19682	31339	23449	66525	51973		
Raghunathpur-II	8424	6919	18751	15399	36648	27544	63823	49862		
Santuri	7077	5235	15751	11652	21220	17526	44048	34413		
Neturia	11064	9374	24627	20864	21528	14465	57219	44703		
Kashipur	19629	14445	43690	32152	48923	41093	112242	87690		
Raghunathpur Sub Division	77791	61375	173148	136608	205547	158650	456486	356633		
District Total	258246	192446	574803	428347	717234	590381	1550283	1211174		

### Literacy Rate in

### Percentage: -

Name of Block / Municipality	Male		Female	e	Total
Manbazar-I	53899	61.62	33578	38.38	87477
Manbazar-II	32545	62.28	19713	37.72	52258
Purulia-I	53325	62.54	31934	37.46	85259
Purulia-II	56429	62.14	34381	37.86	90810
Hura	53324	60.48	34846	39.52	88170
Puncha	45193	60.35	29695	39.65	74888
Bandwan	31742	61.32	20021	38.68	51763
Purulia Municipality	50276	55.53	40258	44.47	90534
Jhalda-I	48754	61.77	30172	38.23	78926
Jhalda-II	45846	66.14	23471	33.86	69317
Joypur	42750	64.47	23565	35.53	66315
Arsha	47505	65.7	24799	34.3	72304
Barabazar	59476	62.19	36162	37.81	95638
Baghmundi	43072	64.74	23460	35.26	66532
Balarampur	46443	63.32	26907	36.68	73350
Jhalda Municipality	7741	57.52	5718	42.48	13459
Kashipur	74279	58.85	51948	41.15	126227
Para	71843	62.5	43111	37.5	114954
Raghunathpur-I	43510	60.99	27232	38.17	71342
Raghunathpur-II	41680	61.97	25575	38.03	67255
Santuri	26881	60.9	17258	39.1	44139
Neturia	34786	59.76	23421	40.24	58207
Raghunathpur Municpality	10156	57	7660	43	17816
District Total	1021455	61.7	634885	38.3	1656940

# Hazard Vulnerability Capacity & Risk Assesment (HVCRA)

•		•	•	
	•	•	•	

### Topographical Details: - Climate

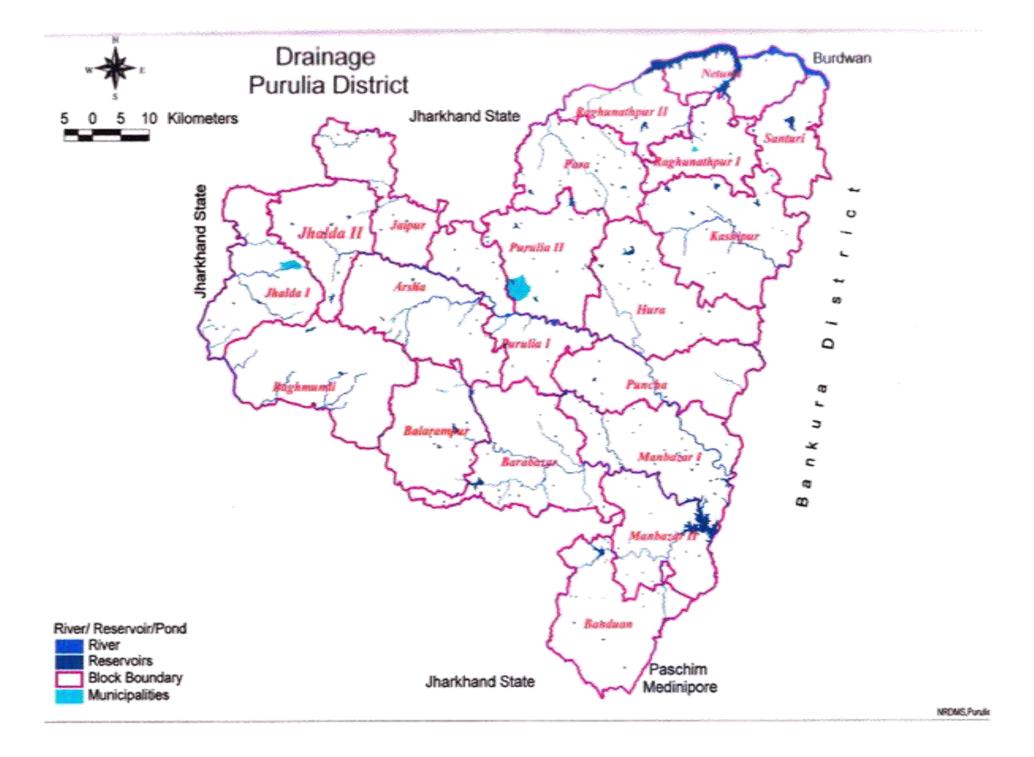
### and Rainfall: -

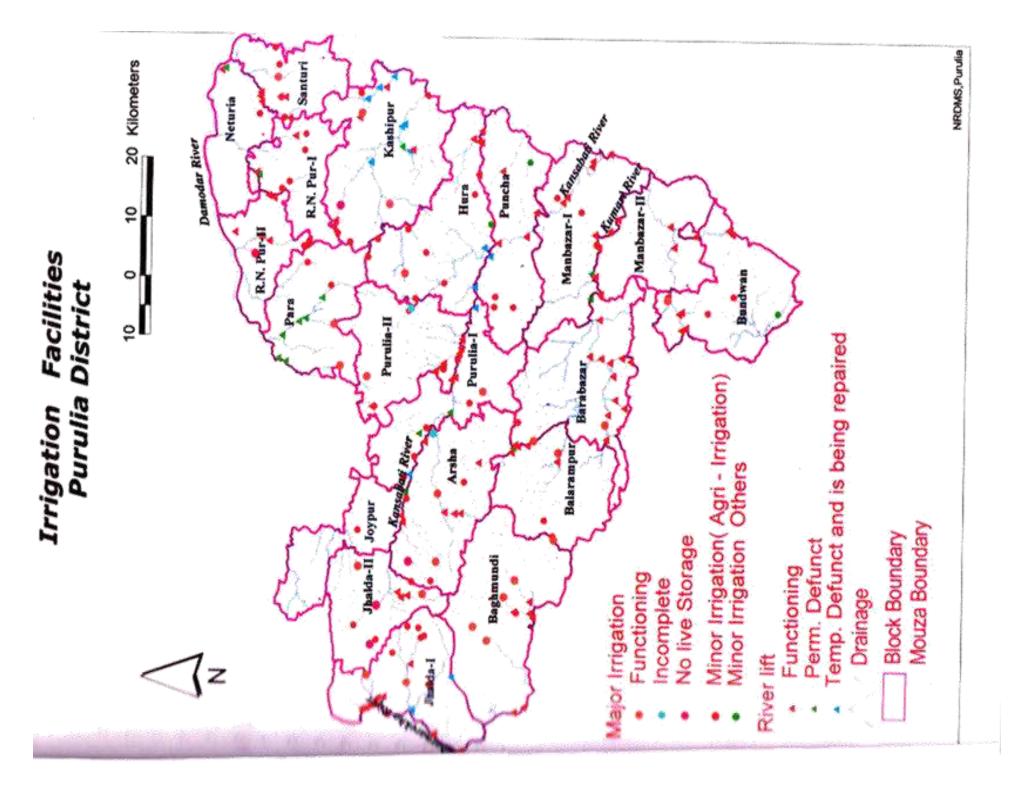
SI. No.	Month	Actual Rainfall (in mm)	Average Rainfall (in mm)
1.	April' 18	84.98	2.83
2.	May' 18	70.76	2.28
3.	June' 18	198.01	6.60
4.	July' 18	76.52	5.88

### Rain Recording stations: -

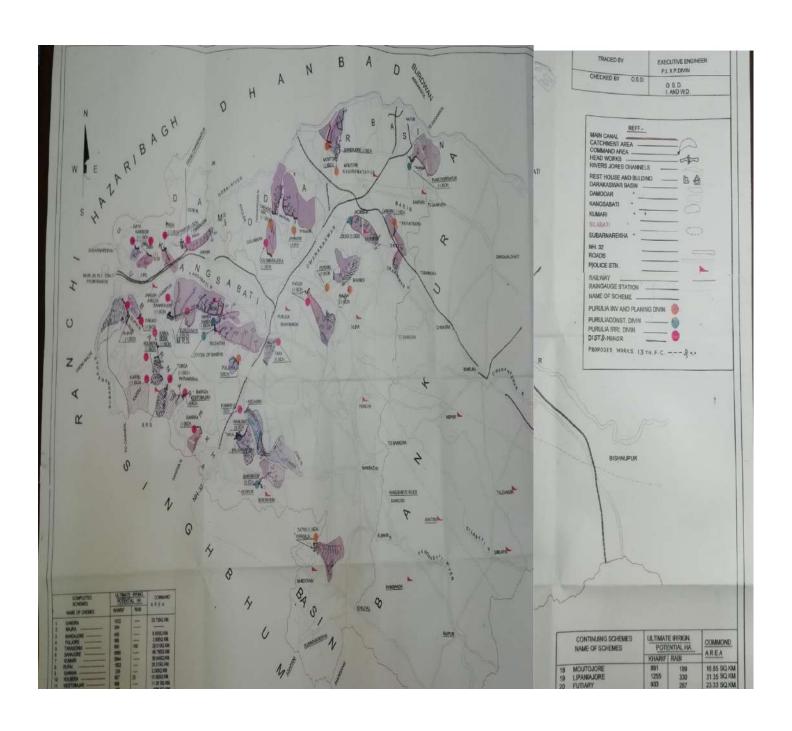
- Total No. of rain recording stations in the District: -13 Nos.
- Location of rain recording stations –

SI. No.	Location of rain recording	Telephone numbers
1.	Hatuara, Purulia	9474722717
2.	Santuri	9609542060
3	Para	9474509983
4	Manbazar	7872529279
5	Joypur	9932527432
6	Jhalda	8170846929
7	Baghmundi	9433071024
8	Balarampur	8436224149
9	Barabazar	8016619626
10	Puncha	9153442514
11	Hura	9732132568
12	Kashipur	9732228574
13	Neturia	9476345400





### Inundation Map of Purulia



# **VULNERABLITY MATRIX OF PURULIA**

10	Priority ranking as per vulnerability to multiple disasters.								5										0			
6	Earthquake as per vulnerability to multiple disasters.									0												
8	Total number of people given in columns 2 to 7	95002	99197	156329	0	0	0	3281	5126	0	0	0	12581	0	2854	0	4284	0	0	16500	13365	408519
7	People likely to be affected by other disaster, if any <u>Draught</u> (mention disaster & number of people)						· ·														2761457	2761457
9	If vulnerable to chemical/industrial disaster, mention number of people likely to be affected																					
2	If vulnerable to landslide, mention number of people likely to be affected									10												
4	If vulnerable to Tsunami, mention number of people likely to be affected in case of tsunami	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	If vulnerable to Cyclone, mention number of people likely to be affected in case of cyclone	95002	97154	153985	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	346141
2	If prone to flood, mention number of people in vulnerable	0	2043	2344	0	0	0	3281	5126	0	0	0	12581	0	2854	0	4284	0	0	16500	13365	62378
1	Name of Block/ Municipality	Bandoyan	Manbazar II	Manbazar I	Barabazar	Balarampur	Puncha	Baghmundi	Arsa	Purulia I	Hura	Purulia II	Jhalda I	Jhalda II	Kashipur	Jaipur	Para	Raghunathpur I	Santuri	Raghunathpur II	Nituria	Total

## Institutional Arrangements for Disaster Management

### Who formulates and carries out the plan:

As per instruction from Joint Secretary, State Disaster Management Department, Government of West Bengal for prepare Multi-Hazard District Disaster Management Plan. The District Disaster Management Committee, Purulia takes the initiative to up date the Multi-Hazard District Disaster Management Plan of Purulia District. The District Disaster Management Section, Purulia carries out the concerned activities and mans the Emergency Operation Centre (EOC) during disasters.

Sl.No.	Block	Natural disaster	Man made disaster
1	Purulia-I	Flash Flood/Thundering Drought/Heat wave	House Fire/Road Accident
2	Purulia-II	Thundering/Drought Heat wave	House Fire/Road Accident
3	Hura	Thundering/Drought/Heat wave	House Fire/Road Accident
4	Puncha	Thundering/Drought/Heat wave/Flash Flood	House Fire/Road Accident
5	Manbazar-l	Thundering/Drought/Heat wave	House Fire/Road Accident

6	Manbazar-II	Thundering/Drought/Heat wave/Flash Flood	House Fire/Road Accident
7	Bundwan	Thundering/Drought/Heat wave	House Fire/Road Accident
8	Barabazar	Thundering/Drought/Heat wave	House Fire/Road Accident
9	Balarampur	Thundering/Drought/Heat wave	House Fire/Road Accident
10	Baghmundi	Thundering/Drought/Heat wave/Flash Flood	House Fire/Road Accident
11	Arsha	Thundering/Drought/Heat wave/Flash Flood	House Fire/Road Accident
12	Jhalda-I	Thundering/Drought/Heat wave	House Fire/Road Accident
13	Jhalkda-II	Thundering/Drought/Heat wave	House Fire/Road Accident
14	Joypur	Thundering/Drought/Heat wave	House Fire/Road Accident
15	Para	Thundering/Drought/Heat wave/Flood	House Fire/Road Accident
16	Raghunathpur-I	Thundering/Drought/Heat wave	House Fire/Road Accident
17	Raghunathpur-II	Thundering/Drought/Heat wave/Flood/Drowning	House Fire/Road Accident
18	Kashipur	Thundering/Drought/Heat wave	House Fire/Road Accident
19	Santuri	Thundering/Drought/Heat wave	House Fire/Road Accident
20	Neturia	Thundering/Drought/Heat wave	House Fire/Road Accident

Sl. No. & Block	Name of the Institution	Address	Telephone Number
1-Arsha	United Bank of India	Arsha	8145614649
2-Arsha	United Bank of India	Sirkabaid	8001552180
3-Arsha	United Bank of India	Hensla	9007357386
4-Arsha	United Bank of India	Puara	9547532577
5-Arsha	State Bank of India	Mankiyari	7797554561
6-Arsha	BGVB	Sirkabaid	9933666104
7-Baghmundi	United Bank of India	Baghmundi	9163133371
8-Baghmundi	United Bank of India	Baghmundi	9433443048
9-Baghmundi	United Bank of India	Burda-Kalimati	9474878763
10-Baghmundi	United Bank of India	Tunturi-Suisa	9434669003
11-Baghmundi	WB State Cooperative Agril	Baghmundi	9434161671
12-Balarampur	State Bank of India	Balarampur	8001196449
13-Balarampur	Central Bank of India	Balarampur	8348690732
14-Balarampur	United Bank of India	Balarampur	9434252310
15-Balarampur	Central Bank of India	Bela	8348690720
16-Balarampur	United Bank of India	Bara-Urma	9933949321
17-Balarampur	Central Co-operative Bank	Balarampur	9434018437
18-Balarampur	SKUS	Genrua	9932393729
19-Balarampur	SKUS	Balarampur	9932503169
20-Balarampur	SKUS	Ghatbera-Kerowa	9933965969
21-Balarampur	SKUS	Tentlow	8016215504
22-Balarampur	SKUS	Darda	8967960552
23-Balarampur	SKUS	Bela	8967960552
24-Barabazar	BGVB	Barabazar	03253258170
25-Barabazar	United Bank of India	Berada	9732154037
26-Barabazar	United Bank of India	Tumrasole	9933321286
27-Barabazar	State Bank of India	Barabazar	03252258162
28-Barabazar	State Bank of India	Dhelatbamu	8001195481
29-Barabazar	Bank of Baroda	Shukurhutu	9933652585
30-Barabazar	BGVB	Sindri	9732155718
31-Barabazar	United Bank of India	Barabazar	9046132580
32-Bundwan	BGVB, Bundwan Branch	Bundwan	03253257522
33-Bundwan	State Bank of India, Kuilapa	Kuilapal	8001195433
34-Bundwan	BGVB, Kuilapal Branch	Kuilapal	9933515125
35-Bundwan	State Bank of India	Kuchia	9474999531
36-Hura	State Bank of India	Hura	03252240230
37-Hura	BGVB	Hura	03252240333
38-Hura	United Bank of India	Lakhanpur	9474116278
39-Hura	BGVB	Ladhurka	03252247013
40-Hura	State Bank of India	Keshargarh	8001195400
41-Hura	State Bank of India	Kalabani	8001195484
42-Hura	State Bank of India	Rakhera-Bispuria	9635540456
43-Jhalda-I	State Bank of India	Jhalda Municipality	8001195412

Sl. No. & Block	Name of the Institution	Address	Telephone Number
44-Jhalda-I	State Bank of India	Kalma	8001195472
45-Jhalda-I	State Bank of India	Ichag	8001195448
46-Jhalda-I	United Bank of India	Jhalda Municipality	03254255254
47-Jhalda-I	United Bank of India	Iloo-Jargo	8967963457
48-Jhalda-I	BGVB, Tulin	Tulin	03254253544
49-Jhalda-I	PCCB, Jhalda	Jhalda Municipality	9932344153
50-Jhalda-II	Allahabad Bank	Nowahatu	9475604688
51-Jhalda-II	Allahabad Bank	Chitmu	08986803289
52-Jhalda-II	United Bank of India	Bamniya-Belyadih	9434640481
53-Jhalda-II	BGVB	Begunkodar	9434656320
54-Joypur	Allahabad Bank	Sidhi-Jamra	
55-Joypur	Allahabad Bank	Ropo	
56-Joypur	United Bank of India	Joypur	
57-Kashipur	United Bank of India	Kashipur	9679978711
58-Kashipur	Allahabad Bank	Beko	9378073197
59-Kashipur	Allahabad Bank	Agardih-Chitra	9775785167
60-Kashipur	State Bank of India	Beko	03251244235
61-Kashipur	BGVB	Gourangdih	9434547731
62-Kashipur	BGVB	Sonathali	03251242363
63-Kashipur	United Bank of India	Beko	9832440747
64-Kashipur	РССВ	Kashipur	9434204379
65-Manbazar-I	State Bank of India	Manbazar	8001195385
66-Manbazar-I	United Bank of India	Manbazar	9479563731
67-Manbazar-I	BGVB	Gopalnagar	03253254313
68-Manbazar-I	BGVB	Chandra-Pairachali	
69-Manbazar-II	United Bank of India, Khari	Kumari	993266180
70-Manbazar-II	BGVB, Bari Branch	Bari-Jagda	8018027066
71-Manbazar-II		Boro-Jaragora	9474509552
72-Manbazar-II	Bank of Baroda, Jamtoria B	Borgoria-Jamtoria	9932131098
73-Neturia	BGVB	Janardandih	9434649042
74-Neturia	United Bank of India	Shaltore	9434071960
75-Neturia	United Bank of India	Shaltore	03251-252205
76-Neturia	United Bank of India	Raibundh	9830880053
77-Neturia	United Bank of India	Sarbari	9547741107
78-Para	BGVB	Anara	03251254360
79-Para	BGVB	Deoli	03251260601
80-Para	United Bank of India	Dubra	03251266224
81-Para	United Bank of India	Deoli	9475665544
82-Para	State Bank of India	Para	8001195395
83-Para	State Bank of India	Anara	8001196310
84-Para	Allahabad Bank	Jabarrah-Jhapra-I	03251201293
85-Para	UCO Bank	Anara	03251254270
86-Puncha	BGVB, Napara	Napara	

Sl. No. & Block	Name of the Institution	Address	Telephone Number		
87-Puncha	BGVB, Bagda	Bagda			
88-Purulia-I	Central Bank of India	Garaphusra			
89-Purulia-I	BGVB	Lagda			
90-Purulia-I	Punjab National Bank	Manara			
91-Purulia-II	United Bank of India, Kusta	Agaya-Narrah	03252-201326		
92-Purulia-II	United Bank of India, Chha	Chharrah-Dumdumi	03252-203597		
93-Purulia-II	United Bank of India, Hutm	Hutmura	03252-243270		
94-Purulia-II	United Bank of India, V. Na	Raghabpur	9233453046		
95-Purulia-II	BGVB, Karcha Branch (for B	Bhangra			
96-Purulia-II	Central Bank of India	Belma	03252-222114		
97-Purulia-II	Central Bank of India	Ghonga	03252-222108		
98-Purulia-II	Central Bank of India	Golamara	03252-202323		
99-Purulia-II	BGVB	Pindra	03252-206037		
100-Purulia-II	Bank of Baroda	Bhangra	03252-222548		
101-Raghunathpur-I	State Bank of India	Arrah	03251244235		
102-Raghunathpur-I	United Bank of India	Babugram	03251251021		
103-Raghunathpur-I	Bank of India	Bero	03251264125		
104-Raghunathpur-I	BGVB, Madhutati	Khajura	03251258622		
105-Raghunathpur-I	BGVB, Nutandih	Nutandih	9434882541		
106-Raghunathpur-II	BGVB	Cheliyama	03251262605		
107-Raghunathpur-II	United Bank of India	Cheliyama	9732371197		
108-Raghunathpur-II	State Bank of India	Mangalda-Moutore	8016694748		
109-Raghunathpur-II	State Bank of India	Joradih	03251260243		
110-Santuri	BGVB	Balitora	03251-72046		
111-Santuri	BGVB	Ramchandrapur-Kotaldih	03251-50628		
112-Santuri	Central Bank of India	Ramchandrapur-Kotaldih	03251-250249		
113-Santuri	Central Bank of India	Santuri	9378450047		
114-Purulia-I	Post Office	Chakda	03252 - 202607		
115-Purulia-I	Post Office	Chakda	03252 - 202607		
116-Purulia-I	Post Office	Chakda	03252 - 202607		
117-Purulia-I	Post Office	Chakda	03252 - 202607		
118-Purulia-I	Post Office	Chakda	03252 - 202607		
119-Purulia-I	Post Office	Chakda	03252 - 202607		
120-Purulia-I	Post Office	Chakda	03252 - 202607		
121-Purulia-l	Post Office	Chakda	03252 - 202607		
122-Purulia-II	Post Office	Bongabari	03252 - 222790		
123-Purulia-II	Post Office	Bongabari	03252 - 222790		
124-Purulia-II	Post Office	Bongabari	03252 - 222790		
125-Purulia-II	Post Office	Bongabari	03252 - 222790		
126-Purulia-II	Post Office	Bongabari	03252 - 222790		
127-Purulia-II	Post Office	Bongabari	03252 - 222790		
128-Purulia-II	Post Office	Bongabari	03252 - 222790		
129-Purulia-II	Post Office	Bongabari	03252 - 222790		

Sl. No. & Block	Name of the Institution	Address	Telephone Number
130-Purulia-II	Post Office	Bongabari	03252 - 222790
131-Manbazar-I	Post Office	Patharmahara	03253 - 255209
132-Manbazar-I	Post Office	Patharmahara	03253 - 255209
133-Manbazar-I	Post Office	Patharmahara	03253 - 255209
134-Manbazar-I	Post Office	Patharmahara	03253 - 255209
135-Manbazar-I	Post Office	Patharmahara	03253 - 255209
136-Manbazar-I	Post Office	Patharmahara	03253 - 255209
137-Manbazar-I	Post Office	Patharmahara	03253 - 255209
138-Manbazar-I	Post Office	Patharmahara	03253 - 255209
139-Manbazar-I	Post Office	Patharmahara	03253 - 255209
140-Manbazar-I	Post Office	Patharmahara	03253 - 255209
141-Manbazar-II	Post Office	Borgoria	03253 - 252286
142-Manbazar-II	Post Office	Borgoria	03253 - 252286
143-Manbazar-II	Post Office	Borgoria	03253 - 252286
144-Manbazar-II	Post Office	Borgoria	03253 - 252286
145-Manbazar-II	Post Office	Borgoria	03253 - 252286
146-Manbazar-II	Post Office	Borgoria	03253 - 252286
147-Manbazar-II	Post Office	Borgoria	03253 - 252286
148-Puncha	Post Office	Puncha	03253 - 259207
149-Puncha	Post Office	Puncha	03253 - 259207
150-Puncha	Post Office	Puncha	03253 - 259207
151-Puncha	Post Office	Puncha	03253 - 259207
152-Puncha	Post Office	Puncha	03253 - 259207
153-Puncha	Post Office	Puncha	03253 - 259207
154-Puncha	Post Office	Puncha	03253 - 259207
155-Puncha	Post Office	Puncha	03253 - 259207
156-Puncha	Post Office	Puncha	03253 - 259207
157-Puncha	Post Office	Puncha	03253 - 259207
158-Bundwan	Post Office	Bundwan	03253 - 257202
159-Bundwan	Post Office	Bundwan	03253 - 257202
160-Bundwan	Post Office	Bundwan	03253 - 257202
161-Bundwan	Post Office	Bundwan	03253 - 257202
162-Bundwan	Post Office	Bundwan	03253 - 257202
163-Bundwan	Post Office	Bundwan	03253 - 257202
164-Bundwan	Post Office	Bundwan	03253 - 257202
165-Bundwan	Post Office	Bundwan	03253 - 257202
166-Hura	Post Office	Hura	03252 - 240249
167-Hura	Post Office	Hura	03252 - 240249
168-Hura	Post Office	Hura	03252 - 240249
169-Hura	Post Office	Hura	03252 - 240249
170-Hura	Post Office	Hura	03252 - 240249
171-Hura	Post Office	Hura	03252 - 240249
172-Hura	Post Office	Hura	03252 - 240249

Sl. No. & Block	Name of the Institution	Address	Telephone Number
173-Hura	Post Office	Hura	03252 - 240249
174-Hura	Post Office	Hura	03252 - 240249
175-Hura	Post Office	Hura	03252 - 240249
176-Arsha	Post Office	Sirkabaid	03254 - 258017
177-Arsha	Post Office	Sirkabaid	03254 - 258017
178-Arsha	Post Office	Sirkabaid	03254 - 258017
179-Arsha	Post Office	Sirkabaid	03254 - 258017
180-Arsha	Post Office	Sirkabaid	03254 - 258017
181-Arsha	Post Office	Sirkabaid	03254 - 258017
182-Arsha	Post Office	Sirkabaid	03254 - 258017
183-Arsha	Post Office	Sirkabaid	03254 - 258017
184-Baghmundi	Post Office	Pathardih	03254 - 240209
185-Baghmundi	Post Office	Pathardih	03254 - 240209
186-Baghmundi	Post Office	Pathardih	03254 - 240209
187-Baghmundi	Post Office	Pathardih	03254 - 240209
188-Baghmundi	Post Office	Pathardih	03254 - 240209
189-Baghmundi	Post Office	Pathardih	03254 - 240209
190-Baghmundi	Post Office	Pathardih	03254 - 240209
191-Baghmundi	Post Office	Pathardih	03254 - 240209
192-Balarampur	Post Office	Bansgarh	03252 - 280255
193-Balarampur	Post Office	Bansgarh	03252 - 280255
194-Balarampur	Post Office	Bansgarh	03252 - 280255
195-Balarampur	Post Office	Bansgarh	03252 - 280255
196-Balarampur	Post Office	Bansgarh	03252 - 280255
197-Balarampur	Post Office	Bansgarh	03252 - 280255
198-Balarampur	Post Office	Bansgarh	03252 - 280255
199-Barabazar	Post Office	Barabazar	03253 - 258224
200-Barabazar	Post Office	Barabazar	03253 - 258224
201-Barabazar	Post Office	Barabazar	03253 - 258224
202-Barabazar	Post Office	Barabazar	03253 - 258224
203-Barabazar	Post Office	Barabazar	03253 - 258224
204-Barabazar	Post Office	Barabazar	03253 - 258224
205-Barabazar	Post Office	Barabazar	03253 - 258224
206-Barabazar	Post Office	Barabazar	03253 - 258224
207-Barabazar	Post Office	Barabazar	03253 - 258224
208-Barabazar	Post Office	Barabazar	03253 - 258224
209-Joypur	Post Office	Joypur	03254 - 252231
210-Joypur	Post Office	Joypur	03254 - 252231
211-Joypur	Post Office	Joypur	03254 - 252231
212-Joypur	Post Office	Joypur	03254 - 252231
213-Joypur	Post Office	Joypur	03254 - 252231
214-Joypur	Post Office	Joypur	03254 - 252231
215-Joypur	Post Office	Joypur	03254 - 252231

Sl. No. & Block	Name of the Institution	Address	Telephone Number
216-Jhalda-I	Post Office	Mosina	03254 - 255261
217-Jhalda-I	Post Office	Mosina	03254 - 255261
218-Jhalda-I	Post Office	Mosina	03254 - 255261
219-Jhalda-I	Post Office	Mosina	03254 - 255261
220-Jhalda-I	Post Office	Mosina	03254 - 255261
221-Jhalda-I	Post Office	Mosina	03254 - 255261
222-Jhalda-I	Post Office	Mosina	03254 - 255261
223-Jhalda-I	Post Office	Mosina	03254 - 255261
224-Jhalda-I	Post Office	Mosina	03254 - 255261
225-Jhalda-I	Post Office	Mosina	03254 - 255261
226-Jhalda-II	Post Office	Kotshila	03254 - 255304
227-Jhalda-II	Post Office	Kotshila	03254 - 255304
228-Jhalda-II	Post Office	Kotshila	03254 - 255304
229-Jhalda-II	Post Office	Kotshila	03254 - 255304
230-Jhalda-II	Post Office	Kotshila	03254 - 255304
231-Jhalda-II	Post Office	Kotshila	03254 - 255304
232-Jhalda-II	Post Office	Kotshila	03254 - 255304
233-Jhalda-II	Post Office	Kotshila	03254 - 255304
234-Jhalda-II	Post Office	Kotshila	03254 - 255304
235-Raghunathpur-I	Post Office	Raghunathpur	03251 - 255278
236-Raghunathpur-I	Post Office	Raghunathpur	03251 - 255278
237-Raghunathpur-I	Post Office	Raghunathpur	03251 - 255278
238-Raghunathpur-I	Post Office	Raghunathpur	03251 - 255278
239-Raghunathpur-I	Post Office	Raghunathpur	03251 - 255278
240-Raghunathpur-I	Post Office	Raghunathpur	03251 - 255278
241-Raghunathpur-I	Post Office	Raghunathpur	03251 - 255278
242-Raghunathpur-II	Post Office	Cheliyama	03251 - 262393
243-Raghunathpur-II	Post Office	Cheliyama	03251 - 262393
244-Raghunathpur-II	Post Office	Cheliyama	03251 - 262393
245-Raghunathpur-II	Post Office	Cheliyama	03251 - 262393
246-Raghunathpur-II	Post Office	Cheliyama	03251 - 262393
247-Raghunathpur-II	Post Office	Cheliyama	03251 - 262393
248-Kashipur	Post Office	Kashipur	03251 - 246238
249-Kashipur	Post Office	Kashipur	03251 - 246238
250-Kashipur	Post Office	Kashipur	03251 - 246238
251-Kashipur	Post Office	Kashipur	03251 - 246238
252-Kashipur	Post Office	Kashipur	03251 - 246238
253-Kashipur	Post Office	Kashipur	03251 - 246238
254-Kashipur	Post Office	Kashipur	03251 - 246238
255-Kashipur	Post Office	Kashipur	03251 - 246238
256-Kashipur	Post Office	Kashipur	03251 - 246238
257-Kashipur	Post Office	Kashipur	03251 - 246238
258-Kashipur	Post Office	Kashipur	03251 - 246238

Sl. No. & Block	Name of the Institution	Address	Telephone Number
259-Kashipur	Post Office	Kashipur	03251 - 246238
260-Kashipur	Post Office	Kashipur	03251 - 246238
261-Neturia	Post Office	Ramkanali	03251 - 264050
262-Neturia	Post Office	Ramkanali	03251 - 264050
263-Neturia	Post Office	Ramkanali	03251 - 264050
264-Neturia	Post Office	Ramkanali	03251 - 264050
265-Neturia	Post Office	Ramkanali	03251 - 264050
266-Neturia	Post Office	Ramkanali	03251 - 264050
267-Neturia	Post Office	Ramkanali	03251 - 264050
268-Para	Post Office	Para	03251 - 266234
269-Para	Post Office	Para	03251 - 266234
270-Para	Post Office	Para	03251 - 266234
271-Para	Post Office	Para	03251 - 266234
272-Para	Post Office	Para	03251 - 266234
273-Para	Post Office	Para	03251 - 266234
274-Para	Post Office	Para	03251 - 266234
275-Para	Post Office	Para	03251 - 266234
276-Para	Post Office	Para	03251 - 266234
277-Para	Post Office	Para	03251 - 266234
278-Santuri	Post Office	Muradih	03251 - 203090
279-Santuri	Post Office	Muradih	03251 - 203090
280-Santuri	Post Office	Muradih	03251 - 203090
281-Santuri	Post Office	Muradih	03251 - 203090
282-Santuri	Post Office	Muradih	03251 - 203090
283-Santuri	Post Office	Muradih	03251 - 203090

# Prevention and Mitigation Measures

Geographical Area (in Acre)

Sl.		Agricultural Land (acre)			Grazing	Forest		Total
No.	District	High	Medium	Low	land	(ha)	Others	area.
1	Purulia	225210	86619	34648	14788	87715322	148689. <u>86</u>	625276.86

# Land Holding Pattern (No. of HH)

SI No	Name of Block / Sub Division	Big Farmers	Marginal Farmers	Small Farmers	Agricultural Labours	Landless	Total
1	B.D.O. Purulia –I	1940	2668	5093	0	0	9701
2	B.D.O. Purulia –II	2259	3107	5931	0	0	11297
3	B.D.O. Hura	1995	2743	5236	0	0	9974
4	B.D.O. Arsha	2021	2779	5306	0	0	10106
5	B.D.O. Balarampur	1864	2563	4892	0	0	9319
	Purulia Sadar Sub Division	10079	13860	26458	0	0	50397
6	B.D.O. Manbazar –I	2372	3261	6225	0	0	11858
7	B.D.O. Manbazar –II	1553	2135	4075	0	0	7763
8	B.D.O. Puncha	1959	2694	5143	0	0	9796
9	B.D.O. Bandwan	1418	1949	3721	0	0	7088
10	B.D.O. Barabazar	2270	3121	5958	0	0	11349
	Manbazar Sub Division	9572	13160	25122	0	0	47854
11	B.D.O. Baghmundi	1876	2580	4925	0	0	9381
12	B.D.O. Jhalda –I	1764	2425	4630	0	0	8819
13	B.D.O. Jhalda –II	1870	2571	4909	0	0	9350
14	B.D.O. Joypur	1509	2075	3961	0	0	7545
	Jhalda Sub Division	7019	9651	18425	0	0	35095
15	B.D.O. Para	2289	3148	6010	0	0	11447
16	B.D.O. Raghunathpur-I	1545	2125	4056	0	0	7726
17	B.D.O. Raghunathpur-II	1642	2258	4312	0	0	8212
18	B.D.O. Santuri	1130	1553	2965	0	0	5648
19	B.D.O. Neturia	1204	1655	3160	0	0	6019
20	B.D.O. Kashipur	2492	3427	6542	0	0	12461
	Raghunathpur Sub Division	10302	14166	27045	0	0	51513
	District Total	36972	50837	97050	0	0	184859

# **Crop Pattern**

Sl. No.	Name of the District	Type of Crop	Area Cultivated (in acre)	Area under Crop insurance (in acre)	
1.	Purulia	Paddy/Vegetable/ Potato.	285422	Not available.	

# **Livelihood Details (No. of Families)**

SI No	Name of Block /	Total	Farmers	Agricultural	Other labours	Fishing	Petty	Service	Others
	Sub Division	Household		Labours			Business	Holder	(Specify)
. 1	B.D.O. Purulia –I	- 24251	4365	-11883	-2668	1445	2183	1698	. 0
. 2	B.D.O. Purulia –II	28243	5084	13839	3107	1695	2542	1977	0
3	B.D.O. Hura	24932	4488	12217	2743	1496	2244	1745	0
4	B.D.O. Arsha	25267	4548	12381	2779	1516	2274	1769	0
• 5	B.D.O. Balarampur	• 23297	1493	·11416	-2563	1398	2097	1631	. 0
	Purulia Sadar Sub	. 125990	19978	61736	13860	7550	11340	8820	. 0
	Division								
6	B.D.O. Manbazar	29645	5336	14526	3261	1779	2668	2075	0
•	<b>–</b> I	•	•	•	•				•
. 7	B.D.O. Manbazar	. 19407	3493	9509	.2135	1164	1747	1358	. 0
	-II								
. 8	B.D.O. Puncha	. 24490	4408	12000	2694	1469	2204	1714	. 0
9	B.D.O. Bandwan	17720	3190	8683	1949	1063	1595	1240	0
10	B.D.O. Barabazar	28370	1507	13901	3121	1702	2553	1986	0
-	Manbazar Sub	119632	17934	-58619	13160	7177	10767	8373	. 0
	Division								
11	B.D.O. Baghmundi	23452	4221	11491	2580	1407	2111	1642	0
12	B.D.O. Jhalda –I	22046	3968	10803	2425	1323	1984	1543	0
13	B.D.O. Jhalda –II	23376	4208	11454	2571	1403	2104	1636	. 0
. 14	B.D.O. Joypur	18862	3390	. 9228	.2072	. 1130	1695	1318	. 0
	Jhalda Sub	87736	15787	42976	9648	5263	7894	6139	0
	Division	-	_	•	•	•			-
15	B.D.O. Para	28617	5151	14022	3148	1717	2576	2003	0
16	B.D.O.	19316	3477	9465	2125	1159	1738	1352	0
-	Raghunathpur-I	•	•	•		-			
. 17	B.D.O.	. 20531	3696	.10060	.2258	. 1232	1848	1437	. 0
	Raghunathpur-II								
18	B.D.O. Santuri	14121	2542	6919	1553	847	1271	988	0
19	B.D.O. Neturia	5048	2709	· 7374	1655	903	1354	1053	. 0
- 20	B.D.O. Kashipur	- 31150	5607	.15264	.3427	1869	2804	2181	. 0
	Raghunathpur	118783	23182	63104	14166	7727	11591	9014	0
	Sub Division	•	•	•	•	Ī	•		-
	District Total	452141	76881	226435	50834	27717	41592	32346	0

**Drinking Water Sources: - (F – Functional, D – Defunct)** 

Name of Block	Tube	e well	Well	DIID Stand
Name of Block	F	D	wen	PHD Stand
Manbazar-I	1120	86	544	9
Manbazar-II	845	78	378	15
Purulia-I	2360	389	988	20
Purulia-II	1890	269	756	14
Hura	1248	244	245	10
Puncha	1598	184	231	11
Bandwan	895	110	345	9
Jhalda-I	894	98	278	16
Jhalda-II	965	95	138	11
Joypur	853	59	256	12
Arsha	758	68	233	8
Barabazar	978	91	245	13
Baghmundi	1025	145	289	8
Balarampur	1089	132	298	9
Kashipur	1162	157	306	15
Para	1089	138	278	8
Raghunathpur-I	1258	203	264	19
Raghunathpur-II	785	69	245	7
Santuri	863	54	288	9
Neturia	896	45	269	9

### **River / Creeks:**

Sl. No.	Name of the river / creek	Name of the place	Danger level
1	Bauri Khal	Bareria, Baghmundi	
2	Kangsabati	Simulia, Dumrasole, Talasiyari, of Purulia –I Nadiha, Boodhpur of Puncha	6 Mtrs.
3	Subarnarekha	Tulin, Jhalda-I	10 Mtrs
4.	Tatko	Fulberia, Bandwan	
5.	Tatko & Kumari	Bargoria of Manbazar-II	
6.	Damodar	Ichhar, Kargali, Chelyama of Raghunathpur –II	8 mtrs.
7.	Darakeswar, Beko	Gamarkuli, Narayan Garh, Rajwarpara, Ahartore, Payia, Jorsholl of Kahipur	9 Mtrs.
8	Damodar	Raibandh, Buniyara, Sarbari, Saltore of Santuri	8 mtrs.
9.	Goyai Harai	Barrah, Deoli of Para	
10.	Kangsabati	Birchali, Haranama, Jambad of Arsha	6 Mtrs.

# **Irrigation Facilities and Sources: -**

Name of District	Ponds	Dug Wells	LI Points	Drift/ Shallow Tubewel	River	Creeks	Canal
Purulia	20580	2704	0	22571	6	5	1

# Infrastructure (Nos. AND/ OR distance in Kms.)

SI. No.	Name of Sub- Division	FP Outlets	Post Office	Police Station / Out	Pucca Building	CHC/ RH	PHC	Dispensary / SC	Cyclone Shelter	Educational Institute					ARDD Centre	Cortege Industries	Industries	Godown
										Primary – 2971	High145	-HS (+2) 86 Nos.	- College 26	University - 1				
1	Purulia Sadar	800	145	18	18	8	28	Nil	Nil	1185	52	38	12	1	189			10

# **Availability of Irrigation Facility (Major)**

Sl. No.`	Name of the Project	Area (in Hec) under Irrigation
1	BURIDUMUR (1) SCHEME	85,000
2	SAHARJORE (1) SCHEME	4808.000
3	DIMU (1) SCHEME	530,150
4	PARGA (1) SCHEME	650.000
5	KANSAI (1) SCHEME	323.760
6	FAKIDI (1) SCHEME	242.820
7	KARRIOR (I) SCHEME	461.000
8	RUPAI (I) SCHEME	1680.000
9	TARA (I) SCHEME	140.000
10	GOLAMARA (I) SCHEME	190.000
11	KUMARI (I) SCHEME	3238.000
12	SANKHA (I) SCHEME	259.000
13	PATLOI (I) SCHEME	150.000
14	KESTOBAZAR (I) SCHEME	687.980
15	KHAIRABERA (I) SCHEME	526.900
16	KULBERA (I) SCHEME TURGA (I) SCHEME	607.040
17	TUNUA (I) SCHEWIE	708.220

# **Availability of Irrigation Facility**

Sl No	Name of the Project	Area (in Hecs) under Irrigation
1	BANDHU (I) SCHEME	2712
2	BARABHUM (I) SCHEME	2728
3	HANUMATA (I) SCHEME	2767
4	RAMPUR (I0 SCHEME	2389
5	BEKO (I) SCHEME	1586
6	EXTN OF BANDHU	526
	TOTAL	12708

### Road Network: -

- National Highway (in KMs): 112 Kms.
- State Highways (in Kms): 125.6 Kms.
- Forest Roads (in Kms): -149.5 Kms.
- Classified Village Roads (in Kms): -813.5 Kms.
- Block Roads (in Kms): -9086
- PWD Roads (in Kms): -1743 Kms.
- Other Roads, if any (in Kms / Katcha): 7120 Kms.
- Water Ways (in Kms): Nil.
- Railways (in Kms): 495.6 KMS.

### Chapter –III

### **Resource Inventory / Capacity Analysis: -**

Resource type	Details	Number	Govt. / Private	Contacts / Owner's Name with Telephone No.
Transportation and Communication	Tractor	38	Govt.	
	Trekker	15	Private	
	Trolley, Rickshaw	105	Private	
	Four wheeler	705	Govt. –7 /Pvt. –698	
	Boats	5	Private	
	Telephone	35897	Govt / Private	
	Any other	Nil	Nil	
Containers	Tankers	19	Govt.	

		<u> </u>	·	1
	Overhead tank	5	Govt.	
	Jerry canes	-	-	
	Big vessels	-	-	
Cleaning and cutting equipments	Gaiti	250	100 / 600	
	Kudal	9000	1000 / 11000	
	Sabal	7580	500 / 11500	
	Rope	Available	Govt. / Private.	
	Big saw	190	100 / 90	
	Other, if any	-	-	
Other Resources	Gen set	18	Govt. / Private	
	Pump set	1156	Govt. / Private	
•	Petromax	134	Govt.	
	Tent house	159	Govt.	
	Gas light	387	Private	
	Solar light	246	Govt. / Private	
	Biogas	70	Private	
Temporary Shelter	Tents	100	25 / 75	
	Tarpaulins/Palythenes	250	50 / 200	
	Bamboo	230000	Private	
	Other, if any	Nil	Nil	

# **Emergency Contingency Plan for Purulia District.**

Name of District	Present population		Requiremen	nt of Food M	laterial per d	lay		Medicine	s per week
	•	Chira @ 200 gms/Head	Gur @ 50 gms/Head	Rice @ 250 gms/Head	Dal @ 25 gms/Head	Salt @ 10 gms/Head	K Oil @ 50 ml /Head	ORS in packet / Head	Halogen Tabs (7 tabs / Head)
Purulia	2761457	552292	138073	690365	69036	27614	138072	2761457	19330199

. . .

### Storage facilities with capacity

Sl.No.	Type of storage structure	location Capacity		Contact person	Address and phone No.	Remarks
1	Storing agents godown	Telkolpara 2000 ton		Monoj Kumar Fogla	Telkolpra, Purulia 03252-222007	
2	Storing agents godown	Barakar Road 5500 ton		Santosh Kumar Kataruka	Barakar Road, Purulia 03252-224320	
3	Storing agents godown	Jhalda	1000 ton	P.M. Agarwala	Jhalda, Purulia 03254-255342	
4.	Storing agents godown Raghunathpur 2000 tor		2000 ton	Om Prakash Agarwal	Raghuanthpur, Purulia 03251-255609	

# Public Distribution System of Purulia District

BLOCK		SI.	MR Dealer name &location			APL					BPL					AAY			APS		
	MR Distributor	no.																		Name of the Sub- Inspector/Inspector	Contact No.
	2			Α	М	T	F	E.U	Α	М	T	F	EU	Α	М	T	F	EU		Na! Insp.	
		1	Sukumar Sen; SIRKABAD	1363	217	1580		1471.5	771	210	981		876	885	40	925		905	4		
		2	Sarat Ch. Majhi; SIRKABAD	534	83	617		575.5	655	160	815		735	727	Nil	727			Nil		
		3	Aditya Majhi; SIRKABAD	806	160	966		886	584	157	741		662.5	617	6	623		620	Nil		
		4	Binata Mahato; AHARRAH	1235	148	1383		1309	1085	381	1466		1275.5	795	40	835		815	20		
		5	Rajendranath Mahato;SENABORA	534	40	574		554	552	78	630		591	575	20	595		585	1		
		6	Aswini Kr. Mahato;BIRCHALI	377	31	408		392.5	344	42	386		365	315	20	335		325	Nil		
		7	Chhater Majhi; JAMBAD	377	55	432		404.5	397	120	517		457	154	15	169		161.5	Nil		
		8	Uma Shankar Tudu; KALABANI	345	40	385		365	297	79	376		336.5	300	10	310		305	1		
	<	9	Haripada Mahato; NUNIA	394	41	435		414.5	465	130	595		530	245	Nil	245		245	Nil		
	P.D. JHUNJHUNWALA	10	Srikanta Mahato; NUNIA	142	42	184		163	201	84	285		243	275	Nil	275		275	Nil	ned	0,
ARSHA	N H	11	Indrajit Mahato; LOCHAMANPUR	259	16	275		267	253	33	286		269.5	227	10	237		232	Nil	Mustaq Ahamed	9734211470
AR	Ž,	12	Parikshit Mahato; KADAMPUR	465	50	515		490	147	25	172		159.5	48	5	53		50.5	Nil	staq	7342
	□	13	Kanchan Gorain; KADAMPUR	295	44	339		317	394	113	507		450.5	262	Nil	262		262	Nil	Σ̈́	6
	٣.	14	Bholanath Majhi; PHASKO	327	36	363		345	522	78	600		561	473	64	537		505	2		
		15	Shyamapada Dutta; RUGRI	517	46	563		540	508	92	600		554	291	30	321		306	Nil		
		16	Aparup Mandal; ARSHA	1525	71	1596		1560.5	1852	212	2064		1958	769	60	829		799	3		
		17	Jiten Ch. Mandal; ARSHA	1520	108	1628		1574	1477	226	1703		1590	1065	60	1125		1095	2		
		18	Baidyanath Paramanik; ARSHA	1304	204	1508		1406	1239	324	1563		1401	536	55	591		563.5	4		
		19	Ramdas Kumar; ARSHA	200	10	210		205	392	43	435		413.5	238	18	256		247	Nil		
		20	Dharam Kumar; KARANDIH	665	102	767		716	554	165	719		636.5	195	20	215		205	Nil		
		21	Dhananjoy Layek; RANGAMATI	667	25	692		679.5	574	60	634		604	776	33	809		792.5	1		
		22	DurgadasDeshmukh; RANGAMATI	1100	99	1199		1149.5	1194	212	1406		1300	207	35	242		224.5	Nil		

1	ĺ	23	Baranasi Mahato; RANGAMATI	393	27	420	406.5	382	53	435	[ [	408.5	100	Nil	100				'
		24	Sashadhar Kumar; PAIPAL	400	41	441	420.5	537	43	580		558.5	nil	Nil			Nil		
		25	Jiten Ch. Mandal; ARSHA	87	5	92	89.5	145	18	163		154	nil	Nil			Nil		
		26	Bhajahari Mahato; JARATARD	322	70	392	357	289	174	463		376	126	38	164	145	Nil		
		27	Chandra Kanta Mahato; CHITIDIH	288	17	305	296.5	352	23	375		363.5	201	15	216	208.5	Nil		
		28	Sricharan Singh; MANKIARI	464	57	521	492.5	448	124	572		510	603	20	623	613	Nil		
		29	Asit Saw; THAKURSIMA	763	105	868	815.5	559	124	683		621	312	32	344	328	5		
		30	Rajendra Chandra; BORAM	215	20	235	225	190	40	230		210	73	4	77	75	2		
		31	Dukhaharam Mahato; BORAM	1215	155	1370	1292.5	1045	328	1373		1209	393	18	411	402	3		
		31	Bokhanaram Mahato, BOKAM	1213	155	1370	1272.5	1043	320	13/3		1207	373	10	411	402	Nil		
		32	Haren Chandra Mahato; ULUGERIA	472	48	520	496	412	75	487		449.5	178	4	182	180	Nil		
		33	Hiralal Mahato;BALIA	512	55	567	539.5	414	28	442		428	395	5	400	397.5	Nil		
		34	Gurupada Mandal; NAGRA	402	36	438	420	326	75	401		363.5	288	15	303	295.5	Nil		
		35	Tapan Mahato ;TUMBA JHALDA	745	91	836	790.5	649	170	819		734	391	48	439	415	1		
		36	Sashadhar Mahato; BAMUNDIHA	317	41	358	337.5	364	64	428		396	263	Nil	263		Nil		
		37	Deben Kumar; KUDAGRA	737	91	828	782.5	687	90	777		732	419	42	461	440	Nil		
	¥.	38	Dhrubapada Gorain; BELDI	825	57	882	853.5	669	140	809		739	775	Nil	775		13		
	JHUNJHUNWALA	39	Santiram Mahato; BELDI	557	50	607	582	405	100	505		455	330	Nil	330		Nil		
ARSH/	JH.	40	S.K.Ahia; BHURSA	685	63	748	716.5	560	69	629		594.5	315	Nil	315		Nil		
₹	l E	41	Birendra nath Roy; GOURADAG	820	45	865	842.5	752	103	855		803.5	75	Nil	75		Nil	Do	Do
	P.D.	42	Bhim Mahato ; HARANAMA	265	19	284	274.5	247	38	285		266	65	Nil	65		Nil		
		43	Arun Kr. Ganguly; HETJARI	835	77	912	873.5	728	100	828		778	398	44	442	420	Nil		
		44	Sukdeb Mahato; BARUADIH	710	57	767	738.5	565	100	665		615	323	34	357	340	Nil		
		45	Sovaram Mahato; HETGUGUI	607	162	779	688	128	31	159		143.5	484	25	509	496.5	1		
		46	RampadoChoudhuryUPARGUGUI	636	122	758	697	620	223	843		731.5	631	28	659	645	3		
		47	Trilochan Dey; UPARJARI	750	96	846	798	348	114	462		405	456	74	530	493	4		
		48	Bholanath Mahato; KENDA	853	171	1024	938.5	51	38	89		70	501	8	509	505	2		
		49	Tejula Mahato;BHELAIDIH	294	51	345	319.5	451	242	693		572	160	20	180	170	2		
		50	Prafulla Kr.Mahato; PATHARDIH	449	230	679	564	25	4	29		27	130	Nil	130		Nil		
		51	Umarani Singh Sardar; TAYASI	554	124	678	616	81	16	97		89	291	Nil	291		2		
		52	Anadi Mohan Mahato; JUNJKA	691	115	806	748.5	nil	Nil				372	7	379	375.5	Nil		

		53	Gayaram Mahato; SALUIDAHAR	348	66	414	381	100	27	127	113.5	140	Nil	140		Nil		
		54	Rupchand Majhi; SATRA	1182	432	1614	1398	nil	Nil			1095	104	1199	1147	7		
		55	Sudhir Ch. Kumar; SATRA	243	31	274	258.5	nil	Nil			43	13	56	49.5	Nil		
		56	Bholanath Mahato ;HENSAL	882	201	1083	982.5	nil	Nil			680	Nil	680		2		
		57	Habulal Mahato; HENSLA	753	26	779	766	nil	Nil			368	Nil	368		Nil		
		58	Sudhangshu; PATURA	657	74	731	694	nil	Nil			367	Nil	367		Nil		
		59	Banka Shyam MajhiPATURA	493	88	581	537	159	47	206	182.5	477	32	509	493	5		
		60	Paritosh Kuiry; KINUTAR	696	90	786	741	296	114	410	353	275	55	330	302.5	1		
		61	Sandip Ch. Majhi ;CHATUHANSA	588	76	664	626	215	84	299	257	469	80	549	509	2		
		62	Smt. Sarada Kumar; SINDURPUR	645	131	776	710.5	305	175	480	392.5	120	Nil	120		5		
		63	SatyanarayanSingh Babu; MUDALI	577	20	597	587	204	63	267	235.5	189	20	209	199	2		
		64	Bhola Majhi; MISIRDIH	295	54	349	322	185	82	267	226	260	10	270	265	Nil		
		65	Kalyani Majhi, MISIRDIH	577	53	630	603.5	105	47	152	128.5	254	12	266	260	Nil		
	/ALA	66	Atibul Ansari; LILUDIH	870	250	1120	995	566	246	812	689	895	20	915	905	2	Do	Do
⋖	JHUNJHUNWALA	67	Anil Mahato; KUMURDIHA	390	59	449	419.5	299	59	358	328.5	309	10	319	314	NIL		
ARSHA	Z H	68	Manik Mandal; JURI	1210	37	1247	1228.5	771	24	795	783	356	38	394	375	2		
		69	Rathu Mahato; KORANG	365	8	373	369	319	35	354	336.5	125	NIL	125	070	NIL		
	P.D.	70	Durgadas Paramanik; KORRORIA	750	162	912	831	609	155	764	686.5	389	30	419	404	2		
		71	Subhas Ch. Mehata; PURA	940	246	1186	1063	961	190	1151	1056	763	53	816	789.5	NIL		
		72	Sidheswar Banerjee; PUARA	416	30	446	431	574	82	656	615	572	46	618	595	3		
		73	Smt.SubhadraMahato;Khukramura	352	44	396	374	242	82	324	283	153	15	168	160.5	2		
		74	Bhabataran Mahato; DODPUARA	795	22	817	806	647	104	751	699	360	48	408	384	3		
		75	Narsiruddin Ansary; GOBINDPUR	1205	99	1304	1254.5	1050	144	1194	1122	603	35	638	620.5	12		
		76	Anadi Ch. Mahato; DHANARA	811	102	913	862	747	200	947	847	367	45	412	389.5	NIL		
			GRAND TOTAL=	47854	6367	54231	51038	35240	7731	42971	39106	28652	1688	30340		126		
		1	Lambodar Mahato, Zilling	503	295	798	650.5	1269	49	1318	1293.5	484	8	492	488	Nil		
	iety	2	Sakti pada Majhi, Birgram	417	71	488	452.5	717	33	750	733.5	383	7	390	386.5	1	æ	
<u>ā</u>	. Soc	3	Naziruddin Ansary, Dirgram	622	129	751	686.5	701	38	739	720	425	8	433	429	Nil	araSankar Sinha	128
BAGMUND	-Op1	4	Gourango Mahato, Gandhudih	266	145	411	338.5	649	33	682	665.5	365	4	369	367	1	nkar	9547414128
BAG	00	5	Dolgobinda Gorain, Hurumda	391	55	446	418.5	754	14	768	764	558	12	570	564	2	raSaı	9547
	U.F.&S.CO-Opt. Society	6	Sec Patahesal S.K.U.S., Patahesal	428	189	617	522.5	829	87	916	872.5	247	12	259	253	2	Таі	
		7	Jagannath Roy , Chairda	574	232	806	690	785	26	811	798	526	6	532	529	2		

İ			Berry Nyma ar Cay Circ dei	1	Ī				İ	<b>i</b> i	Ī	1	1 /1/5	ı		l 1	ı	01 F I	ı		ı
		8	Barun Kumar Saw, Sindri	347	275	622		484.5	612	9	621		616.5	90	3	93		91.5	6		
		9	Braja Bilash Kumar, Torang	565	110	675		620	434	9	443		438.5	345	2	347		346	Nil		
		10	Smt.GruruBariMahato, Ghorabandha	533	288	821		677	1283	36	1319		1301	509	39	548		528.5	1		
		11	Saraban Kumar Mahato, Deva	351	120	471		411	885	17	902		893.5	212	12	224		218	Nil		
		12	Rajesh Pr. Sao, Sindri	556	244	800		678	1096	11	1107		1101.5	577	44	621		599	Nil		
		13	Bhajahari Kumar, Karru	335	152	487		411	368	14	382		375	272	27	299		285.5	Nil		
		14	Ramkanai Kumar, Karru	339	187	526		432.5	387	10	397		392	252	12	264		258	1		
		15	Panchanan Bhagat, Suisa	389	140	529		459	436	55	491		463.5	254	26	280		267	Nil		
		16	Madhusudhan Bhagat, Suisa	272	175	447		359.5	293	46	339		316	85	21	106		95.5	4		
		17	Sree Prasad Kuiry, Nowadih	627	323	950		788.5	962	56	1018		990	805	85	890		847.5	Nil		
		18	Baidyanath Kuiry, Gagi	603	193	796		699.5	523	26	549		536	503	44	547		525	2		
		19	Ram Singar Mahato, Saridi	467	201	668		597.5	571	84	655		613	354	50	404		379	2		
		20	Tarapada Singhdev, Tunturi	248	225	473		360.5	546	58	604		575	191	8	199		195	1		
	ciet)	21	Ghanshyam Kumar, Marcha	469	184	653		561	613	43	656		634.5	551	12	563		557	1		
ᅙ	t. So	22	Gopinath Mahato, Peretorang	527	176	703		615	678	36	714		696	211	16	227		219	1		
BAGMUND	U.F.&S.CO-Opt. Society	23	Niranjan Paramanik, Raydih	699	135	834		766.5	791	94	885		838	704	46	750		727	5	Do	Do
BAC	S.CC	24	Jagannath Mahato, Atna	350	120	470		410	567	52	619		593	301	41	342		321.5	2		
	J.F.&	25	Bhagirath Kumar, Bidri	387	205	592		489.5	1093	6	1099		1096	289	Nil	289			1		
	ے	26	Sitaram Mahato, Rathtar	164	200	364		264	411	32	443		427	161	2	163		162	Nil		
		27	Satya Mahato, Bhursu	267	312	579		423	805	15	820		812.5	297	7	304		300.5	Nil		
		28	Baghamber Kumar, Rathtar	247	572	819		285.5	1461	31	1492		1476.5	88	nil	88			1		
		29	Tripurari Kumar, Bhursu	512	77	589		593	803	33	836		819.5	413	46	459		436	1		
		30	Bhudhan Mahato, Kusaldih	678	162	840		776.5	790	73	863		826.5	458	6	464		461	2		
		31	Jyoti lala Gorai (T), Sarmali	579	197	756		601	653	69	722		687.5	473	8	481		477	1		
		32	C.A.D.C., Ajodhya	262	44	306		290	163	12	175		169	281	2	283		282	nil		
		33	Maharaj Kumar, Sirkadih	149	56	205		160	169	2	171		170	23	2	25		24	1		
		34	Bharat Ch. Mahato, Burda	272	22	294		346.5	440	12	452		446	256	10	266		261	2		
		35	Sadananda Paul, Burda	693	149	842		700	683	52	735		709	429	18	442		438	Nil		
		36	Biswanath Saw, Sarjumhatu	319	14	333		369	250	16	266		258	148	6	154		151	Nil		
		37	Manindranath Roy, Kalimati	370	100	470		428.5	375	71	446		410.5	374	16	390		382	1		

1	i.	1	1	Î.	i	i	1		i	1		 	ı	ı			i	i i	Ī
		38	Kalimati S.K.U.S. Kalimati	351	117	468		456	259	38	297	278	122	2	124	123	Nil		
		39	Galak Ch. Mahato, Bandhdih	993	210	1203		1086.5	1683	20	1703	1693	644	16	660	652	Nil		
		40	Bimal Ch. Mahato, Ukada	1297	187	1484		1340.5	1594	68	1662	1628	1042	69	1111	1076.5	Nil		
		41	Takur Prasad, Bukadih	559	87	646		656	1444	66	1510	1477	549	17	566	557.5	Nil		
		42	Sakuntala Mahato, Koreng	417	194	611		489.5	1985	22	2007	1996	715	53	768	741.5	Nil		
		43	Amit Mehta, Burda	481	145	626		656.5	1185	25	1210	1197.5	428	30	458	443	Nil		
		44	Smt. Chayya Majhi, Gobindapur	1279	351	1630		1446	861	76	937	899	575	22	597	586	13		
		45	Rasbehari Kumar, Gobindapur	991	334	1325		1362	543	52	595	569	111	8	119	115	3		
		46	Sakti paada Majhi, Ekra	464	742	1206		468.5	792	11	803	797.5	45	Nil	45		2	Do	Do
	<b>÷</b>	47	Panchanan Khan, Madla		9			388			590	564	298			307	5		
_	ocie	48	Dipak Kr. Khan, Bagmundi	308		317		753.5	538	52		1219		18	316	1057	9		
BAGMUND	&S.CO-Opt. Society	49	Pratima Khan, Bagmundi	567	160	727		512.5	1187	64	1251	1414	1046	22	1068	333			
W.G.M	O O	50	Ashim Laha, Bagmundi	416	373	789		620.5	1386	56	1442	1170	323	20	343	609.5	Nil		
8	SS.C	51	Shyama Pada Singha, Bagmundi	538	193	731		441.5	1136	68	1204	823	605	9	614	355	Nil		
	U.F.	52	Ummesh Ch. Mahato, Dhanudih	390 401	165 103	555 504		700	791 437	64 62	855 499	468	352 274	6 11	358 285	279.5	6 Nil		
		53	Rajesh Kr. Khan, Matha					1003				1497							
		54	Dhananjoy Kumar, Rerengtar	934	598	1532		190	1479	36	1515		1188	Nil	1188	621	1		
		55	Madhusudan Gorain, Ponra	190	138	328		285.5	785	nil	785	1476.5	617	8	625		Nil		
		56	Lt. Dasarath Majhi, Pardih	247	572	819		593	1461	31	1492	819.5	88	nil	88	436	3		
		57	Kalikinkar Laha, K.Rakha	512	77	589		776.5	803	33	836	826.5	413	46	459	461	Nil		
			·	678	162	840			790	73	863		458	6	464		13		
		58	Tilak Singh Sardar, Saharjuri	579	197	756		601	653	69	722	687.5	473	8	481	477	3		
		59	Kirti Mohan Dey, Ranga	559	243	802		680.5	1258	86	1344	1301	830	4	834	832	1		
		60	Madan Ch. Bistu, Andhra	371	120	491		431	701	84	785	743	333	16	349	341	12		
			GRAND TOTAL=	29299	11951	41210		34755	48596	2516	51112	49072	24423	1059	25477	23255	115		
		1	Srimtya PurnimaHalder;BANDWAN	1761	136	1897	Ì	1829	1223	20	1243	1233	837	93	930	579	NIL		
z	H	2	Mihir Ch. Halder;BANDWAN	609	37	646		627.5	638	11	649	643.5	248	48	296	1034.5	1		
BANDWAN	ANA 'RW,	3	PabanKr.Agarwalla; BANDWAN	990	271	1261		1125.5	1295	26	1321	1308	648	98	746	999.5	2		
BAN	BISWANATH AGARWAL	4	Kanaklata Mandal; SIRISGORA	583	234	817		700	823	55	878	850.5	466	86	552	713	1		
		5	Upendra nath Majhi; KENDAPARA	485	87	572		528.5	1295	180	1475	1385	466	88	554	880.5	2		
× 7	Z Z	6	Nepal Ch. Dey; CHILA	1095	110	1205		1150	1850	35	1885	1867.5	90	8	98	1167	5	ndr tth sda	467
BANDW	BISWAIN ATH AGARW	7	Karali Kr. Mandal; JAHIRADIH	1052	430	1482		1267	1864	44	1908	1886	42	NIL	42	594.5	NIL	Narendr a nath Hansda	9679467 198
			1		1			1	·		1	 						1	

		8	Gobardhan Mahato; MADHUPUR	1000	236	1236	1	118	1667	47	1714		80	12	92	657	2		
		9	Darpanarayan Mahato; PACHAPNI	1203	507	1710	14	156.5	1202	NIL	1202	1690.5	636	186	822	569	2	-	
		10	Jogindranath Mahato; KUNCHIA	714	168	882	7	798	960	NIL	960		638	166	804	746	1		
		11	Jiban Kar;BHAMRAGORA	967	146	1113	1	040	992	NIL	992		362	63	425	413.5	2		
		12	Mohan Ch. Mani;RAJGRAM	1283	276	1559	1	421	1386	NIL	1386		665	70	735	579	3	1	
		13	Manash Mandal;KUILAPAL	1332	162	1494	1	413	1490	NIL	1490		748	84	832	1034.	5 4		
		14	Md. Jahid Husen;BARAKARMO	180	186	366	2	273	1100	31	1131	1115.5	542	74	616	999.5	3	1	
		15	Kripasindu Das;DHADKA	1207	607	1814	15	510.5	1535	42	1577	1556	980	109	1089	713	10		
		16	Chakradhar Das;DHADKA	1034	550	1584	1	309	1435	19	1454	1444.5	890	219	1109	880.5	8	1	
		17	Swapan Kr. Mandal;KUMRA	714	424	1138	9	926	830	21	851	840.5	640	146	786	1167	NIL	1	
		18	Subhash Ch. Sahu; JOSHPUR	886	521	1407	11	46.5	905	34	939	922	804	153	957	594.5	4	1	
		19	Bankim Mahato;TUITAR	1761	852	2613	2	187	2143	5	2148	2145.5	1102	130	1232	657	12	1	
		20	Rangalal Mahato ;CHANDRA	1020	332	1352	1	186	1180	10	1190	1185	526	137	663	569	4	1	
		21	Balaram Mandal;BAHADURPUR	920	435	1403	11	37.5	1385	NIL	1385	1103	605	104	709	746	4		
		22	Tralakya Mahato;KHERIADIH	968	235	1203	10	085.5	842	NIL	842		540	58	598	413.5	NIL		
		23	Bhusan Ch. Mahato;	1351	136	1487	1	419	2094	50	2144		707	78	785	579	1		
			RADHANAGAR									2119							
		24	Ganesh Ch. Singh;KATAAGORE	409	282	691	Ţ	550	365	NIL	365		365	97	462	1034.	5 2		
			GRAND TOTAL=	23524	7360	30932	27	7204	30499	630	31129	22192	13627	2307	15934	18321	73		
		1	Parikshit Mahato;HURUMDA	642	40	682	6	662	421	71	492	456.5	260	50	310	285	2		
		2	Ajit Kr. Mahato; SHIRKETIA	687	154	841	7	764	423	130	553	488	259	34	293	276	1		
ZAR	I	3	Uttam Kumar Tibwalla;SINDRI	1241	167	1408	13	324.5	769	98	867	818	579	135	714	646.5	2	Murulidhar Kumar	115
3ARABAZAR	K.P.SAH	4	Smt. Mayna Paul; SINDRI	1371	266	1637	1.	504	900	156	1056	978	413	57	470	441.5	2	Jhar	9732325115
BAR	⊻.	5	Sect Sindri S.K.U.S.; SINDRI	2149	244	2393	2	271	1086	135	1221	1153.5	575	18	593	584	4	uruliji	973.
		6	Motilal Mahato;LAKA	734	161	895	8	14.5	536	134	670	603	270	12	282	276	3	Σ	
		7	Huttasan Mahato; JEELING	1102	245	1347	12	224.5	825	205	1030	927.5	590	120	710	650	2		
J.R		8	Smt. Bulu Mahato; HIZIA	681	114	795	7	738	581	86	667	624	625	133	758	691.5	2		
3AZ4	K.P.SAH	9	Smt. Arati Mahato; BANJORA	844	260	1104	9	974	675	180	855	765	440	19	459	449.5	nil		
BARABAZAR	K.P.	10	Arup Kr. Mahato, BANDWAN	549	234	783		666	508	179	687	597.5	572	80	652	612	6		
B,		11	Aswani Kr. Mahato; KAIPARA	727	192	919	8	323	535	130	665	600	481	78	559	520	2		

		12	Radhapada Mahato; TASARBAKI	862	169	1031	946	.5 65	59	105	764	711.5	454	14	468	461	3		
		13	Monohar Mahato; KANDYA	669	141	810	739	.5 33	32	94	426	379	199	9	208	203.5	2		
		14	Nirmal Ch. Panda; ULDA	776	240	1016	89	5 52	24	144	668	596	214	15	229	221.5	1		
		15	Gorachand Mahato; BHAGABANDH	1630	272	1902	17	6 11	69	140	1309	1239	510	47	557	533.5	2		
		16	Bhaktaranjan Mahato; BAMU	551	186	737	64	4 50	00	62	562	531	263	21	284	273.5	1		
		17	Mahadev Mahato,;KHARIPAHARI	496	128	624	56	) 29	93	135	428	360.5	377	20	397	387	1		
		18	Banamali Mahato; RAWTURA	726	157	883	804	.5 47	75	90	565	520	214	4	218	216	1		
		19	Ashutosh Mahato; DHABERA	657	102	759	70	3 53	34	56	590	562	287	31	318	302.5	2		
		20	MadhusudanMahato; BAMUNJORA	411	98	509	46	31	12	51	363	337.5	174	28	202	188	1	Do	Do
		21	Sk. Manirudin; RAIGHARA	888	284	1172	10	0 65	51	114	765	708	490	6	496	493	1		
		22	Amulya Mahato, TALTARD	707	181	888	797	.5 50	02	36	538	520	386	71	457	421.5	1		
		23	Guruncharan Mahato, TOKORIA	646	109	755	700	.5 44	45	60	505	475	256	5	261	258.5	3		
		24	Prakash Ch Mahato, SACHANDIH	991	174	1165	10	8 70	08	100	808	758	551	21	572	561.5	2		
		25	Bharat Ch. Mahato;PRATAPPUR	701	84	785	74	3 38	85	89	474	429.5	61	0	61	61	NIL		
		26	Lalmohan Mahato; TENTULADIH	663	30	693	67	3 67	70	22	692	681	113	7	120	116.5	NIL		
		27	Purna Ch. Singha; BAJRA	630	132	762	69	5 49	98	120	618	558	39	5	44	41.5	1		
		28	Hiralal Singh;BAJRA	564	140	704	63	4 47	70	90	560	515	65	8	73	69	NIL		
		29	Pasupati Mahato; SARISHABAHAL	353	89	442	397	.5 36	67	55	422	394.5	71	4	75	73	1		
		30	Maloti Mahato; JHARIA	723	124	847	78	5 68	84	75	759	721.5	109	12	121	115	3		
		31	Sabitri Mahato; BAMU	939	190	1129	10	4 77	77	105	882	829.5	205	27	232	218.5	5		
		32	Smt. Sarathi Mahato; PURIARA	693	80	773	73	3 61	15	68	683	649	112	8	120	116	4		
		33	Ratanlal Kedia; BARABAZAR	742	201	943	842	.5 61	14	140	754	684	284	45	329	306.5	1		
		34	Sect BZR CC Store; BARABAZAR	124	178	302	21	3 48	82	107	589	535.5	231	8	239	235	1		
		35	Aswini Duta; BARABAZAR	712	208	920	81	5 43	31	107	538	484.5	363	11	374	368.5	2		
		36	Benerasylal Sah; BARABAZAR	1484	275	1759	16	2 88	86	225	1111	998.5	506	14	520	513	2		
0∠		37	Kailash Sharma; BARABAZAR	840	276	1116	97	3 59	96	108	704	650	449	36	485	467	4		
3ARABAZAR	Y.	38	Dwarika Sharma; BARABAZAR	658	278	936	79	7 46	68	107	575	521.5	394	34	428	411	3		
RAB	K.P.SAH	39	Satyenkar Modak; BARABAZAR	905	176	1081	99	3 72	29	189	918	823.5	443	64	507	475	1		
BA		40	Suddodhan Mahato;BANSBERA	777	159	936	856	.5 58	86	96	682	634	185	4	189	187	1		
		41	Pradhan Ch. Murmu; FAGUDIH	430	127	557	493	.5 34	45	84	429	387	303	11	314	308.5	NIL		

		42	Chandan Gorain; RAGMA	1858	193	2051	1955	1488	76	1564		1526	601	54	655	I	628	7		
		43	Rashbihari Mandal; SARGO	729	78	807	768	473	80	553		513	379	74	453		416	3		
		44	Ashoke Singbabu; BAGALBANDH	798	165	963	880.5	527	91	618		572.5	394	70	464		429	2		
		45	Khagendranath Mahato; RANGAGORA	630	129	759	694.5	416	85	501		458.5	277	28	305		291	1		
		46	Nirmal Ch. Mahato, BANKATI	799	217	1016	907.5	685	86	771		728	313	36	349		331	NIL		
		47	Phanibhusan Majhi, SARBERIA	1894	320	2214	2054	1493	225	1718	1	1605.5	134	163	297		215.5	6		
		48	Chinmay Mishra; NOWADIH	1638	241	1879	1758.5	1151	86	1237		1194	700	76	776		738	3	Do	Do
		49	Prahlad Ch. Mahato;PUIJANGA	1147	148	1295	1221	146	165	311		228.5	693	56	749		721	6		
		50	Puspa Mahato; DHARGRAM	596	169	765	680.5	285	77	362		323.5	107	123	230		168.5	Nil		
		51	Dibakar Goswami;TUMRASOLE	1372	224	1596	1484	1002	128	1130		1066	680	20	700		690	2		
		52	Suresh Kr. Kedia; BARABAZAR	1228	226	1454	1341	786	126	912		849	418	60	478		448	2		
		53	Haripada Mahato; LAKHANPUR	498	204	702	600	704	133	837		770.5	558	65	623		590.5	6		
		54	Rahin Ch. Modak; NISCHANTAPUR	1048	254	1302	1175	743	203	946		844.5	454	43	497		475.5	2		
		55	Manmatha nath Mahanty; JERIA	863	117	980	921.5	657	91	748		702.5	466	92	558		512	3		
		56	Sushil Kr. Kedia; BARADA	1389	329	1718	1553.5	817	276	1093		955	1087	121	1208	1	1147.5	9		
		57	Niranjan Mahato; GOKULNAGAN	836	227	1063	949.5	616	148	764		690	447	60	507		477	2		
		58	Narayan Mahanti; KUKURCHARI	545	79	624	584.5	454	74	528		491	361	58	419		390	2		
		59	Bhuban Gorain; B. CHALIAMA	787	144	931	859	539	125	664		601.5	227	39	266		246.5	1		
		60	Amal Kr. Mukherjee; SUKURUNTU	1197	237	1434	1315.5	870	180	1050		960	671	7	678		674.5	6		
		61	Shyamal Kr. Mahapatra;B.MUKRH	814	222	1036	925	622	112	734		678	339	36	375		357	1		
		62	Ashok Kr. Mahato; DUMURDIH	664	175	839	751.5	440	114	554		497	437	22	459		448	3		
		63	Gunaram Mahato; MANPUR	920	215	1135	1027.5	669	133	802		735.5	428	44	472		450	1		
		64	Bhomkesh Modak; BAMUNDIHA	637	204	841	739	467	105	572		519.5	177	10	187		182	Nil		
		65	Suphal Ch. Mahato; RUPAPADIA	682	159	841	1027.5	504	114	618		561	293	38	331		312	1		
			GRAND TOTAL=	56244	11741	67985	62382	40520	7511	48031		43801	24013	2721	26734	2	25374	145		
	S	1	Badri Prasad Sau, Dimo	773	96	869	821	349	1	350		349.5	511	138	649		580	2		
_	KUNDU ENTERPRISES	2	Rohidas Kumar, Narayanpur	1073	194	1267	1170	701	47	748		724.5	594	139	733		663.5	10	(Chief	
JHALDA-II	TERF	3	Kokil Gope, Lupungdih	1671	601	2272	1971.5	977	108	1085		1031	890	252	1142		1016	nil	ak (c	574
HAL	EN C	4	Abinash Kumar, Majhidih	1245	953	2198	1721.5	733	184	917		825	878	74	952		915	4	n Raj pect	9434346574
	JUNU	5	Gorinath Mahato, Rajadera	1119	775	1894	1506.5	727	nil	727			796	154	950		873	nil	ikesh Ins	9434
	=====================================	6	Haripada Mahato, Pandra	649	117	766	707.5	591	nil	591			992	170	1162		1077	8	Hrishikesh Rajak ( Inspector)	
		7	Abinash Kumar, Barahankal (T)	612	248	860	736	338	nil	338			64	6	70		67	nil	_	

	8	Abinash Kumar, Barahankal	923	469	1392	1157.5	987	10	997	992	374	103	477	42	25.5	nil	
	9	Nilkanta Kumar, Oldi	397	180	577	487	347	nil	347		136	57	193	10	64.5	nil	
	10	Chittaranjan Banerjee, Oidi	356	84	440	398	204	nil	204		144	18	162	1	153	nil	
	11	Ramanath Kumar, Goriatard	340	69	409	374.5	852	74	926	889	223	12	235	2	229	nil	
	12	Krishna Majhi, Chekya	275	189	464	369.5	408	nil	408		150	36	186	1	168	3	
	13	Anil Kumar, Chekya	264	112	376	320	364	4	368	366	71	4	75		73	nil	
	14	Chepa Kumar, Chekya	426	72	498	462	376	28	404	390	119	22	141	1	130	nil	
	15	Krishna Majhi, Chekya (T)	388	112	500	444	1023	nil	1023		105	64	169	1	137	nil	
	16	Rajesh Sahoo, Chekya	391	149	540	465.5	852	54	906	879	247	19	266	2	56.5	1	
	17	Pasupati Gorai, Chekya	336	181	517	426.5	524	32	556	540	311	51	362	33	36.5	2	
	18	Badal Gope, Goaladih	1332	416	1748	1540	613	38	651	632	455	26	481	4	468	5	
	19	Bhubaneswar Misra, Unika	427	132	559	493	254	nil	254		123	27	150	13	36.5	nil	
	20	Thkurdas Misra, Noahatu	661	174	835	748	294	57	351	322.5	367	6	373	3	370	nil	
	21	SadhucharanMahato,Chawadih	1136	343	1479	1307.5	552	47	599	575.5	539	11	550	54	44.5	1	
	22	Kashinath Dutta, Kochahatu	1018	319	1337	1177.5	530	69	599	564.5	593	51	644	6	18.5	nil	
	23	Kalipada Mahato,Batrinti	1363	304	1667	1515	204	3	207	205.5	480	68	548		514	3	
	24	Santiram Mahato, Batri	580	179	759	669.5	1387	12	1399	1393	370	nil	370			1	
	25	Bisma Kumar, Rola	2391	616	3007	2699	1378	12	1390	1384	964	60	1024	9	994	4	
	26	Khedan Gorain,rola	1212	498	1710	1461	783	NIL	783		199	33	232	2	15.5	nil	
	27	Bhijuram Mahato,urusaram	806	153	959	882.5	209	NIL	209		641	74	715	ć	578	1	
	28	Falguni Gorai, gurdih	1063	365	1428	1245.5	503	9	512	507.5	545	125	670	60	07.5	2	
	29	Chapala Kumar, Pagro	1171	347	1518	1344.5	769	18	787	778	750	143	893	82	21.5	2	
	30	Bhaigirath Gorai, Chitmu	1321	728	2049	1685	528	3	531	529.5	635	108	743	6	589	3	
	31	Moti Lal Kumar, Tatuara	996	570	1566	1281	578	8	586	582	384	59	443	4	13.5	2	
	32	Sistidhar Kumar,Tatuara	838	162	1000	919	398	8	406	402	644	20	664	6	554	10	
RISES	33	Rathu Kumar,Tatuara	533	388	921	727	239	27	266	252.5	310	26	336	3	323	nil	
DA-II ERPF	34	Ajodhi Kuamr,Tauara	685	291	976	830.5	327	8	335	331	556	64	620		588	nil	
JHALDA-II	35	Digambhar Mahato.Timangda	884	266	1150	1017	527	9	536	531.5	311	39	350	33	30.5	nil	
JHALDA-II KUNDU ENTERPRISES	36	Tilak Kumar, Sarjumatu	906	340	1246	1076	526	29	555	540.5	483	64	547	- 5	515	nil	
∑	37	Rabindranath Kumar,Bamnia	594	110	704	649	382	16	398	390	216	33	249	23	32.5	nil	
	38	Hemanta Kundu,Panrua	1251	303	1554	1402.5	nil	nil	nil	-	124	31	155	13	39.5	nil	
	39	Hemanta Kumar ,Salgram	418	81	499	458.5	194	20	214	204	246	125	371	30	08.5	1	

		40	Bhagirath Kumar, Dangal	1509	582	2091		1800	783	NIL	783	-	242	8	250	246	6		
		41	Dhruba lal Kumar, Durgu	878	230	1108		993	429	NIL	429	-	316	41	357	336.5	nil		
		42	Kapil Chandra Kumar, Durgu	1103	221	1324	1:	213.5	299	NIL	299	-	298	27	325	311.5	2		
		43	Mahindra Mahato, Nalkupi	926	350	1276		1101	515	NIL	515	-	78	17	95	86.5	nil	Do	Do
		44	Hasmat Ali Ansari, Beadih	945	212	1157		1051	330	36	366	348	317	52	369	343	1		
		45	Ashok Kumar Dutta, Jaharhatu	433	185	618		525.5	221	1	222	221.5	75	15	90	82.5	nil		
		46	Suresh Kumar, Dangal	862	273	1135	9	998.5	430	NIL	430	-	596	111	707	651.5	3		
		47	Kesab Mahato,Raghunathpur	1246	512	1758		1502	1118	68	1186	1152	557	138	695	626	nil		
		48	Partho Sarathi Mahato, Chitarpur	911	158	1069		990	458	NIL	458		408	59	467	437.5	1		
		49	Peli Kumar, Chiruhatu	877	147	1024	9	950.5	419	nil	419		348	86	434	391	8		
		50	Krishna Pada Kumar, Matkuma	402	184	586		494	236	15	251	243.5	5	nil	5		nil		
		51	ChandamohanMahato,Mahuda	1263	373	1636	1.	449.5	614	nil	614		493	97	590	541.5	nil		
		52	Gautam Kumar, Matukura	727	444	1171		949	427	nil	427		294	42	336	315	1		
		53	Nersing Kumar, Adardih	1123	210	1333		1228	572	nil	572		277	42	319	298	2		
		54	Nipendra Modak, Begunkodar	462	224	686		574	239	nil	239		154	22	176	165	1		
		55	Ashish Dutta, Begunkudar	683	338	1021		852	274	nil	274		583	72	655	619	1		
		56	Tulsi Dutta, Begunkudar	231	52	283		257	119	nil	119		70	9	79	74.5	1		
		57	Abdul Samser, Begunkudar	487	189	676	5	581.5	249	nil	249		93	23	116	104.5	1		
		58	Mahindi Kumar, Bartulia	1248	131	1379	1:	313.5	365	nil	365		401	41	442	421.5	1		
		59	Bipptaran Dutta, Begunkodar	508	129	637	5	572.5	287	nil	287		88	20	108	98	1		
	RISES	60	Raghunath mahato, Begunkudar	1037	356	1393		1215	559	18	577	568	481	20	501	491	nil	D-	
JHALDA-II	KUNDU ENTERPRISES	61	Biswanath Mahato, Chitambari	532	147	679	ć	605.5	231	nil	231		171	33	204	187.5	1	Do	Do
JHAL	OU EN	62	Tarapada Laha, Begunkudar	353	96	449		401	154	8	162	158	295	44	339	317	5		
	KUNE	63	Manjur Majhi, Simni	778	40	818		798	276	32	308	292	81	13	94	87.5	nil		
		64	Lilabati Kumar, Matkuma	367	165	532	4	449.5	278	nil	278		337	47	384	360.5	nil		
			GRAND TOTAL=	36658	12714	49372	4	43015	21617	696	22313	132161	17226	2864	20090	18653	101		
_ <	∢ . ~																	는 ±	25
JHALDA -I	PURNA MAL AGAR	1	Subpdh Kuiri, Pusti	1230	215	1445	1:	337.5	641	180	821	731	521	59	580	550.5	01	Chanch al Palit	9475657 829

		2	Jayanta Ghosh,Hensla	1025	202	1227	[	1126	894	58	952	ĺ	923	480	108	588	534	01		
		3	Gopinath Mahato, Dulmi	884	164	1048		966	898	80	978		938	506	108	614	560	03		
		4	Mitan Mahato, Dulmi	181	80	261		221	147	20	167		157	154	36	190	172	NIL		
		5	R.D. Bhagat, Karadi	885	280	1165		1025	869	153	1022		945.5	137	21	158	147.5	01		
		6	Sripada Mahato, Vakuadih	502	180	682		592	530	165	695		612.5	282	45	327	304.5	01		
		7	Krishna Mahato, Kudlong	980	310	1290		1135	772	241	1013		892.5	293	31	324	308.5	01		
		8	Amar Kuiri,Durgu	502	115	617		559.5	393	37	430		411.5	205	16	221	213	01		
		9	Prasanta Mandal, Iloo	1363	265	1628		1495.5	1488	152	1640		1564	406	56	462	434	01		
		10	Kabita Mandal, Iloo	1134	310	1444		1289	1295	200	1495		1395	377	35	412	394.5	03		
		11	Shankar Mahato, H. Jargo	402	185	587		494.5	391	100	491		441	355	29	384	369.5	02		
		12	Sagar Mahato, Jargo	502	140	642		572	512	50	562		537	468	131	599	533.5	01		
		13	Mohan Mahato, Pardi	502	140	642		572	553	80	633		593	388	70	458	423	02		
		14	Satyajit Mahato ;Ichag	1443	160	1603		1523	1165	32	1197		1181	927	151	1078	1002.5	03		
		15	Tarapada Chatterjee: Kuki	401	170	571		486	390	2	392		391	301	23	324	312.5	02		
		16	Ramnath Mahato: Chatamghutu	985	226	1211		1098	647	14	661		654	410	32	442	426	02		
		17	Subal Ch. Mahato: Chatamghutu																	
		18	Birendra Mahato: Karadi	686	146	832		759	241	0	241		241	357	8	365	361	03		
		19	Amaresh Mahato: S.MATU	332	155	487		409.5	210	51	261		235.5	101	9	110	105.5	NIL		
		20	Bourikanta Mahato: Nawadi	643	150	793		718	342	11	353		347.5	268	38	306	287	NIL		
		21	Kalabati Mahato; Darpa	522	185	707		614.5	404	12	416		410	358	64	422	390	02		
		22	Sudarshan Mahato;G.KUSI	783	195	978		880.5	919	22	941		930	269	50	319	294	02		
	_	23	Sushil Kumar;BIRUDI	552	200	752		652	609	70	679		644	396	72	468	432	03		
	AGARBAL	24	Saktipada Mandal;KHAMAR	793	205	998		895.5	874	25	899		886.5	547	119	666	606.5	03		
<del>-</del>	AGA	25	Ajit Mahato;JAJAHATU	402	108	510		456	386	20	406		396	226	40	266	246	01		
JHALDA-		26	Biraj Mahato;ARAHARA	572	125	697		634.5	551	0	551		551	283	56	339	311	03		
当	ΑĀ	27	Niranjan Mahato;RANIDIH	401	195	596		498.5	388	22	410		399	398	54	452	425	01		
	PURNAMAL	28	Bisakha Mahato, Olgara	622	130	752		687	775	160	935		855	505	115	620	562.5	02		
		29	Durgacharan Mahato;DARDA	502	265	767		634.5	691	41	732		711.5	511	72	583	547	4		
		30	NirmalBhattacharjee;P.JHALDA	1103	206	1309		1206	996	40	1036		1016	439	45	484	461.5	<b>-</b>		
		31	Sunil Mahato;BAGBINDHA	912	288	1200		1056	899	8	907		903	303	53	356	329.5	6		
		32	Durga Mahato;GUTILOYA	693	140	833		763	472	12	484		478	511	103	614	562.5	1	Do	Do
		52	25.ga Manaro, Controll	502	195	697		599.5	471	61	532		501.5	373	20	393	383	2		

ĺ		33	Sanjin Mukherjee;MOSINA			1	]					l					l I	I			ĺ
		34	B.N. Mukherjee;KHATJURI	1730	390	2120		1925	1382	150	1532		1457	218	77	295		256.5			
		35	Paresh nath Mahato;UHUPIRI	1605	270	1875		1740	1511	187	1698		1605	656	60	716		686	9		
		36	Gopal Mahato;MOTALA	698	120	818		758	913	81	994		953.5	440	36	476		458			
		37	Shyamal Singha;TULIN	803	130	933		868	311	38	349		330	297	16	313		305	1		
		38	Ashok ChandraTULIN	1035	239	1274		1155	766	28	794		780	523	87	610		566.5			
		39	Ashok Halder;TULIN	302	139	441		371.5	587	0	587		587	164	11	175		169.5	1		
		40	Saktipada Dutta;TULIN	940	250	1190		1065	960	78	1038		999	273	57	330		301.5	11		
		41	Kirtibas Mahato;COUPAD	885	205	1090		987.5	700	2	702		701	393	60	453		423			
		42	Dilip Mahato;KERWARI	583	187	770		676.5	533	95	628		580.5	323	80	403		363	<u> </u>		
		43	Isha Ansari;KALMA	542	170	712		627	426	3	429		427.5	252	55	307		279.5	2		
		44	Nakul Mahato;MAHATOMARA	703	170	873		788	841	14	855		848	497	31	528		512.5	1		
		45	Dubraj Mahato;DUMURDIH	1486	188	1674		1580	1465	250	1715		1590	843	104	947		895	1		
		46	Bekan Show;HENSAHATU	1875	422	2297		2086	1490	66	1556		1523	1061	156	1217		1139	6		
		47	Pradeep Kr. Shaw;C.BAKAD	332	179	511		421.5	298	64	362		330	377	35	412		394.5	1		
		48	Umesh Ch. Gorain;GORIA	288 793	185 130	473 923		380.5 858	330 863	20 109	350 972		340 917.5	369 274	3 44	372 318		370.5 296	3		
JHALDA-I	0	49	Jogeswar Shaw;BRAJAPUR	1682		2392		2037	1448	27	1475		1462	1121	165	1286				Do	De
H AH			GRAND TOTAL=	39223	710 <b>10114</b>	49337		44281	35637	3331	38968		37304	20136	2946	23082		1203.5 <b>21609</b>	6 <b>46</b>	Do	Do
				37223	10114	47337		44201	55057	3331	30700		37304	20130	2740	25002		21007			
		1	Hrishikesh Kumar;BALRAMPUR	1511	683	2194		1852.5	664	NIL	664		664	804	138	942		873	NIL		
		2	Bansgarh S.K.U.S.;BALARAMPUR	219	131	350		284.5	735	132	867		801	172	40	212		192	NIL		
		3	Chittaranjan Mahanty; BALARAMPUR	278	100	378		328	424	75	499		461.5	250	39	289		269.5	NIL		
	ED	4	ShivSankarKundu;BALARAMPUR	1238	531	1769		1503.5	628	60	688		658	236	50	286		261	NIL		
o∪R	IMI	5	Prabhat Kr.Jaiswal BALARAMPUR	1172	411	1583		1377.5	695	70	765		730	380	44	424		402	13	o O	40
BALARAMPUR	B.T.L.S.C.A.M.S. LIMITED	6	Dilip Kr. Goenka BALARAMPUR	673	224	897		785	1010	95	1105		1057.5	229	33	262		245.5	NIL	Dulal Orao	9874462240
ALAF	C.A	7	Gaytri Devi BALARAMPUR	2310	918	3228		2769	984	188	1172		1078	449	68	517		483	NIL	Dula	9874
8	T.L.S.	8	Kishorilal Sarma BALARAMPUR	297	278	575		436	862	150	1012		737	NIL	NIL	NIL		NIL	NIL		]
	B.	9	Dwijapada Paul BALARAMPUR	699	309	1008		853.5	636	140	776		708	391	60	451		421	NIL		
		10	BiseswarKr.GuptaBALARAMPUR	1563	465	2028		1795.5	971	NIL	971		971	377	39	416		396.5	NIL		
		11	DinabandhuModak,BARAURMA	565	494	1059		802	1221	40	1261		1241	337	45	382		359.5	NIL		
		12	Tapan Kr. Mandal;DUMARI	2078	531	2609		2343.5	965	153	1118		1041.5	750	97	847		798.5	18		

1 1	Ī	13	Golapi Mahato;PARANDA	1047	265	1312	1147.5	360	9	369	364.5	530	76	606	568	NIL	1	1 !
		14	Shakuntala Mahato;NAMSHOL	17	194	211	114	1021	50	1071	1046	460	64	524	492	NIL		
		15	Mital Mahato;DARBERIA	1675	380	2055	1865	531	130	661	596	575	142	717	646	NIL		
		16	Santiram Mandal;GHATBERIA	966	471	1437	1201.5	1090	125	1215	1152.5	578	113	691	634.5	NIL		
		17	Kerowa Skus;KEROWA	1156	309	1465	1312.5	660	124	784	722	903	219	1122	1012.5	18		
		18	Rampada Mandal;DHAKIBAD	933	467	1400	1166.5	850	25	875	862.5	596	121	717	656.5	NIL		
		19	Kalipada Paramanik;KARMA	1065	282	1347	1206	418	61	479	448.5	700	136	836	768	NIL		
		20	Hemanto Mahato;MACHATAD	456	350	806	645.5	1048	88	1136	1092	445	92	537	491	NIL		
		21	Abinash Kumar;JUGIDIH	175	71	246	210.5	473	96	569	521	273	77	350	311.5	NIL		
		22	Gostobihari Mahato;DARDA	353	82	435	466	936	29	965	950.5	354	33	387	370.5			
		23	Nabakishore Mandal;KURNI	172	226	398	202	613	44	657	635	379	Nil	379				
		24	Sudhir Mandal;;KURNI	468	60	528	544.5	545	21	566	555.5	469	12	481	475			
		25	Subhas Gope;RAPKATA	1013	153	1166	1207	1556	26	1582	1569	809	38	847	828			
		26	Kritibas Mahato;MURUGORA	683	388	1071	877	1210	97	1307	1258.5	720	205	925	667.5	18		
		27	AdityaNarayanMahanty;TENTLOW	536	122	658	597	278	34	312	295	175	50	225	162.5	NIL		
		28	Manik Ch. Kumar;CHOTOGADO	97	18	115	106	96	15	111	103.5	NIL	NIL			NIL		
		29	Salbani Skus;SALBONI	463	118	581	522	575	17	592	583.5	285	21	306	174	NIL		
		30	Sunil Das;BELA	554	283	837	695.5	944	9	953	948.5	660	131	791	526.5	NIL		
	Д	31	Dhirendranath Paul; BLPur	700	460	1160	930	1362	NIL	1362		608	67	675	404.5	NIL		
J.	B.T.L.S.C.A.M.S. LIMITED	32	Durga Sapuria; BALARAMPUR	2759	520	3279	3019	2175	437	2612	2393.5	1880	284	2164	1366	18	Do	Do
BALARAMPUR	4.S. L	33	Barnali Paul;NEKREY	1028	254	1282	1155	1645	NIL	1645		1067	143	1210	748	NIL		
-AR/	. A.	34	Dilip Rajak;KANA	902	249	1151	1026.5	1325	571	1896	1610.5	1112	250	1362	931	NIL		
BAI	L.S.C	35	Samik Halder; BALARAMPUR	924	100	1024	974	1762	554	2316	2039	874	200	1074	737	9		
	B.T.	36	Santanu Kundu ;BALARAMPUR	1788	478	2266	2027	1353	280	1633	1493	850	245	1095	792.5	NIL		
		37	Sanatan Gorai;DALDIRI	1002	264	1266	1134	2300	655	2955	2627.5	1300	46	1346	719	NIL		
		38	Lakhindar Kumar;DAVA	383	163	546	464.5	1260	170	1430	1345	525	110	635	427.5	NIL		
		39	Manaranjan Singh Sarddar;MALTI	1083	934	2017	1550	1860	109	1969	1914.5	414	82	496	330	NIL		
			GRAND TOTAL=	49016	17348	66364	41497	59698	8309	68007	37276	33934	5776	39710	19941	94		
		1	Chittaranjan Mahato, Laldungri	910	268	1178	1044	997	152	1149	1073	435	185	620	527.5	3	sda	
AR-≡	ATO	2	Shibaprasad Mandal, Ankro	1801	217	2018	1909.5	1547	106	1653	1600	633	238	871	752	-	Hansda	198
BAZ/	AAH,	3	Arun Ch. Mahato, Barakadam	947	114	1061	1004	1084	167	1251	1167.5	266	90	356	311	-	nath	9679467198
MANBAZAR-II	N.C.MAHATO	4	Sadhan Ch. Modak, Donduri	873	291	1164	1018.5	961	248	1209	1085	489	165	654	571.5	5	Narendra nath	9679
_	_	5	D.K.Dutta, Mamro	631	127	758	694.5	656	123	779	717.5	338	147	485	411.5	-	Nare	

	,	1															•	
		6	Sunil Dutta, Mamro	588	211	799	693.5	565	168	723	649	475	113	588	531.5	4		
		7	Ram Ch. Mondal, Kallabera	879	200	1079	979	1107	231	1338	1222.5	496	183	679	587.5	4		
		8	Brajakishore Mahato, Dharampur	721	270	991	856	507	111	618	562.5	368	95	463	415.5	4		
		9	Sahadev Mahato, Boro	772	258	1030	901	564	122	686	625	441	47	488	464.5	2		
		10	Ajit Kumar Mahato, Rampur	760	148	908	834	890	232	1122	1006	260	63	323	291.5	-		
		11	Biswanath Sen, Dangardih	1017	305	1322	1169.5	1575	297	1872	1723.5	423	64	487	455	-		
		12	Jaladhar Sen, Dangadih	724	130	854	789	712	107	819	765.5	533	153	686	609.5	6		
		13	Lalit MohanBaskey, Nuniachhatra	738	166	904	821	793	160	653	873	240	112	352	296	-		
		14	Thakurdas Mahato, Darikadoba	1189	390	1579	1384	1251	387	1638	1444.5	575	40	615	595	1		
		15	Tushar Kanti Char, Kalapati	808	108	916	862	781	38	819	800	432	139	571	501.5	4		
		16	Fakir Ch. Bhadra, Buribandh	896	167	1063	979.5	1244	168	1412	1325	567	48	615	591	2		
		17	Gunadhar Das, Taldabra	1058	314	1372	1215	1560	270	1830	1695	780	161	941	860.5	3		
		18	Ambuj Kumar Mahato, Tamakhun	1022	227	1249	1135.5	1167	217	1384	1275.5	523	160	683	603	8		
		19	Ganesh Ch. Mahato, Bundia	960	208	1168	1064	963	213	1176	1069.5	340	92	432	386	-		
		20	Debdulal Mahanty, Kuntni	935	143	1078	1006.5	1122	145	1267	1197.5	500	72	572	536	1		
		21	Paritosh Mahato, Dighi	973	132	1105	1039	1152	138	1290	1221	438	139	577	507.5	-		
		22	Gopal Chandra Majhi, Bhutadih	691	181	872	872	490	65	555	522.5	354	94	448	401	-		
		23	Sushil Kumar Mahato, Chirugora	538	178	716	716	464	128			340	89			4		
		24	Prabhas Ch. Mahato, Palashbani	682	266	948	948	1249	339	592	528	557	130	429	384.5	-		
_	0	25	Sudhir Kumar Mahato, Jagda	-	-		_	31	1	1588	1418.5		_	687	622	_		
AR-I	HATC	26	Suumar Mahato, Jargoria	675	147	822	822	681	186	32	31.5	129	82		-			
MANBAZAR-II	N.C.MAHATO	27	Nilmahan Mahato, Pencharya	1234	478	1712	1712	1099	251	867	774	569+7	202	211	170	7		
MAI	N.	28	Ambika Mahato, Nalkuri	979	134	1113	1113	1194	43	1350	1224.5	171	43	202	-			
		29	Gopal Ch. Mahato, Jawrah	1050	303	1353	1353	994	136	1237	1215.5	486	192	214	192.5	6	Do	Do
			'							1130	1062			678	582			
		30	Baru-S.K.U/S., Bari	602	157	759	759	600	122	722	661	340	100	440	390	-		
		31	Jogindra nath Murmu, Basantapur	828	77	905	905	863	118	981	922	362	80	442	402	-		
		32	Ashok Kr. Sen, Kumari	762	261	1023	1023	543	87	630	586.5	540	95	635	587.5	6		
		33	Pasupati Chand, Khariduara	650	215	865	865	734	158	892	813	331	78	409	370	-		
		34	Subrata Chand, Khaiduara	476	174	650	650	533	101	634	583.5	349	71	420	384.5			
		35	Chandna Rani Mandal, Tilabani	787	170	957	957	673	105	778	725.5	494	83	577	535.5	7		
		36	Nimai Ch. Mandal, Tilabani	264	45	309	309	220	43	263	241.5	186	79	265	225.5	-		

1	37	Shyamapada Mandal, Toparbaid	94	17	111	111	71	12	83	77	54	13	67	60.5	-	
	38	Ajit Mahato, Rangametya	1143	437	1580	1580	1389	310	1699	1544	775	290	1065	920	-	
	39	Ajit Kr. Mahato, Bargoria	748	197	945	945	931	205	1136	1033.5	505	109	614	559.5	-	
	40	Mantu Mahato, Jarabai	675	337	1012	1012	696	307	1003	849.5	298	50	348	323	-	
	41	Smt. Latika Rani Das, Jamtoria	739	172	911	911	863	193	1056	959.5	276	123	399	337.5	-	
	42	Animesh Pati, Baghabaid	715	154	869	869	764	103	867	815.5	152	73	225	188.5	12	
		GRAND TOTAL=	33534	8494	42028	39831	36280	6813	43093	39687	16251	4582	20833	18441	88	

####### \$\$\$\$\$\$

Block_Muni	FPS NAME	AAY Family	AAY Head	PHH Head	SPHH Head	RKSY-I Head	RKSY-II Head	Total Head
PURULIA-I	AMALENDU KUIRY	26	97	428	318	322	244	1409
	ANANDA MAHATO	41	153	445	577	242	245	1662
	ANATHBANDHU SINGHMODAK	55	230	583	1011	445	259	2528
	ARUP MUKHERJI	39	138	543	379	966	188	2214
	ASHOKE KR MAHATO	68	250	919	663	1518	674	4024
	ASWINI GORAIN	42	83	780	1007	1011	254	3135
	BANKIM CH PANDEY	17	37	422	169	871	167	1666
	BHUDEB CH DUBEY	85	304	1002	1324	913	145	3688
	BIBHUTIBHUSAN MAHATO	44	176	839	661	482	355	2513
	BIJAY KR MAHATO	26	83	510	306	310	96	1305
	BIKASH CH MAHATO	23	73	244	377	840	340	1874
	BINODBEHARI PANDEY	97	389	1124	1197	1107	664	4481
	BISWARUP MAHATO	6	7	450	186	807	78	1528
	DANDULAL KUMBHAKAR	40	143	507	746	439	207	2042
	DHRUBARAJ MAHATO	30	89	420	533	762	143	1947
	FATIK CH SARDAR	65	244	502	645	223	135	1749
	FATULAL MAHATO	14	35	200	230	47	76	588
	GOPAL CH MAHATO	93	401	773	1210	903	403	3690
	HIRA DEY	44	222	234	236	250	315	1257
	HIRA DEY	22	88	495	868	408	217	2076
	HIRENDRANATH DUTTA	34	126	615	527	1667	550	3485
	INDUBALA GOPE	11	34	521	322	626	250	1753
	JADAB CH MURMU	38	120	415	864	183	84	1666
	JAGADISH MAHATO	41	137	1224	1297	1016	470	4144

JANANI MAHATO	12	31	589	231	1640	124	2615
JITENDRA KR SIKHAR	98	343	1024	2253	1269	1185	6074
JOGENDRANATH MAHATO	9	24	231	272	91	107	725
KALIPADA MAHATO	80	264	1355	1791	857	659	4926
KALYANI PRASAD PANDEY	69	267	443	596	529	219	2054
KAMALAKANTA MAHATO	6	20	410	366	667	84	1547
KARTIK CH OJHA	32	129	668	769	383	342	2291
KIRITI BHUSAN MAHATO	13	46	353	203	747	56	1405
LAXMIKANTA MAHATO	45	166	589	651	1082	509	2997
MANIK CH MAHATO	18	55	1134	654	929	443	3215
MANJUSHREE RAKSHIT	49	199	972	789	897	636	3493
MANORANJAN KUIRY	123	504	615	1157	614	623	3513
MOHD ABDUL GAFFAR	54	194	719	949	598	409	2869
NABAKISHORE MAHATO	11	31	973	419	824	170	2417
NARESH CH MAHATO	19	61	794	543	146	123	1667
NIRANJAN KUMBHAKAR	26	65	389	376	152	244	1226
NIRANJAN MAHATO	51	219	1092	937	1118	464	3830
NIYATI MAHATO	79	322	1108	993	1267	245	3935
NUNIBALA MAHATO	20	63	958	567	969	347	2904
PARAMESWAR GORAIN	151	574	796	1077	645	372	3464
PARIKSHIT MAHATO	29	81	486	947	259	112	1885
PARIKSHIT MAHATO	44	143	1135	785	1559	677	4299
PHANIBHUSAN MAHATO	14	41	583	423	823	336	2206
RABINDRANATH SEN	15	46	531	380	1303	567	2827
RAJESHLAL SINGH DEO	43	165	405	914	490	729	2703
SANDHYA MAHATO	33	122	382	574	1019	160	2257
SANTA MONDAL	24	68	972	657	560	419	2676
SANTOSH MAHATHA	107	385	861	688	1348	796	4078
SHYAMAL KR MAHATO	17	42	834	501	339	131	1847

Total	2719	9913	42017	43698	45353	19895	160876
TARAKESWAR MUKHERJI	51	253	893	766	974	501	3387
TAPAN KR PANDEY	36	128	412	608	682	102	1932
TAPAN KR MONDAL	1	1	445	271	332	62	1111
TAPAN KR MONDAL	58	136	490	579	265	375	1845
SUNIL CH GORAIN	45	172	906	690	535	50	2353
SUDHANSU MAHATO	5	21	275	180	175	127	778
SUDARSHAN MAHATO	50	169	1329	1097	645	176	3416
SUBIRAN KHATUN	86	302	543	924	1166	470	3405
SRIPATI GOPE	55	236	779	907	743	90	2755
SK ALIMUDDIN	40	166	349	561	354	95	1525

Block_Muni	FPS NAME	AAY Family	AAY Head	PHH Head	SPHH Head	RKSY-I Head	RKSY-II Head	Total Head
Purulia - II	ABED ALI ANSARY	19	51	763	340	819	228	2201
	AMULYA MAHATO	103	393	430	1118	318	200	2459
	ANIL CH MAHATO	86	287	1802	1995	1782	295	6161
	ARUN CH ROY	62	166	565	555	945	1086	3317
	BHABATOSH MAHATO	76	243	1469	1649	1096	581	5038
	BHANGRA SKUS	99	364	1076	2189	558	371	4558
	BIJALA MAHATO	11	47	674	286	556	80	1643
	BYOMKESH CHATTERJI	23	58	697	498	247	235	1735
	CHANCHRA SKUS	84	335	426	1078	350	50	2239
	CHINIBAS MAHATO	31	59	1637	787	1375	300	4158
	DHANANJAY MAHATO	81	362	687	762	444	306	2561
	GANAPATI MAHATO	48	109	848	1150	1569	282	3958
	GOBINDA MONDAL	90	412	515	1258	246	368	2799

HAMID ANSARY	13	47	1171	658	342	83	2301
HUTMURA CO-OP. SOCIETY	90	272	660	2173	539	231	3875
KALIPADA MAHATO	49	213	493	860	1226	30	2822
KASHINATH SUPAKAR	58	253	1069	1217	670	491	3700
KUNTIBALA MAHATO	118	375	1573	1451	944	299	4642
MANOJ KR MAHATO	67	280	1624	915	913	338	4070
MANTULAL NANDI	39	170	868	751	209	290	2288
MRITYUNJAY MISHRA	75	293	1491	624	294	562	3264
NABA KR TIWARY	295	1377	411	1753	373	445	4359
NIRAD MAHATO	23	59	963	552	663	104	2341
NIRANJAN PRASAD SAO	105	445	637	1297	583	223	3185
NIRMAL MAHATO	103	260	1076	1377	1432	182	4327
NRIPEN BANERJI	116	408	1052	2076	1641	355	5532
NUNIBALA BIBI	21	72	654	928	265	93	2012
NUR HUSSAIN ANSARY	32	100	1037	855	1260	269	3521
PARIKSHIT MAHATO	28	74	811	634	1181	329	3029
PINDRA MOHRA SKUS	108	363	1309	1159	824	439	4094
PRATAP KR ROY	64	256	813	1048	855	307	3279
RAGHUBIR NEOGI	209	853	1006	1393	316	204	3772
RAJKISHORE MAHATO	143	541	1844	2560	2437	820	8202
SAGAR CH MALAKAR	156	659	897	1320	685	300	3861
SAGAR CH RAKSHIT	64	266	636	1001	654	103	2660
SAMIR KR GANGULY	35	107	573	543	1786	255	3264
SAMUEL KR SAJ	81	334	1096	1557	947	208	4142
SANTOSH KR MAHATO	86	271	1146	1770	1501	180	4868
SASADHAR MAHATO	163	487	1114	1663	1795	1029	6088
SATISH CH. MAHATO	16	36	867	477	705	93	2178
SHIBAPRASAD BAURI	55	206	836	1427	2580	176	5225
SK JAN MOHAMMAD	189	721	1200	1870	1412	258	5461
SK TURAB	101	356	1033	1447	853	207	3896

Total	4055	14903	47215	58696	45931	16179	182924
YASIN ANSARY	44	137	625	346	519	586	2213
TAPAN PANDEY	154	507	951	617	1532	747	4354
SUPRIYA ADHIKARY	119	489	1214	2577	916	562	5758
SUNIL MAHATO	31	95	703	856	630	135	2419
Sunil Kr. Mahato	0	0	0	0	10	4	14
SUNIL KR DEY	105	330	720	1588	670	278	3586
SUDHIR MAHATO (KUSHTAR)	7	9	109	12	203	13	346
SUDHIR KR MAHATO(SITALPUR)	34	100	933	694	644	200	2571
SUDARSHAN MAHATO	46	196	411	985	617	369	2578

Block_Muni	FPS NAME	AAY Family	AAY Head	PHH Head	SPHH Head	RKSY-I Head	RKSY-II Head	Total Head
Hura	ABHIRAM MAJI	73	298	581	1421	146	135	2581
	ANATH BANDHU MONDAL	89	357	1004	1607	625	401	3994
	ARUP KR. GORAIN	132	503	697	1511	296	307	3314
	ASHOKE BANERJI	29	110	738	634	524	205	2211
	ASHOKE CHOWDHURY	99	411	660	1011	452	324	2858
	ASHOKE MONDAL	80	299	1068	1093	420	465	3345
	ASIT BARAN SAR	110	422	1190	1629	743	322	4306
	ASWINI KUMBHAKAR	77	298	889	1184	617	254	3242
	BALARAM MAHATO	23	92	313	257	94	144	900
	BATUL CH. MAHATO	42	123	779	543	212	246	1903
	BHAGYABATI MAHATO	29	93	714	503	491	118	1919
	BIBHISAN MAHATO	11	20	1313	368	551	245	2497
	BIPRODAS BANERJI	70	257	901	1466	558	316	3498
	BIRAT CH KAIBARTA	39	108	1116	645	354	316	2539
	BISHPURIA SKUS	16	38	1376	535	384	32	2365
	CHITTARANJAN GORAIN	13	33	840	465	403	234	1975
	DOMON MAHATO	33	82	306	355	591	85	1419
	HARAKRISHNA MAHATO	49	171	865	934	250	411	2631
	HIMADRI DEY	19	41	1462	664	364	346	2877
	JHARNA MAHATO	61	222	921	976	352	507	2978
	JITEN DUTTA	27	80	813	534	314	259	2000
	KALIPADA MONDAL	30	96	771	981	263	187	2298
	KALPANA MAHATO	10	17	1016	422	850	304	2609
	KAMRUL HODA ANSARY	27	88	1130	809	479	154	2660
	KARUNAMOY NANDY	88	230	1010	1870	1912	426	5448
	KESHARGARH SKUS	99	353	661	1394	208	392	3008
	KIRITY BHUSAN MAHATO	52	183	849	694	335	109	2170
	KISHORI GARAIN	79	278	1689	1240	823	629	4659

MADHURI MAHATO	36	80	1657	1494	1016	474	4721
MADHUSUDAN MONDAL	24	60	1485	926	158	208	2837
MARIRAM MAHATO	10	17	358	214	309	104	1002
MD HABIB ANSARY	53	205	2046	1455	675	693	5074
NIKHUTI GOPE	53	106	608	1336	71	109	2230
NIRMAL CHANDRA MURMU	1	2	0	0	9	22	33
NITYABALA MAHATO	45	128	1055	660	1303	319	3465
PARIKSHIT MAHATO	14	30	678	442	213	191	1554
PRASANNA DUTTA	106	435	920	734	368	367	2824
PRAVAS CH MALLICK	59	193	910	1055	663	405	3226
PURNIMA DUBEY (CHAKRABORTY)	63	223	1237	1045	592	189	3286
REBATI MAHATO	37	92	1453	624	224	179	2572
SADHAN MONDAL	22	71	870	1082	519	210	2752
SADHANA MAHATS	44	113	1167	765	402	303	2750
SAGAR CH MONDAL	13	25	751	799	392	121	2088
SAHADEV MAHATO	9	13	597	159	355	169	1293
SAMAUN ANSARY	15	54	1321	909	366	260	2910
SANDHYA PATI	99	456	830	1101	816	269	3472
SANJOY MUKHERJI	42	135	834	957	772	361	3059
SUBHAS CH DUTTA	22	51	1295	402	316	310	2374
SUDHIR KR GORAIN	27	61	1220	1053	581	345	3260
SUJIT MONDAL	43	164	2382	1007	560	591	4704
SWAPAN CH GORAIN	12	27	726	344	553	180	1830
SWAPAN MAHATO	26	74	493	650	442	163	1822
TARAPADA GOSWAMI	25	79	1086	546	394	94	2199
TRILOCHANA MAHATO	19	44	1442	556	272	86	2400
UTTAR CH MAHATO	68	201	1541	1122	830	559	4253
DIBAKAR GOSWAMI	0	0	0	0	0	5	5
UMESH CHANDRA MAHATO	0	0	7	0	0	0	7
SAMIMA BIBI	0	0	0	0	0	3	3

S H MIRDHA	0	0	0	8	0	0	8
Total	2493	8442	54641	47190	26782	15162	152217

Block_Muni	FPS NAME	AAY Family	AAY Head	PHH Head	SPHH Head	RKSY-I Head	RKSY-II Head	Total Head
Jaipur	RABINDRA NATH PANDEY	0	0	0	0	0	3	3
	ADITYA KUMAR	22	72	448	715	31	7	1273
	ANIL CHANDRA MAHATO(JOYPUR)	30	92	986	874	841	458	3251
	ASWINI KUMAR HAZRA	52	173	1153	1308	1956	499	5089
	BAPPADITYA PATTANAYAK	69	288	1350	1330	1100	296	4364
	BARUN KUMAR MITRA	82	349	1186	1313	1105	375	4328
	BARUN KUMAR MITRA	43	174	851	1034	1098	419	3576
	BHUKAL PARAMANIK	34	151	1115	751	533	79	2629
	BIJOY KUMAR DUTTA	63	239	1244	1001	1511	467	4462
	BIPLAB MAHATO	77	340	498	800	596	125	2359
	BISWANAT MAHATO	30	101	897	560	844	209	2611
	BISWANATH RAJAWAR	49	155	644	794	344	299	2236
	DHANANJOY DUTTA	78	279	1452	1380	2278	598	5987
	DILIP KUMAR HALDER	85	336	1431	1144	1518	322	4751
	DIPAK KUMAR MUKHERJEE	17	49	386	545	564	130	1674
	FARUK ANSARY	28	57	2125	1025	939	253	4399
	HAREKRISHNA MAHATO	87	327	1143	919	630	236	3255
	HITLAL MAHATO	74	237	1050	812	666	293	3058
	JAGANNATH MAHATO	47	147	1635	1548	2035	219	5584
	JANI BABU ANSARY	108	396	996	1480	950	328	4150
	KARTICK CHANDRA MODAK	71	258	868	928	1279	251	3584
	KESHAB CHANDRA MAHATO	74	283	854	910	1256	150	3453
	KHAJAMUDDIN ANSARY	37	105	1780	1615	580	333	4413
	Lakshman Poddar	0	0	0	0	7	15	22
	LALIT KISHOR MAJHI	19	36	532	514	270	229	1581
	MAMATA MAHATO	87	285	1952	2062	1553	272	6124
	MANBHUL GORAI	22	59	655	631	527	78	1950
	NAGENDRANATAH GORAI	22	42	1555	366	1630	316	3909

NANDALAL MAHATO	12	27	418	406	424	69	1344
PARAMANANDA MAHATO	50	210	1574	1375	643	95	3897
PHANINDRANATH MAHATO	37	126	1836	788	813	324	3887
PRANAB KUMAR CHOUDHURY	7	13	1085	473	1455	252	3278
PRANAB KUMAR CHOUDHURY	72	243	1606	1484	1452	186	4971
PRANGOBINDA KUMAR	19	44	620	866	406	15	1951
PRASENJIT MODAK	66	222	1339	1528	518	231	3838
RAHAMATULLA ANSARY	49	192	1011	1101	560	145	3009
SAMIR KUMAR ADHIKARY	54	125	1956	1558	2474	475	6588
SANTOSH KUMAR MAHATO (JOYPUR)	49	200	373	553	822	88	2036
SASHADHAR MAHATO (JOYPUR)	34	90	1975	987	1300	149	4501
SATRUGHANA MAHATO	46	121	1304	844	1065	159	3493
SENAPATI MAHATO	59	240	1863	1348	349	149	3949
SHIBARAM MAHATO	42	139	2023	629	968	83	3842
SOMARANI MANDAL	3	4	926	557	226	117	1830
TARINIPADA KUMAR	36	98	752	829	795	150	2624

Block_Muni	FPS NAME	AAY Family	AAY Head	PHH Head	SPHH Head	RKSY-I Head	RKSY-II Head	Total Head
Manbazar - I	ADITYA KR MAHATO	21	40	659	343	144	145	1331
	ALOKANANDA MAHATO	71	142	1021	1128	321	393	3005
	ANATHBANDHU MOHANTY	58	197	1125	773	797	213	3105
	ANIL BARAN CHAND	132	479	1158	1404	661	183	3885
	ANIL CH MAHATO	18	41	778	899	250	94	2062
	ASHIS MAHATO	63	190	2250	1866	859	153	5318
	ASHOKE KR MAHATO	5	10	382	156	379	111	1038
	ASWINI KR SINGH MAHAPATRA	69	263	738	914	145	67	2127
	BABULAL MANDI	18	22	717	613	12	83	1447
	BADAL CH ROY	146	452	680	1264	194	727	3317
	BADAL DUTTA	106	437	467	637	921	338	2800
	BEGUM LUTFA	86	313	787	1135	634	127	2996
	BHUDEV CH GANGULY	47	124	613	799	695	161	2392
	BIDHAN CH MOHANTY	36	95	1042	1129	348	87	2701
	BYASDEV MAHATO	23	31	1290	390	360	75	2146
	DEBASISH KAR MODAK	125	423	948	1656	220	206	3453
	DILIP KR MONDAL	74	243	646	1440	6	220	2555
	DIPAK KARMAKAR	137	468	2223	1333	1541	743	6308
	FATIK CH ROY	49	180	941	684	148	422	2375
	GOPAL CH. MAJHI	81	188	944	1110	454	336	3032
	GOUTAM KR MAHATO	73	302	658	851	390	65	2266
	GUNADHAR BOURI	58	143	924	1673	52	203	2995
	HAREKRISHNA MAHATO	12	22	1185	688	216	96	2207
	ISHAN CH MAHATO	21	57	906	674	306	135	2078
	JHARNA KUMBHAKAR	28	66	692	430	263	611	2062
	KAJAL KR MUKHERJI	129	535	666	1332	694	299	3526
	KAMALA MAHATO	53	134	1074	951	450	200	2809
	KANAILAL MAHATO	104	341	1012	1440	333	106	3232

LAXMIKANTA MAHATO	16	37	549	276	489	41	1392
MADAN MOHAN MAHATO	127	407	1911	1259	417	558	4552
MALAY MAHATO	24	47	1568	868	396	172	3051
MANORANJAN MAHATO	12	28	356	267	182	14	847
NABAKISHORE MAHATO	14	20	817	229	134	152	1352
NARAYANI MAHAPATRA	84	278	842	558	578	95	2351
NARESH KR AGGARWAL	38	66	965	751	802	34	2618
NETAI CH MAHATO	79	247	2063	1478	840	179	4807
PASHUPATI PATRA	80	269	608	556	332	367	2132
PRAFULLA KR MAHATO	16	28	1145	476	375	109	2133
PRALAY KR BANERJI	115	385	552	1136	1117	423	3613
PULAK KR MUKHERJI	26	95	182	329	6	211	823
RABINDRA NATH PANDEY	40	86	1362	1124	734	129	3435
RAGHUNATH MONDAL	184	622	1308	2548	57	1544	6079
RAMAN KORA	50	147	812	1215	8	345	2527
RANJIT NARAYAN DEV	187	641	1628	2188	1143	422	6022
SADHAN KR MAHATO	82	247	1484	1142	354	300	3527
SANJOY DEY	123	366	1118	1263	501	372	3620
SASANKA SEKHAR MAHATO	13	69	1017	487	158	87	1818
SATYAKINKAR MAJI	80	285	941	1273	78	129	2706
SITARAM MAJHI	74	168	1271	1815	194	448	3896
SUDHANGSU MAHATO	42	149	902	540	291	169	2051
SWAPAN KR MAJHI	124	374	1067	1479	341	501	3762
TAPAN MAHATO	61	152	1399	921	720	500	3692
TIRTHANKAR MAHATO	99	258	2177	1330	769	863	5397
TRILOCHAN MAHATO	33	115	1065	755	413	103	2451
UMESH CH MAHATO	15	45	585	236	444	10	1320
SAROJ KR DAS	36	99	1360	1252	143	216	3070
Total	3717	11668	57580	55463	23809	15092	163612

Block_Muni	FPS NAME	AAY Family	AAY Head	PHH Head	SPHH Head	RKSY-I Head	RKSY-II Head	Total Head
Puncha	AJIT KR MAHATO	6	12	340	207	176	42	777
	BHOLANATH ROY	78	326	355	564	140	82	1467
	BIRENDRANATH BANERJI	9	42	828	227	519	68	1684
	BRIKADAR MAHATO	13	46	216	155	0	16	433
	FANIBHUSAN MAHATO	14	23	931	329	452	167	1902
	GOLAK MAHATO	41	115	1131	771	454	229	2700
	GYANADA MAHATO	133	294	288	347	263	74	1266
	JANOKI MAHATO	67	141	882	413	695	276	2407
	KALABATI MAHATO	35	131	509	593	89	186	1508
	MANJU KHAN	42	111	1340	790	1734	362	4337
	NARENDRANATH MAHATO	25	83	1024	622	1241	162	3132
	P SINGH DEO	115	390	620	1077	214	796	3097
	PRAFULLA KR MAHATO	28	71	845	657	537	140	2250
	PUNURA SKUS	27	60	627	295	208	227	1417
	RAMNATH MAHATO	81	266	1103	1168	242	352	3131
	RANJIT KHAN	16	68	309	302	245	32	956
	RETHUNATH MAHATO	17	46	656	226	327	54	1309
	SISIR KR MAHATO	92	276	2002	2215	656	335	5484
	SUBHAS CH MAHATO	32	94	813	662	471	90	2130
	TAGAR CHATTERJEE	99	214	1805	971	752	718	4460
	TARAPADA MAHATO	141	271	1585	930	2382	1186	6354
	UTSABANANDA CHOWDHURY	79	265	607	1305	272	184	2633
	ARUN CH ROY	2	4	0	0	0	8	12
	ABANI KUMAR PATRA	29	80	302	258	512	186	1338
	ADITYA MAHAPATRA	50	180	418	593	447	267	1905
	AJIT KUMAR ROY	83	303	114	164	293	445	1319
	AJIT KUMAR DUARY	13	40	381	252	296	136	1105
	ALOKESH MISHRA	56	179	551	838	767	502	2837

AMITAV SARKAR	29	87	647	783	927	272	2716
ANUP DUTTA	30	116	400	266	445	157	1384
ARABINDA MAHATO	31	96	483	626	389	79	1673
ASWINI GORAI	48	116	766	755	538	239	2414
BHASKAR MAHATO	32	74	811	684	671	203	2443
BIBEK PAL	28	80	1396	1324	913	319	4032
BIJOY BANDHU GORAIN	53	141	941	1137	663	611	3493
BINODH BIHARI MUKHERJEE	67	239	626	1183	513	411	2972
BIRINCHI KARMAKAR	40	92	704	572	817	636	2821
CHANDI CHARAN MANDI	41	155	332	637	378	148	1650
DAYAMOY SEN	120	450	847	1020	1199	183	3699
DILIP KUMAR MANDAL	55	177	1149	966	624	179	3095
DIPAK KUMAR SAHANA	107	434	436	664	450	148	2132
GORACHND MISHRA	41	130	284	684	343	102	1543
HARIPADA RAKSHIT	32	71	697	826	725	290	2609
KANANBALA MUKHERJI	76	257	759	965	453	206	2640
KSHITISH DUTTA	54	194	441	419	342	413	1809
MAHADEV MAHATO	84	311	400	397	141	34	1283
MANIK CHANDRA DUTTA	46	174	411	365	509	86	1545
PANCHANAN MAHATO	36	101	550	512	399	57	1619
PRABIR SEN	63	242	811	703	529	530	2815
SAHADEV DAS	60	211	592	572	732	204	2311
SAJAL KUMAR PANDA	213	1010	403	833	1114	293	3653
SANTA MONDAL	39	119	1096	962	786	57	3020
SATRUGHNA MAHATO	55	197	793	482	720	230	2422
SRIPATA MAHATO	10	31	485	326	589	151	1582
SURENDRANATH DUTTA	37	73	747	1109	304	78	2311
SUSANTA MUKHERJI	34	124	149	563	113	77	1026
SWAPAN KUMAR PAUL	28	99	157	390	191	177	1014
TAPASH KUMAR HALDER	73	263	401	733	611	284	2292

			Total	3085	9995	39296	38389	31512	14176	133368
--	--	--	-------	------	------	-------	-------	-------	-------	--------

Block_Muni	FPS NAME	AAY Family	AAY Head	PHH Head	SPHH Head	RKSY-I Head	RKSY-II Head	Total Head
Puruliya (M)	TAPAN CHANDRA MAHATO	0	0	0	0	0	6	6
	KAJAL KR MUKHERJI	0	0	0	0	0	3	3
	TAPAN MAHATO	0	0	0	0	0	4	4
	AMAL KR SEN	41	128	1284	1195	1132	2169	5908
	BHARATI MUKHERJEE	66	287	936	1698	766	1373	5060
	BHOLANATH SAO	37	142	420	778	333	460	2133
	BHUBAN BANERJI	23	101	550	1054	203	266	2174
	BIJAY KR KAR	57	178	451	721	514	809	2673
	DINABANDHU CHOWDHURY	17	69	1260	2849	534	641	5353
	DIPAK KR DEY	38	113	520	918	809	1760	4120
	DIPAK KR MAJUMDAR	15	49	246	725	756	875	2651
	DIPAK KR. MALLIK	55	148	892	887	875	994	3796
	DURGA DUTTA	12	45	298	473	144	63	1023
	DURGA SHANKAR DAS	34	120	705	1302	471	700	3298
	JABA GANGULY	26	85	186	362	302	195	1130
	JHARNA HALDAR	15	36	587	660	240	188	1711
	KANAILAL KUNDU	18	48	1443	1036	764	978	4269
	KRISHNA LYE	25	107	376	923	215	171	1792
	MALOY KR HALDAR	29	96	782	596	341	309	2124
	MD YUSUF KHAN	30	148	550	1197	604	491	2990
	MIRA KHAN	21	72	701	978	129	665	2545
	MOHIT NAG	18	46	2033	1679	609	928	5295
	MUMTAJ ANSARY	127	342	1267	1736	1861	1779	6985
	NAGENDRANATAH GORAI	0	0	0	0	0	1	1
	NIKHIL BHUSAN NAG	17	63	403	891	58	63	1478
	PARAG SOURAV PAUL	21	77	398	622	362	422	1881
	PARESHNATH BID	21	66	420	760	488	243	1977
	SANTOSH KR RAJAK	21	76	415	1248	286	533	2558

SHIBU DAS GUPTA	14	37	342	308	571	855	2113
SIKHA DUTTA	38	101	890	574	686	812	3063
SK GOLAM HYDER	24	112	166	810	180	259	1527
SUBHAS CH DARIPA	44	140	1031	1243	529	706	3649
SUBHAS CH HALDAR	15	66	217	554	135	235	1207
SUDHARANI DAN	18	50	303	718	330	232	1633
SULEKHA KHAN	21	80	672	820	198	275	2045
SUNITI MUKHERJEE	8	22	160	211	161	328	882
SUNITI MUKHERJEE	0	0	0	0	0	3	3
SUSHIL KR KHEMKA	76	219	656	1130	1124	1037	4166
SWAPAN KR CHELL	32	114	652	883	262	368	2279
SWAPAN KR CHOWDHURY	54	160	1043	1831	374	698	4106
TANUSHRI GUPTA KABIRAJ	26	100	522	756	275	233	1886
TAPAN KR CHOWDHURY	71	234	918	1273	608	661	3694
TINKARI MUKHERJI	17	43	292	693	209	227	1464
TRIPTI MOITRA	19	57	524	1761	281	383	3006
ASHOKE CHOWDHURY	1	3	2	0	0	9	14
RABINDRANATH SEN	0	0	0	0	0	6	6
SWAPAN CH GORAIN	0	0	0	0	0	7	7
PABAN KUMAR AGARWAL	0	0	0	0	0	2	2
DURGA CHARAN MAHATO	0	0	0	0	0	2	2
SUDARSHAN MAHATO	0	0	3	0	0	0	3
PRABHAT KUMAR JOYSWAL	0	0	0	0	1	0	1
SADANANDA PAUL	0	0	0	0	0	6	6
KHEDAN CHANDRA GORAIN	0	0	0	0	0	1	1
JANARDAN MODAK	0	0	0	0	0	5	5
BINODH BIHARI MUKHERJEE	0	0	0	0	0	2	2
TAPASH KUMAR HALDER	0	0	0	0	0	1	1
SHYAMA PRASAD SHA	0	0	0	0	0	5	5
B C W CO OPT	0	0	0	0	2	0	2

CHANDRA SEKHAR SINGHANIA	0	0	0	0	7	2	9
GOPAL CH GORAI	0	0	0	0	0	1	1
C.R. BHANDARY	0	0	0	0	1	2	3

Block_Muni	FPS NAME	AAY Family	AAY Head	PHH Head	SPHH Head	RKSY-I Head	RKSY-II Head	Total Head
Jhalda (M)	AMIYA SHAW	31	98	478	1132	408	109	2225
	ASHOK KUMAR DAS	11	34	322	360	309	58	1083
	ASIT BARAN SEN	7	14	403	318	272	42	1049
	DEBASIS SEN	24	73	563	1096	422	105	2259
	MANIK CHANDRA	13	44	328	889	408	95	1764
	MAYARANI DAS	52	185	1142	1756	548	256	3887
	MURULIDHAR CHANDRA	22	68	529	1052	285	141	2075
	PRABHAT KUMAR DUTTA	110	360	813	1675	651	216	3715
	PURUSOTTAM SHARMA	25	68	428	952	231	283	1962
	RAJENDRA NATH SEN	6	10	47	411	89	16	573
	RAM NATH MAHATO	0	0	0	0	0	2	2
	SIBNATH SEN	2	6	24	138	7	18	193
	Total	303	960	5077	9779	3630	1341	20787

Block_Muni	FPS NAME	AAY Family	AAY Head	PHH Head	SPHH Head	RKSY-I Head	RKSY- II Head	Total Head
Raghunathpur - I	PRAHLAD CHANDRA MAHATO	0	0	0	0	0	3	3
	BAGATBARI S.K.U.S.	112	468	747	1201	342	271	3029
	GORACHND MISHRA	0	0	0	0	2	3	5
	SUSANTA MUKHERJI	0	0	0	0	4	0	4
	ABDUL RASHID	0	0	4	0	0	0	4
	AKHILESH PRASAD SINGH	37	89	923	216	1118	1363	3709
	AKUL CH. PARAMANIK	158	694	522	966	525	1181	3888
	AMIT KUMAR MUKHERJEE	0	0	5	0	0	0	5
	ANIL AGARWALA	0	0	4	0	0	0	4
	BISWANATH AGARWALLA	24	95	427	477	419	1336	2754
	CHAMPA MAJEE	19	45	423	227	822	920	2437
	GOUR CH SUTRADHAR	0	0	0	0	2	0	2
	JAYANTA KUMAR GON	130	413	482	295	631	491	2312
	KALIPADA BAURI	46	200	502	717	566	1096	3081
	KAMALA KANTA PANDEY	15	50	355	379	353	271	1408
	MD. MUKTAR NASIM	65	188	439	188	649	932	2396
	PARESH CH. MANDAL	25	68	624	534	971	537	2734
	RAJ KUMARI AGARWAL	0	0	0	0	3	0	3
	SARBANI MAJEE	129	477	461	954	324	650	2866
	SUDHIR CHANDRA MAJHI	140	364	1029	663	537	480	3073
	SURANJAN MAJEE	20	66	429	199	451	80	1225
	TARAPADA NANDI	63	221	529	874	506	1026	3156
	A ANSWARI	0	0	0	0	0	2	2
	ACHIN DEOGHORIA	121	472	958	1196	447	497	3570
	AMAR MANDAL	62	211	1386	1625	201	456	3879
	ANIL GORAIN	38	142	840	1167	111	213	2473
	ASHOK DIGAR	32	99	988	958	154	129	2328
	ASHOK MAJI	58	282	686	528	301	755	2552

ASHOKE GORAIN	62	213	1423	1111	197	126	3070
ASTIK PATTAAYAK	79	309	741	1066	489	904	3509
B. GORAIN	48	173	733	766	486	258	2416
BABUGRAM S.K.U.S.	36	148	425	775	833	449	2630
BISWAN MAJEE	21	81	290	605	156	488	1620
D.G. TEWARY	117	418	872	1225	232	587	3334
H. ANSWARI	68	155	1611	1860	917	1145	5688
H.D. MUKHUTY	44	148	418	1005	271	770	2612
JYOTSNA GHATAK	29	118	167	687	51	384	1407
NABIN DEOGHORIA	82	307	214	560	84	595	1760
P.L.CHOWBEY	56	209	667	881	213	253	2223
PANKAJ KUMAR MANDAL	103	427	784	1199	234	523	3167
PRABIR CHOUDHURY	18	89	233	361	35	128	846
R.K. MANDAL	46	129	986	1208	179	477	2979
RANJIT KR. DEY	28	70	490	974	113	836	2483
SHIBARAM MAJEE	65	225	1895	2063	571	292	5046
SMT. KALYANI MAJEE	33	122	325	690	398	280	1815
SMT. S. CHAKRABORTY	61	215	853	1483	245	984	3780
SMT. SANTANA MANDAL	70	239	669	1121	194	529	2752
SUSANTA MAHATO	46	136	1279	1194	350	339	3298
T.K. CHATTERJEE	66	296	905	914	398	128	2641
T.K. DEY	52	179	655	942	641	745	3162
T.K. MANDAL	34	93	1681	1073	363	266	3476
T.L.MAJEE	168	641	315	1567	526	589	3638
UTTAM SINGHANIA	122	416	831	1416	218	618	3499
UTTAM SINGHANIA (TAGGED AREA OF RS CHAKRABORTY)	96	419	823	1342	95	199	2878
SAKTI PADA MAJEE	0	0	4	0	0	0	4

Block_Muni	FPS NAME	AAY Family	AAY Head	PHH Head	SPHH Head	RKSY-I Head	RKSY-II Head	Total Head
Raghunathpur - II	AJIT KUMAR MAHATO	0	0	0	0	1	0	1
	NARAN CH. SING	0	0	0	0	2	0	2
	SARAT MAHATO	16	54	691	439	871	321	2376
	A ANSWARI	23	88	1472	1118	1135	486	4299
	AMIT MANDAL	130	492	456	1800	259	294	3301
	B C W CO OPT	7	24	350	220	716	272	1582
	B N KATARUKA	85	312	1155	1501	888	261	4117
	B P MAJEE	58	204	1424	1426	425	467	3946
	BALARAM MANDAL	40	141	1375	827	93	342	2778
	BASANTI CHAKRABORTY	107	362	827	1486	776	645	4096
	CHELIYAMA S K U S	26	97	1867	831	2234	446	5475
	D.G. TEWARY	0	0	0	0	0	1	1
	DEBASISH MAHATO	42	157	2027	1417	951	251	4803
	DIBAKAR MAHATO	30	99	1097	594	279	270	2339
	GOUTAM MAHATHA	13	55	254	110	1068	608	2095
	GOUTAM MAHATHA	87	443	1288	1392	1806	700	5629
	H D MODAK	78	363	1227	1368	1225	423	4606
	HARADHAN DAS	40	113	868	954	298	224	2457
	J L CHAKRABORTY	75	297	949	1445	464	197	3352
	M C MAJEE	84	334	1165	1520	699	726	4444
	M D MAHATO	71	287	2923	1584	2819	476	8089
	P C GORAIN	135	575	862	1087	340	442	3306
	R K MANDAL	64	192	1106	1345	234	343	3220
	S C MAJEE	54	195	1378	1042	567	121	3303
	S H MIRDHA	123	493	1046	1544	137	170	3390
	S K MUKHERJI	30	74	735	974	377	409	2569
	S P DEY	69	179	1038	1180	1030	344	3771
	S S MUKHERJEE	215	921	2399	2617	714	932	7583

SK FIROZ	92	338	2005	3497	2733	821	9394
SOURAV BANERJEE	32	121	722	626	297	191	1957
T K HALDAR	116	407	1027	1231	694	441	3800
T K MUKHERJEE	81	276	1069	1497	282	217	3341
TAGGED BASANTI CHAKRABORTY	112	477	807	1109	151	88	2632
TAPAS SARKAR	19	64	436	632	337	248	1717
TARAK NATH NAG	0	0	1	0	0	0	1

### **MITIGATION PLAN**

# **Sector wise Vulnerability Reduction Measures (considering GP plans)**

Type of Sector	Sub-sector	Mitigation measures	Responsible Deptt.	Time Frame
Infrastructure Development	Information Education Centre (IEC) activities	Improving Information Education and communication activities through walling ,posters, street play,volunteers training , village task force training. Mass rallies during normal period.	Leading NGOs	
	Road	Repair/ Restoration of vulnerable points on Roads before unset of monsoon.	PWD / RD/ Panchayat Samiti.	
	Embankment	Repair of vulnerable points in river/ canal Embankment during free flood period.	Irrigation / Minor Irrigation.	
	Bridge	Repair/ Restoration of vulnerable points on bridge before unset of monsoon.	PWD / concern village committee.	
	Safe shelters	Ensuring proper maintainance of shelter places constructed by default agencies.	Block / concern village committee.	
	Communication	Ensure maintainance and proper functioning of electronic communication system	BSNL Deptt.	

	Drinking water and sanitation	Immediate Response for repair/ replacement of tube wells / Pipe water supply system.	PHE / RWSS	
	Power	Immediate response for repair of electric line and supply	Electrict Deptt.	
	Technology dissemination	Nil	Nil	Nil
Health / Animal Husbandry	IEC activities	By way of IEC activities through walling posters, street play, village task force/volunteers training, during normal period.	By leading NGOs,CMO, ARDD	
	Vaccination	Adequate stock piling of vaccines should be ensured for vaccination before disaster.	NGOs,CMO, ARDD	
	Training	Training programme of common people should be programmed for health care, sanitation and first aid from village level lto district level	NGOs,CMO, ARDD	
Livelihood Sector	Awareness	Creating awareness among general public during normal time to insured human life.	Leading NGOs.	
	Agriculture	To reduce adverse impact on agriculture farmers should be advised alternating cropping pattern/flood resistance crops.	Dy. Director Agriculture.	
	Fishing	Early warning to fisherman	Dy.Director Fishery	
	Fishery	Arrangement of boats/ vehicles etc.for	Dy.Director Fishery	
	Allied activities	-	-	-

	Horticulture	Drought resistance short duration paddy seeds be made available to farmers.	Dy . Director Horticulturist	
Insurance	IEC activities	By way of IEC activities through walling posters, street play, village task force/ volunteers training during normal period.	CMO/NGOs/ARDD	
	Infrastructure	Improving information education and communication activities through walling, posters, street play, volunteers training		
	Livelihood	By way of IEC activities through walling posters, street play, village task force/volunteers training, during normal period.	By leadidng NGOs/ CMO/ARDD	
	Life	Creating awareness among general public during normal time to insured human life.	Leading NGOs.	_

# Preparedness Measures

## Composition of Quick Response Team & Damage Assessment Team.

SI.	Name of	В	Police Station
1	Block / Police	Name	Name
2	Manbazar-I	Block Development Officer	IC / OC of Police Station
3	Manbazar-II	Block Development Officer	IC / OC of Police Station
4	Purulia-I	Block Development Officer	IC / OC of Police Station
5	Purulia-II	Block Development Officer	IC / OC of Police Station
6	Hura	Block Development Officer	IC / OC of Police Station
7	Puncha	Block Development Officer	IC / OC of Police Station
8	Bandwan	Block Development Officer	IC / OC of Police Station
9	Jhalda-I	Block Development Officer	IC / OC of Police Station
1	Jhalda-II	Block Development Officer	IC / OC of Police Station
11	Joypur	Block Development Officer	IC / OC of Police Station
12	Arsha	Block Development Officer	IC / OC of Police Station
13	Barabazar	Block Development Officer	IC / OC of Police Station
14	Baghmundi	Block Development Officer	IC / OC of Police Station
15	Balarampur	Block Development Officer	IC / OC of Police Station
16	Kashipur	Block Development Officer	IC / OC of Police Station
17	Para	Block Development Officer	IC / OC of Police Station
18	Raghunathpur-I	Block Development Officer	IC / OC of Police Station
19	Raghunathpur-II	Block Development Officer	IC / OC of Police Station
20	Santuri	Block Development Officer	IC / OC of Police Station
20	Neturia	Block Development Officer	IC / OC of Police Station
22	Santaldih	Block Development Officer	IC / OC of Police Station
23	Kenda	Block Development Officer	IC / OC of Police Station

### **Details of Volunteers of Purulia District**

- 1. Suraj Kumar Mahali, Dibritikar, 25 Years
- 2. Ajambar Mahato, Mosina, 28 Years
- 3. Rahul Mahato, Arjundih, 31 Years
- 4. Dhananjay Majhi, Talsakar, 26 Years
- 5. Raju Mahato, Ichag, 25 Years
- 6. Bimal Chandra Lohara, Bisria, 22 Years
- 7. Upen Mahato, Koradih, 30 Years
- II) Responsitibility assigned with them i.e. to which work or in which team he or she will take part i.e.
  - (a) Early Warning Team
    - i. MAHAPRABHU MURA
    - ii. AJOY KUIRY
    - iii. DEBDAS GORAIN
    - iv. AJAMBAR MAHATO
    - v. DIPAK MAHATO
    - vi. BIMAL CH. MAJHI
    - vii. SUSANTA MAHATO
    - viii. MAHABIR MAHATO
    - ix. SANDIP MAHATO
    - x. PANCHANAN MAHATO
  - (b) Serch and Rescue Team
    - i. AMULYA MAHATO
    - ii. NIRANJAN MAHATO
    - iii. RAKESH CH MAHATO
    - iv. BIDHAN MAHATO
    - v. AKASH MODAK
    - vi. MANARONJAN MAHATO
    - vii. BIJAY MAHATO
    - viii. BHRIGURAM MAHATO
    - ix. JAGANNATH MAJHI
    - x. TARANI MAHATO
  - (c) First-Aid-Team
    - i. Susanta Mahato
    - ii. Raju Sing Ganjhu
    - iii. Balaram mahato
    - iv. Sudam MAHATO
    - v. BHUPAL MAHATO
    - vi. SURESH MAHATO
    - vii. PRESENJIT MAHATO
    - viii. ASHOK ARAHAN
    - ix. ASHOK MAHATO
    - x. GURUPADA MAJHI

### (d) Shelter Management Team

- i. HALADHAR MAHATO
- ii. SADDAM ANSARY
- iii. CHANDA SEKHAR MAHATO
- iv. KUNJA MAHATO
- v. DEBEN PARAMANIK
- vi. HEMANTA LAYA
- vii. AMULYA MAHATO
- viii. DILIP SUTRADHAR
- ix. RAJIB MAHATO
- x. PANDU RAJAK

### (e) Drinking Water Management Team

- i. BASUDEB MAHATO
- ii. SANTOSH KR. MAHATO
- iii. GANAPATI SWARNAKAR
- iv. KEDAR GORAIT
- v. PARESH MAJHI
- vi. KRISHNA KARMALI
- vii. UMESH CH. MAHATO
- viii. NARESH TANTUBAI
- ix. GAMBHIR MAHATO
- x. RAHUL MAHATO

### (f) Maintenance of Toilets / Sanitation Team

- i. BIDYUT BARA BHATTACHARJYA
- ii. SUBHADRABALA MAHATO
- iii. ATUL PR. MAHATO
- iv. MRINAL ORANG
- v. RAKESH CH. GORAIN
- vi. HALDHAR MAHATO
- vii. RAMNATH NAYAK
- viii. BASANTA MAHATO
- ix. SABITA RAJAK
- x. PARTHA MAHATO

### (g) Carcass disposal Team

- i. MIHIR MUKHERJEE
- ii. KUMARESH CH SHAW
- iii. BISNU RAJAK
- iv. MUKESH SHAW
- v. TAFAN NAYAK
- vi. TAPAN CH MAHATO
- vii. RAHUL RAJAK
- viii. BASANTA MAHATO
- ix. SISUPAL KUMAR
- x. DHIREN MAHATO

### (h) Damage Assessment Team

- i. ANUDIP BISWAS
- ii. BISWANATH MAHATO
- iii. UJJAL DARIPA
- iv. BABAN BOURI
- v. NIBARAN KARMAKAR
- vi. SOMNATH KUMAR

### (i) Relief and Rehabilitation Team

- . MIHIR MUKHERJEE
- ii. MRINAL ORANG
- iii. SHILA MAJHI
- iv. PRANAB KUMAR
- v. TARUN KR. MISHARA
- III) How many trainings they have been imparted with in connection with disaster management matters furnish details of the training so imparted : No such training
  - 8. Resource Availability
    - i. No. of Tree cutting equipment details of owners and contact nos. : SK SAHID HUSSAIN 9732209263, KANTADIH.

# SDO Office, Raghunathpur List of CD Volunteers who are deployed as Homeguard for

Si. No.	Name of the CD Volunteers	Father's Name of CD Volunte
1	Kajal Baurl (Leuder)	Nayan Bauri
2	Prakash Shukla	Pradip Shukla
3	Haren Karmakar	Manesh Karmakar
4	Dhananjay Nag	Gurupada Nag
5	Ranjan Majee	Radhanath Majee
6	Bappa Majee	Tapan Kr. Majee
7	Adwaita Mandal	Uttam Mandal
.0	Miten Paul	Mukta Paul
9	Natabar Bouri	Laxmi Narayan Bouri
30	Abinash Powrel	Rebati Mohan Powrel
35	Akshay Ghatak	Raj Kumar Ghatak
12	Rakesh Banerjee	Ratan Banerjee
13	Ramesh Kalbarta	Sadhan Kalbarta (Sadhu)
14	Taraprassanna Ganguly	Debdas Gangaly
15	Mithun Mandal	Bhanu Mandal
16	Milan Pattanayak	Ahalad Pattanayak
2.7	Suman Bauri	Manesh Bauri
18	Bibekananda Deogharia	Ramkrishna Deogharia
19	Bidhan Baurt	Kamal Bauri
20	Bikash Garain	Niranjan Garain
21	Abhijit Pattanzyak	Santosh Pattanayak
22	Prasanta Majee	Nanigopal Majee
23	Prasanta Mandal	Sudhir Mandal
24	Pundarik Pattanayak	Partha Pattanayak
25	Prakash Pandey	Panchanan Pandey
25	Prasanta Gorai	Barid Baran Goral
27	Rajib Majee	Pagal Majee
28	Aloy Ganguly	D.D. Gangoly
29	Bidur Maine	Phanibhusan Majee
30	Dulai Kasbartta	Dugai Kaihartta
31	Bidesh Kaibartta	Shyumapada Kaibartta
32	Bikash Pattanayak	Samar Pattanayak
33	Upon Ch. Malee	The state of the s
34	Lakshan Pandey	Dhrubalal Majee
35	The state of the s	Bijoy Kr. Pandey
35	Bablu Bauri Kanai Tantubai	Manchar Bauri Bamapada Tantubal
37	The state of the s	Shymal Mandal
38	Jitendranath Mandal	A CONTRACTOR OF THE PROPERTY O
and the same of th	Avilit Kar	Nupur Kar
39 40	Rajen Nayek	Ram Nayek
CONTRACTOR DESCRIPTION	Tanmoy Hazra	G.C. Hazra
45	Sujit Karmakar	Ajay Xarmakar
42	Mintu Karmakar	Umapada Karmakar
43	Sandip Goral	Tapan Goral
44	Ghanashyam Majee	Sibaram Majee
45	Jagannath Roy	Suboch Roy
46	Bidyut Majee	Eaxman Majee
47	liten Kalbarta	Subhash Kaiberta
48	Prasanta Kr. Majee	Taranisen Majee
49	Akash Pattanayak	Samar Pattanayak
50	Ashoke Kr. Mahato	Bharab Mahato

Sr. SOI , Civil befence Raghunathpur Sub-Divisional Officer Raghunathour

# 31 Point Report

Monthly Report t Name of district-	Duralia Duralia					
Date of Report- 3	1/05/2019					
Report for Month		9	47	ait.	All .	v
Materials	Balance in hand at beginning of month	Stock/ funds received if any	Total stock/ funds available	issued/allotted in month	Material actually distributed to beneficiaries	Remarks
Tarpaulin	13501	0	13501	2076	2076	
Garments	90574	0	90574	5403	5403	
NormalGR	0	186,308 MT	186,308 MT	0	0	
Special GR	73515 Kg	6027 KG	79542 Kg	72 Kg	72 Kg	
Cash GR	342610	0	342610	9120	9120	
MLA Quota materials						Remarks
Tarpaulin	0	0	0	0	0	
Garments	0	0	0	0	0	
Funds						
Ex Gratia NC	24,00,000	0	24,00,000	24,00,000	24,00,000	
Ex Gratia others	4,00,000	0	4,00,000	4,00,000	4,00,000	
HB Grant	55100	14,06,800	14,61,900	55,100	55,100	
ER Grant	2,55,000	0	2,55,000	0	0	
Infarastructure Funds						
Relief Godown	0	0	0	0	0	
Flood shelter	0	0	0	0	.0	
Relief Contingency	0	7,00,000	7,00,000	0	0	
Any other Funds	. 0	0	0	0	0	
Total funds	31,10,100	21,06,800	52,16,900	28,55,100	28,55,100	
	Pending at beginning of month	Submitted In month	Pending at end of month	Rmarks	20	
Utilisation Certificates	1318630	0	1318630			
Confirmation Certificate	0	0	0	0	0	
Delivery report of any other material supplied	0	0	0	0	0	
Audit reply			La trave			
Expenditure	Till beginning of month	In current month	Expenditure at end of month	Expenditure in previous year till same month		Difference in expenditure with previous month
	323113	0	323113	323113		
Attendance at district level	% of staff attending office on time	Attendance at subdivision level	% of staff attending office on time	Attendance a	t block level	% of staff attending office on time
Good	100%	Good	100%	60	73	100

Disaster Risk Reduction	on					
Annual Rainfall till beginning of month	Rainfall in month	Actual rainfall till end of month	Normal rainfall	Difference in actual and normal rainfall		
0	0	0	0			
Casualties till beginning of month	Casualties in month	Total casualties in year	Casualties in previous year till same month	Difference in casualties in this year & previous year		
	4	4	4			
Mock Drills till beginning of month	Mock Drills in month	Mock Drills till end of month	Mock Drills last year till same month	Difference in mock drills this year & previous year		
0	0	0	0			
Training till beginning of month	Training done	Training till end of month	Training last year till same month	Difference in training done this year & previous year		
0	0	0	0			
Pending unpaid bills in entire district at beginning of month	Payment cleared during month	Pending unpaid bills in entire district at end of month	Reasons for non payment	remarks		
0	0	0				
Long pending admini	strative issues, if any	Long pending huma	n resource issues, if ar	Ϋ́		
-	NII	NII				
Long pending financia	al issues, if any	Long pending infrastructure issues, if any				
	NII	NII				
Requisition pending a		Undisbursed ex gratia, if any				
Relief Cont. 0, Ex-gra	tia-0,HB(NC)-0	Nil				
	e during month, if any	Action taken	10000			
	Nil	NII				
	e during month, if any	Remarks.				
	Nil					
Any issues related of	Civil Defence, if any	NII				
Availability of boats		Nil				
Availability of CD volu	inteers	25 Nos-All time available & 150 Nos -As an when required				
Observations by DDN	10 on performance in ti	ne month.				
1	More Awarness/Traini		eded. Being planned.			

# **Stock Position Report**

Fortnightly Report of Stock Position of Relief Materials as on 15 June, 2019 at Block/Municipality/Sub-Division/District Head Quarters of Purulia District

A	Name of Sub-Dive./	Tarpaulin	Dhuti	Saree	Lungi	7.7	(Sets)	Blanket	Male	Salwar	Pajama	Disaster	Digotty
	Block/ Municipality	(Pcs.)	(Pcs.)	(Pcs.)	(Pcs.)	Boys	Girls	(Pcs.)	Wrapper (Pcs.)	(Sets)	Panjabi (Sets)	(Pcs.)	Kits (Pcs.
1	S.D.O. Purulis (S)	577	351	1407	1534	86D	776	251	292	593	587	41	0
2	S.D.O. Shakta	1352	225	2300	2651	1600	1200	978	1350	1650	1803	56	0
3	S.D.O. Manbasar	1560	65	33	0	10	33	157	124	13	18	5	12
4	S.D.O. Raghunathpur	635	510	2030	2150	1315	755	620	2250	1095	1185	142	50
5	B.D.O. Purulia «I	150	282	272	230	200	190	276	500	291	264	73	0
6	9.0.0. Purulia -II	190	20	8	7	11	7	104	160	22	3	75	0
7	B.D.O. Hura	457	162	66	158	158	104	288	296	143	155	75	0
8	B.D.O. Puncha	150	84	391	572	280	339	302	112	1221	974	53	6
9	B.D.O. Manbazar -I	196	25	393	400	252	237	7	200	326	310	25	0
10	9.0.0. Manbazar -II	125	198	130	128	155	118	185	40	175	202	39	7
11	B.D.O. Bandwan	225	150	509	489	303	228	253	200	299	400	78	0
12	B.O.O. Balarampur	579	238	53	278	53	42	246	280	322	269	72	0
13	B.D.O. Barabazar	147	171	173	700	430	449	169	72	729	707	36	10
14	B.D.O. Baghmundi	609	832	62	681	322	252	353	569	750	695	73	6
15	B.D.O. Arsha	0	100	100	0	5	0	25	10	20	5	37	0
16	B.D.O. Ihalda -I	95	103	43	67	2	54	12	76	45	24	64	6
17	B.D.O. IhaldaII	334	21	45	17	45	5	78	11	101	150	68	0
18	8.0.0. Joypur	140	177	0	152	272	326	90	5	150	265	74	0
19	B.D.O. Para	444	745	316	375	196	194	181	479	439	267	56	0
20	B.D.O. R.N.Pur-I	159	180	439	221	98	115	112	367	286	204	14	0
21	B.D.O. R.N.Pur-II	519	444	108	143	138	144	64	111	274	279	43	0
22	B.D.O. Senturi	205	334	434	115	104	114	369	266	197	155	46	0
23	B.D.O. Neturia	70	350	510	426	386	346	107	391	689	525	49	0
24	B.D.O. Kashipur	130	18	62	53	12	12	327	325	31	19	58	0
25	Chairman, Purulia Municipality	20.102					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		2000		3-807		4716
26	Chairman, R.N.Pur Municipality												
27	Chairman, Ihalda Municipality												
	Total	9148	5785	9884	11547	7207	6040	5554	8481	9861	9465	1352	97
В	District Hd. Quarters	2527	448	780	1032	944	893	2752	2867	667	864	40	0
_	Total	11675	6233	10664	12579	8151	6933	8306	11348	10528	10329	1392	97

# Response & Relief Measures

# Crisis response structure of the Block

# A. Early Warning Dissemination and Response Plan

Department	R							
	Preparedness	Pre(after warning)	During Disaster	Post Disaster				
Block	Assignment of duties to the District level officials /Tashildars/BDOs.	Arrangement of food/drinking water/mediciane in the shelter places.	Assign ing responsibilities to officials for distribution of emergent relief / running of free kitchen.	Trained voluntary staffs/ task forces/ Anganwadi workers on use and providing min. Health services to the community.				
Police	Good	G	G	G				
Health	Deployment of medical staff. Constitute mobile teams and visit the worst affected areas. Vaccination.	Stock pilling of life sasving drungs/ ORS packets/ Halogen tablets. Aawareness messages to stop the outbreak of epidemics.	Treatment of the injurred persons and Transporation of the injured to hospital. Disease surveillance and transmission of reports to the higher authorites on a daily basis	To obtain/ transmist information on naltural calamities to district control room.				
Irrigation	Stock piling of repair materials like sand, bag, bamboo at vulnerable points. Provision of guarding of weak points.	Collection and stacking of empty cement bages and sand etc. Inspection of the embankment streangthing of the embankment if necessary.	Reparting of water level of gumti at various lintervals due watch on the embankments. Inspection of embankment.	Repariring work of the damaged embankment will be considered if necessary.repairing of the embankment necessary.				
RD	Repair/Restoration of vulnerable points on roads before unsent of monsoon.							
PWD	Repair/Restoration of vulnerable points on roads before unsent of monsoon.							

ARDD	Partly by dint of telephone and through special messenger.	Partly by dint of telephone and through special messenger	Partly by dint of telephone and through special messenger	Partly by dint of telephone and through special messenger
Power	Alwaya alert	Alwaya alert	Alwaya alert	-
Agriculture	We are always prepared to combat any add. situation.	Pre/after warning is issued to the respective S.A's of the Agri. Sub-Divisions depending on the field situation.	In case of draught we advise the SA's to lutilise the full protentiality of the irrigation projects available with them to save field crops. In case	In case of drought according to fund available with the PRIS/ fund received from the central govt. as assistance is provided to the
			of flood we suggest the SA's to collect seed of short duration variety and to raise community nursery and distribute the seedling to the affects cultivators.	affected cultivators in terms of seed. Fertilizer, P.PC.etc. for growing the next crops.  In case of flood we also provide assistance to the affected cultivators if the disaster occur in the late seasons for growing the next crops.  Attack of swarning catterpiller may occur after flood. We warn the S.A's to combat the situation if any on war time emergency basis after formation of team with field furnctionery by way of setting camps in the spot.
NGO's	Awareness:- Collection/stock of medicines	Awareness campaigns	Distribution of medicines, Medical camps	Distribution of medicines, Health camps, Awareness.
ICAT	Public awareness programme through street Drama, Saminar by publishing News, articles a photographs in newspaper & megazine.	Group talk announcement	Public awareness programme through street Drama, Saminar by publishing News, articles a photographs in newspaper & megazine.	Public awareness through announcemen t

### CAR CASS/ DEAD BODIES DISPOSAL

Departments	Preparedness	Pre(after warning)	During Disaster	Post Disaster
Health /VAS	There is no such infrastructure for disposal of car cass.	There is no such infrastructure for disposal of car cass.	There is no such infrastructure for disposal of car cass.	There is no such infrastructure for disposal of car cass.
Gram Panchayat and NGO			Help in funerals.	In getting death certificate, to clean environment.

### SHELTER MANAGEMENT

Sl.No.		Shelte	r Management – Resp	oonse System	
	Departments	Preparedness	Pre(after	During Disaster	Post Disaster
	1		warning)		
1	Dist.	Control room	Control room	Good	Good
	Administration	always opened and	always alert and		1
2	Police	Good	Good	Good	good
3	Electricity	Standby	Emergency	Inspection and repair of	
		arrangements for temporary electric supply or geneerators.	inspection by mechianical engineer of all plant and equipments.	high tensionlines/ substations/transformers/ poles etc.	
4	RD	Communication	All staff informed	Emergency inspection	Arrangement of
		establishemet with district and block / tahasil control rooms and departmenteal offices.	about the disasters, likely damages and effects.	by mechianical engineer of all plant and equipments.	extra vehicles/ heavy equipments, such as front end loaders/ towing vehicles/ earth moving equipments/ cranes etc.
5	Medical	Medicine / Saline/	Always alert	Ambulance always	Good.
		bandage / good number of Doctors/ good no. of ambulance are available	medical team and medicine	ready	

6.	PWD	Always prepared any natural calamities	Always prepared any natu	natural calamities	Always prepared any natural calamities
7.	PHC	Medicine // Saline/ bandage / good number of Doctors/ good no. of ambulance are available			Medicine / Saline/ bandage / good number of Doctors/ good no. of ambulance are available
8.	NGO/ volunteers	Listing of club Houses, Schools, Community Centres	Preparation of shelters in clubs, Schools, Halls etc, collection of tents.	Replacement of affected people in the shelters/camps, collection of tents, poly thenes etc.	Cleaning of Tempor ary shelters
9.	ICAT	As and when required and reports of the evacuees		As and when required	News, Features photographs of position of the evacuees.

#### WATER AND SANITATION

Sl.No.	Health and sanitation – Response System						
	Departments	Preparedness	Pre(after warning)	During Disaster	Post Disaster		
		Medicine / Saline/	Sufficient stock to	Sufficient stock to	Sufficient stock to		
		bandage / good	be procured and	be procured and	be procured and		
		number of	distributed.Miking,	distrubuted./ Dist	distrubuted./ Dist		
		Doctors/ good no.	Drum beating etc.	RRT and Sub-	RRT and Sub-		
		of ambulance are	Control rooms-	Divisional RRT is	Divisional RRT is		
		available.	CMO office	formed/ Miking	formed/ Miking		
1.	СМО			Drum beating etc.	Drum beating etc		
1.	CIVIO			Preventive	Preventive		
				measures to be	measures to be		
				done / Clo-	done / Clo-		
				ordination with	ordination with		
				other department	other department		
				to be done.	to be done.		

2.	CDPO/Supervisor	1.Special awareness camp in gram panchyat under MTB block 2.Door to door visit Prog. For awaring community about safe drinking water& sanitation. 3.Joint visit with medical staff.	Demonstration prog.  After action taken accordingly.	Total staff enrolement the cambathing the disaster.	NHED (Nutrition of health education)
3.	Sanitation & Water supply	Sanitation and water supply availabnle in the all block areas. Namely Mark-II/ III/ Deep tube well / Shallow tube well / Katcha well and RCC well .	Sanitation and water supply availabnle in the all block areas. Namely Mark-II/ III/ Deep tube well / Shallow tube well / Katcha well and RCC well .	Sanitation and water supply availabnle in the all block areas. Namely Mark-II/ III/ Deep tube well / Shallow tube well / Katcha well and RCC well .	Sanitation and water supply availabnle in the all block areas. Namely Mark-II/ III/ Deep tube well / Shallow tube well / Katcha well and RCC well .
4.	Executive Engi PWD	Communication establishemtn with District and Block / Tahasil control rooms and departmental offices within the division.	Inspection and emergency repair for roads/ road bridges/ underwater inspection/ piers/ concrete and steel work.	Emergency inspection by mechinical engineer of all plant and equipments.	Community assistance mobilized for road clearing / arrangement of extra vehicles/ heavy equipments, such as front –end loaders/ towing vehicles/ earth moving equipments / cranes etc.

5.	RD/NGO/Volunteers	Listing of club	Preperation of	Replacement of	Cleaning of
		houses, schools,	shelters in clubs	affected people in	temporary shelters.
		community centres	schools, halls etc.	the shelters /	
			Collection of	camps/ collection	
			tents.	of tents/ polythenes	
				etc.	
6.	ICAT	Public awareness		Public awareness	Group talk
		programme through		through	announcement
		street Drama,		announcement	
		Saminar by			
		publishing News,			
		articles a			
		photographs in			
		newspaper &			
		megazine.			

#### Relief

Sl.No.	Relief Operation – Response						
	Departments	Preparedness	Pre(after warning)	During Disaster	Post Disaster		
1.	Dist. Admin.	Considering the	Meeting with	Regular collection	Helping the		
		gravity os situation	district level	of situation report			
		the Collector shall	officials at Head		returning to their		
		convene the	quarter and chock	vulnerable areas	houses/ Immediate		
		district level	out emergency plan	from the officers	arrangement of		
		natural calamity	with vulnerable	assign for the	free kitchen in the		
		meeting when ever	areas and resource	purpose./ Provision	cut off and		
		required.	list./ Arrange food	for administering			
			and other basic	emergent relief and	Repair /		
			requirement for	the other basic	Restoration of		
			emergency	needs.	roads./ Monitoring		
			response./ Collect		of Relief		
			information from		distribution /		
			different areas and		Provision of		
			to act accordidngly.		drinking water.		

2.	Block	always alert and	always alert and		Relief operation smoothly as per effected area for natural calsmities.
3.	СМО	Stock Position of life sasving drugs,	Sufficient stock to be procured and	Sufficient stock to be procured and	Sufficient stock to be procured and
		ORS, IV fluids and other equipment. Distribution of ORS Halogen to field areas. Awareness through propagation of healthy practices	distributed.Miking, Drum beating etc. Control rooms- CMO office, Udapur/SDMO BLN/ SDMO, AMP/ SDMO,SBM.	distributed.Miking, Drum beating etc. Control rooms- CMO office, Udapur/SDMO BLN/ SDMO, AMP/ SDMO,SBM.	distrubuted./ Dist RRT and Sub- Divisional RRT is formed/ Miking Drum beating etc./ Preventive measures to be done / Clo- ordination with
4.	PWD	during the disaster time.  Communication establishment with district and block/	Always allert and staff available for natural calamities /	emergency repair	other department to be done.  Community assistance mobilized for road
		rooms and departmental		1 1	clearing./ Clearance fof blocked roads./Route strategy for evacuation and relief marked.

5.	Sanitation & water supply	Sanitation and water supply availabnle in the all block areas. Namely Mark-II/III/ Deep tube well	Sanitation and water supply availabnle in the all block areas.  Namely Mark-II/ III/ Deep tube well / Shallow tube well /	Sanitation and water supply availabnle in the all block areas.  Namely Mark-II/ III/ Deep tube well / Shallow tube well /	available
		/ Katcha well and RCC well.	Katcha well and RCC well.	Katcha well and RCC well.	
6.	NGO/Volunteer	Houses, Schools, Community Centres	Preparation of shelters in clubs, Schools, Halls etc, collection of tents.	Replacement of affected people in the shelters/camps, collection of tents, poly thenes etc.	temporary shelters.
7.	ICAT	Public awareness programme through street Drama, Saminar by publishing News, articles a photographs in newspaper & megazine.		Public awareness through announcement	Group talk announcement

#### INFRASTRUCTURE RESTORATION

			Departments					
	•	RD	Health	Irrigat	tion	Electrical	PWD	District
Prepare	edness		Stock Position of	Collec	ction	Standby arrangements	Communication	Control
			life sasving drugs,	and	stacking	for temporary electric	establishment	room always
			ORS, IV fluids	of	empty	supply or geneerators.	with district and	opened and
			and other	bages	and		block/ Tahasil	

	equipment. Distribution of ORS Halogen to field areas. Awareness through propagation of healthy practices during the disaster time.	sand etc. Inspection of the embankment strengthing of the embankment if necessary.No weak point is found in the embankment.	and departmental offices within the division.	time to time information received from SDMs and BDOs.
Pre(after warning)	Awareness campaign is being done like workshop, seminar group discussion, Mass media and folk media etc.	Repairing work of the damaged embankment will be considered if necessary. Repairing of the embankment necessary.	Always allert and staff available for natural calamities / All staff informed about the disasters ,likely damages and effects.	Relief operation smoothly as per effected area for natural calsmities.
During	Sufficient stock to be procured and distributed.Miking, Drum beating etc. Control rooms- CMO office, Udapur/SDMO BLN/ SDMO, AMP/ SDMO,SBM.	Reparting of water level of	Inspection and emergency repair for roads/ road bridges/ underwater inspection/ piers/ concrete and steel work.	Control room always opened and time to time information received from SDMs and BDOs.

Post	Sufficient stock to		Community	Control
	be procured and		assistance	room always
	distrubuted./ Dist		mobilized for	opened and
	RRT and Sub-		road clearing./	time to time
	Divisional RRT is		Clearance fof	information
	formed/ Miking		blocked	received
	Drum beating etc./		roads./Route	from SDMs
	Preventive		strategy for	and BDOs.
	measures to be		evacuation and	
	done / Clo-		relief marked.	
	ordination with			
	other department			
	to be done.			

#### **CATTLE CAMPS**

	Departments				
	VAS	BDO	NGO/Volunteer		
Preparedness		Comunication establishment with district and Block / Tahasil control rooms and departmental offices within the division.	Listing of club houses, schools, community centres		
Pre(after warning)		Collect information from different areas and to act accordingly./ Assignment of duties.	Preparation of shelters in clubs, Schools, Halls etc, collection of tents.		
During		Regular collection of situation report of the risk and vulnerable areas from the officers assign for the purpose.	Replacement of affected people in the shelters/camps, collection of tents, poly thenes etc.		
Post	There is no such infrastructure disposal of car cass.	Helping the evacues for returning to their houses/ immediately arrangement of free kitchen in the cut-off and inaccessible areas	Cleaning of temporary shelters.		

## CRISIS RESPONSE STRUCTURE

### Early warning dissemination.

PREPAREDNESS	RESPONSIBILITY
<ul> <li>Setting up control room and manning of Control Room round the clock.</li> </ul>	□ All District level officials.
<ul> <li>Assibnment of duties to the District level officials and Sub collectors / Tehasildars / BDOs.</li> </ul>	□ All Sub Collectors.
<ul> <li>Arreangenment of vehicle and sound system for information discrimination.</li> </ul>	□ District /Sub-Division/Block Administration
□ NGO coordination and assignment of duty.	□ All BDOs.
<ul> <li>Proper record keeping and transmission of information to all the levels.</li> </ul>	□ District /Sub-Division/Block
<ul> <li>Early warning to fisherman.</li> </ul>	Administration Dist. Fisheries
<ul> <li>Holding of Natural calamity meeting.</li> </ul>	Officer.
<ul> <li>Ensure functioning of warning systems &amp; communication systems.</li> </ul>	□ Leading NGOs.
<ul> <li>Create awareness with the target groups.</li> </ul>	□ DDO (Nodal officer of
□ Ensure Mock Drill.	NGOsDistrict /Sub-
	Division/Block Administration.

#### Evacuation.

PREPAREDNESS	DESDONSIDII ITV
<ul> <li>To warn people about the imperding danger &amp; to leave for safer places.</li> <li>To coordinate with Civil defence/ NGOs/Secy. Rajya Sainik Board/Police for support.</li> <li>Arrangement of boats/vehicles etc. for evacuation.</li> <li>Evacuate people of marooned arcas and administer emergent relief.</li> <li>Organize trained task force members.</li> </ul>	RESPONSIBILITY  District Administration District /Sub-Division/Block Administration. All BDOs. District /Sub-Division/Block Administration
<ul> <li>Deployment of police for maintaining law &amp; order &amp; peace keeping during evacuation.</li> <li>Mobilize people to go to identified/safer shelters.</li> <li>Deployment of Power Boat/Country Boat (Govt./Private) for evacuation.</li> </ul>	□ Dist. Fisheries Officer for Boat. □ Leading NGOs. □ Police.

#### **SEARCH AND RESCUE**

PREPAREDNESS	RESPONSIBILITY
<ul> <li>Deployment of Police /Fire Brigade for searce and rescue.</li> </ul>	□ Police.
<ul> <li>Co-ordination with the NCC/NSS/Civil Defense/Rajya Sainik Board</li> </ul>	□ Fire Brigade.
etc. for rescue operation.	□ Leading NGOs.
<ul> <li>Ensure availability of the rescue materials.</li> </ul>	□ All Tehasildars.
<ul> <li>Prepare inventory of shelter places and map including the</li> </ul>	□ Sub Collectors.
shelter centers.	□ BDOs.
<ul> <li>Provide &amp; arrange Rescue kit at risk areas.</li> </ul>	□ Programme Co-ordinators
	of NSS/NCC/Defence units.

#### **MEDICAL AID**

PREPAREDNESS	RESPONSIBILITY
<ul> <li>Deployment of Medical staff.</li> </ul>	□CMO
<ul> <li>Stock pilling of Life saving drugs/ORS packets/Halogen tablets</li> </ul>	
<ul> <li>Treatment of the injured persons and Transportation of the inju</li> </ul>	red □SDMO
ro hospitals.	□SDVO
<ul> <li>Awareness message to stop the outbreak of epidemics.</li> </ul>	■ Medical Officers of
<ul> <li>Disease surveillance and transmission of reports to the higher</li> </ul>	authorities PHC/CHCs.
on a daily basis.	□ICDS
<ul> <li>Vaccination.</li> </ul>	□ Leading NGOs.
<ul> <li>Constitute mobile teams and visit the worst affected areas.</li> </ul>	□ Pradhan.
<ul> <li>Dis-infection of Drinking water sources.</li> </ul>	
<ul> <li>Identification of site operation camps.</li> </ul>	
<ul> <li>To obtain/transmit information on natural calamities to District 0</li> </ul>	Control
Room.	
<ul> <li>Advance inoculation programme in the flood/Cyclone prone are</li> </ul>	eas.
<ul> <li>Arrangement of fodder/medicines for the animals.</li> </ul>	
<ul> <li>Vaccination, Cite operation camps, Carcasses disposal.</li> </ul>	

#### SHELTER MANAGEMENT.

PREPAREDNESS	RESPONSIBILITY
Identification of Shelter/Temporary shelter in high elevated places and arrangement of tents etc.  Arrangement of Food/Drinking water/Medicine in the shelter places.	□ District /Sub-Division/Block Administration
Person's allocation for each shelter.	
3- 3- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1-	
Arrangement of safe shelter for animals.	
The state of the s	
Deployment of Police Personnel.	
Temporary supply of safe drinking water.	

#### **EMERGENT RELIEF / FREE KITCHEN OPERATION.**

EMERGENT RELIEF / FREE KITCHEN OPERATION.	RESPONSIBILITY
PREPAREDNESS	□ District /sub-Division/Block
<ul> <li>Deployment of vehicle.</li> </ul>	Administration
<ul> <li>Procurement and transportation of Relief materials to affected pockets/areas.</li> <li>Arrangement of free kitchen in the shelter camps &amp; affected areas.</li> <li>Assigning responsibilities to officials for distribution of emergent relief / running of free kitchen.</li> <li>Coordinating with the NGOs/Other voluntary organization &amp; PSUs/NICEF/UNDP /Red Cross/OXFAM for continuing Relief Operation.</li> <li>Monitoring.</li> </ul>	□ BDOs. □ Medical Officer. □ Paramilitary Force. □ Police. □ PHD/RWSS. □ RTO/MVI. □ Leading NGO.

## **Health and Sanitation Response Structure.**

PREPAREDNESS	RESPONSIBILITY
<ul> <li>List of the Medical staff members with contact address/telephone number.</li> <li>Stock position of medicines at District/Sub-Division/PHC/CHC/AWC.</li> <li>Plan and ident position of stock.</li> <li>Trained voluntary staff/task forces/Anganwadi workers on use and</li> </ul>	□CMO. □CDVO. □PHD □RWSS

	<ul> <li>District /Sub-Division/Block</li> </ul>
providing min. health services to the community.	Administration
Arrangement of Mobile Health unit for incessible pockets/Health	
awareness campaign.	□ BDOs.
Stock position for medicine for animals.	<ul><li>Medical Officers.</li></ul>
Ensuring supply of safe drinking water arrangement for supply of safe	<ul><li>Paramilitary Forces.</li></ul>
drinking water.	□ Police.
Disinfectant for purification of water.	□ RTO/MVI.
Arrangement of mobile team and assigning specific operational area for supply of water.	
Involvement of volunteers/village level workers.	

#### Infrastructure Restoration.

PREPAREDNESS	RESPONSIBILITY
<ul> <li>Formation of task force with specific equipments.</li> </ul>	<ul><li>NH Authorities.</li></ul>
<ul> <li>Assigning responsibilities for specific areas.</li> </ul>	□ R&B
<ul> <li>Emergency cleaning of debris to enabled reconnaissance.</li> </ul>	□ Police.
<ul> <li>Coordinate road cleaning activities to assist local relief work.</li> </ul>	□ PHD/RWSS.
<ul> <li>Begin clearing roads, assemble casual labour provide a work team</li> </ul>	□ RTO/MVI
carrying emergency tool kits.	<ul><li>All line Departments.</li></ul>
□ Towing vehicles, Earth moving equipments, cranes, construct temporary	<ul><li>All Tehasilders.</li></ul>
roads.	□ All BDOs.
Keep National & other Highways clear from disaster effects.	
<ul> <li>Damage assessment.</li> </ul>	
□ Monitoring.	

#### PREPAREDNESS CHECKLIST FOR VARIOUS DEPARTMENTS

#### DISTRICT CONTROL ROOM

- Vulnerability map of the block / Tahasil
- 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 communicaion/generator sets etc.
- Arrangement of vehicles/boats of for evacuation.
- Dissemination of warning/coordination with District Control room.

#### BDO / TAHASILDARS

- Vulnerability map of the Block / Tahasil
- List of cut off areas with sasfe 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 of for evacuation.
- Dissemination of warning/coordination with District control room.

#### **IRRIGATION**

- Communication establishment with District and Block/ Tahasil 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 down stream/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 pilling of repair materials at vulnerable points
- Guradidng of weak embankments
- All staff informed about the disasters, likely damages and effects.

#### **AGRICULTURE**

- 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**

- Communication establishment with District and Block /Tahasil Control Rooms and departmental offices within the division
- An officer to be appointed as nodal officer
- Overall traffic management and patrolling of all highways ands 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 fto district authorities for taking necessary action against hoarders, black marketers and those found lmanipulating 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.

#### **CMO**

- Communication establishment with District and Block /Tahasil Control Rooms and departmental offices within the division
- An officer to be appointed as nodal officer
- Stockpiling of live saving, anti-diarrhoeal drugs, de-toxicants, anesthesia, adequate drinking water.
- Arrangement of ambulance/ generators
- In-house emergency medical teams to ensure that adequate staff available at all times to handle emergency causalities.
- Listing of private health facilities
- Streangthenming 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 /Tahasil Control Rooms and departmental offices within the division
- An officer to be appointed as nodal officer
- 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 lmarked
- Clearance of blocked roads
- Community assistance mobilized for road clearing

#### **TELECOMMUNITION**

- Communication establishment with District and Block /Tahasil 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

#### **RURAL WATER SUPPLY & SANITATION**

- Communication establishment with District and Block /Tahasil Control Rooms and departmental offices within the division
- An officer to be appointed as nodal officer
- 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

#### CHECKLISTS: DO'S AND DON'TS

a) Operational guidelines of what to do in the event of a **flood.** 

Natural calamities. effo	ganising shelter for the people in distress in case the orts of the civil authorities are considered dequate, army assistance should be requisitioned. ief measires by non-official and voluntary
<ul> <li>Closure of past breaches in river and canal embankments and guarding of weak points.</li> <li>Rain recording and submission of rainfall reports.</li> <li>Communication of gauge readings and preparation of maps and charts</li> <li>Dissemination of weather reports and flood bulletins issued by the meteorological centres, ccentral wter commission, Flood forecasting Organisation.</li> <li>Installation of temporary police wireless stations and temporary telephones in flood prone areas</li> <li>Storage of food in interior vulnerable strategic and key areas</li> <li>Arrangements for keeping the drainage system desilted and properly maintained</li> <li>Agricultureal measures</li> <li>Training in flood relief work</li> <li>Organisation of relief parties</li> <li>Alternative drinking water supply arrangements.</li> <li>Relicultures</li> <li>Pro</li> <li>Mal</li> <li>Mal</li> <li>Mal</li> <li>Pro</li> <li>San</li> <li>Mal</li> <li>Pro</li> <li>Mal</li> <li>Pro</li> <li>Mal</li> <li>Pro</li> <li>Mal</li> <li>Pro</li> <li>San</li> <li>Mal</li> <li>Pro</li> <li>Pro</li> <li>San</li> <li>Mal</li> <li>Pro</li> <li>Pro</li> <li>San</li> <li>Organisation of</li> <li>Organisation of</li> <li>Rel</li> </ul>	anisastions may be enlisted as far as possible vision of basic amenities like drinking water, itation and public health care and arrangements cooked food in the relief camps.  king necessary arrangements for air dropping of food keers in the marooned villages thourgh helicopters ablish alternate communication links to have ective communication with marooned areas.  ganising controlled kitchens to supply foods initially east for 3 days.  pairs and reconstruction of infrastructure facilities sush roads, embankments, resettlement of flood prone as.  pabilitation of homeless.  ganise relief camps ant of emergency relief to all the affected people.  ief for economic reconstruction,  alth measures.

#### b) Operational Guidelines of what to do in the event of a Cyclone

DO's DON'ts

- Check your house, repair doors and windows, where ever necessary
- Keep a Hurricane Lantern filled with kerosene, flashing, match boxes, candles and enough dry cells
- Make sure that your radio set is fully serviceable. Keep an extra set of batteries ready for transistor.
- Keep your radio set on and listen to the latest weather warnings and advice from the nearest. All India Radio Station. Pass the information to others (by word of mouth.
- Don't venture into the areas where streams or rivers flow, hight water due to heavy rains, may surge.
- Bolt up glass windows and put shutters in place.
- Get extra food stored, particularly that type which does not require cooking such as, Flat, Rice, Sattu (pulse powder). Store extra drinking water.
- When you are moving to a shelter move your valuable articles to upper floors or tie lit to the roof so that these would not be submerged.
- Make provisions for children and old people requiring special diets.
- Be clam. Your ability to meet an emergency will inspire and help others.
- Stay in the shelter, as long as you are informed to do so
- While in the shelter, follows the instructions of lpersonnel-in-charge.

- Do not keep loose objects like cans, tins and other implements. They may become weapons of destruction during strong winds.
- Do not spread rumours, not listen to them, only official version of the warnings may be listened to through Radio.
- Do not stay in your house, when advised to vacate by authorities, especially when your house is located in a low-lying area. You may run the risk of being marooned.
- Do no venture out, if the weather suddenly clears during a strom as indicated by a full in the wind and rain. Remember strong wind will return equally suddenly from the opposite direction with even greater velocity. This happens when the eye of the strom passes over your area.
- Avoid any loose wires, hanging from the poles to avoid electrocution.
- Drink only safe water.
- Prople should keep away from disaster areas, unless they are required to assist.
- Anti social elements should be prevented from doing mischief.
- Houses and dwellings should be cleared of debris.
- The losses should be reported to the revenue authorities
- Relatives should be promptly informed about the safety of person in the disaster area.
- c) Operational Guidelines of what to do in the event of a **Heat wave**.

DO's	DON'ts
-	-

d) Operational guidelines of what to do in the event of a **Drought.** 

DO's	<b>DON'ts</b>
<ul> <li>A detailed contingency plan for supply of drinking water in rural areras to be formulated with technical help from the</li> <li>Central Ground Water Board and utilising, if required, the rigs and other capital equipment from the CGWB.</li> <li>Adequate plans to be made in the supply of drinking water in urban areas through bores,tankers, special trains and other suitable measures.</li> <li>Continuous monitoring of rural and urban driniing water availability in drought affected areas.</li> <li>Preparation of a water budget for each irrigation reservoir covering drinking water, kharif and rabi requirements and capping damage to ground water regime.</li> <li>Regulating supply to water –intensive industries, if necessary.</li> <li>Minimising evaportion losses in tanks and small reservoirs by using chemical methods, subject to Health clearance.</li> </ul>	<ul> <li>Assessment of fdder requirement in drought affected districts and locate areas where shortages are likely to occur and arrange for supplies from outside.</li> <li>Monitoring the prices of fodder in selected places/ markets.</li> <li>Arrange to procure fodder in selected outlets.</li> <li>State Forest Department to arrange for the cutting and bailing of grasses in the forest, wherever possible to meet the demand from fodder deficit districts.</li> <li>Fodder cultivation to be encouraged wherever feasible.</li> <li>Ensure supply for molasses to catle feed plants.</li> <li>Obtaining from premixed feed and urea-molasses bricks to the extent necessary.</li> <li>Improper landuse practices such as heavy tilling, agricultural practices and settlement patterns have contributed to creep and withdrawal of support in many cases.</li> </ul>

e) Operational guidelines of what to do in the event of an earthquake

DO's DON'ts

- Enrolment of volunteers trained for basic first aid instructions and relief and rescue operations.
- Assess the magnitude of problem likely to arise. Carry out studies on possible scenarios of future earthquake to point out gaps in planing and preparedness.
- Allotment of responsibilities of lofficials and nonofficials agencies. Coordination of relief and rescue organizations. Identification of search and rescue teams. Assistance from defense services.
- Resource evaluation regarding manpower, equipment, transport, hospitals, fire fighting units and so on.
- Draw hospital contigency plan. Mobile field hospitals and surgical units.
- Construction of demonstration earthquake resistant houses suited to the region.
- Assess vulnerability of structures and retrofit and strengthen weak structures.
- Draw education programs for general masses and school children. Make posters, handouts, films, TV programme, press notes etc.
- Train administrators, engineers and masons about earthquake resistant construction.
- Collect earthquake motion data by suitable instruments.
- Enforce building codes for new construction. While constructing new buildings, follow building codes and other sound practices to minimize earthquake hazards. Build on firm ground or go right up to the bed rock level when laying foundations. Avoid filed up areas for construction as far as possible.

- Check for injuries for not attempt to move seriously injured person unless they are in immediate dander of further injury.
- Check for fires.
- Wear shoes in all areas near debris and broken glass.
- Check service lines and appliances for damage. Do not use matches or lighters until it has been established that there are no gas leaks.
- Draw moderate quantity of water in case sersvice is disrupted.
- Do not draw large quantity as this could interfere with fire fighting operation.
- Do not eat or drink any thing from open containers, specially near shattered glass be prepared for additional earthquake shocks
- Respond to requests for help from civil, defense, fire services, police and home guards
- Do not crowd damaged areas unless help has been requested.
- Cooperate with the public safety officials.
- Do not spread rumors, they often do great harm following disasters.
- Disposal of dead bodies.
- Provide emergency shelter and medical aid.
- Repair / replacement and restoration of damaged structures/ equipment.
- Damage survey-documentation of damage and scientific data.
- Rehabilitation and reconstruction of new earthquake resistant construction

# Annexure - I

Action Plan of Dy. Dir Agri and UNICEF

# District Disaster Management Plan 2019-20 Purulia

#### Department of Agriculture, Govt. of West Bengal

**Introduction:** Disaster is a calamitous event, especially one occurring suddenly and causing great loss of life, damage, or hardship, as a flood, draught, cyclone, hail storms etc. Natural and human-caused disasters affect thousands of people each year. Major adverse events such as these have the potential to cause catastrophic loss of life and physical destruction. They are often unexpected and can leave whole communities in shock.

Purulia district is draught prone accompanied with uneven and erratic rainfall (60% of the total rainfall occurs only within 14 rainy days). Due to long exposure of high degree of erosion, the top soil are lost, leaving the fertility status and physical condition of the soil is very poor. The undulation of the topography and excessive runoff causes soil erosion and moisture stress. Soil is acidic in nature, shallow soil depth and poor water holding capacity leads to poor crop growth though the annual average rainfall is 1427 m.m.









**Land Situation of Purulia District** 

#### The year wise rainfall Static of Purulia district

YEAR	May	June	July	August	Sep	Total	Four Months Average	Annual Average
1990	75.840	212.320	468.110	211.900	305.040	1273.210	254.642	1617.24
1991	69.790	151.260	324.000	281.170	119.070	945.290	189.058	1165.18
1992	78.510	189.900	233.300	274.340	263.300	1039.350	207.870	1153.41
1993	47.830	212.540	193.000	243.300	408.020	1104.690	220.938	1291.32
1994	43.390	347.070	425.140	273.780	141.790	1231.170	246.234	1449.15
1995	133.75	0 298.690	399.660	405.800	87.660	1325.560	265.112	1533.33
1996	32.590	460.500	289.950	413.070	146.500	1342.970	268.594	1422.07
1997	53.760	269.520	416.350	327.700	123.710	1191.040	238.208	1395.17
1998	36.680	137.780	197.800	190.270	235.680	798.210	159.642	1210.76
1999	169.01	0 213.350	33.670	266.330	426.760	1109.120	221.824	1291.82
2000	83.060	169.220	252.440	156.360	309.230	970.310	194.062	1095.74
2001	119.27	0 386.000	288.050	290.470	152.490	1236.280	247.256	1393.79
2002	62.330	331.240	160.000	304.700	259.710	1117.980	223.596	1279.72
2003	41.560	213.930	251.600	243.990	122.500	873.580	174.716	1219.92
2004	45.790	168.680	247.060	392.480	144.800	998.810	199.762	1173.82
2005	73.000	137.100	239.000	198.660	118.140	765.900	153.180	1082.21
2006	102.50	0 206.400	381.200	272.400	223.000	1185.500	237.100	1245.45
2007	58.500	124.600	564.500	401.700	349.400	1498.700	299.740	1637.11
2008	43.000	381.700	429.300	21.600	203.470	1079.070	215.814	1137.67
2009	117.48	54.330	258.470	313.660	286.960	1030.900	206.180	1125.91
2010	80.260	100.080	158.270	208.500	156.540	703.650	140.730	835.60
2011	71.560	437.500	130.320	392.100	337.800	1469.280	293.856	1569.58
2012	25.970	141.900	198.160	299.920	384.370	1050.320	210.064	1273.45
2013	246.48	0 202.200	190.360	293.040	219.220	1151.300	230.260	1534.06
2014	66.730	156.270	252.190	218.870	196.880	899.940	179.988	1027.24
2015	66.460	164.380	528.210	201.700	67.300	1028.050	205.610	1154.12
2016	81.690	108.900	244.400	496.340	333.160	1264.490	252.898	1346.16
2017	98.67	155.2	709.4	231.7	187.9	1382.87	345.7175	1693.3
2018	69.6	198.9	275.6	139.5	141.6	825.2	206.3	979.6

From the above mentioned data it has been observed that every 4-5 years interval, the rainfall during June to September is not sufficient to support the growth and yield of kharif paddy, the main crop of the district. The moisture stress during flowering and panicle initiation of the kharif paddy badly affect the growth and yield causing agricultural draught like situation.



Agricultural draught like situation in Purulia District

## Block wise data of agricultural drought like situation in Purulia district:

Block	% of affected area	AFFECTED AREA IN Ha
NETURIA	53.96	3811
JHALDA-I	46.15	831
BALARAMPUR	55.3	689
Jhalda-II	44.93	2795
Joypur	47.6	1501
Arsha	45.67	2559.51
Baghmundi	46.78	672
Barabazar	54.5	2115
Bundwan	50.03	306
Purulia-II	58.25	7419
Para	55.61	516
Purulia-I	60.15	4720
Hura	54.35	5319
Manbazar II	64.64	2342
R N Pur-I	54.714	2750
District Average affected area	52.84	38345

From the above mentioned data it has been observed that total affected area due to draught like situation in Purulia district in 2014 is 38345 ha. and no. of farmers affected 95562 (approximately).

#### **Mitigation and Management:**

Drought like situation and mitigation can be accomplished with the following practices: (1) soil and water conservation, and (2) Agronomic practices.

#### **Soil and Water Conservation**

Conservation practices minimize the disruption of the soil's structure, composition and natural biodiversity, thereby reducing erosion and soil degradation, surface runoff, and helps in *in- situ* soil moisture conservation. The following are established practices of soil and water conservation:

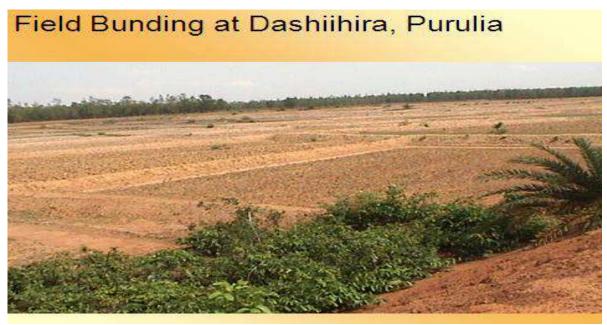
- Crop rotation
- Contoured row crops
- Terracing
- Tillage practices
- Use of draught resistant variety for cultivation
- Erosion-control structures
- Water harvesting structures

Soil and water conservation can be approached through agronomic and engineering measures. Agronomic measures include crop rotation, contour farming, off-season tillage, deep tillage, mulching providing vegetative barriers on the contour and use of draught resistant variety for cultivation. These measures prevent soil erosion and increase soil moisture strata.

Engineering measures differ with location, slope of the land, soil type, and amount and intensity of rainfall. Measures commonly used are the following:

#### Contour bunds, trenches, Land labeling and field bunding

To bring more area under cultivation by development of cultivable waste lands into arable land. The cultivable wasteland in the ridge areas which are lying unbunded, will be developed through land labeling, field bunding, graded bunding, bench terracing etc. and thereby a significant area can be brought under cultivation additionally.



#### Check dams and other gully-plugging structures

Check dams and gully plugging structures are temporary structures constructed with locally available materials.



#### Water Harvesting structure:

These features store water for irrigation and recharge the groundwater. They are constructed by excavating to form a small or large reservoir.5% model may be constructed for live saving irrigation to ensure minimum 100% cropping intensity.



To increase moisture availability, the following *in-situ* moisture-conservation practices can be adopted:

- For agricultural crops, measures include ridges and furrows, basins, and water spreading.
- For tree crops, measures include saucer basins, semi-circular bunds, crescent-shaped bunds, catch pits and deep pitting.
- Rainwater harvesting collects rainfall or moisture for immediate or eventual use in irrigation or domestic supplies. Part of the rainwater collected from roofs can be stored in a cistern or tank for later use.
- Landscape contouring is used to direct runoff into areas planted with trees, shrubs, and turf.

#### Judicious use of Water:

Micro irrigation (Sprinkler or drip irrigation) through Bangla Krishi Sech Yojonamay be adopted in Purulia district for proper utilization of available water. This practice not only save the water, it also increase crop coverage area and also increase the crop yield.



Farmers can prepare for drought by developing plans in Purulia district which cover all aspects of farm management and take into account variable climatic conditions.

#### **Crop insurance:**

National Agricultural Insurance Schemes (NAIS)/ Rasriya Krishi Bima Yojona (RKBY) provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases and encourage the farmers to adopt progressive farming practices, high value inputs and higher technology in Agriculture. It also helps to stabilize farm incomes, particularly in disaster years.

Three broad groups of crops under coverage are -

- a. Food crops (Cereals, Millets & Pulses)
- b. Oilseeds
- c. Sugarcane, Cotton & Potato (Annual Commercial / Horticultural crops)

#### Farmers to be covered:

All farmers including sharecroppers, tenant farmers growing the notified crops in the notified areas are eligible.

The Scheme covers following groups of farmers:

- a. *On a compulsory basis*: Loanee farmers.
- b. On a voluntary basis: Non-Loanee farmers

#### Risks Covered

Cover yield losses due to non preventable risks like-

- Natural Fire and Lightning
- Storm, Hailstorm, Cyclone, Typhoon, Hurricane, Tornado etc.
- Flood, Inundation and Landslide
- Drought, Dry spells
- Pests/ Diseases etc.

It does not cover yield losses due to preventable risks like war, nuclear risks, malicious damage etc. Agriculture department provides awareness cum training to get crop insurance.

#### Administrative set up to Support during draught like situation.

Sl. No.	Administrative wings (District , Sub Div. & block label	Contact No.
1.	Deputy Director of Agriculture (Admn), Purulia	9434659972
2.	Deputy Director of Agriculture (WBP), Purulia	-
3.	Deputy Director of Agriculture (Soil Conservation), KRVP,Purulia	8240843237
4.	Asst. Director of Agriculture (Admn), Purulia Sadar Subdivision	8918775068
5.	Asst. Director of Agriculture (Admn), Raghunathpur Subdivision	9434177865
6.	Asst. Director of Agriculture, Purulia-I	9674458802
	Asst. Director of Agriculture, Purulia-II	9732940775
7.	Asst. Director of Agriculture, Arsha	9732150316
8.	Asst. Director of Agriculture, Balarampur	9002368415
9.	Asst. Director of Agriculture, Barabazar	9547705177

10.	Asst. Director of Agriculture, Baghmundi	8927446105
11.	Asst. Director of Agriculture, Manbazar-I	9804519265
12.	Asst. Director of Agriculture, Manbazar-II	8750805552
13.	Asst. Director of Agriculture, Puncha	9734654330
14.	Asst. Director of Agriculture, Hura	9475074957
15.	Asst. Director of Agriculture, Kashipur	9476252824
16.	Asst. Director of Agriculture, Neturia	9735874690
17.	Asst. Director of Agriculture, Santuri	9474713331
18.	Asst. Director of Agriculture, Jhalda-I	8170846929
19.	Asst. Director of Agriculture, Joypur	8346840282
20.	Asst. Director of Agriculture, Para	9732212217
21.	Asst. Director of Agriculture, Raghunathpur-I	8901415843
22.	Asst. Director of Agriculture, Raghunathpur-II	9733410434
23.	Asst. Director of Agriculture, Jhalda-II	8116419739
24.	Asst. Director of Agriculture, Bundwan	8436240530

## Proposed five years plan details (Physical and financial):

Sl. No.	Name of the scheme	Physical (Ha/nos./RMT)	Financial (Rs. In Lakh)
1	Awareness and capacity building about soil an moisture conservation @Rs.0.10 Lakh/ training/40 participent	1000 nos.	100.00
2	Development of land and soil resources through bunding of unbunded/ poorly bunded land and periphery/protection wall of <b>Jalakunda</b> @ 0.30 Lakh/ Ha	15,000 Ha	4500.00
3	Gully control measures @Rs. 1.0 Lakh per structure	100 nos.	100.00
4	Construction of Irrigation/Field/ diversion channel @ Rs. 0.03600 Lakh per RMT.	10000 RMT	360.00

5	Construction of check Dams @ 15.00 Lakh/ Structure	40 nos.	600
6	Ravine and sand reclamation scheme @ Rs. 15.00 Lakh/ ha	200 Ha	30.00
7	New excavation of water harvesting structure (WHS) @ Rs. 3.0 Lakh/ WHS	300 nos.	900.00
8	Re- excavation of existing silted water harvesting structure (WHS) @ Rs. 2.0 Lakh/ WHS	300 nos.	600.00
9	Excavation of open dug well @ Rs. 1.5 Lakh/ Structure	50 nos.	75.00
10	Installation of Micro Irrigation (Sprinkler and drip) @ Rs.0.30 Lakh/ Ha	1000 ha	300.00

## Mouza wise affected

	NETURIA BLOCK									
SI. No.	G.P	Mouza &	Geographic	Cultiviable	% of	Coverage	Affectated	% Affectated area		
31. 140.	G.F	J.L No.	al Area(ha)	area (ha)	rea (ha) Coverage area		area(Ha)	% Affectated afea		
1	Raibandh	Beliadanga(3)	185.25	94	46.5	43.71	50.29	53.5		
2	Raibandh	Naynakuri(4)	292.2	108	41.7	45.036	62.964	58.3		
3	Raibandh	Gopalchak(2)	185.24	55	49	26.95	28.05	51		
4	Raibandh	Bhauramahal(8)	103.63	61	53.5	32.635	28.365	46.5		
5	Raibandh	Balarampur(13)	118.79	45	52.6	23.67	21.33	47.4		
6	Raibandh	Bakbari(33)	300.27	81	46.2	37.422	43.578	53.8		
7	Raibandh	Bhiringi(34)	302.39	116	41.7	48.372	67.628	58.3		

8	Raibandh	Jorberia(7)	178.24	90	50	45	45	50
1	Guniara	Birbaldih(29)	123.55	102	56.3	57.426	44.574	43.7
2	Guniara	Gobindapur(30)	215.48	156	55.7	86.892	69.108	44.3
3	Guniara	Kalipathar(35)	299.19	113	47.9	54.127	58.873	52.1
4	Guniara	Malancha(36)	286.33	125	44.4	55.5	69.5	55.6
5	Guniara	Ghatkul(37)	296.36	136	40.6	55.216	80.784	59.4
6	Guniara	Tantly(38)	334.68	170	54.2	92.14	77.86	45.8
7	Guniara	Salchura(39)	153.31	60	49	29.4	30.6	51
8	Guniara	Kharbona(41)	104.89	40	48.6	19.44	20.56	51.4
9	Guniara	Bhukundabari(42)	441.92	388	49.8	193.224	194.776	50.2
10	Guniara	Bathanbari(43)	300.71	175	49.2	86.1	88.9	50.8
11	Guniara	Kristapur(49)	123.87	47	57.5	27.025	19.975	42.5
1	Janardandih	Radhamadhabpur(1 16)	93.65	76	45	34.2	41.8	55
2	Janardandih	Gopalganj(118)	31.33	22	45.8	10.076	11.924	54.2
3	Janardandih	Harmadih(119)	52.73	44	38	16.72	27.28	62
4	Janardandih	Madandih(120)	132.76	110	41.1	45.21	64.79	58.9
5	Janardandih	Khowar(122)	55.19	40	56	22.4	17.6	44
6	Janardandih	Erakusum(121)	107.99	83	54.5	45.235	37.765	45.5
7	Janardandih	Jabardih(123)	15.74	8	50	4	4	50
8	Janardandih	Itapara(126)	20.21	10	50	5	5	50
1	Digha	Anandapur(113)	163.4	136	50.8	69.088	66.912	49.2
2	Digha	Bartoria(110)	226.36	190	48	91.2	98.8	52
3	Digha	Basko(115)	173.32	138	51.7	71.346	66.654	48.3
4	Digha	Bindudih(111)	130.41	82	58.5	47.97	34.03	41.5
5	Digha	Digha(68)	132.87	110	47.5	52.25	57.75	52.5
6	Digha	Goaladih(112)	89.46	69	54.8	37.812	31.188	45.2
7	Digha	Heddi(69)	37.17	26	47.6	12.376	13.624	52.4
8	Digha	Manpura(72)	68.49	48	42.1	20.208	27.792	57.9
9	Digha	Marjadpur(77)	43.85	27	56.5	15.255	11.745	43.5
10	Digha	Murgaboni(102)	61.35	37	40	14.8	22.2	60
11	Digha	Nabagram(71)	102.31	68	33.3	22.644	45.356	66.7
12	Digha	Notundih(67)	125.41	82	48.3	39.606	42.394	51.7

13	Digha	Paharberia(66)	100.25	84	54.7	45.948	38.052	45.3
14	Digha	Paharpur(75)	62.9	43	41.7	17.931	25.069	58.3
15	Digha	Parbatpur(65)	147.67	120	52.5	63	57	47.5
16	Digha	Pochhara(73)	102.24	80	45.7	36.56	43.44	54.3
17	Digha	Rangadih(114)	92.72	65	41.5	26.975	38.025	58.5
18	Digha	Santhalmotha(104)	165.27	100	39.6	39.6	60.4	60.4
19	Digha	Sultandih(109)	63.03	40	33.3	13.32	26.68	66.7
20	Digha	Tiltore(74)	55.59	38	40	15.2	22.8	60
21	Digha	Mahakura(86)	21.55	8	50	4	4	50
1	Sarbari	Benipur(84)	51.18	34	40.9	13.906	20.094	59.1
2	Sarbari	Gopalpur(82)	62.05	50	42.9	21.45	28.55	57.1
3	Sarbari	Kelasota(80)	299.23	250	48	120	130	52
4	Sarbari	Mahesnadi(40)	296.22	236	41.4	97.704	138.296	58.6
5	Sarbari	Nadiha(81)	258.27	200	34.8	69.6	130.4	65.2
6	Sarbari	Narayanpur(87)	163.49	104	36.4	37.856	66.144	63.6
7	Sarbari	Puapur(79)	207.28	120	55.6	66.72	53.28	44.4
8	Sarbari	Sarbari(91)	365.36	320	45.6	145.92	174.08	54.4
9	Sarbari	Utthra(83)	78.33	60	37.1	22.26	37.74	62.9
1	Bhamuria	Neturia(92)	130	70	32.5	22.75	47.25	67.5
2	Bhamuria	Bhamuria(98)	441.87	314	50.8	159.512	154.488	49.2
3	Bhamuria	Hirakund(97)	118.96	52	45	23.4	28.6	55
4	Bhamuria	Asanmoni(99)	169.75	118	47.5	56.05	61.95	52.5
5	Bhamuria	Alkusa(100)	196.85	115	56	64.4	50.6	44
6	Bhamuria	Dhangajore(101)	141.1	86	58.2	50.052	35.948	41.8
7	Bhamuria	Ranpur(102)	30.75	17	20	3.4	13.6	80
8	Bhamuria	Bonra(105)	319.73	76	26.8	20.368	55.632	73.2
9	Bhamuria	Baruipara(106)	28.91	25	53.3	13.325	11.675	46.7
10	Bhamuria	Nowada(108)	20.01	14	45	6.3	7.7	55
1	Saltore	Parbelia(95)	622.9	286	40	114.4	171.6	60
2	Saltore	Deoli(88)	207.54	156	40	62.4	93.6	60
3	Saltore	Saltore(89)	441.11	213	43.6	92.868	120.132	56.4
4	Saltore	Pathardiha(93)	58.7	50	34.3	17.15	32.85	65.7
	•					•		

#### JHALDA-I BLOCK

SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area (ha)	% of Coverag e	Coverag e area (Ha)	Affectate d area(Ha)	% Affectated area
1	Pusti	Gosaidih(69)	307.55	100	55	55	45	45
2	Pusti	Betob(70)	191.16	74	52	38.48	35.52	48
3	Pusti	Chak keruary(71)	346.5	147	55	80.85	66.15	45
4	Pusti	Nayadih alias(Koradih)73	126.37	55	54	29.7	25.3	46
5	Pusti	Heped(74)	734.59	324	52	168.48	155.52	48
6	Pusti	Bhakudih(75)	113.15	62	52	32.24	29.76	48
7	Pusti	Bhusudih(76)	192.48	76	52	39.52	36.48	48
8	Pusti	Pusti(77)	304.5	118	53	62.54	55.46	47
9	Pusti	Kudlung(78)	188.51	73	52	37.96	35.04	48
10	Pusti	Patradih(79)	50.58	26	55	14.3	11.7	45
11	Pusti	Dulmi(80)	304.47	98	54	52.92	45.08	46
12	Pusti	Durgu(81)	103.57	91	58	52.78	38.22	42
13	Pusti	Hesla(82)	917.43	573	56	320.88	252.12	44

#### **BALARAMPUR BLOCK**

SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area (ha)	% of Coverag e	Coverag e area (Ha)	Affectate d area(Ha)	% Affectate d area
1	Ghatbera Kerua	Ghatbera(1)	479.15	220	41	90.2	129.8	59
2	Ghatbera Kerua	Parbaid-Kasitanr(2)	777	365	40	146	219	60
3	Ghatbera Kerua	Mirmi(4)	176.44	45	49	22.05	22.95	51
4	Ghatbera Kerua	Serenghutu(5)	300.68	165	45	74.25	90.75	55
5	Ghatbera Kerua	Tilai(14)	458.51	165	42	69.3	95.7	58
6	Ghatbera Kerua	Jerka(15)	33.18	29	40	11.6	17.4	60

7	Ghatbera Kerua	Dandudih(16)	34.4	23	45	10.35	12.65	55
1	Tentlow	Gobindapur(61)	84.18	45	49	22.05	22.95	51
2	Tentlow	Samurdih(64)	68.8	25	48	12	13	52
1	Baraurma	Khairadih(28)	231.48	125	48	60	65	52

IHALDA -II BLO	ОСК	T	ī				1	1
SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area (ha)	% of Coverag e	Coverag e area (Ha)	Affectate d area(Ha)	% Affectate d area
1	Rigid	Chitahi(145)	43.29	21	56.25	11.8125	9.1875	43.75
2	Rigid	Naranpur(147)	42.04	23	53.23	12.2429	10.7571	46.77
3	Rigid	Ghutnia(143)	55.82	31	54.9	17.019	13.981	45.1
4	Rigid	Taherbera(152)	29.69	12	59.26	7.1112	4.8888	40.74
5	Rigid	Karior(156)	357.13	117	52.99	61.9983	55.0017	47.01
1	Majhidih	Khairy(181)	158.33	108	57.41	62.0028	45.9972	42.59
2	Majhidih	Urmad(170)	144.34	106	54.72	58.0032	47.9968	45.28
3	Majhidih	Simni(175)	531.09	272	51.16	139.1552	132.8448	48.84
4	Majhidih	Jabar(176)	826.69	287	50.27	144.2749	142.7251	49.73
5	Majhidih	Marlong(179)	243.11	125	54.4	68	57	45.6
1	Beladih	Jaharhatu(264)	725.85	202	50.98	102.9796	99.0204	49.02
2	Beladih	Nichintapur(255)	199.28	113	54.87	62.0031	50.9969	45.13
3	Beladih	Parua(257)	137.06	107	57.01	61.0007	45.9993	42.99
4	Beladih	Lagam(259)	288.24	121	54.9	66.429	54.571	45.1
5	Beladih	Lakharhatu(260)	23.97	12	59.38	7.1256	4.8744	40.62
6	Tatuara	Barometla(200)	402.33	207	50.24	103.9968	103.0032	49.76
1	Begunkodor	Bartolia(245)	100.73	92	56.52	51.9984	40.0016	43.48
2	Begunkodor	Mamudih(274)	856.45	84	53.57	44.9988	39.0012	46.43
3	Begunkodor	Chatambari(266)	117.16	95	50.79	48.2505	46.7495	49.21
1	Chekya	Chatrani(134)	58.67	47	59.57	27.9979	19.0021	40.43
2	Chekya	Barohonkol(222)	134.89	102	56.86	57.9972	44.0028	43.14
3	Chekya	Patrahatu(183)	77.01	59	57.63	34.0017	24.9983	42.37
4	Chekya	Chutukpiri(164)	169.96	76	56.58	43.0008	32.9992	43.42
5	Chekya	Chhotohonkoi(221)	84.87	48	58.33	27.9984	20.0016	41.67
1	Hirapur- Adardih	Harbaho(243)	155.75	80	56.25	45	35	43.75

2	Hirapur- Adardih	Basudevpur(248)	99.98	56	50	28	28	50
3	Hirapur- Adardih	Hirapur(251)	68.48	37	59.46	22.0002	14.9998	40.54
4	Hirapur- Adardih	Hudurgora(252)	23.76	13	52.94	6.8822	6.1178	47.06
5	Hirapur- Adardih	Poradih(253)	73.6	47	51.06	23.9982	23.0018	48.94
6	Hirapur- Adardih	Mahuda(250)	110.44	68	54.41	36.9988	31.0012	45.59
7	Hirapur- Adardih	Matkumar(228)	164	85	57.65	49.0025	35.9975	42.35
8	Hirapur- Adardih	Adardih(218)	115.49	61	57.38	35.0018	25.9982	42.62
9	Hirapur- Adardih	Chiruhatu(217)	111.2	70	54.29	38.003	31.997	45.71
10	Hirapur- Adardih	Chitorpur(229)	192.57	93	55.91	51.9963	41.0037	44.09
11	Hirapur- Adardih	Chaitandih(240)	132.85	64	57.81	36.9984	27.0016	42.19
12	Hirapur- Adardih	Rampur(242)	145.4	75	54.67	41.0025	33.9975	45.33

1	Nowahatu	Goaladih(230)	108.52	54	55.56	30.0024	23.9976	44.44
2	Nowahatu	Murulahar(231)	136.83	72	56.94	40.9968	31.0032	43.06
3	Nowahatu	Ghatketya(213)	94.75	58	56.9	33.002	24.998	43.1
4	Nowahatu	Hanslata(239)	250.06	129	55.81	71.9949	57.0051	44.19
5	Nowahatu	Jiudara(232)	180.96	76	55.26	41.9976	34.0024	44.74
6	Nowahatu	Kotshila(233)	267.25	138	52.17	71.9946	66.0054	47.83
7	Nowahatu	Shyampur(212)	124.09	67	53.73	35.9991	31.0009	46.27
8	Nowahatu	Hurshi(210)	211.62	112	51.79	58.0048	53.9952	48.21
9	Nowahatu	Choyadih(211)	109.2	62	51.61	31.9982	30.0018	48.39
10	Nowahatu	Digijara(189)	77.6	53	52.83	27.9999	25.0001	47.17
11	Nowahatu	Gari(215)	39.71	23	53.85	12.3855	10.6145	46.15

	12	Nowahatu	Ukma(184)	264.15	122	54.92	67.0024	54.9976	45.08
Г									
	6	Mukundupur	Litiadih(99)	33.95	14	53	7.42	6.58	47

#### **JOYPUR BLOCK**

SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area (ha)	% of Coverag e	Coverag e area (Ha)	Affectate d area(Ha)	% Affectate d area
1	Ghagra	Udaypur(28)	103.07	51	53	27.03	23.97	47
2	Ghagra	Basgarh(30)	83.95	42	54	22.68	19.32	46
3	Ghagra	Kalikapur(35)	174.82	80	45	36	44	55
4	Ghagra	Karmatanr(37)	239.94	127	57	72.39	54.61	43
5	Ghagra	Rangadih(38)	212.78	109	54	58.86	50.14	46
6	Ghagra	Ghagra(115)		175	59	103.25	71.75	41
1	Mukundupur	Durmurdih(93)	100.39	37	50	18.5	18.5	50
2	Mukundupur	Pratappur(94)	100.57	37	50	18.5	18.5	50
3	Mukundupur	Salagram(95)	127.51	41	50	20.5	20.5	50
4	Mukundupur	Baligora(96)	76.77	32	51	16.32	15.68	49
5	Mukundupur	Kamukha(98)	40.57	18	50	9	9	50

7	Mukundupur	Amdih(100)	97.84	18	50	9	9	50
8	Mukundupur	Shyampur(101)	56.63	22	52	11.44	10.56	48
9	Mukundupur	Mirid(102)	195.75	41	50	20.5	20.5	50
10	Mukundupur	Dhaboni(103)	227.02	60	52	31.2	28.8	48
11	Mukundupur	Tunta(104)	151.72	41	53	21.73	19.27	47
12	Mukundupur	Ghagri(106)	162.45	54	53	28.62	25.38	47
13	Mukundupur	Kulara(107)	147.45	32	51	16.32	15.68	49
14	Mukundupur	Srirampur(108)	506.31	186	54	100.44	85.56	46
15	Mukundupur	Jahajpur(109)	219.76	82	50	41	41	50
16	Mukundupur	Khairatanr(110)	44.4	18	50	9	9	50
1	Ropo	Chakudih(27)		15	38	5.7	9.3	62
1	Uparkahan	Sabanpur(82)	113.96	47	51	23.97	23.03	49
2	Uparkahan	Kanudih(86)	90.24	54	56	30.24	23.76	44
3	Uparkahan	Manipur(84)	146.32	73	56	40.88	32.12	44
4	Uparkahan	Chapoitanr(88)	180.83	72	56	40.32	31.68	44
5	Uparkahan	Palanja(91)	276.58	126	55	69.3	56.7	45
6	Uparkahan	Beltadr(92)	80.33	28	50	14	14	50
7	Uparkahan	Baruadih(112)	95.32	55	51	28.05	26.95	49
8	Uparkahan	Hetkahan(113)	293.6	145	56	81.2	63.8	44
1	Baragram	Chotki Siphore(56)	75.15	37	50	18.5	18.5	50
2	Baragram	Hargara(58)	246.13	86	52	44.72	41.28	48

3	Baragram	Bhalaidih(67)	134.21	85	52	44.2	40.8	48
4	Baragram	Durma(69)	67.31	33	56	18.48	14.52	44
5	Baragram	Bongara(71)	152.13	82	53	43.46	38.54	47
6	Baragram	Selini(72)	218.03	82	50	41	41	50
7	Baragram	Ratandih(73)	111.68	109	51	55.59	53.41	49
8	Baragram	Kukiara(74)	227.54	90	51	45.9	44.1	49
9	Baragram	Fuljhoria(76)	46.75	21	56	11.76	9.24	44
10	Baragram	Chaitandih(78)	140.55	68	46	31.28	36.72	54
11	Baragram	Agarpur(80)	206.36	117	56	65.52	51.48	44
1	Joypur	Parga(54)	206.92	107	54	57.78	49.22	46
2	Joypur	Howandanga(59)	246.14	130	58	75.4	54.6	42
3	Joypur	Dhabani(60)	167.62	61	55	33.55	27.45	45
4	Joypur	Ruatadih(62)	192.26	70	58	40.6	29.4	42
5	Joypur	Barabenda(63)	217.32	116	55	63.8	52.2	45

SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area (ha)	% of Coverag	Coverag e area	Affectate d	% Affectate d area
1	Arsha	Harada(34)	414	300	е 52	(Ha) 156	area(Ha) 144	48
2	Arsha	Palpal(35)	1513.13	1150	57	655.5	494.5	43
3	Arsha	Manpur(41)	146.9	50	57	28.5	21.5	43
4	Arsha	Arsha(43)	326.99	150	57	85.5	64.5	43
5	Arsha	Fosko(52)	349.65	205	57	116.85	88.15	43
1	Hesla	Saluidahar(64)	566.56	286	55	157.3	128.7	45
1	Hetgugui	Ghatiyali(19)	295.42	100	57	57	43	43
2	Hetgugui	Kariardih(20)	104.41	40	31	12.4	27.6	69
3	Hetgugui	Sitarampur(22)	122.22	55	57	31.35	23.65	43
4	Hetgugui	Goalikocha(24)	844.59	230	52	119.6	110.4	48
1	Mankiyari	Boram(04)	537.02	155	57	88.35	66.65	43
2	Mankiyari	Thakursima(05)	247.67	150	57	85.5	64.5	43
3	Mankiyari	Torang(49)	762.03	270	57	153.9	116.1	43
1	Chatuhansa	Chatuhansa(73)	853.89	331	52	172.12	158.88	48
1	Beldi	Bhursa(80)	436.03	305	52	158.6	146.4	48
2	Beldi	Kanchanpur(54)	214.08	106	52	55.12	50.88	48
3	Beldi	Jhuradih(55)	179.28	160	57	91.2	68.8	43
1	Puara	Sodpuara(98)	239.57	170	57	96.9	73.1	43
2	Puara	Dhanara(88)	263.05	200	57	114	86	43
3	Puara	Khukramura(95)	316.06	232.8	57	132.696	100.104	43
4	Puara	Korang(94)	406.71	300	57	171	129	43
5	Puara	Kukurchirka(206)		250	57	142.5	107.5	43
1	Sirkabad	Tanasi(26)	460.13	100	53	53	47	47
2	Sirkabad	Pattanr(27)	275.19	45	52	23.4	21.6	48
3	Sirkabad	Bhelidih(30)	87.41	20	52	10.4	9.6	48
4	Sirkabad	Gandhabazar(32)	250.1	80	52	41.6	38.4	48
5	Sirkabad	Sirkabad(68)	881.18	300	57	171	129	43

SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area	% of Coverag	Coverag e area	Affectate d	% Affectate
	+			(ha)	е	(Ha)	area(Ha)	d area
1	Tunturi-Suisa	Rangamati(1)	212.87	98	52.04	50.9992	47.0008	47.96
2	Tunturi-Suisa	Mukrub(2)	22.17	11	50.91	5.6001	5.3999	49.09
3	Tunturi-Suisa	Peretorang(3)	272.76	95	51.61	49.0295	45.9705	48.39
4	Tunturi-Suisa	Chogapiri(5)	168.35	41	53.66	22.0006	18.9994	46.34
5	Tunturi-Suisa	Gagi(6)	357.74	121	53.09	64.2389	56.7611	46.91
6	Tunturi-Suisa	Saldabra(7)	134.36	59	50.85	30.0015	28.9985	49.15
7	Tunturi-Suisa	Suisa(8)	543.49	232	50.67	117.5544	114.4456	49.33
8	Tunturi-Suisa	Raidih(9)	191.01	39	51.28	19.9992	19.0008	48.72
9	Tunturi-Suisa	Tunturi(10)	317.68	45	51.11	22.9995	22.0005	48.89
10	Tunturi-Suisa	Sopa(11)	175.63	41	51.22	21.0002	19.9998	48.78
11	Tunturi-Suisa	Tiruldih(12)	176.44	33	54.55	18.0015	14.9985	45.45
12	Tunturi-Suisa	Simali(17)	499.47	71	50.7	35.997	35.003	49.3
13	Tunturi-Suisa	Deuli(19)	293.8	83	57.83	47.9989	35.0011	42.17
1	Ajodhya	Bongada(75)	527.61	12	58.33	6.9996	5.0004	41.67
2	Ajodhya	Sonahara(76)	108.86	11	54.55	6.0005	4.9995	45.45
3	Ajodhya	Puniasasan(108)	210.03	12	58.33	6.9996	5.0004	41.67
1	Serengdi	Budsudi(25)	107.65	39	51.28	19.9992	19.0008	48.72
2	Serengdi	Serengdi(26)	107.65	37	56.76	21.0012	15.9988	43.24
3	Serengdi	Dulmi(28)	155.8	61	54.1	33.001	27.999	45.9
4	Serengdi	Bidri(29)	144.07	63	55.56	35.0028	27.9972	44.44
5	Serengdi	Chatua(30)	58.27	18	50	9	9	50
6	Serengdi	Chokai Cholang(31)	157.02	62	53.23	33.0026	28.9974	46.77
7	Serengdi	Jhabri(50)	78.51	29	55.17	15.9993	13.0007	44.83
1	Budra Kalimati	Kalimati(32)	584.37	103	50.49	52.0047	50.9953	49.51

**BARABAZAR BLOCK** 

			Geographica	Cultiviabl	% of	Coverag	Affectate	%
Sl. No.	G.P	Mouza &	l Area(ha)	e area (ha)	Coverag e	e area (Ha)	d area(Ha)	Affectate d area
1	Sukwehuta	Siyarkelya(61)	148.56	40	50	20	20	50
2	Banjora	Simuduri(188)	306.11	80	50	40	40	50
						0	0	100
1	Berada	Kasbahal(101)	142.62	100	55	55	45	45
2	Berada	Sweaidih(102)	86.88	20	55	11	9	45
1	Barabazar	Rajdaha(126)	147.04	28	52.5	14.7	13.3	47.5
2	Barabazar	Radhanagar(127)	148.22	80	42.5	34	46	57.5
3	Barabazar	Pattoria(129)	193.76	110	41.8	45.98	64.02	58.2
4	Barabazar	Sorakdih(130)	31.33	20	50	10	10	50
5	Barabazar	Baisnabdih(131)	108.51	50	54	27	23	46
6	Barabazar	Tipur(132)	49.53	20	50	10	10	50
7	Barabazar	Gopalpur(133)	72.29	40	51	20.4	19.6	49
8	Barabazar	Palaskanali(134)	26.71	10	50	5	5	50
9	Barabazar	Sugaibasa(155)	132.35	50	40	20	30	60
10	Barabazar	Barabazar(156)	335.01	100	52	52	48	48
11	Barabazar	Barraha(157)	211.44	100	50	50	50	50
12	Barabazar	Bankati(158)	14.54	10	52	5.2	4.8	48
13	Barabazar	Dhadkidia(159)	134.95	60	50	30	30	50
14	Barabazar	Motiramdih(160)	65.94	30	40	12	18	60
15	Barabazar	Nelmohanpur(171)	63.33	11	45.04	4.9544	6.0456	54.96
1	Latpada	Medinitanr(121)	116.21	15	40	6	9	60
2	Latpada	Bamnidih(162)	194.78	100	40	40	60	60
3	Latpada	Nowadih(163)	150.88	80	40	32	48	60
4	Latpada	Bhagabandh(164)	144.04	80	41	32.8	47.2	59
5	Latpada	Kristonagar(165)	81.67	45	40	18	27	60
6	Latpada	Gobindapur(169)	204.51	120	42.5	51	69	57.5
7	Latpada	Puijanga(170)	203.03	120	42.5	51	69	57.5
8	Latpada	Latpada(185)	526.98	300	53.6	160.8	139.2	46.4
9	Latpada	Amagara(120)	148.03	48	40	19.2	28.8	60
10	Latpada	Gahamikocha(200)	171.64	120	41	49.2	70.8	59

11	Latpada	GoUddih(201)	87.38	40	41	16.4	23.6	59
12	Latpada	Gidhighati(202)	194.05	120	40	48	72	60
13	Latpada	Dhagram(203)	315.36	250	41	102.5	147.5	59
14	Latpada	Sibadih(204)	109.88	30	40	12	18	60
15	Latpada	Mukundapur(205)	43.82	20	40	8	12	60
16	Latpada	Sarberia(206)	386.89	240	50	120	120	50
17	Latpada	Taradih(209)	549.01	170	40	68	102	60
1	Sindri	Hinjla(184)	245.18	90	50	45	45	50
2	Sindri	Agoijhor(186)	282.27	70	50	35	35	50
3	Sindri	Ajodhyadin(191)	237.04	100	55	55	45	45
4	Sindri	Khoyerboni(195)	242.61	130	52	67.6	62.4	48
5	Sindri	Kasubera(198)	66.96	10	50	5	5	50
6	Sindri	Babuijore(208)	169.94	100	45	45	55	55
7	Sindri	Valukdih(212)	98.34	50	51	25.5	24.5	49
8	Sindri	Hatuadih(213)	89.35	34	50	17	17	50
9	Sindri	Sasaudih(214)	217.68	120	51	61.2	58.8	49
10	Sindri	Jilling(216)	964.45	360	41	147.6	212.4	59

#### **BANDWAN BLOCK**

SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area (ha)	% of Coverag e	Coverag e area (Ha)	Affectate d area(Ha)	% Affectate d area
1	Gurur	Hetyakal(3)	196.68	161	57.25	92.1725	68.8275	42.75
2	Gurur	Baro Parasia(6)	117.57	86	43.58	37.4788	48.5212	56.42
3	Gurur	Chhoto Poasia(7)	324.3	173	49.6	85.808	87.192	50.4
4	Gurur	Bhalu(8)	262.81	200	49.45	98.9	101.1	50.55

#### **PURULIA -II BLOCK**

SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area (ha)	% of Coverag e	Coverag e area (Ha)	Affectate d area(Ha)	% Affectate d area
1	Raghabpur	Raghabpur(66)	610	445	46.59	207.3255	237.6745	53.41
2		Bongabari(65)	539	384	44.52	170.9568	213.0432	55.48
3		Hatara(64)	273	206	43.31	89.2186	116.7814	56.69
4		Dhruhi(147)	116	64	42.86	27.4304	36.5696	57.14
5		Gengara(148)	393	280	39.91	111.748	168.252	60.09
6		Ratulia(149)	187	107	34.65	37.0755	69.9245	65.35
7		Nadiha(61)	518	392	40.94	160.4848	231.5152	59.06
8		Birgiri(63)	198	124	39.36	48.8064	75.1936	60.64
9		Surulia(62)	377	258	40.82	105.3156	152.6844	59.18
10		Johapura(146)	122	56	38.46	21.5376	34.4624	61.54
11		Tatiberia(145)	95	51	39.53	20.1603	30.8397	60.47
12	Hutmura	Chhotochachra(159)	66.44	56.08	33.33	18.69146	37.38854	66.67

13		Kathaldiha(153)	270.87	260	32.94	85.644	174.356	67.06
14		Kulberia(140)	43.82	38.02	33.33	12.67207	25.34793	66.67
15		Baligara(161)	438.56	388	32.08	124.4704	263.5296	67.92
16		Korchakuri(158)	119.94	100	31.25	31.25	68.75	68.75
17		Sidpur(154)	297.23	260.02	30.12	78.31802	181.702	69.88
18		Bhabanipur(155)	376.26	300.06	33.02	99.07981	200.9802	66.98
19		Hutmura(139)	246.09	140	32.97	46.158	93.842	67.03
20		Chirumacha(160)	280.01	200.08	30.22	60.46418	139.6158	69.78
21		Chachra(156)	220.56	195.08	31.82	62.07446	133.0055	68.18
22		Dhansura(157)	196.22	170.08	34.78	59.15382	110.9262	65.22
23	Chharrah	Bandhgarh(128)	262.08	208.04	43.33	90.14373	117.8963	56.67
24		Dakhingohal(128)	81.02	49.02	57.14	28.01003	21.00997	42.86
25		Biltora(126)	153.02	116.04	46.015	53.39581	62.64419	53.985
26		Amjora(133)	200.14	130	42.42	55.146	74.854	57.58
27		Chharrah(131)	512.28	491.02	56.09	275.4131	215.6069	43.91
28		Jahajpur(132)	109.02	75.02	45.1	33.83402	41.18598	54.9
29		Dumdumi(89)	757.06	538.04	56.11	301.8942	236.1458	43.89
30		Andhuli(127)	98.08	73.02	43.4	31.69068	41.32932	56.6
31		Podhlara(130)	266	196	47.06	92.2376	103.7624	52.94
32		Bihahura(145)	33.44	20.08	46.15	9.26692	10.81308	53.85
33		Ledabera(62)	80	57.05	42.55	24.27478	32.77523	57.45
34	Ghonga	Khudibandh(78)	173.23	137.02	56.38	77.25188	59.76812	43.62
35		Natua(77)	69.49	52	48.28	25.1056	26.8944	51.72
36		Tatari(76)	122.96	82	42.31	34.6942	47.3058	57.69
37		Ghonga(27)	591.69	443.06	46.39	205.5355	237.5245	53.61
38		Kolbandh(88)	268.08	257.02	45.79	117.6895	139.3305	54.21
39		Sihali(75)	365.06	307.02	41.1	126.1852	180.8348	58.9
40		Shyampur(71)	135.94	103.6	45.71	47.35556	56.24444	54.29
41		Manipur(72)	82.53	63.2	43.59	27.54888	35.65112	56.41
42		Chargoli(73)	382.036	328.8	46.61	153.2537	175.5463	53.39
43		Raghuchalk(79)	28.84	18.04	54.55	9.84082	8.19918	45.45
44		Parkidivyalidih(81)	166.74	113.6	57.38	65.18368	48.41632	42.62
45		Senera-Amra(82)	443.95	344.08	56.34	193.8547	150.2253	43.66
46	Bhangra	Bhangra(143)	588.92	490	33.02	161.798	328.202	66.98
47		Chepra(141)	348.03	304	27.84	84.6336	219.3664	72.16
48		Sanradihi(152)	80.94	64	36.67	23.4688	40.5312	63.33

49		Haramjanga	168.35	149	29.41	43.8209	105.1791	70.59
50		Dubchoraka(162)	331.03	278	32.16	89.4048	188.5952	67.84
51		Sitalpur(164)	143.66	115	34.48	39.652	75.348	65.52
52		Kolakota(142)	187.77	158	33.33	52.6614	105.3386	66.67
53		Korcha(151)	351.91	306	31.28	95.7168	210.2832	68.72
54		Singhbazar(150)	174.42	147	33.73	49.5831	97.4169	66.27
55		Chepri(134)	269.93	192	34.78	66.7776	125.2224	65.22
56	Belma	Madhagora(99)	91.61	54	46.15	24.921	29.079	53.85
57		Kanchanpur(100)	70.72	46.04	45.45	20.92518	25.11482	54.55
58		Chamrubera(102)	108.84	78.08	48	37.4784	40.6016	52
59		Dubrajpur(105)	228.83	165.6	58.06	96.14736	69.45264	41.94
60		Raghudih(106)	238.37	197.6	44.59	88.10984	109.4902	55.41
61		Hirbahal(120)	127.13	80	46.15	36.92	43.08	53.85
62		Belma(122)	292.53	213.2	45.21	96.38772	116.8123	54.79
63		Golkunda(123)	315.72	221.2	45.45	100.5354	120.6646	54.55
64		Mamurjore(124)	261.42	183.6	45.16	82.91376	100.6862	54.84
65		Nehalpur(125)	114.49	80	46.43	37.144	42.856	53.57

#### **ARSHA BLOCK**

SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area (ha)	% of Coverag e	Coverag e area (Ha)	Affectate d area(Ha)	% Affectate d area
1	Anara	Rampur(133)	154.33	130.83	51.18	66.95879	63.87121	48.82
3	Para	Hariharpur(98)	170.5	60.5	56.14	33.9647	26.5353	43.86
4		Baisyakuli(126)	241.2	165.6	54.74	90.64944	74.95056	45.26
		Goaladih(93)	63.2	36.6	57.89	21.18774	15.41226	42.11
	Nadiha Surulia	Chalka(44)	131.72	90	54.54	49.086	40.914	45.46
	Dubra	Mahuda(84)	349.2	211.2	54.34	114.7661	96.43392	45.66
						0	0	100
	Deoli	Kanki(64)	382.4	355.4	58.33	207.3048	148.0952	41.67
		Bhelpahari(67)	135.6	114.6	56.7	64.9782	49.6218	43.3

#### **PURULIA -I BLOCK**

	Ī		i i					
SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area (ha)	% of Coverag e	Coverag e area (Ha)	Affectate d area(Ha)	% Affectate d area
1	Lagda	Belkuri(13)	593.68	460	45	207	253	55
2		Hulka(26)	255.36	238	50	119	119	50
3		Kultanr(28)	171.18	125	45	56.25	68.75	55
4		Chokra(29)	282.47	205	40	82	123	60
5		Polkiri(300	135.07	100	40	40	60	60
6		Boraidih(31)	44.11	37	41	15.17	21.83	59
7		Bhagudih(33)	141.24	98	30	29.4	68.6	70
8		Lagda(68)	428.57	378	45	170.1	207.9	55
9		Dhadka(69)	106.03	72	40	28.8	43.2	60
10		Mohalitora(71)	103.2	78	40	31.2	46.8	60
11		Nadiara(74)	333.52	270	45	121.5	148.5	55
12	Chakoltore	Fatepur(48)	108.5	66	40	26.4	39.6	60
13		Karamara(49)	130.17	80	40	32	48	60
14		Tamna(50)	257.38	159	40	63.6	95.4	60
15		Chandradih(204)	259.5	160	40	64	96	60
16		Amchuria(205)	311.18	192	40	76.8	115.2	60
17 B	ShandarPuara	Dumurdih(173)	195.2	117	44	51.48	65.52	56
18		Tilagara(178)	101.6	60	30.43	18.258	41.742	69.57
19		Maldih(179)	267.2	160	44.6	71.36	88.64	55.4
20		Koldih(186)	150.2	90	50.7	45.63	44.37	49.3
21		Patatri(182)	366.6	220	39.77	87.494	132.506	60.23
22		Chipida(189)	470	280	49.72	139.216	140.784	50.28
23		Turuhulu(184)	316	190	30	57	133	70
24		Pichasi(191)	174	85	25	21.25	63.75	75
25	Durku	Gosaidih(202)	128.29	88	35	30.8	57.2	65
26		Digsili(203)	341.86	280	35	98	182	65
27		Sundradih(197)	114.12	78	35.65	27.807	50.193	64.35
28		Beliapathar(194)	279.23	190	35.45	67.355	122.645	64.55
29		Doldari(56)	52.61	36	36	12.96	23.04	64
30		Damda(53)	340.75	234	37	86.58	147.42	63
31	Manara	Kumiha(188)	111.69	79.94	30.1	24.06194	55.87806	69.9

33		Tara(201)	254.55	189.5	32.84	62.2318	127.2682	67.16
34		Chitora(214)	146.9	103.71	34.01	35.27177	68.43823	65.99
35		Bhadsa(216)	222.58	156.83	35	54.8905	101.9395	65
36		Bhrsa(218)	160.66	113.34	39.72	45.01865	68.32135	60.28
37		Pundru(226)	256.98	180.88	44.92	81.2513	99.6287	55.08
38	Sonaijuri	Bhalumara(38)	164.52	111.5	52.66	58.7159	52.7841	47.34
39		Maguria(40)	143.66	97.5	40	39	58.5	60
40		Sonaijuri(39)	375.95	254	50.99	129.5146	124.4854	49.01
41		Ramnagar(67)	329.82	224.5	45.02	101.0699	123.4301	54.98
42		Chakda(42)	430.99	291.5	45	131.175	160.325	55
43		Belguma(41)	133.55	92	40	36.8	55.2	60
44		Simulia(44)	272.76	183	37.77	69.1191	113.8809	62.23
45		Dulmi(289)	58.68	50	41	20.5	29.5	59

#### **HURA BLOCK**

SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area (ha)	% of Coverag e	Coverag e area (Ha)	Affectate d area(Ha)	% Affectate d area
1	Maguria-Lalpur	Ledadih(71)	325.53	195	49.14	95.823	99.177	50.86
2		Paharpur(92)	270.34	192	51.46	98.8032	93.1968	48.54
3		Pratappur(93)	284.72	197	48.85	96.2345	100.7655	51.15
4		Noadih(96)	529.73	396	48.7	192.852	203.148	51.3
5	Rakhera Bishpuria	Kumardih(104)	215.74	193	45.18	87.1974	105.8026	54.82
6		Dhaboni(105)	890.03	582	52.63	306.3066	275.6934	47.37
7		Cholagora(106)	55.94	49	48.65	23.8385	25.1615	51.35
8	Lakhanpur	Kapatkata(39)	145.5	115	46.39	53.3485	61.6515	53.61
9		Madhuban(77)	312	312 260 46.86 121.836		138.164	53.14	
10		Palma(79)	135.23	95	54.55	51.8225	43.1775	45.45
11		Deoli(84)	488.78	405	45.51	184.3155	220.6845	54.49
12	Kalabani	Tilaboni()4	230.28	175	50.34	88.095	86.905	49.66
13		Batabathan(7)	59.13	25	45	11.25	13.75	55
14		Kalaboni(8)	1499.79	1227	45.99	564.2973	662.7027	54.01
15		Pirraha(9)	843.6	665	47.41	315.2765	349.7235	52.59
16	Daldali	Daldali(73)	678.7	473	47.49	224.6277	248.3723	52.51
17								
18		Chakolta(76)	365.8	247	45.65	112.7555	134.2445	54.35
19		Kusumjoria(85)	428.92	227	43.33	98.3591	128.6409	56.67
20		Bhagabandh(88)	696.44	493	41.21	203.1653	289.8347	58.79
21		Palgang(89)	309.82	227	41.9	95.113	131.887	58.1
22	Ladhurka	Sesunia(15)	170.07	89	55.29	49.2081	39.7919	44.71

23		Chakolta(76)	365.8	247	45.65	112.7555	134.2445	54.35
24		Kusumjoria(85)	428.92	227	43.33	98.3591	128.6409	56.67
25		Bhagabandh(88)	696.44	493	41.21	203.1653	289.8347	58.79
26		Palgang(89)	309.82	227	41.9	95.113	131.887	58.1
27	Ladhurka	Sesunia(15)	170.07	89	55.29	49.2081	39.7919	44.71
28		Chitora(25)	183.53	153	55.48	84.8844	68.1156	44.52
29		Saldiha(38)	157.33	66	50	33	33	50
30	Chatumathar	Hatikundar(56)	721.64	473	47.95	226.8035	246.1965	52.05
31		Amlatora(57)	330.53	252	51.69	130.2588	121.7412	48.31
32		Kajuli(58)	137.89	115	115 47.27 54.3605		60.6395	52.73
33		Piralia(62)	277.27	7 117 51		59.67	57.33	49
34	Hura	Motipur(90)	709.19	393	45.58	179.1294	213.8706	54.42
35		Kumrabad(102)	194.09	121	46.79	56.6159	64.3841	53.21
36		Samukjoria(103)	398.47	285	47.43	135.1755	149.8245	52.57
37	Kesargarh	Madandih(27)	79.51	51	45.65	23.2815	27.7185	54.35
38		Jojodih(29)	245.73	116	45.45	52.722	63.278	54.55
39		Arjunjoria(51)	330.51	276	39.62	109.3512	166.6488	60.38
40		Kudlung(52)	1153.28	1153.28 445		176.9765	268.0235	60.23
41	Jabbrrah	Gurda(36)	149.84	118	15.32	18.0776	99.9224	84.68
42		Dumkadih(43)	448.33	265	55.43	146.8895	118.1105	44.57
43		Nadiha(44)	452.55	209	48.61	101.5949	107.4051	51.39

#### MANBAZAR BLOCK

SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area (ha)	% of Coverag e	Coverag e area (Ha)	Affectate d area(Ha)	% Affectate d area
1	Dighi	Sindradih(168)	240	172.8	20.83	35.99424	136.8058	79.17
2		Chholagora(170)	65.2	59.3	32	18.976	40.324	68
3		Dundlu(178)	200.4	124	53.01	65.7324	58.2676	46.99
4		Loyadih(179)	149.2	76	16.8	12.768	63.232	83.2
5		Gobradih(180)	100	60	40	24	36	60
6		Dighi(181)	537.6	360	44.52	160.272	199.728	55.48
7		Chirugora(201)	226.8	120	52.32	62.784	57.216	47.68
8		Tamakhun(196)	239.2	200	42.3	84.6	115.4	57.7
9	Kumari	Khariduara(176)	364.6	286	39.5	112.97	173.03	60.5
10		Boach(177)	145.97	87.5	30	26.25	61.25	70
11		Dhanda(261)	337.17	116	25	29	87	75
12		Pandra(245)	385.26	115	33.33	38.3295	76.6705	66.67
13		Rangamrta(250)	55.98	50	50	25	25	50
14	Akro- Barokdam	Khairaboni(224)	316.53	316.53 157 31.19 48.9683		108.0317	68.81	

15		Hatiramgora(225)	293.01	192.5	40.32	77.616	114.884	59.68
16		Jamira(226)	299.87	196.5	40.15	40.15 78.89475 11		59.85
17		Chhotokodam(239)	61.73	50	50	25	25	50
18		Joypur(238)	243.3	90	54.55	54.55 49.095		45.45
19						0	0	100
20	Bari – Jagda	Joregoria(25)	302.86	162.55	47.95	77.94273	84.60728	52.05
21		Dabra(165)	76.36	34.79	28.57	9.939503	24.8505	71.43
22		Pitidiri(167)	361.3	170.2	24.8	42.2096	127.9904	75.2
23		Joara(183)	150.57	95.47	33.33	31.82015	63.64985	66.67
24		Poradih(188)	613.61	284	34.67	98.4628	185.5372	65.33
25		Patrapahari(192)	383.21	274.5	30.04	82.4598	192.0402	69.96
26		Jagda(191)	268.58	168.16	24.21	40.71154 127.4485		75.79

#### **RAGHUNATHPUR-I BLOCK**

SI. No.	G.P	Mouza &	Geographica I Area(ha)	Cultiviabl e area (ha)	% of Coverag e	Coverag e area (Ha)	Affectate d area(Ha)	% Affectate d area
1	Babugram	Selata(81)	120.55	107	45.88	49.0916	57.9084	54.12
2		Churmi(88)	273.66	190	42.75	81.225	108.775	57.25
3		Kasad(89)	19	16	46.15	7.384	8.616	53.85
4		Barmesia(97)	72.2	67	41.5	27.805	39.195	58.5
5		Rangamati(100)	174.37	132	42.15	55.638	76.362	57.85
6		Namdih(105)	82.24	57	42	23.94	33.06	58
7		Gobindapur(115)	) 103.23 72 43.64		31.4208	40.5792	56.36	
8		Nandha(118)	68.92	63	43.14	27.1782	35.8218	56.86
9	Arrah	Harka(174)	46.42	13.13	46.15	6.059495	7.070505	53.85
10		Arrah(59)	1395.27	465.1	59.5	276.7345	188.3655	40.5



# CHILD RISK & IMPACT ANALYSIS

## **DISTRICT: PURULIA,**

# An INITIATIVE OF

# DISASTER MANAGEMENT & CIVIL DEFENCE DEPARTMENT, Government Of West Bengal

UNICEF

Facilitated by

UJJIBAN 03

### TABLE OF CONTENTS

Executive Summary	34
Health	34
Preparedness	34
Response	34
Recovery & Mitigation	35
Nutrition	35
Preparedness	35
Response	35
Recovery & Mitigation	35
Education	36
Preparedness	36
Response	36
Recovery & Mitigation	36
WASH	37
Preparedness	37
Response	37
Child Protection	38
Preparedness	38
Mitigation	38
Chapter I: Introduction	39
The history of impact of disaster on children in the Puruliya district in West Bengal	39
Chapter 2: Demographic and Socioeconomic Profile	42
Degree of social exclusion	43
Inequity in basic indicators	44
Chapter 3: Sector specific Risk & Impact Analysis: Health	46
Context of child health outcomes - associated risks due to gaps in health status	46
Antenatal care	47
Institutional birth	47
Immunization	48
Childhood morbidity and treatment seeking of children	49
Bottlenecks in child centered services in Sub Centres due to excessive heat wave primary data analysis	
Analysis of Semi Structured Interviews at District level	52
Chief Medical Officer I, Health	52

Analysis of Block Level In Depth Interviews	53
Block Medical Officer, Health: Purulia II CD Block	53
Block Medical Officer, Health: Jhalda I CD Block	53
Chapter 4: Sector specific Risk & Impact Analysis: Nutrition	55
District Context on child nutritional outcomes - associated risks due to gaps in Nu achievements	
Macronutrient Deficiency	55
Risk of Malnutrition among children in Vulnerable blocks of Purulia district	55
Micronutrient Deficiency	57
Bottlenecks in service delivery of AWCs due to extreme hot weather - Block level analysis	•
Analysis of Semi Structured Interview at District level	60
District Programme Officer, Integrated Child Development Services	60
Analysis of In depth Interviews at Block Level	61
Child Development Project Officer: Purulia II CD Block	61
Child Development Project Officer: Jhalda I CD Block	62
Chapter 5: Sector specific Risk & Impact Analysis: Education	64
Context of child educational outcomes - associated risks due to gaps in Education	nal status 64
School availability	64
Gap in Enrolment	65
Gap in Service Availability	66
Bottlenecks in regular services in schools due to exposure to extreme weather - E	
Analysis of District level Semi Structured Interview	69
District Inspector, School Education Department	69
Analysis of In depth Interviews at Block Level	70
Sub Inspector, School Education Department: Purulia II CD Block	70
Sub Inspector, School Education Department: Jhalda I CD Block	71
Chapter 6: Sector specific Risk & Impact Analysis: WASH	72
Context of associated risks to children due to gaps in access to WASH facilities	72
Gap in accessibility	72
access to improved water source and sanitation in CD blocks in Purulia district	73
Bottlenecks in access to water source and toilet in service delivery points - the ir Analysis of Block level Primary data	-
Analysis of District Level Semi-Structured Interview	77
Executive Engineer, Public Health Engineering Department	77
Analysis of Block Level In Depth Interviews	77
Rural Water Supply: Purulia II CD Block	77

PHE Officer: Jhalda I CD Block	78
Chapter 7: Sector specific Risk & Impact Analysis: Child Protection	79
Context of child protection outcomes - associated risks due to gaps in child prote	ection issues
Birth Registration	
Gap in child security	
Bottleneck in service delivery to ensure child protection during and after exposu weather- Analysis of Block level primary data to assess the impact on service del	
Analysis of District Level Semi-Structured Interviews	81
District Child Protection Officer: Integrated Child Protection Service	81
Analysis of Block Level In Depth Interviews	82
Block Welfare: Purulia II CD Block	82
Block Welfare Officer: Jhalda I CD Block	82
Chapter 8: Loss and Damage Analysis	84
At Block Level in the study area	84
Sector Specific Loss and Impact of disaster like situation	88
Health	88
Nutrition	88
Education	89
Child Protection	90
Chapter 9: KAP in Child Centred Disaster Risk Reduction: Community Level	92
Chapter 10: Recommendations: Preparedness, Response & Mitigation	94
District Disaster Management Department & Civil defence	94
OC - DM&CD	94
District Disaster Management Officer, DM&CD	94
Health	95
Chief Medical Officer Health	95
Block Medical Officer Health: Purulia II CD Block	95
Block Medical Officer Health: Jhalda I CD Block	96
Nutrition	96
District Programme Officer, Integrated Child Development Service	96
Child Development Project officer, Puruliia II CD Block	97
Child Development Project officer, Jhalda I CD Block	98
Education	
District Inspector, School Education Department	99
Sub Inspector, School: Purulia II CD Block	99
Sub Inspector, School: Ihalda I CD Block	100

V	VASH	100
	Executive Engineer, Public Health Engineering Department	100
	Rural Water Supply: Purulia II CD Block	101
	PHE Junior Engineer: Jhalda I CD Block	101
C	Child Protection	102
	District Child Protection Officer, Integrated Child Protection Scheme	102
	Block Welfare: Purulia II CD Block	103
	Block Welfare: Jhalda I CD Block	103
Ref	erence	104

#### **EXECUTIVE SUMMARY**

Purulia district mostly experiences extreme hot summer when excessive heat wave is a common phenomenon. Children living in areas with water scarcity are mostly exposed to risk of poor health, nutrition, cognitive development and child protection related issues. Among them children belonging to poor families, excluded families suffer the most. Child Centred DRR is an initiative to make the sectors - providing child centric services - risk informed to reduce the likelihood of further increase in child specific deprivations in those areas.

Child Risk and Impact Analysis is an initiative of Department of Disaster Management & Civil Defence and UNICEF - conducted by Ujjiban 03, technical partner of UNICEF - to assess the risks faced by children due to disaster and factors increasing the risk of survival, development, protection and participation related deprivations.

The CRIA assessment conducted inception workshops, discussions and meets at district, block, GP and community level to explore the needs to be ensured for making the child centric services risk informed. From District Disaster management Plan it has been found that twenty blocks are vulnerable with respect to the exposure to heat and impact of extreme weather.

The CRIA assessment suggests

#### HEALTH

#### PREPAREDNESS

- GIS mapping of SHCs and PHCs are to be done linking with service uptake data in respective centres as well as data on source of drinking water.
- 4 to 5 Trainings for supervisors, ANM and ASHA workers are to be arranged starting from most vulnerable block. Training sessions are to be preceded by District and Block level orientation workshops.
- Ensure supply of sanitary napkings through installation of vending machine.
- 4 to 5 Social and Behaviour Change programmes are to be conducted starting from vulnerable communities of most vulnerable block. Mothers and other women are to be targeted.
- The programmes are to be followed by monitoring and feedback sessions and reporting to assess the impact and effectiveness. Accordingly action plans are to be modified.
- More discussions are to be arranged through health and disaster management department to increase awareness within community regarding childcare in summer season.
- Vending machines for sanitary napkins are to be installed in centres and schools.

#### RESPONSE

- Children are to be taken out early in the morning and are to go back before afternoon.
- Care during pregnancy like adequate consumption of fluid with proper diet is to be ensured during dry summer.

- Any health emergency at village level is to be communicated to PHC or BPHC level as per need arranging handholding support for ASHA workers and in support of WSHG.
- Ambulance is to be arranged for the BPHC and 2 PHCs for providing emergency service during disaster like situation and linking with other routine services.

#### **RECOVERY & MITIGATION**

- Sub health centre running in rented or damaged buildings are to be repaired and made disaster resilient.
- Source of drinking water within/near centre are to be monitored by WSHG along with PHE personnel to ensure proper quality and quantity.
- Repairing of houses which are damaged due to heat wave will help to reduce common childhood illness during rainy season.

#### **NUTRITION**

#### **PREPAREDNESS**

- 2 to 3 ponds are to be constructed to store water for summer. It can be linked with MGNREGA- to provide regular service at anganwadi center and to ensure water use after defecation and hand washing.
- AWW and AWH are to be trained on the actions on sector specific preparedness, response and mitigation
  plan with practical solutions. In a year minimum 4 training programmes are to be conducted in each
  vulnerable block followed by feedback sessions to assess the effectiveness.
- Rain water harvesting will help to store water for summer.
- Tube wells are to be mapped with location of AWCs to avoid water scarcity during summer. Before summer season tube well construction near AWCs is to be ensured.
- 4 to 5 awareness programmes are to be arranged covering girls, women within the community to sensitise them on how to raise voice to ensure childcare. Blocks with lower level of female literacy rate are to be targeted differently. More emphasis on infotainment activities are to be given.

#### **RESPONSE**

- If cooking gets hampered due to water scarcity during summer, dry foods like cake, snacks, biscuits, sweets are to be served.
- SNP is to be cooked in nearby household/ school/ shelter where tube well is functional within premise. WSHG may help anganwadi workers if staffs fail to reach the centre on time due to weather condition or there is staff shortage.

#### RECOVERY & MITIGATION

• If tube wells were not available before (within premise of AWCs) then based on GIS maps on AWC location, nature of landscape new tube wells are to be constructed and made available immediately after disaster like situation.

- AWC specific water reservoirs are to be created.
- AWCs running in own buildings require repairing where the buildings are very old and are to be made disaster resilient.
- Alternative livelihood opportunities are to be arranged for inhabitants in the block to prevent migration.
- Number of buses is to be increased to travel to remote GPs to run services smoothly in scheduled time and every day. Otherwise, AWWs and AWHs are to be complemented with additional staff so that they can help AWWs to fetch water, repair roofs during heat wave and provide other required handholding supports to ensure service.

#### **EDUCATION**

#### PREPAREDNESS

- Remedial teaching for backward students is to be arranged routine may be arranged accordingly.
- Motivational camps may be arranged to motivate teachers to take additional classes / special classes / remedial teaching.
- Before summer tube well / source of drinking water are to be identified through mapping with the help of PHE and P&RDD.
- Each school is to provide with one improved drinking water source to prevent water scarcity during summer.
- Water sources are to be repaired and made functional if any source is not working within premise.

#### RESPONSE

- During heat wave, school hours are to be shifted in morning shift and regular attendance of students is to be ensured through Mother Teacher Association / parents' meetings.
- Adequate supply of water is to be ensured beforehand so that children do not get dehydrated.

#### **RECOVERY & MITIGATION**

- After summer special classes are to be arranged. Participating teachers are to be rewarded by the SMC/VEC/SLMC.
- Duration of additional classes is to be increased to make up the loss and complete syllabus given varying degree of capacity among students.
- Special focus is to be given for students belonging to poor and marginalised communities.

#### **PREPAREDNESS**

- Tube wells are to be made available based on <u>population density and child population</u> of the Block.
- <u>Assessment</u> is to be done each year to find nearby points to construct tube wells if one community is deprived of tube well due to hard rocky surface of the land area. For example if in a 200 mt. radius they find hard rock base, the radius is to be increased to find the proper place.
- Minimum 4 to 5 Awareness programmes in a year are to be arranged starting from communities of most vulnerable GPs of most vulnerable block. Vulnerable with respect to concentration of marginalised community, lower literacy rate and higher percentage of child population coupled with likelihood of heat wave, cyclone, and other natural disaster.
- These programmes are to be preceded by <u>District</u> and <u>Block</u> level orientation workshops for PHE officers and VHSNC members.
- KAP assessment is to be conducted pre-post awareness campaigning with more focus on <u>SC-ST concentrated</u>
  Blocks and low literacy rate.
- Pond water and unprotected well water are to be tested and accordingly disinfected before summer. 1
   water reservoir is to be created to store water per GP in vulnerable blocks.
- Establishment of fluoride removal plant per vulnerable block is to be initiated.
- A <u>common network</u> is to be created after mapping of each and every drinking water source using GIS technique. Child specific service delivery related uptake and availability covering Sub Centre, Anganwadi Centre, School, VLCPC are to be merged with it.

#### RESPONSE

- Big drums are to be filled with water from far away water sources and are to be reached SHCs, AWCs and Schools by help of local civil volunteers.
- Water is to be stored for use after defecation and hand washing before cooking and eating.
- Adequate supply of hand sanitizer is to be ensured in schools and centres to use during water scarcity.

#### CHILD PROTECTION

#### **PREPAREDNESS**

- Children are to be made aware through arrangement of regular school specific programmes. Each GP is to be targeted with 4 to 5 awareness sessions covering all the schools every year during different times of the year. With more focus on SC-ST concentrated Blocks.
- Linking with DDU-GKY and PMKVY is to be initiated at school level. Students of senior section are to be provided with technical and skill education. 4 to 5 courses are to be started with proper coordination for employability options.
- The group composition is to be based on Child Sex Ratio of the Block -
- 1. Child Sex Ratio low => More boys are to be included in training group and vice versa.
- Regular interaction meeting between community members and VLCPC members are to be organized to build relationship with VLCPC workers. WSHG members can be engaged to accelerate the process.
- New members are to be recruited in VLCPCs to overcome staff shortage. Some of them can be WSHG members.

#### **MITIGATION**

- 2 VLCPC members and 2 WSHG members per 10 schools are to be engaged to track if any child was absent / excluded from the training.
- Frontline workers are to be tagged to all children and they are to maintain database on different violence on children and monitor to know how to mitigate what actions are to be taken.

Child Centered Disaster Risk Reduction is an initiative of Department for Disaster Management and Civil Defence, Government of West Bengal and UNICEF Kolkata to make five sectoral programmes risk adjusted in order to reduce the vulnerabilities and exposure to hazards and strengthening the capacity of the service delivery system to combat the conditions with proper preparedness, response, recovery and mitigation steps. The crucial steps towards implementation of child centered DRR include -

- 1. Child Risk and Impact Analysis and incorporation in DDMP
- 2. Risk Informed Gram Panchayat Development Plan preparation
- 3. Nutrition in Emergency programme
- 4. Child Protection in Emergency programme
- 5. Creation and strengthening of district inter agency group.

The decision was taken to incorporate the recommendations for risk informed programming in district level disaster management plan (DDMP) through child risk & impact analysis to ensure smooth service delivery of different flagship programmes through prevention, response, recovery and mitigation. This would be initiated after contextual analysis of the current situation in the respective district. Incorporation of district specific Child Risk & Impact Analysis (CRIA) in DDMPs will help the disaster management department and other line departments in optimal allocation of resources in relevant sectors.

# THE HISTORY OF IMPACT OF DISASTER ON CHILDREN IN THE PURULIYA DISTRICT IN WEST BENGAL

One study on impact of natural disaster in districts of West Bengal concluded that their houses and means of livelihood, agricultural land, poultry and shops. Since people needs special attention, policy and programmes should ensure the same civic other citizens in other parts of the state including education, health, food and social (Das et al. 2017). Climate change has contribution on changing pattern of rainfall temperature.



the
victims lose
including
these

rights as enjoy, protection significant and

Chart 4: Pattern of rainfall in last 100 years in the Puruliya district<sup>1</sup>

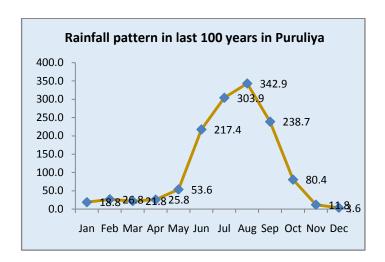
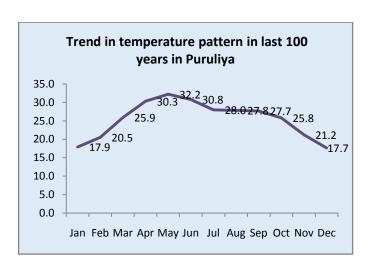


Chart 5: Pattern of temperature in last 100 years in the Puruliya district<sup>2</sup>



Another study mentioned that proper rationing of water use, watershed management, and improvement in cropping patter with innovative technology can be included in disaster management plan to reduce the food scarcity in drought prone area (Gupta et al. 2011). One study have used Markov chain models to evaluate probabilities of getting a sequence of wet and dry weeks during South-West monsoon period in Puruliya. An index based on the parameters of this model has been used to indicate the extent of drought-proneness which is useful to agricultural planners in identifying the areas where agricultural development should be focused as a long term drought mitigation strategy (Banik et al. 2002).

<sup>1</sup> http://sdwebx.worldbank.org/climateportal/index.cfm?page=country\_historical\_climate&ThisCCode=IND

<sup>&</sup>lt;sup>2</sup> http://sdwebx.worldbank.org/climateportal/index.cfm?page=country\_historical\_climate&ThisCCode=IND

Water scarcity is one of the most important concerns as water is the central object in all kinds of developmental activities. It is essential for all socio-economic development and for maintaining a healthy ecosystem. Reduction of water scarcity is prime goal in Puruliya which is one of the most backward districts of West Bengal in terms of economic and human development. Water scarcity is a regular risk for the people of Puruliya which has great negative impacts on development. The study explored the causes of water scarcity and found the impact of drought as the main cause and suggested for strengthening of water resource management planning of the district (Haldar and Saha 2015).

In West Bengal, drought is a frequent natural calamity in the districts of Paschim Medinipur, Bankura, Puruliya and Birbhum. These districts are affected by drought at frequent intervals, mainly due to deficient rainfall and adverse soil conditions. About 11,594 square kilometer areas in thirty-six numbers of blocks under these four districts in West Bengal have been declared as drought prone areas. As the authors suggested, water management strategies can be adapted in different ways like water conservation, recharging underground aquifers, expansion of irrigation facilities, micro irrigation technique, effective dealing with drought, public awareness on the mitigation strategies etc. in the drought prone areas-of-West-Bengal (Halder and Sadhukhhan 2012).

#### CHAPTER 2: DEMOGRAPHIC AND SOCIOECONOMIC PROFILE

Table 2.1: Population distribution in vulnerable blocks in Purulia district by residence

In this section different facets of demographic characteristics of Purulia have been discussed. According to Census 2011, Purulia district has total population 2930115 out of which 2556801 persons or 87.3 per cent population live in rural areas and 373314 persons or 12.7 per cent population live in urban areas. (Census 2011).

District and CD Blocks	Rural	Urban	Total	% of Rural	% of Urban
Purulia	2556801	373314	2930115	87.3	12.7
Arsha	154736	-	154736	100.0	
Baghmundi	135579	-	135579	100.0	
Balarampur	113519	24431	137950	82.3	17.7
Bandowan	88936	5993	94929	93.7	6.3
Barabazar	162508	8056	170564	95.3	4.7
Hura	143575	-	143575	100.0	
Jaypur	123090	10259	133349	92.3	7.7
Jhalda-I	127759	9384	137143	93.2	6.8
Jhalda-II	135814	12342	148156	91.7	8.3
Kashipur	174325	25758	200083	87.1	12.9
Manbazar-I	144550	9521	154071	93.8	6.2
Manbazar-II	97164	-	97164	100.0	
Neturia	83137	18290	101427	82.0	18.0
Para	167997	32624	200621	83.7	16.3
Puncha	123855	-	123855	100.0	
Purulia-I	145494	5694	151188	96.2	3.8
Purulia-II	157862	11626	169488	93.1	6.9
Raghunathpur- I	96488	21272	117760	81.9	18.1
Raghunathpur- II	107827	5963	113790	94.8	5.2
Santuri	72586	5929	78515	92.4	7.6

Census of India, 2011

Table 2.2: Population Density, Sex Ratio, Child Sex Ratio in vulnerable blocks in Purulia district

District and	Population	Sex	Child Sex
CD Blocks	Density	Ratio	Ratio
Purulia	468	957	953
Arsha	413	974	987
Baghmundi	317	950	951
Balarampur	458	943	935
Barabazar	408	986	961
Jaypur	579	975	951
Jhalda-I	435	970	954
Jhalda-II	577	933	934
Bandowan	270	957	944
Hura	376	964	971
Manbazar-I	404	965	939
Manbazar-II	340	974	941
Puncha	375	985	949
Purulia-I	537	939	963
Purulia-II	547	942	960
Kashipur	443	976	969
Neturia	498	942	932
Para	642	960	960
Raghunathpur-I	583	934	959
Raghunathpur-	576	943	
II			949
Santuri	437	959	965

The population density in Purulia district is 468 persons per sq. km. in 2011. Among CD blocks, Bandowan has the lowest population density 270 persons per sq. Km. and Para shows highest population density 642 persons per sq. Km. Sex ratio in Purulia district is 957 which is highest in Barabazar CD block (986) and lowest in Jhalda II CD block (933). Child sex ratio is 953 in the district and among blocks it is highest in Arsha (987) and lowest in Neturia (932).

Census of India, 2011

DEGREE OF SOCIAL EXCLUSION

Table 2.3: SC-ST Population in the most vulnerable blocks in Purulia district

District and CD Blocks	SC	ST	Total	% of SC	% of ST
Purulia	515747	570036	2930115	17.60	19.45
Arsha	29363	32454	154736	18.98	20.97
Baghmundi	25751	28461	135579	18.99	20.99
Balarampur	26551	29346	137950	19.25	21.27
Bandwan	18050	19950	94929	19.01	21.02
Barabazar	32466	35884	170564	19.03	21.04
Hura	27251	30119	143575	18.98	20.98
Jaypur	25316	27980	133349	18.98	20.98
Jhalda-I	26130	28880	137143	19.05	21.06
Jhalda-II	28128	31089	148156	18.99	20.98
Kashipur	37987	41986	200083	18.99	20.98
Manbazar-I	29257	32337	154071	18.99	20.99
Manbazar-II	18459	20402	97164	19.00	21.00

Neturia	19365	21404	101427	19.09	21.10
Para	38118	42130	200621	19.00	21.00
Puncha	23516	25991	123855	18.99	20.99
Purulia-I	28730	31754	151188	19.00	21.00
Purulia-II	31216	34502	169488	18.42	20.36
Raghunathpur-	22515	24885	117760	19.12	21.13
Raghunathpur- II	21600	23874	113790	18.98	20.98
Santuri	14908	16477	78515	18.99	20.99

Purulia district shows 18 per cent of SC population and 19 per cent of ST population. More or less all the blocks depict 1 out of five persons belong to socially excluded communities.

Census of India, 2011

Table 2.4: Literacy Rate and Workforce Participation Rate in blocks in Purulia district

District and CD Blocks	Literacy Rate	Workforce Participation Rate
Purulia	56.5	94.2
Arsha	46.7	99.9
Baghmundi	49.1	100.0
Balarampur	53.2	101.3
Bandwan	54.5	100.1
Barabazar	56.1	100.2
Hura	61.4	99.9
Jaypur	49.7	99.9
Jhalda-I	57.6	100.3
Jhalda-II	46.8	99.9
Kashipur	63.1	99.9
Manbazar-I	56.8	99.9
Manbazar-II	53.8	100.0
Neturia	57.4	100.5
Para	57.3	100.0
Puncha	60.5	99.9
Purulia-I	56.4	100.0
Purulia-II	53.6	96.9
Raghunathpur-I	60.6	100.6
Raghunathpur-II	59.1	99.9
Santuri	56.2	99.9

Literacy rate in Purulia district reflects worse picture of educational achievement among the population. However workforce participation rate shows better picture though most of the workers are engaged in informal sector and substantial fraction includes small and marginal workers. Among blocks, Arsha and Jhalda II show lowest level of literacy (47 per cent) while Kashipur shows comparatively higher level of achievement (63 per cent).

Census of India, 2011

#### INEQUITY IN BASIC INDICATORS

Apart from basic demographic indicators, the table below is showing demographic indicators specific to population and households as per National Family Health Survey 2015 - 16 covering community and household level information.

Table 2.5: Demographic profile of the Purulia district with respect to health, nutrition, WASH and child protection indicators

Indicators	NFHS-4 (2015-16)		
Population and Household Profile	Rural	Total	
Population (female) age 6 years and above who ever attended school	53.5	53.6	
Population below age 15 years	28.1	28.8	
Sex ratio of the total population (females per 1,000 males)	985	983	
Sex ratio at birth for children born in the last five years (females per 1,000 males)	1,079	998	
Children under age 5 years whose birth was registered (%)	95.4	95.9	
Households with electricity	78.1	79.3	
Households with an improved drinking-water source	81.0	82.7	
Households using improved sanitation facility	8.2	12.3	
Households using clean fuel for cooking	5.0	6.8	
Households using iodized salt	92.7	93.9	
Households with any usual member covered by a health scheme or	28.9	27.1	
health insurance			
Women who are literate	48.9	48.1	
Men who are literate	77.6	76.5	
Women with 10 or more years of schooling	14.8	15.7	
Early Marriage and Early Child bearing			
Women age 20-24 years married before age 18 years	42.4	43.7	
Women age 15-19 years who were already mothers or pregnant at the time of the survey	22.2	21.7	

Source: NFHS 4, 2015 - 16

In Purulia district, the population of children below 15 years is about one-third of total population. The literacy rate among women is 48 per cent and much lower than state level. Here 54 per cent of the female population reported that they (6 years and above) ever attended school. However 16 per cent women have completed 10 years of schooling. Sex ratio of women is 983 whereas it is 998 for children. Percentage of children under the age of five whose birth was registered is above 96 per cent. Near about 80 per cent household has electric connection, 83 per cent households have access to improved drinking water source. However accesses to clean fuel for cooking, improved sanitation facility, health insurance are still poor. Prevalence of early marriage is higher than the state level and one-fifth of them are counted under early child bearing.

Table 2.6: Background profile of the frontline workers in Purulia study area

	Purulia	Purulia II	Jhalda I
Religion			
Hindu	98.6	97.4	100.0
Muslim	1.4	2.6	0.0
Caste			
General	53.1	59.7	45.6

OBC	25.5	13.0	39.7
SC	15.9	18.2	13.2
ST	5.5	9.1	1.5

Source: Primary data, CRIA, 2018

Frontline workers interviewed comprised of ANM, ASHA, AWW, school teacher and SMC members, VLCPC and VHSNC members. Almost 99 per cent of them are from Hindu background and is higher in Jhalda I. In relation to ethnicity, most of them belong to general caste.

Table 2.7: Basic infrastructure in the sub centre, anganwadi centre and schools in the Purulia study area

	Purulia	Purulia II	Jhalda I	PRI	ANM	ASHA	AWW	ST/ SMC
Source of drinking wat	er							
Open Well	42.1	23.4	63.2	19.1	55.6	57.1	42.1	23.1
Tube well	56.6	75.3	35.3	81.0	44.4	42.9	55.3	73.1
Tap/deep tube well	1.4	1.3	1.5	0.0	0.0	0.0	2.6	3.9
Source of cooking fuel								
Wood	89.7	93.5	85.3	81.0	94.4	100.0	84.2	84.6
Cow dung cakes	2.1	3.9	0.0	9.5	0.0	0.0	2.6	0.0
Coal/coke/lignite	7.6	1.3	14.7	9.5	5.6	0.0	10.5	15.4
Kerosene	0.7	1.3	0.0	0.0	0.0	0.0	2.6	0.0
Electric connection								
Yes	74.5	68.8	80.9	100.0	77.8	94.3	23.7	96.2
No	25.5	31.2	19.1	0.0	22.2	5.7	76.3	3.9
Sanitary latrine								
Yes	62.1	67.5	55.9	81.0	72.2	68.6	26.3	84.6
Yes, but don't use	11.0	10.4	11.8	9.5	11.1	8.6	10.5	15.4
No	26.9	22.1	32.4	9.5	16.7	22.9	63.2	0.0

Source: Primary data, CRIA, 2018

Among different service delivery points, 81 per cent of panchayat office and 73 per cent schools have tube well as drinking water source. However 42 per cent of anganwadi centres use water from open wells. Among the sub centres, 56 per cent have tube wells Maximum centres and schools use wood as cooking fuel creating the risk of respiratory problems for children who are exposed to that. Almost 84 per cent of the centres and 85 per cent of the schools use wood to cook SNP and Mid Day Meal. Only 24 per cent of AWCs have electricity. All the panchayat offices have electric connection. However 79 per cent of the sub centres and 96 per cent schools have electric connection. In the study area, 62 per cent of the service delivery points including hospitals, schools and centres have toilet facility. Among them condition of AWCs are worse having toilet in only 26 per cent centers.

#### CHAPTER 3: SECTOR SPECIFIC RISK & IMPACT ANALYSIS: HEALTH

CONTEXT OF CHILD HEALTH OUTCOMES - ASSOCIATED RISKS DUE TO GAPS IN HEALTH STATUS

#### ANTENATAL CARE

Among women with a live birth in the five years preceding the survey, percentage who received different types of antenatal care (ANC) during the pregnancy for their most recent live birth, and among women with registered pregnancies, percentage who received a Mother and Child Protection Card (MCP Card) are depicted in the table below.

Table 3.1: Antenatal care uptake in Purulia and West Bengal

	Percentage who had four or more ANC visits	Percentage with an ANC visit in the first trimester of pregnancy	Percentage who took IFA for at least 100 days	Percentage who received two or more TT injections during the pregnancy	Percentage who had full antenatal care	Percentage of women who received an MCP Card
Purulia	68.6	52.4	34.8	79.0	23.5	100.0
West Bengal	76.5	54.9	28	91.4	21.8	97.4

Source: NFHS 4, 2015 - 16

Percentage of respondents who had four or more ANC visits is 69 per cent which is substantially lower than the state level. Furthermore, all of them are not visiting from first trimester and full ANC<sup>3</sup> uptake is very low (24 per cent) - indicating gaps in uptake of full service.

#### **INSTITUTIONAL BIRTH**

Table 3.2: Status of institutional birth in Purulia and West Bengal

Percen	Percent	Percen	Percentag	Percent	Numbe	Percentage
tage of	age of	tage of	e of	age of	r of	of women
births	births	births	deliveries	births	births	with a
deliver	delivere	deliver	assisted	delivere		postnatal
ed in a	d in a	ed in a	by health	d by		check <sup>5</sup>

<sup>&</sup>lt;sup>3</sup> Full antenatal care includes having received at least four antenatal care visits, having received at least one TT injection, and having taken IFA tablets or syrup for 100 or more days.

	public health facility	private health facility	health facility	personnel 4	caesarea n section		within two days of delivery
Purulia	68.2	4.7	72.9	79.9	6.2	208	60.4
West Bengal	56.6	18.6	75.2	81.6	23.8	5,252	63.7

Source: NFHS 4, 2015 - 16

Percentage of live births in the five years preceding the survey delivered in a public facility is more than 90 per cent of total institutional birth and delivery in a health facility covering both private and public is more than 70 per cent. Percentage delivered with assistance from health personnel is much higher and percentage delivered by caesarean section is comparatively low. Percentage of women who had a live birth in the five years preceding the survey who received a postnatal check within two days of birth for their most recent birth, is almost 60 per cent.

Table 3.3: Percentage of institutional birth by demography, uptake of ANC, and access to JSY in Purulia and West Bengal

	Percentage of births of birth order 3 or more	Percentage of last births receiving antenatal care from doctor	Percentage of last births receiving antenatal care from ANM/nurse/ midwife/LHV	Percentage of births in a health facility receiving financial assistance under JSY
Purulia	23.2	68.9	61.2	38.6
West Bengal	16.9	78.9	46.5	28.7

NFHS 4, 2015 - 16

Percentage of births during the three years preceding the survey of birth order 3 or more is almost one-fourth of total birth in that period which is higher in Purulia compared to West Bengal. Percentage of women who had a live birth in the five years preceding the survey, 69 per cent of them received antenatal care (ANC) from doctor. Among the same population subgroup, 61 per cent received from ANM/nurse/midwife/ LHV during pregnancy for the most recent live birth - higher in the district compared to the state. Among women who had a live birth in the five years preceding the survey for the most recent birth that was delivered in a health facility, 39 per cent of them received financial assistance under *Janani Suraksha Yojana* (JSY) which is higher in Purulia compared to West Bengal.

#### **IMMUNIZATION**

<sup>&</sup>lt;sup>5</sup> Postnatal checks are checks on the woman's health within 42 days of the birth

<sup>&</sup>lt;sup>4</sup> Health personnel include doctor, auxiliary nurse midwife, nurse, midwife, lady health visitor, and other health personnel. If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this table.

Table 3.5: Selected vaccinations in Purulia and West Bengal

Percentage of children (12-23 months) who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report) is 87 per cent which is marginally higher than West Bengal. Percentage who received most vaccinations in a public health facility is 100 per cent which is higher than the state level.

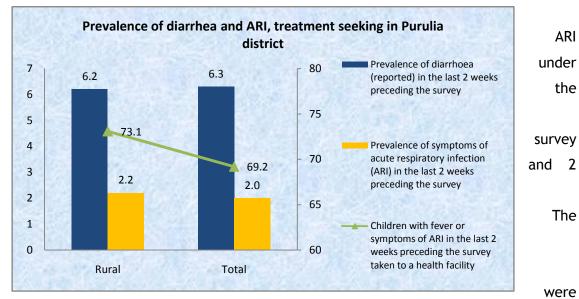
	All basic vaccinations	No vaccinations	Vaccinations in a public health facility
Purulia	87.4	2.5	100.0
West Bengal	84.4	2.0	96.6

NFHS 4, 2015 - 16

#### CHILDHOOD MORBIDITY AND TREATMENT SEEKING OF CHILDREN

Chart 3.1: Prevalence of diarrhea and ARI, treatment seeking in Purulia district

Prevalence<sup>6</sup> of diarrhea and among children the age of 5 in last two weeks preceding the is 6 per cent per cent respectively. treatment seeking among children who



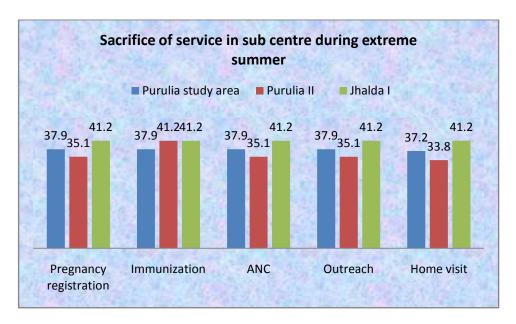
suffering from ARI is evident among 69 to 70 per cent of them.

# BOTTLENECKS IN CHILD CENTERED SERVICES IN SUB CENTRES DUE TO EXCESSIVE HEAT WAVE - BLOCK LEVEL PRIMARY DATA ANALYSIS

49

Chart 3.2: Sacrifice of health service by health workers during disaster in Purulia study area

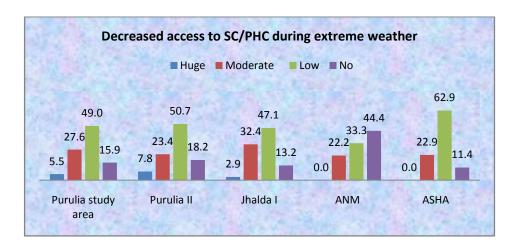
<sup>&</sup>lt;sup>6</sup> NFHS 4, 2015 – 16



Source: Primary Data, CRIA, 2018

During disaster health workers reported that different services like pregnancy registration, antenatal care, immunization, outreach service and home visit were sacrificed at varying degrees. Almost 38 percent to 41 per cent health workers sacrificed any of the above mentioned services which are quite substantial with respect to these essential services. Therefore the health risks among children increases with higher exposure to disaster. The impact on service delivery is higher in Jhalda I development block making children living in the block more vulnerable to worsening of health status.

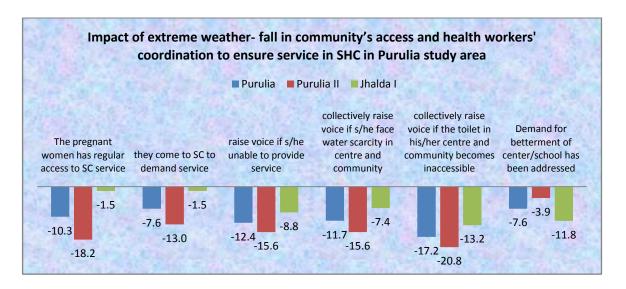
Chart 3.3: Impact of extreme weather - decreased access to health centre in Purulia study area



Source: Primary Data, CRIA, 2018

Child risk increases to moderate extent as accessibility to sub centers decreases by moderate degree in 28 per cent SHCc. However ANM and ASHA workers report that it was experienced by 22 out of 23 of them. Therefore health risks persist and aggravates with disaster - evident in both the blocks.

Chart 3.4: Impact of extreme weather - fall in community's access and health workers' coordination to ensure service in SHC in Purulia study area



Source: Primary Data, CRIA, 2018

The figure depicts the percentage fall in access to and ensuring of sub centre services during and after disaster compared to normal time in the study area. They reported that 10 percentage point fall was visible in regular access to SC services by pregnant women compared to normal time. Fall in overall demand for services was evident by 8 percentage point. However there is higher degree of fall in raising voice by health workers to ensure service individually or collectively during disaster (9 to 16 percentage points) compared to normal time. Fall in initiative is similar to higher with respect to

reducing water scarcity, repairing toilets or infrastructure (12 to 17 percentage point) during disaster compared to normal time.

111mpact of extreme weather- fall in capacity of service delivery in SHC 1.4 3.9 2.8 0.0 0.0 Hrylia Purulia II ■ Halda I 1.5 0.0 -0.7-1.3 -1.3-1.5 -2.6 -4.1-5.2 -14.7As required If ASHA refers Yes, convince Yes, talk to SHG Yes, talk to No Yes to mobilize panchayat to community community ensure service Community people come to Take action to ensure Sub Centre service ASHA worker access service from SubCentre accompany

Chart 3.5: Impact of disaster - fall in capacity of service delivery in the study area of Purulia

Source: Primary Data, CRIA, 2018

During and after disaster, treatment seeking for children reduces by 5 percentage point compared to normal time and fall is evident in Purulia II. However health seeking is ensured if ASHA worker is able to convince them. The situation is reverse in Jhalda I. Frontline worker's initiative to ensure services during disaster remains in moderate degree in terms of asking help from community members, SHG groups compared to normal time. Emergency services by ASHA workers like accompanying pregnant women to hospital for delivery also falls during disaster compared to normal time.

oregnant women and arrange transport for institutional delivery

#### ANALYSIS OF SEMI STRUCTURED INTERVIEWS AT DISTRICT LEVEL

#### CHIEF MEDICAL OFFICER I, HEALTH

During summer children fall ill due to excessive heat wave. They sometimes suffer from heatstroke. Sub centres keep ORS and other medicines ready to serve children in need. Unit wise they organize campaigns to aware people about how to remain safe during extreme hot weather.

#### Challenges

1. Water scarcity causes health problem. Health workers try their best to serve early morning during summer. Adequate ORS is stored beforehand.

- 2. Some of the GPs have only one tube well per 2 to 3 villages. Households wait in queue from 2 to 3 km distance to collect water.
- 3. Physical accessibility to commute every day to sub centre is difficult due to less availability of transport.
- 4. Building for accommodation of second ANM is not yet complete. Some of the centers are located remote areas, near river bank areas.
- 5. Integrated disease surveillance system maintains morbidity incidence data but is not linked with GIS.
- 6. Panchet to Raghunathpur piped water supply was started but not yet complete. Layer of groundwater falls below 700 to 800 ft. during summer.
- 7. Pond water gets dry and people practice hand washing, cleaning of clothes, utensils in pond water leading to water contamination.

### ANALYSIS OF BLOCK LEVEL IN DEPTH INTERVIEWS

### BLOCK MEDICAL OFFICER, HEALTH: PURULIA II CD BLOCK

BMOH mentioned that health department has created a team comprising pharmacist, nurse and doctors but so far the team has not participated in any response as they did not face any disaster.

IEC activities take place through ASHA, AWW and ANM during summer to prevent heat stroke, diarrhea, and vector borne disease - the major health risks arise during excessive heat waves. In addition to that, he gets help from medical officer, Public Health Nurse, nurse staffs during emergency. Hard to reach areas are manually mapped and villages are mapped as per the degree of vulnerability but no mapping using GIS technique is available. ANM, ASHA workers face communication difficulties who are placed in remote centres.

### BLOCK MEDICAL OFFICER, HEALTH: JHALDA I CD BLOCK

BMOH mentioned that heat wave continues from April to July. As per his words, a comprehensive plan to ensure smooth health service delivery is necessary during that period and in following months which should have an option for modification of its process and components. He also mentioned the challenges he face during service delivery.

- 1. Availability of manpower at BPHC, PHC and sub centre level is inadequate. 103 are posts are filled among 116 posts.
- 2. Exhaustion and stress from heat has maximum ill impact on newborn and children. They suffer from high temperature.
- 3. Pregnant women and lactating mothers suffer from dehydration. Breastfeeding of children get hampered.
- 4. Shortage of drinking water source leads to dependency on unprotected well or pond. Though households have toilets in their premise, they are not habituated to use toilets. Availability of water source at distant place is another reason for defecating near ponds.
- 5. Water scarcity and open defecation leads to water contamination and morbidity among children.
- 6. Food scarcity is evident because the area practices mono-cropping in agriculture and it is hampered during summer due to water shortage.
- 7. Prevalence is malnutrition is very high because lack of dietary diversity in feeding practice during weaning period of children.
- 8. Schools run in the morning during summer. However attendance remains low as they face extreme hot while returning home. It eventually leads to school dropout. Availability of medicine and vaccines is inadequate. Not supplied as per requirement instead of repeated requisitions.

### DISTRICT CONTEXT ON CHILD NUTRITIONAL OUTCOMES - ASSOCIATED RISKS DUE TO GAPS IN NUTRITIONAL ACHIEVEMENTS

### MACRONUTRIENT DEFICIENCY

### Table 4.1: Nutritional status of children by in Purulia district and West Bengal

Among last-born children in the past 2 years, percentage breastfed within one hour of birth is visible among 60 per cent in Purulia - 12 percentage points higher than the state value. Data on exclusive breastfeeding of youngest children under the age of 6 months is 51 per cent - 50 per cent gap in success of exclusive breastfeeding is prevailing. Percentage of children under age of five years classified as malnourished according to three anthropometric indices of nutritional status: height-forage, weight-for-height, and weight-for-age, show that stunting, wasting and underweight are substantially higher than the state level.

	Among last born children in the last 2 years percentage breastfed within one hour of birth	Percentage of children under 6 months exclusively breastfed	Height-for-age (Percentage below -2SD) (Stunted)	Weight-for- height (Percentage below -2SD) (Wasted)	Weight-for-age (Percentage below -2SD) (Underweight)
Purulia	59.9	50.7	45.5	34.6	58.2
West Bengal	47.7	52.3	32.5	20.3	31.5

Source: NFHS 4, 2015 - 16

## RISK OF MALNUTRITION AMONG CHILDREN IN VULNERABLE BLOCKS OF PURULIA DISTRICT

Table 4.2: Status of malnutrition and SNP coverage in CD blocks of Purulia district

		Moderately and Severely Underweight children among total children weighed by ICDS Project	Percentage of AWWs Providing SNP for 21+ days in a month
District	Purulia	17.0	99.5
Vulnerable	ARSHA	13.5	98.9
CD blocks	BAGMUNDI	15.9	99.0
	BALARAMPUR	14.0	100.0
	BANDWAN	19.4	100.0
	BARABAZAR	15.0	100.0
	HURA	13.4	100.0
	JHALDA-I	14.8	100.0

JHALDA-II	16.0	100.0
JOYPUR	13.2	100.0
KASHIPUR	12.3	100.0
MANBAZAR-I	15.7	100.0
MANBAZAR-II	18.3	100.0
NETURIA	16.1	98.2
PARA	26.4	100.0
PUNCHA	9.8	100.0
PURULIA-I	15.8	100.0
PURULIA-II	24.4	100.0
RAGHUNATHPUR-I	20.1	100.0
RAGHUNATHPUR-II	21.9	100.0
SANTURI	21.0	99.8

Source: ICDS MPR, November 2018

It is evident from ICDS MPR that moderate to severe underweight is higher in vulnerable blocks among which higher gaps are visible in Para, Raghunathpur I & II, Purulia II and Santuri. However, the coverage of child population under SNP service is higher ranging from 98 to 100 per cent but further assessment is needed to check the dietary diversity and frequency of feeding practiced within community during and after disaster.

Table 4.3: Status of ICDS infrastructure by ICDS projects in vulnerable blocks of Purulia district

		Percentage of AWC Operational by ICDS Project	Percentage of Supervisors in Position by ICDS Project	Percentage of AWWs in Position by ICDS Project	Percentage of AWHs in Position by ICDS Project
District	Purulia	97.6	24.8	90.8	87.6
Vulnerable	Arsha	97.7	20.0	89.2	96.4
CD blocks	Baghmundi	92.4	28.6	82.3	51.5
	Balarampur	98.6	55.6	87.2	89.6
	Bandwan	98.5	25.0	94.4	95.5
	Barabazar	98.3	25.0	92.9	93.3
	Hura	98.2	14.3	91.9	92.3
	Jaypur	97.4	22.2	93.7	62.4
	Jhalda-I	97.9	11.1	95.3	95.9
	Jhalda-II	97.1	25.0	93.7	60.9

Kashipur	99.0	21.4	87.2	91.8
Manbazar-I	97.8	27.3	92.6	86.1
Manbazar-II	97.5	20.0	94.0	94.0
Neturia	97.2	20.0	92.4	82.0
Para	98.2	8.3	81.2	93.1
Puncha	98.0	36.4	93.1	90.2
Purulia-I	95.9	50.0	91.8	90.2
Purulia-II	97.7	30.0	94.1	93.2
Raghunathpur-I	97.4	25.0	89.6	92.7
				93.4
Santuri	97.0	25.0	91.7	89.3
	Manbazar-I Manbazar-II Neturia Para Puncha Purulia-I Purulia-II Raghunathpur-I Raghunathpur-II	Manbazar-I       97.8         Manbazar-II       97.5         Neturia       97.2         Para       98.2         Puncha       98.0         Purulia-I       95.9         Purulia-II       97.7         Raghunathpur-I       97.4         Raghunathpur-II       98.2         Santuri       97.0	Manbazar-I       97.8       27.3         Manbazar-II       97.5       20.0         Neturia       97.2       20.0         Para       98.2       8.3         Puncha       98.0       36.4         Purulia-I       95.9       50.0         Purulia-II       97.7       30.0         Raghunathpur-I       97.4       25.0         Raghunathpur-II       98.2       20.0         Santuri       97.0       25.0	Manbazar-I       97.8       27.3       92.6         Manbazar-II       97.5       20.0       94.0         Neturia       97.2       20.0       92.4         Para       98.2       8.3       81.2         Puncha       98.0       36.4       93.1         Purulia-I       95.9       50.0       91.8         Purulia-II       97.7       30.0       94.1         Raghunathpur-I       97.4       25.0       89.6         Raghunathpur-II       98.2       20.0       91.2         Santuri       97.0       25.0       91.7

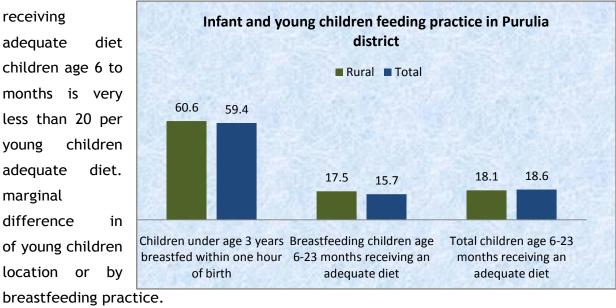
Source: ICDS MPR, November 2018

From above table it is evident that number of AWC operational ranges from 95 to 98 per cent. The crucial point is that the gap in mid level human resource crunch is very high except in Purulia I and Balarampur, indicating rapid filling of the positions is needed to strengthen liaisoning and coordination during disaster to ensure child centric ICDS services during that time.

Chart 4.1: Infant and young children feeding practice in Purulia district

Gap in initiation of breastfeeding is evident in rural area as well as in overall district. Gap in

receiving adequate diet children age 6 to months is very less than 20 per young children adequate diet. marginal difference in of young children location or



among

high

23

cent

receive

There is

feeding

by

MICRONUTRIENT DEFICIENCY

Table 4.4: Percentage of children age 6-59 months classified as having anaemia and percentage of women age 15-49 with anaemia and specific body mass index (BMI) levels in Purulia and West Bengal<sup>7</sup>

	Percentage of children having any anaemia (<11.0 g/dl)	Percentage of women having any anaemia (<12.0 g/dl)	Women with BMI <18.5 (total thin)
Purulia	66.8	80.0	47.5
West Bengal	54.2	62.4	21.3

Source: NFHS 4, 2015 - 16

Percentage of anemic children under the age of five is comparatively higher in Purulia compared to West Bengal indicating higher risk of children with respect to micronutrient deficiency in the district. Risk of women in respect of the same is also much higher in the district. Women's undernutrition level is more than double in the district compared to the state.

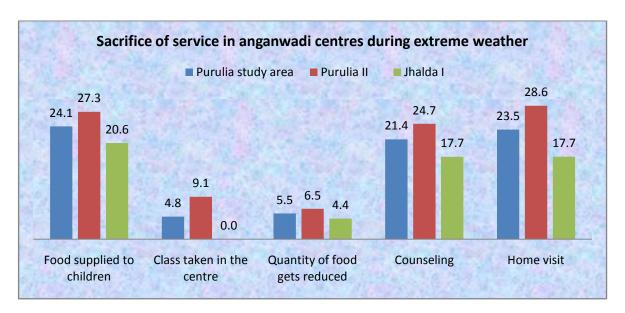
## BOTTLENECKS IN SERVICE DELIVERY OF AWCS DUE TO EXTREME HOT WEATHER - BLOCK LEVEL PRIMARY DATA ANALYSIS

Chart 4.2: ICDS Services sacrificed by anganwadi workers during extreme weather in Purulia study area

For pregnant women, the value is  $<11.0\ g/dl$ 

Excludes pregnant women and women with a birth in the preceding 2 months

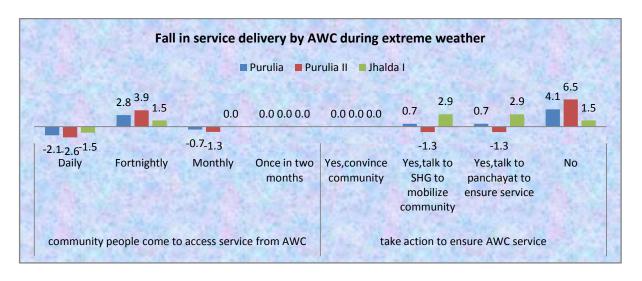
<sup>&</sup>lt;sup>7</sup> Note: Table is based on children/women who stayed in the household the night before the interview. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using the CDC formula (Centers for Disease Control (CDC). 1998. Haemoglobin levels shown in grams per decilitre (g/dl). The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m<sup>2</sup>).



Source: Primary Data, CRIA, 2018

During disaster in the study area, 24 per cent of them failed to provide SNP service which is higher in Purulia II (27 per cent) and lower in Jhalda I (21 per cent). Counseling service is also sacrificed by almost same pattern. Home visit was reduced by 24 per cent of the workers -higher in Purulia II (29 per cent) and lower in Jhalda I (18 per cent). Among the AWCs in the study area, 6 per cent reported that cooked food supply was reduced during disaster - 4 per cent AWWs reported the same in Jhalda I and 7 per cent reported in Purulia II.

Chart 4.3: Change in AWC service availability for children and women during extreme weather in Purulia study area

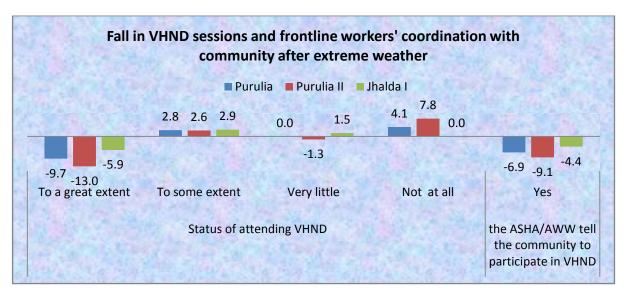


Source: Primary Data, CRIA, 2018

During and after disaster, children's daily access to AWC service falls while irregular access (in gap of 14-15 days) increases. At that time, coordination with community and others become difficult and

mainly reduced communication is reflected. The data also depicts that there is scope for increasing the role of SHG to help AWWs ensuring AWC service.

Chart 4.4: Impact on attending Village Health and Nutrition Days by women and children after disaster in Purulia study area



Source: Primary Data, CRIA, 2018

During normal time attending VHND happens to a great extent which falls during excessive heat waves (10 percentage points). Moderate level of attendance is evident during extreme weather. Home visit of ASHA/AWW (to guide mothers about attending VHND) falls by almost 7 percentage points. Fall in access to service is higher in Purulia II and comparatively lower in Jhalda I. Marginal attendance in VHND is almost equal in both the blocks.

### ANALYSIS OF SEMI STRUCTURED INTERVIEW AT DISTRICT LEVEL

### DISTRICT PROGRAMME OFFICER, INTEGRATED CHILD DEVELOPMENT SERVICES

Purulia is drought prone area with rocky surface. Groundwater level is very low and tube well construction becomes difficult. Block wise and GP wise monitoring is done by block and district officials in child development department.

- 1. Digestion problem occurs as the water is hard.
- 2. During extreme summer children do not come to collect food from center.
- 3. AWW and AWH travels to far away drinking sources to collect water.
- 4. ICDS center remains open during crisis situation but attendance gets reduced.
- 5. No training has been conducted with ICDS workers to manage crisis situation.

### CHILD DEVELOPMENT PROJECT OFFICER: PURULIA II CD BLOCK

CDPO in Purulia II block shared that heat wave is the major natural shock that inhabitants face. Heat wave starts from March to October having its effect on children. She said that due to water scarcity, cooking in centres is a major challenge. As mitigation strategy, during heat wave if AWC runs, it closes early. They ask community to send their children very early in the morning and closes before 11 to 12 noon. Mother's meetings also arranged early. She takes care of all the issues at ground level with handholding support from health workers.

Major help she and her workers receive from health department, block administration and civil society. In relation to water scarcity they ask help from block office, no coordination is practiced with PHE.

- 1. Centres fail to provide supplementary nutrition due to unavailability of water. In this block there are so many tube wells where water is not available.
- 2. The challenges are increasing with changing climate, especially water scarcity leading to crop failure. Water is managed from far away villages and agriculture also suffers as well due to unavailability of water.
- 3. Availability of adequate manpower to deliver uninterrupted service is an issue. To fetch water from distance places anganwadi worker has to give hours of time and during this time children are getting less service at the centre.
- 4. Fund for running the services in AWCs is not adequate. For example, if children need mat, bucket, utensils are inadequate. If requisition is made then fund becomes available at the end of the year i.e. after 6 to 8 months, then it is difficult to manage the situation.
- 5. Among 215 centres, 82 has own building others run in primary school, houses of anganwadi helper, community members. These AWCs face more problems like during rain; the rooms and utensils get dirty. During heat wave rooftop of centres running in kutcha houses moves away. The AWCs remain closed during that time.
- 6. Children suffer from diarrhoea due to water contamination. With limited amount of water households as well as AWWs try to prepare food with minimum water, they wash hands very little due to water scarcity.
- 7. Early warning for heat wave is not visible.
- 8. Awareness level is moderate. In some pockets among socially excluded families awareness is low.

- 9. Dropout rate is very high in Purulia II. 722 children dropped out and high incidence of early marriage is highly evident.
- 10. Roofs in AWC buildings do not have enough capacity to hold rain water. Roofs are damaged in most of the centres and during rain, food is spoiled and utensils become dirty in rain water.
- 11. Last year SM children were near about 700 during June 2017. One major cause of aggravating malnutrition is migration. People migrate to Raniganj, Asansol for better livelihood in brick making factories due to livelihood insecurity of majority of the inhabitants in the block. In new place childcare is visible to a very little extent as parents go for work for the whole day. Child feeding with proper dietary diversity and frequency of feeding gets hampered. When those children return, they come back with malnutrition.
- 12. Physical accessibility is a major issue with respect to running the centre on regular basis in some of the GPs where only two buses run in a day. Anganwadi workers who have to travel for 2 to 3 hours to reach the centres in remote GPs, service delivery is irregular due to unavailability or limited availability of transport.
- 13. Till now no meeting or training has been organised to tackle service delivery during crisis situation.

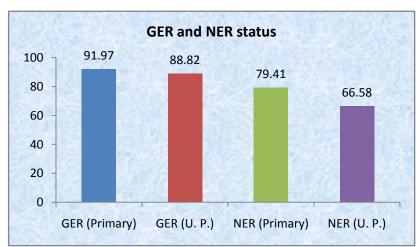
### CHILD DEVELOPMENT PROJECT OFFICER: JHALDA I CD BLOCK

CDPO, Jhalda I was interviewed to assess the barriers to service delivery of the department as well as accessibility of children during summer when they are exposed to water crisis. Water crisis remains for 2 months or more and it has impact on cooking of supplementary nutrition for children. In this block 82 out of 184 centers have own building with infrastructure. Children have no place to sit in most of the rented centers, only utensils are kept inside for cooking. Parents do not send children to centers in rented buildings.

- 1. Water scarcity causes irregular supply of SNP during summer. It happens with all the centers.
- 2. Children shift in other places when caregivers migrate for work in different districts or states. In new places they mostly do not register their children to local AWCs and children left unattended when parents go for work during daytime. Their nutritional status deteriorates.
- 3. Water scarcity increases the likelihood of health risks e.g., diarrhea incidence increases during this season. ORS is supplied from sub centre and anganwadi centre.
- 4. Most of the AWCs do not have access to safe drinking water source. Water from well or other unprotected sources is generally used for food preparation.
- 5. Water used from unprotected sources is not purified before preparing food.
- 6. No early warning is visible before heat wave.
- 7. Awareness within community regarding proper WASH practice is missing. Numbers of AWH positions are vacant in AWCs.
- 8. Supervisors and anganwadi workers have not received any training from disaster management department.
- 9. No preparedness plan exists in the office for tackling disaster like situation.
- 10. No guidance is available to handle children at risk during crisis.
- 11. No guidance is available to handle water scarcity during crisis.
- 12. No separate database is maintained to get the picture of crisis situation.
- 13. Communication related issues are evident especially in remote centers where access to transports is limited.

### CONTEXT OF CHILD EDUCATIONAL OUTCOMES - ASSOCIATED RISKS DUE TO GAPS IN **EDUCATIONAL STATUS**

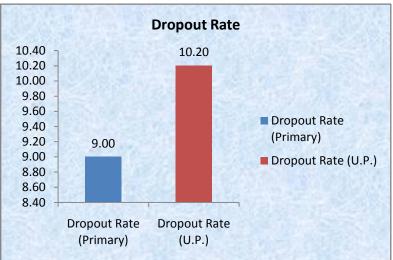
Chart 5.1: Status of Gross Enrolment Ratio (GER) and Net Enrolment Ratio (NER) in Purulia district<sup>8</sup>



GER is higher compared to NER in both Primary and Upper Primary schools. GER in Primary schools is comparatively higher than Upper Primary schools. The same pattern is evident with respect to NER also which is substantially higher in Primary school compared to Upper Primary school.

Chart 5.2: Dropout Rate in Primary and Upper Primary standard in Purulia district9

Dropout rate is higher in Upper Primary indicating that this age group mainly stops education and involves in paid-unpaid work. The rate is 9 in Primary and 10.2 in Upper Primary. It can be inferred that the difference is marginal and younger children are also exposed to insecurities and require protection.



### SCHOOL AVAILABILITY

Table 5.1: Increase in number of schools with year and category of schools functional in Purulia district

	Purulia	West Bengal	Percentage
Total Schools (2016-17)	4964	96418	5.1

<sup>&</sup>lt;sup>8</sup> DISE 2016 – 17

<sup>&</sup>lt;sup>9</sup> DISE 2016 – 17

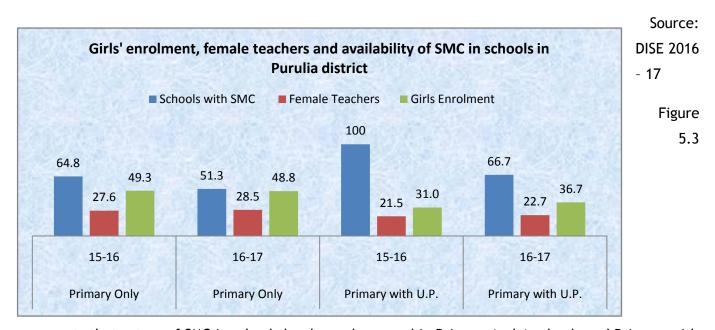
Total Schools (2015-16)	4558	95723	4.8
Government Schools	4332	82993	5.2
Private Schools	433	10404	4.2
Madrasas & Unrecognised Schools	199	3021	6.6
Government Schools: Rural	4195	73261	5.7
Private Schools: Rural	380	7764	4.9

Source: DISE 2016 - 17

The above table shows that Purulia district has opened 406 schools within a period of two years which is 58 per cent of total new schools opened in West Bengal. In Purulia district most of the schools are Government schools and it comprises 5 per cent of total Government run schools in West Bengal. Percentage of Private school is second but 4 per cent of total Private schools of West Bengal are in Purulia. There are 199 Madrsas and unrecognized schools in the district.

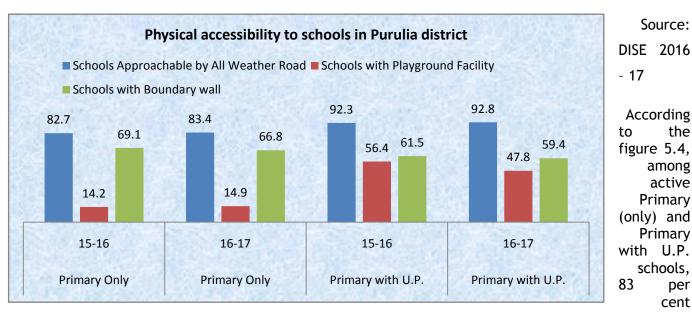
### GAP IN ENROLMENT

Chart 5.3: Girls' enrolment, female teachers and availability of SMC in schools in Purulia district



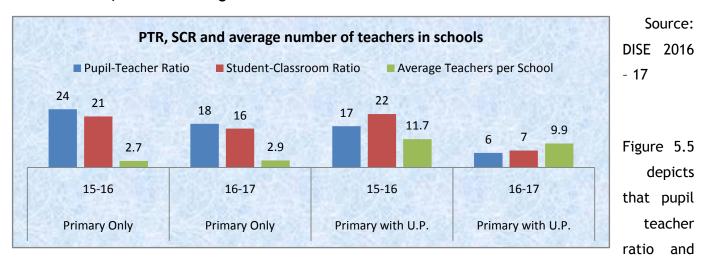
represents that set up of SMC in schools has been decreased in Primary (only) schools and Primary with U.P. schools in the district. There is marginal increase in percentage of female teachers in Primary (only) and primary with U.P in 2016 - 17. There is overall reduction in enrolment of girls' in Primary (only) schools. However increase in girls' enrolment is evident in U.P. schools.

Chart 5.4: Physical accessibility to schools in Purulia district



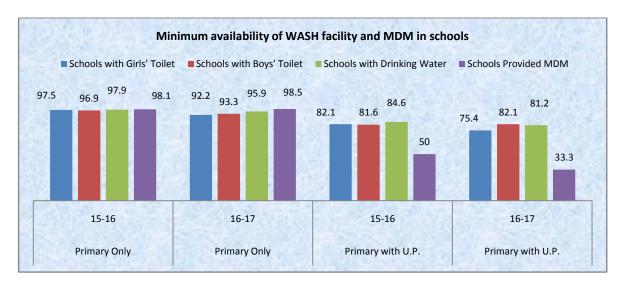
(Primary) to 93 per cent (Primary with U.P.) of them are accessible through all weather roads. Among Primary (only) schools there is marginal change in availability of playground facility (15 per cent) which is reduced from 56 to 48 per cent in Primary with U.P. schools. Similarly, there is increase in construction of boundary wall in both types of schools.

Chart 5.5: PTR, SCR and average number of teachers in schools in Purulia district



student classroom ratio have been decreased from 2015 - 16 to 2016 - 17 in schools of both types - only Primary schools as well as Primary with U.P. schools. Fall in the ratios is higher in schools which have Upper Primary sections along with Primary sections. Average teachers per school are higher in Primary with U.P. and there is fall in human resource strength from 2015 - 16 to 2016 - 17.

Chart 5.6: Availability of WASH facility and MDM in Primary and Primary with U.P. schools in Purulia district

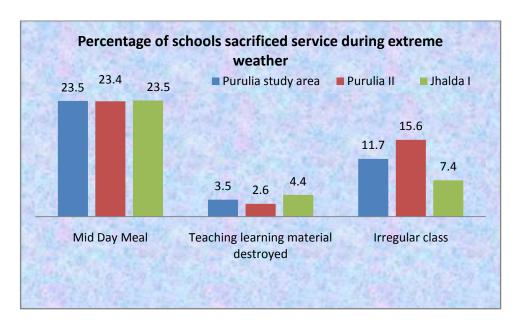


Source: DISE 2016 - 17

It is evident that in 2015 - 16, 97 per cent of Primary (Only) schools and 82 per cent of Primary with U.P. schools had girls and boys toilet. In 2016 - 17, there is decrease in access to toilet as number of schools with accessible girls' and boys' toilet has been reduced. However there is 1 per cent increase in schools with access to boys' toilet in Primary with U.P. schools. Conversely 4 per cent Primary (only) schools and 19 per cent Primary with U.P. schools do not have source of drinking water within school premise. Though 98 per cent Primary (only) schools have MDM service, only 33 per cent of Primary with U.P. schools provides MDM to children.

# BOTTLENECKS IN REGULAR SERVICES IN SCHOOLS DUE TO EXPOSURE TO EXTREME WEATHER - BLOCK LEVEL PRIMARY DATA ANALYSIS

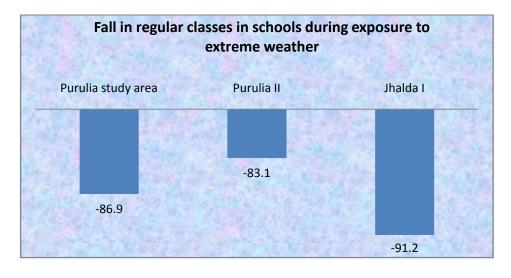
Chart 5.7: Percentage of schools sacrificed service during extreme weather in Purulia study area



Source: Primary Data, CRIA, 2018

During disaster, 24 per cent schools failed to serve Mid Day Meal to the children. In 4 per cent schools teaching learning materials destroyed and it is marginally higher in Jhalda I. Among the schools, 12 per cent reported taking of irregular class.

Chart 5.8: Fall in regular classes in schools during exposure to extreme weather in Purulia study area

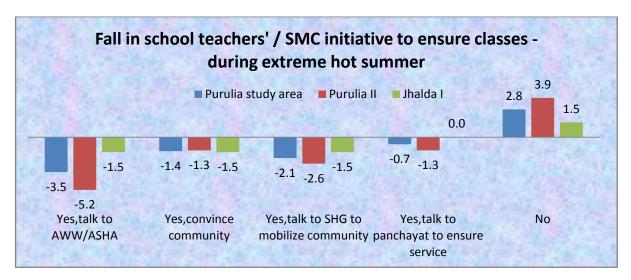


Source: Primary Data, CRIA, 2018

Regular class in school reduced drastically during excessive heat waves compared to normal time. It is depicting huge loss in attendance in academic session as the figure has fallen near about by 87

percentage points during extreme weather - indicates higher impact in Jhalda I compared to Purulia II

Chart 5.9: Impact of extreme weather on ensuring school attendance by school teachers and SMC members in Purulia study area



Source: Primary Data, CRIA, 2018

Fall in school teacher's initiative to ensure class and attendance of students during the period of excessive heat waves is evident by 4 percentage points which is higher in Purulia II.

### ANALYSIS OF DISTRICT LEVEL SEMI STRUCTURED INTERVIEW

### DISTRICT INSPECTOR, SCHOOL EDUCATION DEPARTMENT

DI, School Education Department was interviewed to assess child specific risks visible while providing education to children during crisis situation. He was asked the strategies to mitigate child risks to ensure developmental outcomes during and after crisis situation through proper crisis management.

- 1. Academic loss of V to VIII is not compensated by extra class arrangements which are done for IX to XII.
- 2. Extra classes are taken for 1 to 1 and half hours a day for few days which tries to complete the remaining syllabus but more classes are required.
- 3. Position of different subject teachers are vacant in different schools leading to academic gaps prevailing in normal time. During crisis, irregular attendance increases the loss in other subjects also. It increases likelihood of repetition and dropout.

- 4. Some of the subject teachers for example among 22 teachers 7 to 8 of them do not want to conduct classes during vacation.
- 5. Child care leave is another issue. Teachers whose children are near 18 years of age take frequent leaves to access the benefit of CCL. It impacts on routine class and schools face challenge to complete the syllabus on time. Given the situation, students face difficulty to cope with completing the syllabus as their merit and capacity varies.
- 6. Student attendance becomes regular during the days when they avail benefits of Kanyashree Prakalpa or Sabuj Sathi Prakalpa. During rest of the days in a year they become irregular and some of them even do not register for examination.
- 7. During summer tube wells become dry and excessive pumping damages the source. School repairs the tube wells on their own. No help from other line departments are asked at that time. Damaged or non functioning tube wells are to be reported to block office and respective PHE or RWS officials for timely repairing of the source.
- 8. Some of the schools require boundary wall and boys' toilet. Requisition to block office with a copy to SI, school education, is to be submitted to receive the approval and before summer the construction is to be ensured.
- 9. Even if parents arrange marriage for their daughters they do not inform to avail the scheme benefits.

### ANALYSIS OF IN DEPTH INTERVIEWS AT BLOCK LEVEL

### SUB INSPECTOR, SCHOOL EDUCATION DEPARTMENT: PURULIA II CD BLOCK

SI in Purulia II block was interviewed to assess the problems faced by primary, upper primary, secondary and higher secondary schools to run regular classes, ensure school attendance, supply mid day meal etc. School maintenance grant, school uniform grant are available. Health camps are organized and iron tablets, folic acid, deworming medicines are supplied to students. In addition to that, he shared a lot of challenges towards attaining the outcome indicators in his block. Disaster management plan is not used yet.

- 1. Student absenteeism is not properly reported from school level. Child register updated yearly. Para-teachers visit households to collect information on student dropout. School related data is shared in DISE.
- 2. Due to livelihood insecurity, school going children engage in child labour. However early marriage is reduced to some extent due to Kanyashee Prakalpa.

- 3. Some of the school tube wells are contaminated with iron and some are declared as not fit for drinking after testing done by PHED.
- 4. Due to water scarcity, mid day meal preparation is hampered. To continue service delivery, nearby water sources are used.
- 5. Monitoring is done as per need of the department. Regular monitoring is absent.
- 6. Problem of transport is a major issue. Some of the teachers do not have smart phone and sometimes network problem occurs.
- 7. TLM shortage is evident in mass scale.
- 8. Water purifier is available in very limited number of schools. In some places water is not available, even if it is available either contaminated or become unavailable before summer.
- 9. Seasonal migration leads to school dropout. Another reason of dropout is sibling care at home.
- 10. In minority community elder children stop going to school after certain age.
- 11. No special infrastructure is available to provide education to children with special needs.

### SUB INSPECTOR, SCHOOL EDUCATION DEPARTMENT: JHALDA I CD BLOCK

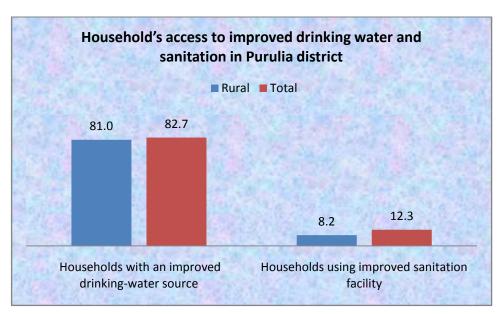
School inspector in Jhalda I block also mentioned that children are exposed to extreme summer and heat wave for 4 to 5 months in a year.

- 1. During summer tube wells become dry and water for mid day meal preparation is collected from distant sources.
- 2. Crisis of teachers and clerks are visible in schools.
- 3. They have very limited idea about disaster management plan. No training is imparted to them regarding disaster management.
- 4. Awareness about importance of school education is missing. Most of the children coming to school are first generation learner.
- 5. High PTR is managed by part time teachers from school fund.
- 6. GP level maps will be used for school mapping and identification. Its preparation is in process.
- 7. Seasonal migration of family increases absenteeism among children.

## CONTEXT OF ASSOCIATED RISKS TO CHILDREN DUE TO GAPS IN ACCESS TO WASH FACILITIES

### **GAP IN ACCESSIBILITY**

Chart 6.1: Household's access to improved drinking water and sanitation in Purulia district (Source: NFHS 4, 2015 - 16)

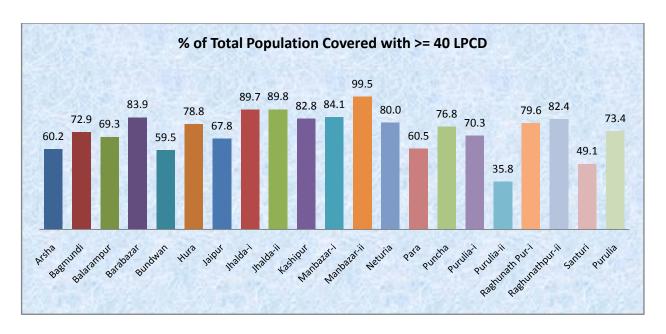


According to NFHS 4 report, 83 per cent of households in Purulia district have access to improved drinking water source while 81 per cent of rural households in the district have access to it. Comparatively, access to improved sanitation is extremely poor. Only 12 per cent households in the district have access to improved sanitary toilet and 8 per cent households in rural counterpart of the district have access to it.

The primary data collected in 2 blocks reveal that during hot and dry summer season, the access to drinking water source and sanitary toilet is reduced. Below figures are describing the phenomena.

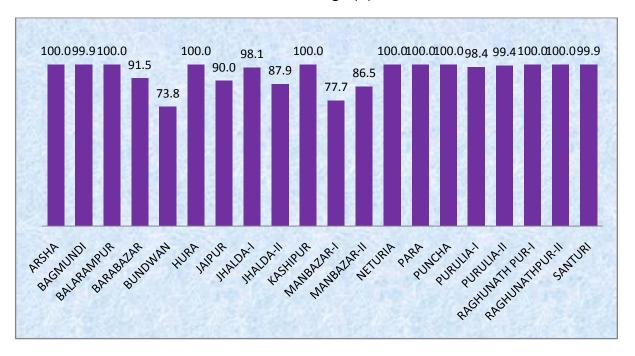
## ACCESS TO IMPROVED WATER SOURCE AND SANITATION IN CD BLOCKS IN PURULIA DISTRICT

Chart 6.2: Households (%) having source of drinking water in the vulnerable blocks in Purulia district



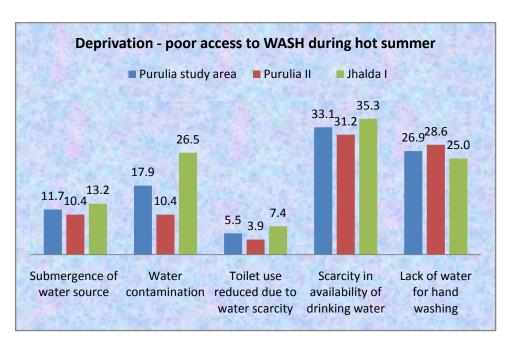
Source: NRDWP 2018

Chart 6.3: Individual household latrine Coverage (%)



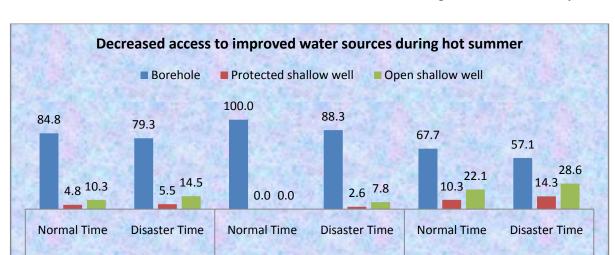
Source: SBM 2018

Chart 6.4: Percentage of frontline workers reported disrupted access to water sources during hot summer



Source: Primary Data, CRIA, 2018

The chart exhibits that frontline workers reported submergence of water sources (12 per cent) in the study area occurs to some extent if heavy rain occurs which is higher in Jhalda I (13 per cent). Among them 18 per cent reported water contamination was evident during hot summer among children who take service from their centre or study in those schools and it was evident more in Jhalda I (27 per cent). Along with that 6 per cent of them stated that use of toilets in centres and schools is reduced due to water unavailability. Near about 33 per cent of them reflected that water scarcity is evident faced in more centres of Jhalda I (35 per cent) compared to Purulia II (31 per cent). Almost 27 per cent of them reported that water becomes scarce for hand washing also.



Purulia II

Chart 6.5: Fall in access to household's main source of drinking water in the study area

Source: Primary Data, CRIA, 2018

Purulia study area

It is evident that the main source of drinking water in the community of the study area is borehole. Dryness of sources during hot summer acts as major barrier to centres', schools' and household's access to drinking water. Overall in the study area it reduces by 6 percentage point, in Purulia II it reduces by 12 percentage point and in Jhalda I by 11 percentage points.

Jhalda I

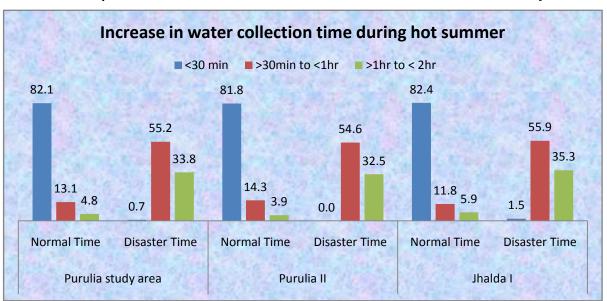
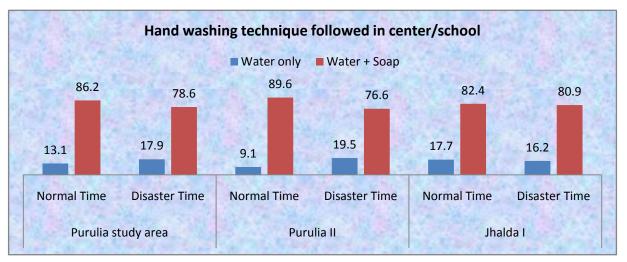


Chart 6.6: Impact of disaster on water collection time in the community in the study area

Source: Primary Data, CRIA, 2018

During normal time the frontline workers and their serving community of 82 per cent service delivery points have access to safe drinking water source within 30 minutes of walking distance. During summer, 55 per cent of them access the source situated within 1 hour of distance in the study area. Moreover, 34 per cent of them spend 1 - 2 hour time to collect water during disaster.

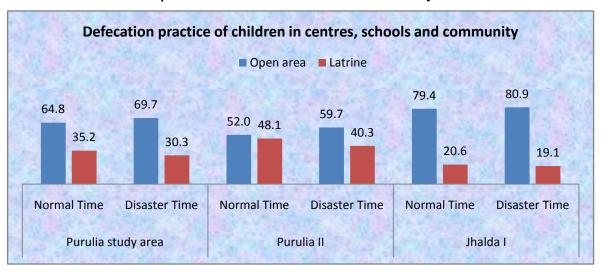
Chart 6.7: Use of different items for hand washing by children in Centre/School the study area - normal time vs. disaster time



Source: Primary Data, CRIA, 2018

During normal time, children in 86 per cent of centre/school use soap and water for washing hands. During summer, it reduces to 79 per cent and use of only water increase up to 18 per cent and the scenario is visible more in Purulia II compared to Jhalda I.

Chart 6.8: Defecation practice of the inhabitants in the study area - normal time vs. disaster time



Source:

Primary Data, CRIA, 2018

Open defecation is already high in the study area (65 per cent). However open defecation increases (70 per cent) during hot summer due to water scarcity. Use of latrine is visible among 3 out of 10 children who come to centre.

### ANALYSIS OF DISTRICT LEVEL SEMI-STRUCTURED INTERVIEW

### EXECUTIVE ENGINEER, PUBLIC HEALTH ENGINEERING DEPARTMENT

He shared that due to dry weather people suffer from huge water scarcity. In addition to this further common people has very little awareness about importance of storing water as they face dry hot summer in most of the year.

### Challenges

- Households possess very low knowledge about precious value of water in an area where water is highly scarce.
- 2. People with water shortage break pipelines to collect water unethically. Wastage of water happens from these points and also becomes contaminated.
- 3. The groundwater contains fluoride which is harmful for children.
- 4. Coordination regarding water testing is done with sub-optimal level of coordination.

### ANALYSIS OF BLOCK LEVEL IN DEPTH INTERVIEWS

### RURAL WATER SUPPLY: PURULIA II CD BLOCK

The officer mentioned that drought like situation prevails from May to August. Heat wave is visible during May to June. The area is very dry up to 700 - 800 ft below. The landscape is rocky. Water is supplied from outside. She feels that they need focus in disaster manage as she has to handle water supply requirement in a dry area where water level exists below 800 ft. She also perceives that during emergency, even after design of a plan based on current context is necessary; modification of existing plan, execution of the same with adequate budget, manpower and supply of resources are to be assured. Their department has attended two training programmes in a year from disaster management. As per need of tube wells they prioritize the construction based on distance of nearby water source. School teachers, ASHA, AWW inform them if they require disinfecting the tube wells. Tube wells are marked to know whether any tube well is left in testing process.

### Challenges

1. Water scarcity is highly prevalent. Existing tube wells contain high degree of iron.

- 2. Open defecation is practiced due to unavailability of water.
- 3. Most of the poor families live in kutcha houses and face house damage during heat waves.
- 4. Some of the ICDS centers run in open space with no source of drinking water in nearby area.
- 5. Drainage system not improved. As a result drinking water sources get contaminated causing diarrhoeal disease outbreak.
- 6. Insecurity of children and women is moderate with high percentage of early marriage and school dropout is visible.
- 7. Practice of water purification, hand washing after defecation/ cooking / before eating are practiced to a very little extent as a result of water scarcity.
- 8. Fund shortage is evident. For example, if the block has requirement of 10 tube wells she gets fund for construction of 2 tube wells. In addition to this further, if Rs. 50,000 is decided to construct 1 tube well then deep tube well construction is not possible. As a result community uses tube wells that supplies contaminated water.

### PHE OFFICER: JHALDA I CD BLOCK

The PHED officer in Jhalda I block mentioned that they face several issues due to dry and hot summer and extreme heat waves. He shared a nuber of challenges with us.

- 1. Water level drastically reduced during summer season. Excessive pumping of tube wells causes damage in tube wells.
- 2. Some of the tube wells are contaminated with arsenic, fluoride.
- 3. In some of the areas land is not suitable to construct tube wells. So ring wells are constructed in those areas. In some schools also ring wells are constructed. Mechanics and repairing staffs are employed from contingency funds. They have 1 permanents staff, 5 mechanics who repair 2 to 3 tube wells per day.
- 4. Open defecation becomes widespread during summer due to water crisis.
- 5. Community wise water source is not available.
- 6. Fund crunch is an issue to provide adequate human resource. Moreover, timely construction of tube wells is also hampered due to unavailability of funds.
- 7. PHED staffs in the block have not received any disaster management training till their joining.
- 8. They receive help from SHG members only at ground level. Mapping of tube wells are not done till now.

CONTEXT OF CHILD PROTECTION OUTCOMES - ASSOCIATED RISKS DUE TO GAPS IN CHILD PROTECTION ISSUES

### **BIRTH REGISTRATION**

Table 7.1: Birth registration of children under age five in the Purulia district and West Bengal

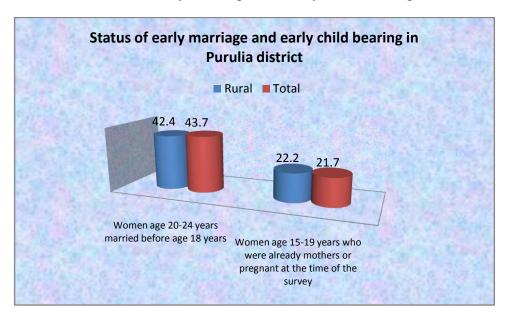
Percentage of children under age five years whose birth was registered with the civil authorities, in Purulia district, West Bengal, 2015-16 is 95.8 per cent - 1 percentage points lower than the state. However among them 89 per cent have birth certificate.

	Registered, has a birth certificate	Registered, does not have a birth certificate	Total registered
Purulia	89.4	6.5	95.8
West Bengal	90.0	6.9	96.9

Source: NFHS 4, 2015 - 16

### **GAP IN CHILD SECURITY**

Chart 7.1: Status of early marriage and early child bearing in Purulia district



Source: NFHS 4, 2015 - 16

Prevalence of early marriage is higher in the district (43 per cent). However early child bearing within the age group of 15 - 19 years is marginally higher in rural area.

BOTTLENECK IN SERVICE DELIVERY TO ENSURE CHILD PROTECTION DURING AND AFTER EXPOSURE TO EXTREME WEATHER- ANALYSIS OF BLOCK LEVEL PRIMARY DATA TO ASSESS THE IMPACT ON SERVICE DELIVERY

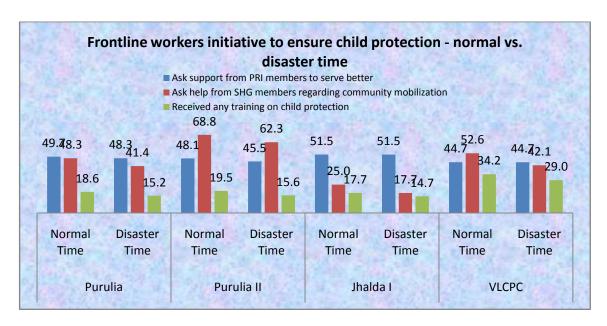
Frontline workers' experience on child protection issues in emergency Purulia study area Purulia II ■ Jhalda I 20.6 18.6 16.9 14.3 13.1 11.8 9.1 4.8 0.0 Displacement increases insecurity Boys start working to cope with Perceived security of girls of girls the price hike after disaster increases early marriage

Chart 7.2: Frontline workers' experience on child protection issues in emergency in the study area

Source: Primary Data, CRIA, 2018

Members of Village Level Child Protection Committee are interviewed to assess the impact of disaster on service delivery in the study area. ASHA and AWW are members in VLCPC committee and takes steps to prevent domestic violence and early marriage of children by their frequent visit within community and higher level of community interactions help them succeed. It is evident that 5 per cent of them say due to insecure livelihood during lean season, displacement increases insecurity of girls and 19 per cent reported that boys start working after lean period to ensure income for their family. Frontline workers also shared that parents feel girls would remain secure if they married early.

Chart 7.3: Frontline workers initiative to ensure child protection - normal vs. disaster time



Source: Primary Data, CRIA, 2018

VLCPC members and other frontline workers reported that to solve the child protection related issues they mainly talk to PRI members and SHG women. During disaster the initiative and active participation gets reduced to some extent (from 53 per cent to 42 per cent). Asking support from PRI members is more evident in Jhalda I (52 per cent) and asking help from SHG group is higher in Purulia II (62 per cent).

### ANALYSIS OF DISTRICT LEVEL SEMI-STRUCTURED INTERVIEWS

### DISTRICT CHILD PROTECTION OFFICER: INTEGRATED CHILD PROTECTION SERVICE

DCPO of Purulia district mentioned that the area is mainly drought prone and due to excessive dryness, agricultural production shortfall is a common phenomenon. He mentioned several challenges facing the community and how the service delivery gaps are increased due to higher exposure of children to extreme weather.

- 1. Loss in agricultural production reduces income of households. As a result they involve their younger sons in wage work. Therefore school dropout followed by child labour increases.
- 2. Children engage in labour in their own locality or migrate with their family. It increases their vulnerability to get trafficked. It is evident that in some GPs like Golamara, Ghonga children migrate to Mumbai, Chennai and other states.

- 3. Increased livelihood insecurity due to exposure to extreme weather de-motivates children in their study. They engage in labour market when they study in class V to IX.
- 4. Since children with proper age specific educational attainment is very limited in number, it becomes difficult to form peer groups to motivate other children.
- 5. DCPU contains only 12 staffs and staff shortage makes it difficult to coordinate with block and take action during any emergency.

### ANALYSIS OF BLOCK LEVEL IN DEPTH INTERVIEWS

### BLOCK WELFARE: PURULIA II CD BLOCK

Purulia II block experiences high prevalence of child marriage and school dropout. The officials engaged in child protection interventions are facing several challenges in implementation. The challenges increase manifold after socioeconomic vulnerabilities rise after extreme hot summer season. Some of the challenges are shared with us.

### Challenges

- 1. Though practice of child marriage is reduced than before due to implementation of Kanyashree Prakalpa, it is prevalent to a great extent.
- 2. VLCPCs are formed at village level but active participation is very limited.
- 3. Frontline workers of different line departments are members of VLCPC. However they feel risky to actively react to any situation of child marriage or trafficking due to life threatening behavior of people involved into it.
- 4. Inadequate supply of ground level workers to support services of VLCPC members hinders the child protection intervention process.

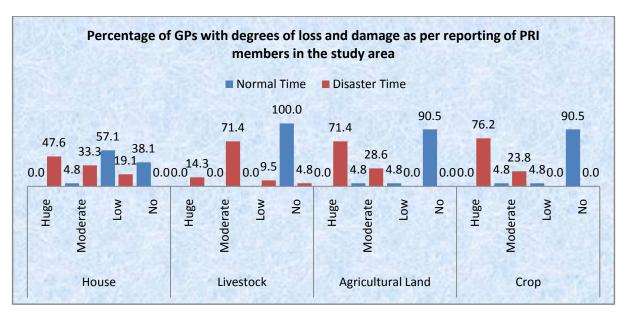
### BLOCK WELFARE OFFICER: JHALDA I CD BLOCK

Jhalda I block welfare officer was interviewed to get flair idea about children's exposure to different types of risks in the block. He also mentioned several contextual challenge aggravating child specific deprivations and increasing their risk and vulnerability.

- 1. Budget provision is not adequate for ensuring child protection, especially stopping child marriage and ensuring their education to employability. Among 600 young girls, 30 cases are found married at age less than 18 years anecdotal evidence suggests.
- 2. Food scarcity is visible due to fall in production. Rising price of necessary consumer goods coupled with lack of production and supply, livelihood insecurity increases the tendency of school dropout in the area.
- 3. Open defecation is evident in places because of water scarcity leading to high toll of common childhood ailments in communities.
- 4. VLCPCs are formed in some places. Some are still in formation stage.
- 5. VLCPCs are not mapped with GIS technique.

### AT BLOCK LEVEL IN THE STUDY AREA

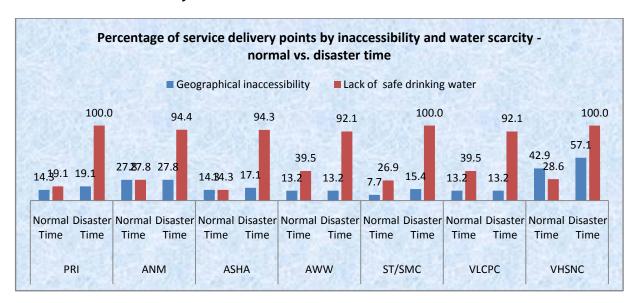
Chart 8.1: Percentage of GPs with degrees of loss and damage as per reporting of PRI members in the study area



Source: Primary data, CRIA, 2018

PRI members of 6 GPs were asked to know the increase in degree of loss and damage during disaster (3 GPs in Purulia II and 3 GPs in Jhalda I were surveyed). It is evident that huge damage of houses is visible during disaster. Loss of livestock mostly the loss occurs at moderate degree during disaster, half of the panchayats agree on damage of agricultural land and loss in crop experienced to a great extent.

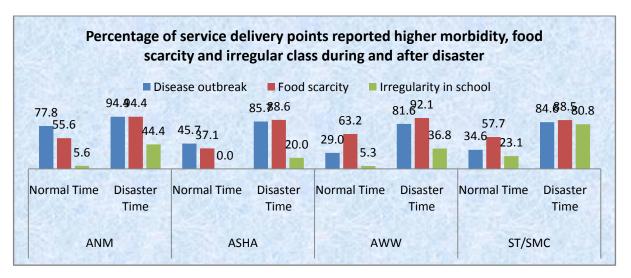
Chart 8.2: Percentage of service delivery points by inaccessibility and water scarcity - normal vs. disaster time in the study area



Source: Primary data, CRIA, 2018

As reported by different ground level stakeholders and frontline workers, geographical inaccessibility to different centers like sub centre, anganwadi centre, schools and panchayat office increases by different degree - visible in the chart above. Water scarcity also increases to moderate degree in all the centers and schools during disaster.

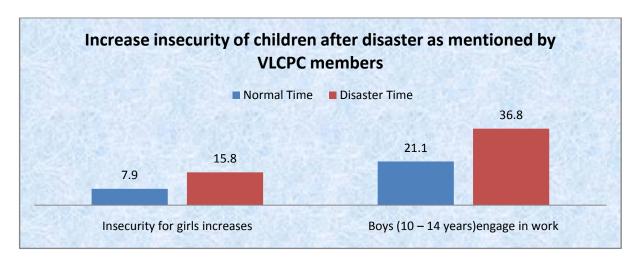
Chart 8.3: Percentage of service delivery points reported higher morbidity, food scarcity and irregular class during disaster time



Source: Primary data, CRIA, 2018

Frontline workers like ANM, ASHA reported that diseases like diarrhea, ARI, common cold increases during disaster as the reporting from community increases during this time. Similarly, AWW reported that food scarcity increases during disaster within community and SNP service becomes irregular. In addition to this further, SNP becomes inadequate (decreases by 30 percentage points) as food is supplied to all the victims - not only to target population. School teachers as well as school management committee members reported that mid day meal supply to children reduces by 30 percentage points. They shared that schools remain closed during disaster and after disaster irregular class takes place in 81 per cent schools.

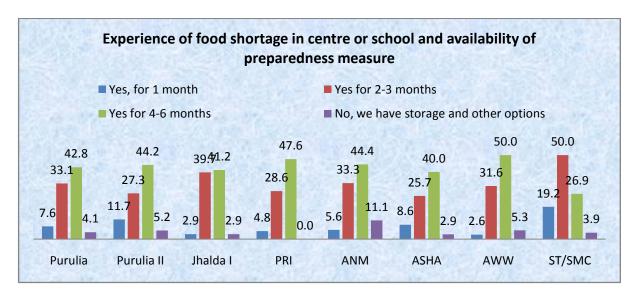
Chart 8.4: Increase insecurity of children after disaster in the study area



Source: Primary data, CRIA, 2018

VLCPC members reported that likelihood of early marriage of girl children increases in the catchment areas of 16 per cent VLCPCs in a GP due to increase in livelihood insecurity of families after disaster. Tendency of engaging young boys in daily work increases and 37 per cent VLCPC members reported that it is evident in their serving community.

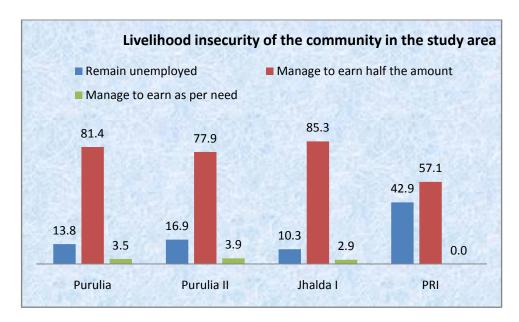
Chart 8.5: Experience of food shortage in centre or school and availability of preparedness measure



Source: Primary data, CRIA, 2018

Mainly anganwadi centers and schools experienced food shortage during disaster as reported by PRI members, ASHA, ANM, AWW and school teachers. Unlike other districts in Purulia, food shortage persists for longer duration for most of the centres and schools. It is evident that degree of preparedness is significantly lower - varying from 0 per cent to 4 per cent.

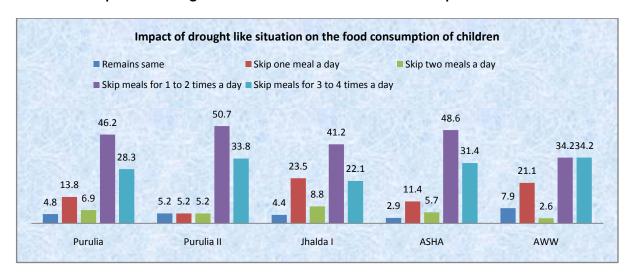
Chart 8.6: Livelihood insecurity of the community in the study area



Source: Primary data, CRIA, 2018

In the study area of Purulia district, 78 to 85 per cent of the serving communities manage to earn half the amount of money they need to consume necessary goods and services throughout the year. PRI members mentioned that it is true for 57 per cent of the serving community and unemployment rate is also very high.

Chart 8.7: Impact of drought like situation on the food consumption of children

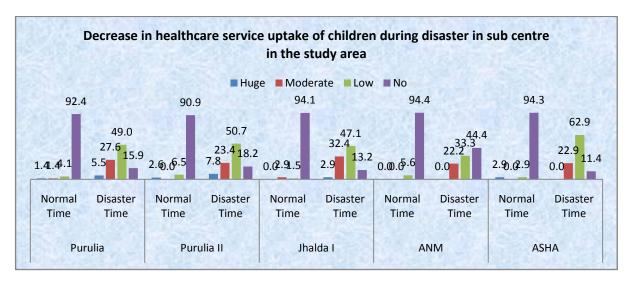


Source: Primary data, CRIA, 2018

ASHA and AWWs reported that with respect to 34 to 50 per cent centers, children registered with them skip meals for 1 to 2 times a day during lean period.

### **HEALTH**

Chart 8.8: Decrease in healthcare service uptake of children during disaster in sub centre in the study area of Purulia district

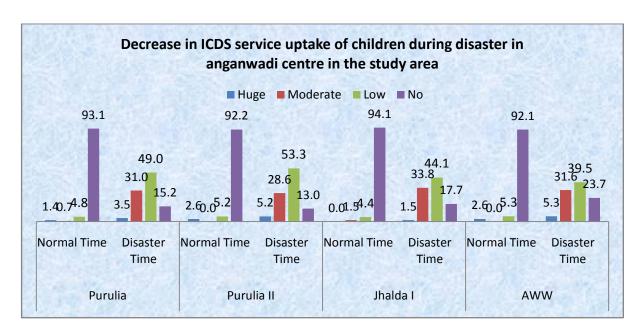


Source: Primary data, CRIA, 2018

Sacrifice of children's healthcare in sub centre increases to a moderate extent which is visible among 28 per cent of sub centers during extreme hot summer. During normal time 4 per cent sub centers experience the same.

### NUTRITION

Chart 8.9: Decrease in ICDS service uptake of children during disaster in anganwadi centre in the study area of Purulia district

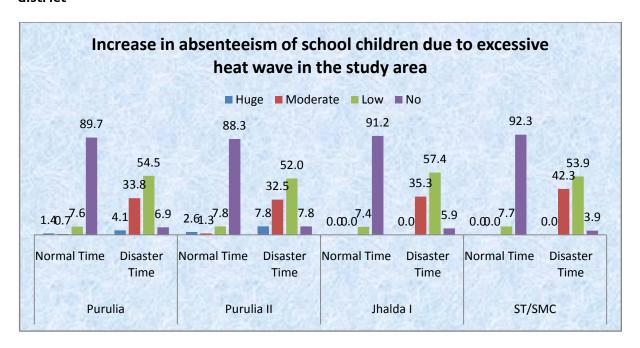


Source: Primary data, CRIA, 2018

Food scarcity during summer season becomes prominent which is evident from above information. In the study area sacrifice of SNP service for children from AWC is evident. Sacrifice in moderate to low amount is visible among 40 to 50 per cent of anganwadi centers compared to 2 to 5 per cent of them experience irregular SNP uptake during normal time.

# EDUCATION

Chart 8.10: Increase in absenteeism of school children due to disaster in the study area of Purulia district

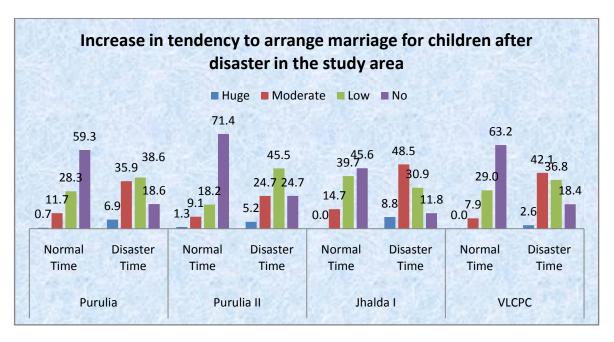


Source: Primary data, CRIA, 2018

Out of School children increases to moderate extent during summer (in 1 per cent schools in normal time to 34 per cent schools during hot climate. Low increase is visible in 55 per cent of the schools which is evident among 8 per cent of the schools during other seasons of the year. Regular presence of children occurs in above 90 per cent of the schools during normal time.

# CHILD PROTECTION

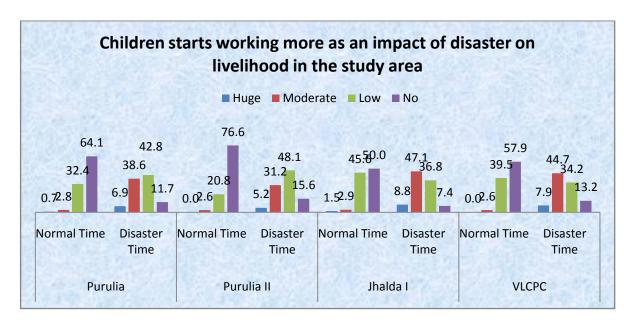
Chart 8.11: Increase in tendency to arrange marriage for children after disaster in the study area of Purulia district



Source: Primary data, CRIA, 2018

Tendency of early marriage of girls increases to some extent as visible to 12 per cent (normal time) to 36 per cent (disaster time) of the VLCPC members of the GPs. Low increase is visible by 39 per cent of the VLCPC members which remains 28 per cent during normal time.

Chart 8.12: Children starts working more as an impact of disaster on livelihood in the study area of Purulia district



Source: Primary data, CRIA, 2018

Trend of engaging children (age of less than 14 years) in paid /unpaid work increases to a moderate extent as visible to 3 per cent (normal time) to 39 per cent VLCPC members after hot summer among serving families. It impact in lower degree - as reported by VLCPCs - increases from 32 per cent (normal time) to 43 per cent (after disaster time).

# CHAPTER 9: KAP IN CHILD CENTRED DISASTER RISK REDUCTION: COMMUNITY LEVEL

In Purulia district focus group discussions were conducted in three communities under the jurisdiction of three gram panchayats - Golamara, Chharadumdumi and Marumasina. Community people have shared the barriers to access child specific services in their communities during and after disaster. They shared the challenges.

# Challenges

# Golamara GP

- 1. Houses get severely damaged during rainy season.
- 2. No land irrigation system which results in major loss in farming.
- 3. Water scarcity in summer, ponds and other water sources get dried up.
- 4. Seasonal migration in search of work resulting in increasing school dropout rate.

# Chharadumdumi GP

- 1. Poor education quality in school.
- 2. No electricity in the village leads to many difficulties among the members of the village.
- 3. Seasonal migration in search of work resulting in increasing school dropout rate.
- **4.** Houses are severely damaged during monsoon.
- **5.** Water scarcity in summer affects households.
- **6.** MGNREGA works frequencies are low which poses a great economic threat.
- 7. Only children and pregnant women are treated in the health centre, others don't receive services from there, they have to opt for quack or private doctor.
- **8.** No proper drainage system in the village.
- **9.** No one have toilet and practice open defecation.
- **10.** Due to drought proneness crops gets affected and they go through a huge economical loss.

# Marumasina GP

1. Crops die due to water scarcity.

- **2.** Poor service received from ICDS centre.
- 3. Child marriage and child labour are two major challenges.
- 4. Water scarcity makes it difficult to manage sanitation and hygiene.
- **5.** Economic crisis leads to seasonal migration.
- 6. People working in Bidi factory tend to develop TB, which increase health risk.
- 7. Poor road condition especially during the rainy season.
- 8. Many houses are broken and have no maintenance.

# CHAPTER 10: RECOMMENDATIONS: PREPAREDNESS, RESPONSE & MITIGATION

# DISTRICT DISASTER MANAGEMENT DEPARTMENT & CIVIL DEFENCE

# OC - DM&CD

OC, disaster management was interviewed to explore the challenges she faces and what kind of solutions she expects to reduce child specific risks in her district.

# Recommendations

- 1. She believes that awareness campaigns are to be regularized in schools. Girl children are to be sensitized to use sanitary napkins to ensure good reproductive age from early adolescence.
- 2. Awareness camps on regular school attendance of children, arranging marriage of girl children after completion of their education etc., are to be organized involving local WSHG. Otherwise it will be difficult to bring social and behavioural change within communities.

# DISTRICT DISASTER MANAGEMENT OFFICER, DM&CD

DDMO Purulia is also in charge of SDDMO of Jhalda Division. He is looking at the district level disaster management in Purulia. He mentioned that Purulia district faces drought or drought like situation and also infrequent thunderstorms are visible. Yearly average rainfall is 1200-1300mm. But last year, the district experienced 700mm., rainfall in 3 to 4 days. Lightening and snakebite are two major causes of human death. They have conducted 17to 18 mock drills last year in all the sub divisions.

# Recommendations

- 1. Linking of data from health, nutrition, education, water, P&RDD with disaster data will help to identify vulnerable children and accordingly measures can be taken.
- 2. GIS and remote sensing techniques are to be used to map the blocks and GPs as per the degree of their exposure to child specific risks. Linking the common database with GIS will help to visualize and track individual child at risk.

# HEALTH

# CHIEF MEDICAL OFFICER HEALTH

- 1. Training of frontline workers are to be arranged starting from most vulnerable block. Sub centers in vulnerable GPs are to be grouped as per the degree of vulnerabilities and deprivations prevailing in their serving communities.
- 2. Behaviour change programmes are vital followed by monitoring and feedback to be arranged starting from vulnerable areas to less vulnerable area.
- 3. GIS mapping is to be done to link status of tube wells with nearby sub centers along with incidence of diarrhea cases to get sub center wise child specific risks.

# BLOCK MEDICAL OFFICER HEALTH: PURULIA II CD BLOCK

- 1. People are to be made aware on staying in cooler places, drink plenty of fluid, ware cotton dresses, use umbrella.
- 2. If still children suffer they are to be hospitalized immediately.
- 3. Pradhan, SHG members, civil society members, panchayat members are also involved in meetings arranged in health department.
- 4. More discussions are to be arranged through health and disaster management department to increase awareness within community regarding childcare in summer season.
- 5. Children are to be taken out early in the morning and are to go back either before afternoon or during dusk.
- 6. Awareness programmes are to arranged on frequent basis (covering each GP every year) to increase social acceptability of health programmes.
- 7. Care during pregnancy like adequate consumption of fluid with proper diet is to be ensured to reduce the intrauterine growth retardation and prevalence of low birth weight babies.
- 8. Any health emergency at village level is to be communicated to PHC or BPHC level as per need arranging handholding support for ASHA workers.
- 9. Ambulance is to be arranged for the BPHC and 2 PHCs for providing emergency service during disaster like situation.
- 10. Sub health centre running in rented or damaged buildings are to be repaired and made disaster resilient.
- 11. All these activities are to be incorporated in one plan document with specific guidelines for children to ensure smooth implementation of the programmes during disaster.

# BLOCK MEDICAL OFFICER HEALTH: JHALDA I CD BLOCK

- 1. Vacant posts are to be fulfilled with technical resource on time to ensure service delivery in timely manner.
- 2. No exposure to heat is to be ensured for newborns. They are to be rubbed with wet cotton cloths to keep them cool and body temperature balanced.
- 3. Pregnant women and lactating mothers are to be guided to take plenty of fluid to keep them hydrated.
- 4. Piped water supply is to be ensured through new connection covering the most vulnerable GP first followed by other GPs.
- 5. School children are to provide emergency kits with umbrella, water bottles during schools to remain safe during summer.
- 6. He also recommended that situation assessment is to be done before planning and implementation.
- 7. Adequate supply of medicines and vaccines are to be ensured on time as per requisitions.
- 8. In hospitals, Unit for newborn care and pregnant women are to be air conditioned.

# NUTRITION

# DISTRICT PROGRAMME OFFICER, INTEGRATED CHILD DEVELOPMENT SERVICE

- 1. Water is to be stored through construction of ponds to hold water.
- 2. In areas of tap water supply, water reservoir is to be created to store water.
- 3. If one community is deprived of tube well due to hard rocky surface of the land area then nearby areas are to be assessed to construct tube wells to provide water to that community. For example if in a 200 mt radius they find hard rock base, the radius is to be increased to find the proper place.
- 4. Alternative water sources are to be explored to provide regular service at anganwadi center and to ensure water for hand washing after defecation.
- 5. He shared that sector specific preparedness, response and mitigation plan will be helpful with practical solutions; the AWW and AWH are to be trained on the actions designed.

6. Periodic meetings on regular basis and training of frontline workers are to be organised periodically in a year. It will help them to reduce the gap in service delivery through well designed response and mitigation strategies.

# CHILD DEVELOPMENT PROJECT OFFICER, PURULIIA II CD BLOCK

- 1. To handle the service delivery during the period of heat waves in summer, they need a complementary plan.
- 2. Tackling of crisis situation demands extra manpower to solve the issue of interrupted service delivery during water scarcity.
- 3. CDPO has created a support group to combat the situation but still it is not sufficiently equipped. They are to be supported with additional workers. It will then be easier for them to serve properly.
- 4. She added that they need sector specific preparedness, response and mitigation plan and when the plan will be in place, the AWW and AWH are to be trained on the actions designed.
- 5. Periodic meetings on regular basis and training of frontline workers are to be organised twice a year. One training during heat wave is to be arranged to well equip frontline workers on mitigation measures. It will help them to reduce the gap in service delivery through well defined mitigation techniques.
- 6. They follow overall response and mitigation plan. But sector specific plan is required.
- 7. VHSNC is formed but they need training for ensuring services to the children during the period of heat waves. Their handholding support to ensure water to different child centric services is to be assured.
- 8. AWCs are mapped according to GPS but tagging of children to track MAM and SAM children on every day basis is to be done.
- Guideline for child risks are to be designed for tackling malnutrition is first priority followed by water scarcity, food scarcity and reduction of school dropout through ensuring uninterrupted services in schools.
- 10. AWCs running in own buildings require repairing as the buildings are very old and are not constructed to be disaster resilient.
- 11. Alternative livelihood opportunities are to be arranged for inhabitants in the block to prevent migration.

12. Number of buses is to be increased to travel to remote GPs to run services smoothly in scheduled time and every day. Otherwise, AWWs and AWHs are to be complemented with additional staff so that they can help AWWs to fetch water, repair roofs during heat wave and provide other required handholding supports to ensure service.

# CHILD DEVELOPMENT PROJECT OFFICER, JHALDA I CD BLOCK

- 1. Each and every centre is to be equipped with deep tube well. If water level is lower than 800 ft. then piped water supply is to be provided.
- 2. Discussion with PRI members is to be initiated regarding the causal impact of livelihood insecurity and seasonal migration on children's nutritional status. Local livelihood opportunities are to be created for families of malnourished children.
- 3. Adequate supply of ORS is to be ensured before summer.
- 4. Routine monitoring system is to be established to ensure proper WASH practice in centers including water collection from safe source, purification of water before drinking and cooking, use of sanitary toilet, hand washing with soap and water before cooking, eating, serving and after defecation.
- 5. Early warning system is to be generated after forecast of heat waves in Puruliia district.
- 6. Awareness programmes for caregivers are to be arranged once in a month GP wise and follow up meetings with community members are to be conducted after 3 to 4 months to assess the effectiveness of the programme.
- 7. Immediate steps are to be taken to arrange local volunteers to support anganwadi workers during crisis situation until the positions of AWH are filled.
- 8. Periodic training programmes are to be arranged for AWWs and supervisors on preparedness, response and mitigation strategies to combat the drought like situation and ensure service delivery. Each GP has to target 2 trainings each year followed by a feedback and discussion day. It will help to analyse the gaps filled up after training. Then assessment is to be done about how far the knowledge evel is getting converted into practice.
- 9. Decision making in relation to services like how to ensure SNP during crisis, what issues are to discuss during home visit in this period is important to manage the crisis situation.
- 10. A guideline is to be designed to incorporate preparedness, response and mitigation strategies to handle water scarcity and risk of under-nutrition during water scarcity.

# DISTRICT INSPECTOR, SCHOOL EDUCATION DEPARTMENT

- 1. Remedial teaching for backward students is to be arranged routine may be arranged accordingly.
- 2. After summer special classes are to be arranged. Participating teachers are to be rewarded by the SMC/ VEC/ SLMC.
- 3. Motivational camps may be arranged to motivate teachers to take additional classes / special classes / remedial teaching.
- 4. Before summer tube well / source of drinking water are to be identified through mapping with the help of PHE and P&RDD.
- 5. During heat wave, school hours are to be shifted in morning shift and regular attendance of students is to be ensured through Mother Teacher Association / parents' meetings.
- 6. Duration of additional classes is to be increased to make up the loss and complete syllabus given varying degree of capacity among students.

# **One Success Story**

A School Awareness Programme on Disaster Management was taken last year (2017-18) in the Purulia district with a view to discussing different aspects of disasters and how to combat them effectively so that loss of lives and properties can be minimized during disasters. One School in each of the 20 nos. of Blocks and 03 nos. Municipalities were planned to be selected initially for the programme. Master Trainers were finalized from the District end for the purpose. BDMOs were selected as Master Trainers to discuss the matter using Power Point Presentation at the different venues selected by the Block/Municipality. SDDMOs under the Sub-Division monitored the programme under their respective Sub-Divisions. Master Trainers discussed about basic concepts of Disaster Management and Do's and Don'ts during different type of Disasters like Drought, flood or flood like situation, cyclone, lightening, earthquake, fire accidents etc.. The Do's and Don'ts were also discussed in respect of heat wave conditions during summer season. Students were requested to share these matter/knowledge further with the others in their locality so that maximum people in the society may know about the basics of disasters and Do's and Don'ts during different type of Disasters.

The programme was successfully completed in most of the schools and had a good response. The District is looking forward to organize more Awareness Generation Programmes on Disaster Management related matters in more schools and in different sectors of the society.

# SUB INSPECTOR, SCHOOL: PURULIA II CD BLOCK

1. To ensure school attendance, more awareness programmes are to be arranged to motivate communities about positive role education plays in future.

- 2. Sikshabandhu workers are to be trained to discuss about the ill effects of engaging children in wage work and how it increases future risks through weakening their resilience.
- 3. Water sources in schools are to be deep tube wells with assurance of regular testing and disinfection.
- 4. Special awareness campaigns are to be arranged for minority communities.
- 5. Special infrastructure for CWSN is to be ensured in schools.

# SUB INSPECTOR, SCHOOL: JHALDA I CD BLOCK

- 1. Alternative water source is to be created to maintain uninterrupted water supply throughout the year.
- 2. New recruitment of school teachers and office staffs are to be initiated with posting of local teachers is to be ensured.
- 3. Training on handling service delivery during crisis situation is to be ensured. One training and one follow up session per village is to be conducted
- 4. Awareness camps are to be arranged in every village starting from the most vulnerable GP of the block.
- 5. However, mapping of schools using GIS and remote sensing techniques is to be ensured along with linking of U-DISE.

# WASH

# EXECUTIVE ENGINEER, PUBLIC HEALTH ENGINEERING DEPARTMENT

- 1. Awareness programmes are to be arranged on regular basis starting from communities of most vulnerable GPs of most vulnerable block. The programme has to cover the utility of saving water, how important it is for well being of children etc.
- 2. Precautionary measures are to be taken to remove fluoride from water sources. Though there exist fluoride removal plants in Purulia, it is inadequate to cover the whole district. Natural process is to be innovated to remove fluoride from water. It will help to reduce nutritional vulnerability among children.
- 3. KAP assessment is to be conducted pre-post awareness campaigning.
- 4. Pond water and unprotected well water are to be tested and accordingly disinfected periodically. Gram Panchayat is to take nodal role in this respect to make all the coordination with block and from block it is to be communicated to district.

- 5. Quality and quantity of water resource is to be maintained. Quality of water is to be ensured with regular purification of water, establishment of fluoride removal plant is to be initiated. Water wastage is to be minimized with proper monitoring of the system.
- 6. Periodic monitoring with follow up sessions are to be conducted time to time.
- 7. A common network is to be created after mapping of each and every drinking water source using GIS technique. Child specific service delivery related uptake and availability are to be merged with it.

# RURAL WATER SUPPLY: PURULIA II CD BLOCK

- 1. New guideline is required to be established to complete service delivery optimally and more efficient way. For example, innovative technology is to be used to track contaminated water source on time and disinfecting of source is to be done without any delay.
- 2. Data is collected as situation occurs. Routine data collection is to be done in future. Annual monitoring is done. However it is to be organized on quarterly basis followed by data collection, analysis and reporting.
- 3. Fund for tube well construction is to be increased. Fund is disbursed directly to GPs to some extent.
- 4. Report on whether newly constructed tube wells are functioning or not -is to be collected after one month of construction work.

# PHE JUNIOR ENGINEER: JHALDA I CD BLOCK

- 1. New drinking water sources are to be constructed in nearby localities where no previous attempt was taken.
- 2. Testing of water is to be done in regular manner through laboratory testing process to know the existence of arsenic or fluoride.
- 3. Each and every school is to be checked to assess the status of drinking water source, their availabilities and requirements. Ground level volunteers are to be engaged to monitor the process.
- 4. River water or pond water can be treated and supplied for use. It will help to reduce open defecation. MTUs are to be used so that water can be prepared after collection and treatment of water from nearby rivers, and ponds.

- 5. More engagement of frontline workers are to be ensured to coordinate regarding requirement of tube wells, repairing, parts changing etc.
- 6. Mapping of tube wells using GIS technique will help to identify the places I need of drinking water source along with it ground water level can also be protected. It can be done by identifying the places where previous attempt for construction has been taken. New construction is to be done in a little far distance.
- 7. Separate fund is to be designed for emergency response for managing water crisis.
- 8. Training and capacity building workshops are to be conducted for PHED staffs in relation to crisis management and follow up sessions are to be designed in interactive mode with increased participation of workers from PHED and line departments.

# CHILD PROTECTION

# DISTRICT CHILD PROTECTION OFFICER, INTEGRATED CHILD PROTECTION SCHEME

- 1. They are to be motivated through arrangement of regular school specific programmes. Each GP is to be targeted with 4 to 5 awareness sessions covering 5 to 10 schools every year.
- 2. Students of senior section are to be provided with technical and skill education at school level with employability options. Participation of each student is to be ensured during technical training.
- 3. Members of child protection committee are to be engaged to track if any child is excluded from the training.
- 4. Regular interaction meeting between community members and VLCPC members are to be organized to build relationship with VLCPC workers. It will help in counseling on child protection issues especially related to vulnerabilities and help in crisis management.
- 5. Staff shortage is to be fulfilled with new appointments to ensure timely delivery of services with proper coordination.

# BLOCK WELFARE: PURULIA II CD BLOCK

- 1. Awareness campaigns for prevention of child marriage are to be organized in whole block starting from the most vulnerable GP.
- 2. Ill effects of early marriage are to be incorporated in school syllabus to educate girls and make their family members aware.
- 3. The members need training on child protection issues and side by side they are to be trained in how to tackle situation during crisis.
- 4. When seasonal migration takes place special monitoring and follow ups are required beforehand to arrange some special care or scheme for vulnerable girls.
- 5. If civil volunteers are engaged as local informers for local police station then more children can be saved from early marriage.
- 6. Ensuring job security with addressing water scarcity through initiation of projects (like Usharmukti) can reduce the likelihood of seasonal migration.

# BLOCK WELFARE: JHALDA I CD BLOCK

- 1. VLCPCs are to be strengthened with trained human resource, equipped with adequate budget and are to be guided by contextual planning.
- 2. He feels that separate plan components covering child protection issues during extreme weather situation and post crisis situation are required followed by continuous need based implementation. Some components are to be there which can be implemented throughout the year for all the communities.
- 3. Mapping of vulnerable points with respect to water scarcity, food scarcity, habitations inn nearby area with local livelihoods are to be mapped. These locations are to be linked with sector specific child related outcome and service delivery indicators. It will help to identify extreme weather related impacts in increasing gaps in service delivery and having poor impact on outcome indicators.
- 4. Water scarcity is a major factor leading to increase inn vulnerabilities of different dimensions. Construction of a Dam can help to reduce vulnerabilities to deprivations especially of children.

# REFERENCE

- 1. Census of India, 2011.
- 2. Child Risk and Impact Analysis, West Bengal, 2018.
- 3. District Disaster Management Plan, Purulia district, 2017.
- 4. ICDS MPR, November, 2018.
- 5. International Institute of Population Sciences. National Family Health Survey Round 4, 2015-16.
- 6. NRDWP, 2018.
- 7. SBM, 2018.
- 8. Unified District information System for Education, 2016 17.

# Annexure - II

Action Plan of RAIL (Adra Division)

# RAIL ADRA DIVISION

दक्षिण पूर्व रेलवे

death not purify; 5 FEB 2019

Office of the, Sr.Divl.Safety Officer, Adra.

No. AC/SFY/Disaster Management/2019.

The Addl. District Magistrate(Gen), Purulia, West Bengal

Adra, Dtd. 13.02.2019. Mob: -9002083875.

Information regarding Disaster Management Plan. Sub:

Your letter No. letter No. 19/DRMP/PRL, dtd. 24.01.2019.

In connection with the above subject, the information for inclusion in your District Disaster Management Plan 2019-20 is enclosed herewith for your kind information and necessary action please.

Encl - As above

# CHAPTER - III

# LIST OF DUTIES OF DIFFERENT OFFICIALS IN THE EVENT OF A SERIOUS ACCIDENT

# 3.01. Duties of a Guard in the event of a serious accident. -

Immediately after occurrence of a serious accident, the Guard of the train must;

- a) Note the exact time of the accident and kilometreage;
- b) i) protect the adjacent line(s) and the train as per GR, 6.03, 9.10 and SRs thereto
  - ii) secure the vehicles as per rules;
  - iii) ascertain if adjacent line(s) is / are fouled;
- c) make a quick survey, for an immediate action, of the casualties, injuries and assistance required;
- d) relay the information giving details of the accident and assistance required to the control through the portable field telephone. In case the field telephone is not working or not provided; the said information must be sent on a memo through the Brakesman / Assistant GUARD or Assistant DRIVER to the nearest station. On double or quadruple line section, a train passing on the adjacent line should be stopped and the DRIVER or GUARD be givens this information, and also depute any Railway employee / willing person(s) available on train to nearest station / police station / Hospital / Village seeking assistance for relief;
- e) render first aid to the injured person(s) taking assistance of all available Railway Staff, Doctors and volunteers on train or near the site of accident. Seek assistance or Railwaymen on the train for attending to the injured and for other relief operations.
- f) Get the particulars of damages to the rolling stock, permanent way,
- Arrange to shift the injured persons to the nearest hospital with the help of all available staff and other volunteers, also keep their particulars;
- h) See that water, tea etc. are supplied to the affected passengers as far as practicable;
- i) Arrange protection of Railway and public property with the help of available Police and Railway staff:
- Preserve all clues to possible cause of accident;
- k) Post an available Railway employee on the field telephone to ensure regular flow of information.
- Check the unaffected portion of the train and arrange to clear the same safety to the adjacent station(s) as per rules and in consultation with the control / station Master(s) concerned;

Notes: In case of suspected sabotage, nothing should be disturbed except for rescuing any injured persons, till arrival of police officials and on orders from a Senior Railway official at the site.

 m) remain in overall charge till replaced by a senior Railway official and permitted by the Competent Authority.

Notes: In the event of any disability of the Driver, the duties devolving on the Driver, for protection of the line / line(s) shall devolve on the Guard or on a Railway servant deputed by him.

May St DSO | ADA

# 3.01.01. Duties of an Assistant Guard in the event of a serious accident. -

Immediately after occurrence of a serious accident, the assistant Guard of the train must :-

- a) Assist the Guard in conveying accident messages to all concerned.
- b) Help the Guard in protection of site of accident.
- c) Assist the Guard in rendering first aid to the injured person(s).
- d) Assist the Guard in arranging to shift the injured persons to the nearest hospital.
- e) Arrange protection of Railway & Public property with the help of available Police, RPF staff and other Railway staff.
- f) Carry out any other job assigned to him relating to the accident by the Guard of the train.

# 3.02. Duties of Driver and engine crew in the event of serious accident -

Immediately after occurrence of a serious accident, the Driver and his crew must;

- a) note the time of the accident, and kilometreage:
- protect the adjacent lines in front and the front portion of the train as prescribed in GR 6.03 and 9.10 and SRs thereto, as the case may be;

Note: In the event of any disability of the GUARD, it will be the responsibility of the DRIVER to ensure protection of obstructed adjacent line(s) and the train in the rear as per GR 6.03, 9.10 and SRs thereto and to give quick information of the accident to the Control / Station Master;

- take such precautions as may be necessary or as prescribed by special instructions to render his locomotive safe,
- render all possible assistance to the GUARD in relief measures to the injured and particularly in the assessment of damage to rolling stock, permanent way, locomotive, OHE and nature of assistance required and in given quick information to the Control/Station Master regarding the accident;

Notes: In case of suspected sabotage, nothing should be disturbed except for rescuing injured persons till the arrival of police officials and on orders from a senior official at the site of accident.

# 3.02.01. Duties of an Assistant Driver in the event of a serious accident :-

Immediately after occurrence of a serious accident, the Assistant Driver of the train must -

- a) Assist the Guard / Driver in conveying accident messages to all concerned.
- b) Help the driver in protection of site of accident.
- Render all possible assistance to the Guard in relief measures to the injured persons(s).
- d) C rry out any other job assigned to him relating to accident by the driver of the train.
- e) He should man the engine in absence of the driver.

# 3.03. Duties of STATION SUPDT./STATION MASTER/ASSISTANT STATION MASTER in the event of an (serious) accident —

Immediately after an accident or on receiving the report of an accident, the station superintendent/ Station Master and Assistant Station Master must:

a) ensure that no other train enters into the affected line/section from either direction/lock the commutator/handle of the Block Instrument controlling the affected section in "Train on Line" position wherever possible/ensure the signals giving entry to the line are kept at the "ON" position/ ensure putting of "Line Blocked" lever/slide collars on the concerned lever and/or slide/ensure that the points are set against the entry to the affected line and clamped wherever practicable;

- b) take action to protect the traffic and safeguard the property;
- collect detailed information of the accident such as time of accident, nature and location of accident, casualties/injuries, obstruction, damages and assistance required and ensure that the adjacent line(s) is/are clear before allowing any movement on it/them;
- d) inform, giving details of the accident and assistance required to the Control through the Control phone or any other available means of communications;
- render first aid to the injured persons taking the assistance of all Railway staff, Doctors and volunteers
  available on train or near the site of accident, if the accident takes place within the station limits;
- arrange to send all available nearest medical assistance to the site of accident, incase the accident takes place in section and is attended with injury to any persons;
- g) take all possible action to inform all concerned officials including civil and police;
- see that the injured persons are shifted to hospital with the help of all available assistance, also see that the detailed particulars of the dead and injured are recorded;
- i) arrange to remove the unaffected vehicles of the train, observing all relevant rules, to facilitate relief operation;

Note: If the accident is attributed to sabotage or suspected sabotage, nothing should be disturbed except for rescuing injured persons unless police clearance is received and on orders from the officer-in-charge at the site.

- j) take all measures for the quick movement of ARME and / or ART to the site of accident and ensure that the caution order etc. are correctly issued to the Driver and Guard of all trains while allowing movement to the site of accident, clearly indicating the site of accident, the locations where the train must come to stop and other restrictions to be observed;
- see that water, tea and other requirements are supplied to the injured and stranded passengers within his resources;
- remain on duty until replaced by a Competent persons;
- m) report the accident to all concerned by the issue of accident message;
- seize the Train Signal Register/log book, Private Number book, Line Admission book and other relevant records are required, note the position of Block Instruments, signals, points indicators and levers etc.
- o) Take the statements of staff where possible;
- Preserve all clues and arrange to protect the area with the help of police or RPF;
- ensure that all trains for transshipment of passengers are worked to the site of accident with the
  engine leading unless there are special reasons or specifically permitted otherwise by the officerin-charge at the site of accident;
- r) warn all passengers in advance in case of their transshipment at the site of accident;
- s) ensure preservation of documents of damaged parcels, mail and goods etc.
- t) ensure chronological recording of all information received or / and action taken in connection with the accident, in the station Diary.

3.04. NOTE: IN THE EVENT OF AN ACCIDENT TO A PASSENGER CARRYING TRAIN, ALL OTHER RAILWAY STAFF TRAVELLING ON THE TRAIN, WHETHER ON DUTY, OR NOT, SHALL PRESENT THEMSELVES TO THE SENIOR MOST OFFICIAL AT THE SITE AND IN THE ABSENCE OF ANY SUCH OFFICIAL, TO THE GUARD OF THE TRAIN AND CARRY OUT THE DUTIES ALLOTTED TO THEM.

# 3.05. Duties of Section Controller -

Immediately when the Section Controller is informed of a serious accident on his section, he shall;

- a) apprise the Deputy Chief Controller of the available particulars of the accident and the nature of assistance required;
- b) ensure that adjacent line(s) in the affected section is / are free from obstruction before advising the concerned Station Masters to allow the Train to run over it/them;
- regulate train services in suitable places if required;
- d) advised the Transportation Inspector, Signal Inspector, Loco Inspector, PWI, TFO/ATFO it any etc. to proceed to the site of accident by first available means;
- e) advise the Section Controllers of adjacent sections of the accident and to regulate the train services in suitable places if required;
- see that the ARME/ART/Transship Train are worked out to and from the site of accident promptly and have a clear passage;
- g) keep a chronological record of all information received regarding the accident and action taken;
- obtain further details with regard to the extent of damages and progress in rescue operation and relief measures and co-ordinate with officer-in-charge at the site;
- arrange to remove the unaffected vehicles if any, adjacent to the affected vehicles to facilitate relief operation;

Note: Coaches with passengers if any should be drawn to a nearby station where catering/drinking water facilities are available, in consultation with the Sr.DOM/DOM.

# 3.06. Duties of Deputy Chief Controller -

Immediately after the Deputy Chief Controller is informed of a serious accident, he shall -

- i) issue order to the concerned SSE / Loco and Station Master for immediately working out of Accident Relief Medical Equipment and Accident Relief Train as required;
  - ii) place demand of ARME immediately without delay, on the division closest / most accessible to the accident site.

NB - The Division on whom the demand of ARME is placed should respond in the quickest possible manner and dispatch the ARME with least possible delay.

- b) ensure the availability or engine for working out of ARME and/or ART.
- Ensure that the Accident Alarm siren is sounded in time;
- d) Inform with available details
  - i) CHC, DSO, Sr. DOM, DOM, AOM, DMO;
  - ii) Sr. DEN/DEN, Sr. DCM/DCM, Sr. DEE/DEE, Sr. DME/DME, Sr. DSTE/DSTE;
  - iii) the concerned OC/GRP, OC/RPF, DM, SDO, DC, IRP, DSP, SRP, OC-Local Police and nearest Forensic Science Laboratory;

- iv) Emergency / Central Control at SE Railway Hd. Qrs.;
- Civil, Military, public hospitals and available Doctors at the nearest places, incase of casualty/ injury;
- ensure that the ARME/ART/Transship Train are moved to and from the site of accident on top priority;
- f) advise RMS authorities if a Mail carrying train is involved in the accident;
- keep a chronological record of details of accident, action taken, progress of rescue service and relief measures etc.

### 3.07. Duties of the Chief Controller -

Immediately on receipt of the information of a serious accident, he shall ensure that -

- a) the advice of the accident is sent to all concerned;
- the Medical relief van and / or relief train etc. are moved promptly to the site of accident on Top priority
- c) the emergency office is opened and manned in the Divisional Control office;
- d) the regulation of traffic is done correctly, in consultation with Sr. DOM / DOM;

**NOTE**: Passenger carrying trains should be regulated at convenient stations, preferably where catering facilities, drinking water etc. are available.

- e) timely information of all changes in train timings, diversion or cancellation of trains etc. is given to all stations on his Division as well as to the adjacent Divisions and / or Railway:
- f) arrangements are made for the onward journey of passengers who are able to proceed; and
- g) all assistance are extended to the officer-in-charge of the Divisional Control Office.

# 3.08. Duties of the Officer-in-charge of the Divisional Control Office -

Unless otherwise arranged, the Senior Divisional Operations Manager or in his absence the Divisional Operations Manager shall take charge of the Control Office accident situation, who shall be assisted by Officer / Sr. Supervisors of all the concerned branches and shall have the authority to summon for such additional assistance as he deems necessary.

He shall;

- a) keep a close watch on the movement of ARME / ART which, meanwhile, have been ordered and arranged for, if required, movement of ARME / ART from adjoining Divisions / Railways;
- make necessary arrangements for doctors and medical staff from near by hospitals, medical units or stations to move promptly to the site of accident;
- c) keep a close touch with the officer-in-charge at the site of accident to ascertain the position and particularly the assistance required at the site;
- ensure that all concerned officials, including Civil and Police authorities, have been advised of the accident;
- collect further information regarding the details of accident, progress of rescue, relief and restoration operation and pass on the information to the Headquarters;

- f) arrange for supply of food and drink to injured passengers as well as to other passengers of the affected train and also to the passengers on trains held up at the adjacent station(s) due to the accident;
- g) arrange to open and man information centres for attending to the enquiries from the public at important stations including the station(s) where injured passengers are received and sent to hospitals:
- h) maintain chronological record of all items of information received and action taken thereon;
- i) arrange to obtain the list of persons killed and/or injured in the accident, display it at important stations for information of the public;
- j) divert / cancel trains and also run duplicate / tranship trains as the circumstances may require;
- k) arrange for transporting the stranded passengers from the site of accident to suitable place (s);
- I) arrange for speedy ex-gratia payment as per extant rules.

# 3.09. Duties of Divisional Transportation Inspector, CI, PWI, Signal Inspector, C&W Inspector, Loco Inspector, TRD Inspector etc. —

On receipt of information of a serious accident, the all concerned Inspectors shall -

- a) Reach the site of the accident by the quickest available means;
- b) Take general charge of the situation until the arrival of an officer;
- c) Ensure the occupied and obstructed lines are protected as per rules;
- d) Make out a quick survey of casualties and injuries, ensure rendering of first aid to the injured, taking assistance of all available Railway Staff, Doctors and Volunteers on the train and near the site of accident;
- Arrange to shift the injured persons to the nearest hospital with the help of available assistance, keeping their particulars as available and ask for further assistance if required;
- f) Collect and record all important information relating to the accident, such as,
  - i) the condition of the track, with special reference to alignment, gauge, cross-levels, superelevation, points of mount and drop, any sign of sabotage etc.;
  - ii) the condition of rolling stock with special reference to brake-power and braking gear;
  - iii) all marks on sleepers, rails, locomotives, and vehicles etc. specially for preservation of clues;
  - iv) position of derailed vehicles;
  - v) position of Block Instruments ;
  - vi) position of indications, keys levers etc. if the accident is with in the station limits, in the section where provided with signals etc.
  - vii) prima facie cause of accident;
- ensure that the Train Signal Register, Log Book, Private Number Book, Line Admission Book, speed Recorder Chart and other relevant records are seized,
- h) obtain the statements of staff involved in the accident, as far as possible;
- prepare a rough sketch showing the position of derailed vehicles, position of track and OHE etc. make a quick survey of the extent of damage;
- j) remain at the site of accident for all possible assistance till relieved by another staff.

# 3.10. Duties of official-in-charge at the site -

The seniormost official present at the site when the accident occurred shall be in overall charge of the relief operation till he is relieved by another official deputed by the Administration to take over charge. However, the seniormost official of the Mechanical Department shall be in-charge of the relief train. The seniormost official present at the site of a serious accident, shall —

- a) take general charge of the situation and take action to provide all possible assistance;
- b) depute Officers / Senior subordinates and all other staff or specific duties in
  - i) assisting the rescue operation, if any;
  - ii) assisting the preservation of clues;
  - iii) assisting the transshipment work, if any;
  - iv) taking action to remove the obstruction as soon as possible;
  - v) ensuring the protection of adjacent line (s) and the affected train as per rules ;
- see that the portable telephone is installed and manned constantly by a responsible staff, and ensure adequate lighting of the accident area at night;
- d) see that the injured persons if any are rendered first aid and shifted promptly for medical aid;
- e) ensure to get clearance from Police authorities in case of suspected sabotage;
- f) make an immediate assessment of the following, with the help of the available doctors and /or others:
  - i) the number of persons killed, and of those sustaining grievous, simple and trivial injury;
  - ii) extent of damage;
  - iii) the period of suspension of traffic;
  - iv) assistance required;
  - v) prima facie cause of accident;
- g) see that a dealing centre is opened at the site of accident and manned
  - i) to keep the details of persons killed, injured, and action taken in each case;
  - ii) to relay the above information in details to the Divisional Headquarters :
  - iii) to attend to public enquiries and
  - iv) to relay the progress of relief work:
- ensure recording of all information at the dealing centre concerning the accident and the relief operations in the form of an accident Log Book.
- i) See that immediate action is taken to protect and safeguard property;
- j) See that proper assistance is given to the injured, ladies, children and the aged;
- k) Arrange for transporting the stranded passengers, preferably to stations where drinking water, catering arrangements etc. are available, unless they can be sent to their destinations:
- See that the arrangement is made for preservation and proper care of dead bodies, if any, till further disposal;
- m) See that obstruction is cleared in a minimum possible time, and every action taken for this purpose;
- n) Arrange, in case of the accident occurring at a station, for speedy ex-gratia payment as per extent rules.

# 3.11. The duties of divisional Safety Officer -

Immediately on receipt of information of a serious accident, the Divisional Safety Officer shall reach the site of accident by quickest means. He will be specially responsible to -

- a) ensure protection of affected line(s) and adjacent line(s) as per rules ;
- b) see that a proper arrangement is made in rescue and / or relief operation;
- c) take all action for preservation of clues;
- d) see that the assistance, to the extent necessary, is called from all sources;
- e) ensure collection of detailed particulars of the accident;
- f) ensure preparation of a general note of all evidence in regard to the cause of the accident;
- ensure co-ordination of all the departments concerned in rescue and / or relief operation.

# 3.12. Duties of Railway Medical Officer —

- The nearest Railway Medical Officer, on receipt of the report of a serious accident with injury to person, shall –
  - a) reach the site of accident with the Medical Relief Train or by the quickest available means, with all men and material commensurate with the seriousness of the accident, assess and advise further medical assistance necessary;
  - b) render medical aid to the injured carefully as far as possible at site;
  - make timely and adequate arrangements for shifting the injured persons to suitable hospitals as considered necessary for further treatment;
  - d) keep detailed particulars of the dead and injured e.g. their name, address etc. as far as available;
  - e) deal with the dead and injured as per extant rules and instruction.
- ii) Duties of the Medical Superintendent / Divisional Medical Officer -

Medical Supdt. / Divisional Medical Officer of the Division shall make suitable arrangements for -

- a) ensuring prompt and adequate medical facilities including hospitalisation for the persons involved in the accident;
- co-ordinating with Civil / Military / State / Public medical authorities and private practitioners for the purpose of (a) above.
- c) Obtaining and transmitting the details of persons involved in the accident to the Divisional Control Office and incase of an accident to a passenger-carrying train, reportedly attended with casualties and / or grievous injuries, unless otherwise advised by the Divisional Railway Manager, must proceed to the site of the accident by the first available means.

# 3.13. Duties of Commercial Officer at site -

The Sr. Divisional Commercial Manager or in his absence the Divisional / Assistant Commercial Manager, on receipt of information of a serious accident, shall :

- a) reach the site of accident by; the quickest available means ;
- b) see that immediate arrangement is made to protect the area and safeguard the property;
- c) look after the comfort of the passengers, injured and un-injured alike;

- ensure prompt supply of refreshments, free of charge, to the injured persons and also make adequate arrangement for refreshment and drinking water for the passengers detained at the site of accident for any reason;
- e) ensure, in co-ordination with Medical Officer (s) at site, preparation of a complete list of injured and dead, obtaining, if possible, the counter signature of a responsible police official and that necessary action has been taken in each case;
- f) arrange for adequate number of porters for carrying passengers' luggage and parcels in case of transshipment etc.;
- g) have the belongings of the injured and dead collected as required and ensure preparation of a list including each time;
- h) see that the doctors are assisted by porters and other staff in attending to the injured and for shifting them to the hospital;
- i) ensure the making over of the dead bodies to the Police for disposal;
- j) arrange preparation of a complete list of damaged consignments;
- see that proper arrangements are made for the transshipment of passengers and their luggage at the site of accident if required, as also for transshipment / unloading of parcels / affected wagons, if required;
- l) ensure preservation of documents of damage parcels, Mails and Goods etc.

# 3.14. Duties of Railway Officers of each Department in Divisional Head Quarters —

Immediately on receipt of an information of a serious accident, all Railway Officers concerned must report at the Control Office or at the nominated place and take the following action promptly;

- decide, the Officers who will be deputed to take charge at the site and at the Divisional Control
  office;
- b) arrange the quickest means for reaching the site of accident;
- ensure that resources of all Departments, in men and material, are promptly made available for rendering assistance to passengers, in clearing the line and, if required, for transshipment of traffic;
- make out a general plan of action for dealing with the accident and detailing the duties of officers of different Branches and other Officials;
- ensure that all Civil authorities concerned and other concerned officials have attended the site of accident;
- ensure attendance of Doctor, ambulances and other available road vehicles in addition to ARME and/or Relief train and preparation being taken in rescue services.
- g) see that the proper arrangement of staff and labour from each Department is made;
- keep a close touch with the Officer-in-charge at the site of accident and different dealing centres and see that all assistance is provided and properly utilised in rescue service and in clearing the line at the earliest
- keep a close ouch with the Head Quarters, adjacent Divisions / Railways for advice and assistance;
- open and man enquiry counters at important stations of the division for the information of the public.

# 3.15. Duties of official-in-charge at the station where the injured are being removed to the hospital.—

An experience Railway Official (preferably an officer) must be deputed to take general charge at the station to which the injured are to be sent for admission to hospital.

The Official-in-charge shall -

- maintain communication with the officer-in-charge in the Divisional Control office and at the site of accident to keep the details of injured and dead and inform the hospital authorities for making necessary arrangements for admission;
- arrange the service of as many senior Railway Officials and available volunteers to look after the injured;
- choose the most convenient platform easily accessible to ambulance car, stretchers etc. for the reception of the train conveying the injured;
- arrange for sufficient number of stretchers and a room or part of a covered platform to the set aside for attending to the cases requiring first aid or medical attention before removal to hospital:
- e) open a special inquiry office at a prominent place for prominent display of notices and lists of the injured or / and dead and to attend to all public inquiries;
- f) request the nearest O/C-RPF and OC/GRP for the posting of an adequate force to control the crowd and for the maintenance of law and order at the station;
- g) depute a responsible Railway Staff to co-ordinate disposal of dead bodies which the police has taken charge and see that arrangements are made to extend facilities to the relatives and public to identify the injured and dead bodies, also arrange for drinking water and light refreshments through the Railway catering / contractors at the station.

### 3.16. Duties of the Officer-in-charge of transshipment in case of serious accident. -

The Sr. Divisional Commercial Manager or in his absence the Divisional / Assistant Commercial Manager will be in charge of arrangements for the transshipment of passengers and their luggages, parcels etc. at the site of accident.

The official-in-charge of transshipment will be responsible -

- a) to advise the passengers of the transshipment programme well in advance;
- to select, in consultation with the Divisional Engineer or Assistant Engineer, the sites suitable for detraining and entraining of passengers;
- to see that the sites are demarcated and lighted at night, also that the routes over which the passenger may have to walk are clear;
- to intimate the Station masters of adjacent stations through Control or in writing the exact kilometres
  of the site of train halt, so that these can be clearly indicated in the Caution Order to be issued
  to the Driver and Guard;
- e) to arrange for supply of drinking water there :
- to arrange for sufficient porters, gangmen, etc. from the nearest sources for the free carriage of passengers' luggage, parcel and Government Mail, etc.
- g) to see that the site is provided with portable Telephone, installed and manned during transshipment work;

- to ensure that each train for transshipment is accompanied by a responsible person, be piloted and correctly hand-signalled to stop at train halt;
- to depute responsible persons to look after the transshipment work and general comfort of passengers and to record the details of the work in Log Book at site;
- to ensure arrangement of Railway Security staff at the site of transshipment to safeguard the passengers and their luggages, especially at night.

# 3.17. The Divisional Railway Manager —

In the event of a serious accident, the Divisional Railway Manager shall -

- depute an officer to the site of the accident to assume overall charge, unless he himself proceeds to the site of the accident;
- ensure that assistance is rendered by each Branch of his Division promptly and efficiently in rescue and relief, transshipment of traffic if required, and for removal of obstruction at the earliest; allot specific duties to the individual Officers for dealing with the accident;
- keep a close touch with the Officer-in-charge at the site of accident and Officer-in-charge at the Control office and see that all assistance is provides and properly utilised in rescue and relief and for removal of the obstruction;
- d) Ensure that Telephonic and / or Telegraphic advice of the accident is sent to the concerned officials;
- Arrange a preliminary enquiry in cases where immediate investigation of certain matters is considered necessary even though the enquiry may be conducted later by the Commissioner of Railway Safety etc.
- f) Proceed to the site of the accident as and when required under extent instructions.

NOTE: i) In the event of an accident not falling under the Classification of serious accident, but attended with blocking of line, the same line of action shall be taken by the different officials as indicated in this chapter, except which are for dealing with the injured and dead. However, the Divisional/Head Quarters Officers concerned will decide the line of action need be taken in relief and restoration operation etc., considering the location and nature of accidents which are not being fallen under the classification of serious accident, as also considering the seriousness of the serious accident. It is clear that the line of action will vary marginally in case of accidents involving passenger trains with loss of life and / or injuries and those involving goods trains.

ii) It is made clear to all concerned officials that the list of duties in this chapter is not exhaustive and this is only to make them attention to important aspects. This does not absolve them from following other rules and instructions on the issue.

The duties of staff travelling in passenger carrying train which met with an accident :

# 3.18. Duties of a Train conductor/Train superintendent in the event of a serious accident —

Immediately after occurrence of a serious accident, the train Conductor / Train Superintendent must -

- a) Assist the Guard in rendering first aid to the injured person (s) and shifting them to the Hospital.
- Look after the comfort of the passengers, injured and un-injured alike.
- Assist the passengers for protection of their luggages.
- Make out a list of injured / dead passengers.

### ACCIDENT MANUAL

- e) Preserve reservation charts to know the particulars of injured / dead passengers.
- f) Organise to transship / transfer passengers and their luggages to the passenger special.
- g) Assist Commercial Inspector for arranging the snacks, tea, Coffee & drinking water to the injured persons and other passengers also detained at the site of accident for any reason.
- Collect the addresses of the relatives of the injured / dead passengers to send information regarding accident.
- i) The Train Supdt. / Train Conductor should look for the assistance of any Doctor or para Medical staff railway / other than railway travelling in the train.

### 3.19. Duties of a Coach Attendant.-

18

Immediately after occurrence of a serious accident, the coach attendant should work under the quidance of Train Conductor/Train Superintendent.

# 3.20. Duties of a Travelling Ticket Examiner (TTE).-

- a) Immediately after the accident takes place, the concerned ticket checking staff manning the coaches should assist the guard and train crew in assessing the site of accident and ascertain the casualties / injuries taken place in their respective coaches and in the reserved compartments as well. The rough assessment made by ticket checking staff should be given to Captain of the train who should hand over it to the Guard for further communication to the controllers without any delay.
- Make adequate arrangements of refreshment and drinking water to the affected passengers.
- c) Arrange for prompt road transport for evacuating stranded passengers.
- d) Arrange adequate number of licensed porters for carrying passengers luggage and parcels.
- e) Arrange for payment of ex-gratia.
- f) Arrange for collecting the belongings of the injured and dead and handing them over on satisfactory proof of ownership being obtained.
- g) Arrange to make over the dead bodies to the police for further necessary action.
- Arrange to set up enquiry-cum-information centres at important stations enroute for giving information to the public.

# 3.21. Duties of A.C. Mechanic. -

- a) He should immediately "Switch Off" the current where necessary to avoid short circuiting.
- He should also assist Commercial staff i.e. Train Conductor / Train Superintendent / TTEs in their duties at accident site.

# 3.22. The seniormost RPF Officer available will assume Control and immediately start the following action. —

- i). Segregate the area of incidence by establishing temporary barriers by use of nylon ropes (if available) or any other make shift device available at the site to protect the area against the entry of spectators into the affected place.
- ii) Baggage of passengers should be isolated and protected and consigned goods are taken care of till they are handed over to claimants or taken over by the Railway.

- iii) RPF personnel should respond to any call for assistance to rescue victims and transport them to nearest Hospital.
- RPF Officers will maintain close liaison and harmony with the Officers of various departments of the Railways, GRP, Local Police and Officers of Civil Administration.

  (For detailed duty list, refer Standing Order No. 34 issued under Railway Roard's latter No. 37.

(For detailed duty list, refer Standing Order No. 34 issued under Railway Board's letter No. 97/ Sec.(SPL.) / 200 / 38 dated 31.7.97.)

# 3.23. Duties of various staff in case of untoward incidents -

# a) Station Superintendent -

- i) If an untoward incident occurs at the station, the concerned Station Superintendent shall immediately arrange for medical assistance to the injured passengers and report such incident within twenty four hours of the occurrence to the Divisional Security Commissioner with details.
- ii) If an untoward incident occurs in the mid-section, in the absence of the Guard; the Conductor and the Train Ticket Examiner, the Station Superintendent, if it comes to his notice, shall perform the duties referred to in sub-clause (i) above.

# b) Guard -

If an untoward incident occurs in the mid-section, the Guard of the concerned train shall inform the Station Superintendent of the nearest station who shall perform the duties referred to in (a) (i) above.

### c) Conductor -

In case the Guard is injured in an untoward incident occurs in the mid section, the Conductor of the concerned train shall inform the Station Superintendent of the nearest station who shall perform the duties referred to in (a)(i) above.

# d) Train Ticket Examiner -

In case both the Guard and the conductor are injured in an untoward incident occurs in the mid section, the Train Ticket Examiner in-charge shall inform the Station Superintendent of the nearest station who shall perform the duties referred to in (a)(i) above.



# CHAPTER - IV

# ACCIDENT RELIEF

# 4.01. Types of accident relief equipments.-

- (a) Following types of accident relief equipments are available on this Railway -
  - (i) Accident Relief Medical Equipment (ARME),
  - (ii) Accident Relief Train (ART).

# 4.02. Accident Relief Medical Equipment. -

- (a) With a view to provide prompt medical aid, the following types of accident relief medical equipments are provided on this Railway—
  - (i) Scale I in medical vehicles, as part of the accident relief trains
  - (ii) Scale II in boxes, at specified stations.
  - (iii) Static first aid boxes-in- break down vans of accident relief trains and at all stations dealing with passenger traffic excepting train halts, also in other trains and places.
  - (iv) Guard's first aid boxes-as a personal equipment of guards of all passenger carrying trains.
  - (v) Elementary first aid boxes-for gangmen.
- (b) Apart from the equipments referred in sub-rule(a) (i) and (ii) above, every Railway Doctor should be provided with an emergency medical bag in which he can carry the injectables, pain relieving drugs, other medicines and dressings required in an emergency. If a Railway Doctor happens to be on the spot of an accident, he can start relief work without waiting for the regular medical equipments to arrive.
- (c) Scale 'I' equipment-
  - (i) Accident relief medical equipment Scale-I in medical vehicles forms an unit of the accident relief train and is stationed at divisional head quarters and at other selected important stations preferably where there are hospitals or health units in charge of Railway Medical Officer. The function of the vehicle is to carry medical equipments to the site of the accident so that prompt medical aid may be rendered and injured persons transported expeditiously to the nearest hospitals.
  - (ii) An auxiliary van is also provided along with the medical vehicle which have provision of emergency tools for extricating injured passengers. This should also carry adequate supply of drinking water and provision for tea, coffee and light refreshments which may be required for affected passengers.
  - (iii) The accident relief medical equipment vehicles shall be stabled in a suitable siding having exits at both ends so as to work it out at a moments notice to any direction. These vehicles must be stabled separately or so marshalled on the relief train that it can, if necessary, be despatched in advance of the relief train without delay.
  - (iv) The person in-charge of the C&W department for ARME vehicles is responsible to maintain these vehicles in the same way as other coaching stock in regular use, in that the running gears shall be regularly attended, oiled and replaced in accordance with the orders inforce He must ensure that these vehicles are always kept in good working condition so as to run at permissible speed. The electrical equipment including batteries shall also be attended to

- and recharged regularly. In the event of an accident requiring medical assistance, no detention shall be permitted to these vehicles for any reason.
- (v) The Telecommunication Inspector must thoroughly test the portabled Telephone provided in ARME van regularly and ensure that this is in good working order and that the line wire diagram is kept upto date.
- (vi) The electrical official in charge shall regularly see and personally ensure that the electrical gear in the ARME vans are in good working order.
- (vii) The train examiner in charge shall see that the Fire Extinguishers are examined once in six months and ensure that they are in good working order with spare refills.
- (viii) One photographer with Camera and necessary equipments should form integral part of the group of staff who accompany the ARME and ART in case of an accident on short notice. All possible action is taken for preservation of the clues in order to enable reconstructing of scene of accident with reliability.

# (d) Scale "II" equipments -

- (i) Accident relief medical equipment Scale-"II" is located at selected stations whether there is accident relief train or not, but there is a Railway hospital or health unit. This equipment should be stored in portable metal boxes of suitable size and kept in a separate room in or adjacent to the station building or in a wagon provided for this purpose. For quick transporting, loading and unloading of the boxes containing Scale-II equipment, wheel trollies are also provided.
- (ii) This equipment is intended for use in major accidents and is to be handled by any Doctor or by qualified first aiders under the supervision of Doctor(s)

# (e) First aid boxes -

- (i) Static first aid boxes in break-down vans of accident relief trains, and at stations, yards, loco sheds, Material train and carriage and wagon depots etc. are kept in a prominent place in the respective places offices. The exact size and pattern of these boxes are standardised by the Chief Medical Officer.
- (ii) The first aid boxes for guards of passenger carrying trains as prescribed by the St. John Ambulance Association of India shall be the personal equipment of the guards and be carried by them in their guard boxes.
- (iii) The first aid boxes provided for gangmen should be of compact and small size.

# 4.03. Maintenance of Keys. -

- (a) Scale 'I' equipment.
  - (i) The keys of the locks of the various external doors of the medical vehicle will be in duplicate, one set to be in charge of the Loco Foreman or the Station Master as the case may be and other with the medical officer in charge. All the keys should be suitably marked for identification. The keys will be kept in a glass fronted box fixed in a prominent place in their respective offices and duly sealed by the Loco Foreman/Station Master/Medical Officer as the case may be.
  - (ii) The keys of any locks inside the vehicle should also be in duplicate, one set is kept in a glass fronted box fixed inside the vehicle duly sealed by the Doctor in charge, and the other set will be kept in a glass fronted box fixed in a prominent place in the hospital or the health unit concerned and the boxes are duly sealed by the Doctor in charge.

(b) Scale 'II' equipment-

The boxes of Scale-'II' equipment will not be provided with locks and keys, but will be sealed by the medical officer in charge. The room in which the boxes are kept will be locked and provided with duplicate keys, one of which will be with the Station Superintendent/Station Master on date and the other with the Medical Officer in charge. The keys will be suitably marked for identification, and will be kept in a glass fronted box, duly sealed by the Station Superintendent/Station Master and Medical Officer in charge as the case may be, and fixed in a prominent place in their respective offices.

# 4.04. Custody, replenishment and inspection of the accident relief medical equipment, etc.—

- (a) The Medical Officer in charge is responsible for ensuring that the prescribed contents of the accident relief medical equipment Scale-I and II are maintained in the chests and are in good condition. Whenever required the medicines, surgical appliances and other articles must be replaced.
- (b) Where Scale II equipment is stored in the Station building, the Station Superintendent / Station Masters will be responsible for the safe custody of the boxes. Whenever this equipment is sent to the site of accident. The Station Superintendent / Station Master shall ensure that the boxes are received back in time and kept at the proper place. On return of the boxes after use, the medical officer in charge should check the same and arrange immediately for necessary replenishment of the articles used. In addition, the medical officer in charge and the Station Superintendent / Station Master will inspect this equipment once in a month.
- (c) ARME Scale-I and Auxiliary must be inspected once in a month by the following officials in charge (preferably jointly)—
  - (i) Medical Officer.
  - (ii) Station Superintendent / Station Master.
  - (iii) Telecommunication Inspector,
  - (iv) Train Examiner.
  - (v) Electrical Official.
- (d) An inspection book must be provided in the ARME van Scale-I as also in the location of Scale-II equipment for record of remarks by inspecting officials and action taken. The inspection book shall neatly be maintained.
- (e) Medical Officer in charge of the division will inspect the Scale-I and Scale-II equipment quarterly and ensure that all the prescribed contents are maintained in good condition.
- (f) After each monthly inspection, a joint report shall be submitted by the officials to their respective Divisional Officers. Every month a certificate to the effect that the contents of the equipment have been checked and replaced (wherever required) shall be sent by the Doctor-in-charge of each equipment to the Medical Officer in charge of the Division who in turn shall forward it to the Chief Medical Officer.
- (g) During the inspection, the Medical Officer shall also see that the water tanks are being refilled every week. The Train Examiner in charge shall be responsible for refilling the water tanks every week. The inspecting officials concerned shall also see that all the articles such as petromax, other lights, mantles, kerosine, matches, torches, batteries and bulbs etc. for lighting arrangements are available and in proper working order. They should ensure that there is sufficient quantity of oil available. The lighting arrangements should be tested by actually burning them. The electrical official in charge shall also ensure that the lights, fans and the batteries are in proper working order.

# 4.05.(a) LOCATION OF ART, TOOL VAN, ARME & BD CRANE IN SER

Srl. No.	Division	Location of ART	Class/ Model of ART	Scale of AMRE	SPARMV/ SPART	Rail Cum Road Vehicle	Availability of BD Crane	Scale-II	No.
1.	ADA	ADA	Class-A	Scale-I			120T BD Crane	Bankura	1
		BKSC	Class-A	Scale-I	-	-	140T BD Crane	Chandil	2
2.	СКР	CKP	Class-A BEMCO 2011	Scale-I	HS SPART	-	140T BD Crane		
	***	DPS	Class-B BEMCO 2014	Scale-I	-				
		BNDM	Class-A BEMCO 2014	Scale-I		-	140T BD Crane	Show you	
		TATA	Class-B MFD 2012	Scale-I	1		-		
		JSG	Tool Van BEMCO 2009		1		ingo pa	Jharsuguda	1
3.	RNC	HTE	Class-B	Scale-I	-	-	-11-4-MI (1)	Bano Muri	1 2
4.	KGP	KGP	Class-A	Scale-I	SPARMV	Available	140T BD Crane	Mecheda Tamluk Balasore Baripada	1 2 3 4
		SRC	Class-B	Scale-I	-				

ARME SC-II, JSG in CKP Division. MFD - 1 (Tata/CKP Divn.)

# (b) AVAILABILITY OF HRD IN ARME/SPARMV IN SER

Division	Location	Equipment	Make	Yera of Comm.	
ADA	ADA .	HRD	LUKAS	2003	
	BKSC	, HRD	LUKAS	2003	
	DNOC	Innu	HALMATRO	2013	
CKP	CKP	HRD	LUKAS	2001	
STATE OF LAND	TATA	HRD	LUKAS	2008	
Trans.	BNDM	HRD	LUKAS	2004	
ara ara	DPS	HRD	HALMATRO	2013	
KGP			LUKAS	2002	
	KGP	HRD	HALMATRO	2013	
	SRC	HRD	HALMATRO	2013	
RNC	HTE	HRD	LUKAS	2012	

#### (c) TURNING OUT FACILITIES (EXIT) OF ART, ARME & BD CRANE/SER

				EXIT	3 3 7 7 7
Srl. No.	Division	Location	ART/Tool Van	ARME	BD Crane
1.	ADA	ADA	Double	Double	Double
		BKSC	Double	Double	Double
2.	CKP	CKP	Double	Double	Single
	1111111	BNDM	Single	Double	Single
		TATA	Double	Double	NA
3 7-1		DPS	Double	Double	NA NA
		JSG (Tool Van)	Double	NA	NA NA
3.	KGP	KGP	Double	Double	Double
		SRC	Single	Double	NA NA
4.	RNC	HTE	Double	Double .	* NA

#### 4.06. Maintenance of Accident Relief Train. -

- (a) Following records shall be maintained in the accident relief trains-
  - (i) Accident Relief Train Log Book.
  - (ii) Attendance Register.
  - (iii) List of tools and equipments.
  - (iv) Register for testing of wire ropes and chains.
  - (v) Periodical testing register for-
    - (1) First aid equipment.
    - (2) Field Telephone.
    - (3) Detonators.
    - (4) Gas cutting equipment.
    - (5) Petromaxes and tilly lamps.
    - (6) Generators.
    - (7) Compressors.
    - (8) Fire fighting equipment.
  - (vi) Inspection register.
- (b) (i) All Relief trains and Relief vans are under the charge of Mechanical department. SSE / Loco and others in charge of the Accident Relief Trains and Relief Vans, are responsible to ensure that they are always fully equipped and in proper running order. They will also inspect the equipments to ensure that they are in efficient working condition. However, the Engineering, Electrical and S&T departments will be responsible to ensure the availability of prescribed equipment of their respective departments and their good condition.
  - (ii) The Divisional Mechanical Engineer, Divisional Engineer, Divisional Electrical Engineer (Tr. D) Where provided and Divisional Signal and Telecommunication Engineer, Divisional Electrical Engineer (G) concerned must personally inspect the Relief Trains and their

equipments concerned to the respective department to ensure the availability and their efficient working condition. They must also satisfy themselves that the deficiencies are made good after use at every accident.

- (c) The person in charge of the Loco-shed, Running shed at the base station of Relief Trains is responsible to see that the Relief Train gang thoroughly understand the accident hooter for their attendance, and to maintain a list with their names and the names of principal members live in the vicinity of the shed who are supposed to attend with the relief train, and also responsible to keep the said list in a place accessable to all.
- (d) The person incharge of the C&W department is responsible to organise a break down gang amongst his staff at the base station of relief train and to see that they thoroughly understand the accident hooter for their attendance, also to ensure that the gang is efficient enough to work at the site of accident.
- (e) The person incharge of the loco shed/Running shed is responsible to keep the engine and accident relief crane (if provided) in readiness. The CYM/YM/SS/SM as the case may be will be responsible to arrange any extra vehicle or brake van for relief work in case of necessity.
- (f) The person incharge of C&W department for relief train is responsible to maintain all the vehicles on the train in the same way as other coaching stock in regular use, in that the running gears shall be regularly attended, oiled and replaced in accordance with the orders inforce. He must ensure that those vehicles are always kept in good working condition, so that in the event of an accident requiring relief train, no detention or speed restriction need be permitted to these vehicles for any reason.

#### 4.07. Availability of HRE in ART/SER .-

Division	Location	Equipment	Make	Yera of Comm.
ADA	ADA	HRE	LUKAS	1997
	BKSC	HRE	MFD	2013
CKP .	CKP	HRE	BEMCO	2011
	TATA	HRE	MFD	2012
	BNDM	HRE	BEMCO	2014
	DPS	HRE	BEMCO	2014
	* JSG	HRE	ВЕМСО	2009
KGP	KGP	HRE	MFD	2009
2.10 10	SRC	HRE	MFD	2013
RNC	HTE	HRE	LUKAS	2003

# 4.08. Display of addresses of Government/Railway officials and other particulars in control office.—

In each control office, a complete list for the whole of the control area must be maintained and hung at a conspicuous place, indicating the following—

(a) Government officials stating the distance of their offices from the nearest station and names of the station under their jurisdiction, i.e., District Magistrate or Dy. Commissioner,

Sub Divisional Officer,

District Superintendent of Government Railway Police.

Inspector General of Railway Police.

Officer in charge of local Police Station.

Officer in Charge of Government Railway Police.

Civil Surgeon,

Post Master General

Superintendent of Post and Telegraph, or

Dy. Superintendent of Post and Telegraph,

Inspector of Post and Telegraph,

Divisional Engineer of Post and Telegraph,

Lineman-Post and Telegraph.

- (b) Base stations of Accident Relief Medical Equipment,
- (c) Base stations of Accident Relief Train.
- (d) Railway, Civil, Military, Private Hospital or Dispensary and local Doctors indicating the distance from nearest station, facilities and means of communication available.
- (e) All Railway officials concerned to accident with their jurisdiction.
- (f) Such road vehicles with the names of the Drivers and address which can be called for incase of emergency.
- (g) Station-wise list of ARME with adjoining divisions of home Railway as well as that of adjoining Zonal Railway.
  NOTE: Sr. DOM / DOM and CHC must ensure that the particulars mentioned above are maintained upto date in the control-offices.

# 4.09. Display of addresses of Government / Railway officials and other particulars at stations and Hospitals / Health Unit. —

- (a) At each Railway Station, a complete list must be maintained and hung at a conspicuous place, indicating the following—
  - Government officials whose jurisdiction include the station and the names of the stations under their jurisdiction.

District Magistrate or Dy. Commissioner,

Sub Divisional Officer,

District Superintendent of Police.

District Superintendent of Government Railway Police.

Inspector General of Railway Police.

Officer in charge of Local Police Station.

Officer in charge of Government Railway Police.

Civil Surgeon.

Post Master General.

Superintendent of Post and Telegraph.

Dy. Superintendent of Post and Telegraph.

Inspector of Post and Telegraph.

Divisional Engineer of Post and Telegraph.

Line man Post and Telegraph.

- (ii) Base stations of Accident Relief Medical Equipment.
- (iii) Base stations of Accident Relief Train.
- (iv) Nearest Railway, Civil, Military, Private Hospital or Dispensary and Local Doctors indicating the distance from the station.
- (v) All Railway officials concerned to accident with their jurisdiction.
- (vi) Such road vehicles with the names of the Drivers and addresses which can be called for in case of urgency.
- (vii) List of persons living in the locality who have passed First Aid examination.
- (b) In each Railway Hospital or Dispensary/Health Unit-

In each Railway Hospital or Dispensary, a complete list of Railway, Civil, Military or Private Hospital or Dispensary and local Doctors indicating the distance from the nearest station and details of facilities available shall be maintained and kept in a conspicuous place.

NOTE: (1) The Station Superintendent/Station Master and Medical Officer in charge of the Station and Hospital respectively must ensure that the above mentioned particulars vide para (a) and (b) are maintained upto date.

NOTE: (2) Information mentioned in sub-para (a) (iv) above should be painted on a slate infront of the Station Master's office.

#### 4.10. Sounding of Hooter. -

(a) Sounding of hooter for turning out of Relief Train/ARME van will be as follows:-

	Total No. of blasts	Duration of each blast	Gap between 2 consecutive blasts
(i) Relief Train with ARME.	. 5	60 seconds	10 seconds
(ii) Crane	4	60 seconds	10 seconds
(iii) Relief Train without ARME	3	60 seconds	10 seconds
(iv) OHE Trouble	1	120 seconds	

- (b) The SSE(Loco) or any other official in-charge of the 'Hooter' is responsible for proper maintenance of it and to keep a trained staff ready round the clock for sounding the hooter at once on receipt of orders from train ordering officials.
- (c) Target time for the turn out of ARME and ART-
  - (i) The Accident Relief Medical Van must be despatched to the site of accident within 15 minutes from the base station after sounding the hooter where there is double exit siding and within 25 minutes in case of single exit siding with the first available engine.
  - (ii) The Accident Relief Train must be turnout/despatched from the base station to the site of accident within 30 minutes by day and 45 minutes by night after sounding of hooter.

#### 4.11. Accident Mock Drills for ARME / ART. -

- (a) The period between two consecutive turnouts of any Relief Train/Accident Medical Equipment should not exceed three months. If, therefore, a relief train/accident medical equipment has not been called out in the normal course during a period of three months, a practice drill should immediately be arranged. In carrying out these drills the following points should be carefully borne in mind:—
  - (i) Every drill should be made as realistic as possible.
  - (ii) Arrangements regarding the drills should be kept confidential.
  - (iii) The turnout of a relief train should be completed with all equipment and staff of all branches concerned including the medical equipment and staff where provided and be made proceed to a near by suitable station and return.
  - (iv) These drills should be ordered by the DRM personally and conducted under the direct supervision of an officer not lower in rank than that of a Senior Scale Officer.
  - (v) The results of mock drills should be maintained in a special register and corrective action taken wherever necessary. The results should also be communicated to Chief Operations Manager / Chief Safety Officer.

#### 4.12. Ordering and despatch of Relief Train and Accident Relief Medical Equipment. -

- (a) As soon as the information of an accident is received, the train ordering officials considering the type/nature of accident and assistance required, will issue orders immediately to the officials concerned for working out the Relief Train and/or Accident Relief Medical Equipment. On receipt of this order, the official concerned must sound the hooter at once. After sounding of this hooter, all concerned officials i.e., principal members, relief trains gang, medical team etc. must get them ready and turnout immediately to accompany the relief train and/or accident relief medical equipment so as to despatch the train within the target time. No detention should be permitted to medical relief and/or relief train on any account at any point unless under special circumstances and with the permission of Sr.DOM/DOM. Refer para 8.02(a) (x) also.
- (b) In case of serious accidents involving loss of life or serious injuries
  - (i) It is of primary importance to send the medical equipment vans/the boxes containing medical equipment including water drums/tanks with fresh drinking water immediately to the site of accident without detaining for the rest of the relief train to get ready.
  - (ii) Unless it is known definitely that adequate medical assistance and equipment have already reached the site of accident or will reach quicker from other or nearer sources, the medical van/the boxes containing medical equipment should be despatched atonce and in advance, without waiting to mobilise the complete relief train and staff.
  - (iii) Special arrangements should be made for transport of medical equipment and injured/dead at the site of accident. In such cases, the Station Superintendent / Station Master of the station of origin of the train or otherwise nominated should arrange atleast 30 licensed coolies to go with the relief train considering the seriousness of the accident with the instructions that they should work under the direction of Railway Doctor or Senior most official in charge at site.
  - (iv) In order to ensure an adequate supply of drinking water to the injured and other passengers, at least two 4-6 gallons capacity drums with taps in good working order should be made available with the Station Superintendent/Station Master at the station of origin of the relief train. These drums filled with clean drinking water should be transported along with the relief train if required in addition to the supply of drinking water with ARME.

- (v) The Station Superintendent/Station Master of the station of origin of the relief train or otherwise nominated should arrange with the Station Catering Officials / vendors for preparation and supply as much food and sweetmeat as possible for the passengers whenever required. The vendors should also arrange supply of fruit and milk. If required, the catering officials and vendors with food, sweetmeats and milk etc. should be sent with the relief train or by other means to the site of accident for supply to the affected passengers.
- (vi) The ARME must be accompained by a team of medical officer and other assistance from its base station. If any Medical Officer resides at an intermediate station whose attendance is also essential at the site of accident, he should be advised before hand to be in readiness and accompany the ARME unless it is known that he already reached the site of accident or will reach quicker by other means. Due to unavoidable circumstances, if any medical officer failed to accompany the ARME whose attendance is also essential at the site of accident, action must be taken to send him subsequently by any available means.
- (vii) Train Examiner along with some carriage and wagon staff and train lighting fitter shall proceed with the ARME to the site of accident. The train lighting staff should ensure before departure of the ARME that the high power lights are in proper working order. The person-in-charge of the C&W department at the base station of ARME shall be responsible to arrange such staff from the nominated gang for relief operation or from the on duty staff at the station/yard. The Train Examiner onduty at the base station of ARME on hearing the hooter, shall get in touch with his in-charge and the Station Superintendent/Station Master to inquire, if his attendance is required at the site of accident with the staff mentioned above.
- (viii) The Accident Relief Medical Equipment and/or Accident Relief Train must be allowed to run to the site of serious accident on top priority. Similar priority should also be given to the train to carry and carrying injured persons from the site of accident. The Section Controller and Deputy Chief Controller on duty of the section concerned shall be responsible to ensure this. On non-controlled section or in case of suspension of Control system the Station Superintendent / Station Master on duty at the station(s) concerned must take every action in time for the purpose mentioned above. Whenever the ARME and/or ART are/is ordered, the Station Superintendent / Station Master / Chief Yard Master / Yard Master in charge of the Station / Yard as the case may be, if off duty, shall be called to duty; steps to turn out the said train shall not, however, pend on this account.

#### 4.13. Medical Aid from other sources. -

In serious cases of accidents with injuries, medical aid must be summoned from all the nearest sources available. In calling the medical assistance from the Civil, Military or Private Hospital or Dispensary or local Doctors, the Station Superintendent/Station Master shall send the requisition by the quickest possible means. If the requisition cannot be sent by telephone, the Station Superintendent/Station Master shall send a messenger with a hand message. The hand message shall be written legibly and sent through suitable staff who have been trained for the purpose and are well acquainted with the residence of the Doctors. It shall be the responsibilities of the Station Superintendent/Station Master to ensure that suitable staff at the station are trained for the purpose.



#### CHAPTER - VI

#### SERIOUS ACCIDENTS

- 6.01. In cases of serious accidents involving loss of human life or grievous hurt or damage to property or serious interruption of any important through line of communication, etc. the duties of different categories of Railway Officials have already been stipulated in chapter—III of this manual. However, in case of loss of human life or injuries to person(s), broadly, relief arrangements constitute the following.—
- (i) Expeditious medical and other assistance at the site of the accident;
- (ii) Suitable transport arrangements of the injured to the nearest hospitals, dispensaries etc.;
- (iii) Arrangements for transporting the dead to a suitable place for establishing identification, verification etc. and disposal of the same;
- (iv) Advice to the next of kin of the dead and injured where possible; and also display of information regarding names of the dead and injured at important stations.
- (v) Arrangements for water, hot beverages, food, etc. for the stranded passengers, as per rules;
- (vi) Expeditious arrangements for transport of stranded passengers and rerouting of other trains where ever required;
- (vii) Issue of passes, etc. as per rules to the next of kin of the dead and injured;
- (viii) Ex-gratia payment to the injured, to the next of kin of dead and payment of compensation at a later stage, as per rules.

#### 6.02. Quickest information of the serious accident.—

- (a) The Deputy Chief Controller on duty in Divisional Control Office in addition to ensuring the sounding of Accident Alarm Siren shall give a detailed information of the serious accident to all concerned officials as mentioned in rule 3.06 by quickest means. Such information shall not be limited to the officials at Divisional Head Quarters, but also to be given to all concerned officials in section for immediate relief arrangement.
- (b) If the GRP, RPI Local Police, DM, SDO, DC, IRP, SRP and Civil, Military, Public Hospitals and nearest Private Doctors, etc. are not connected through telephone or in the event of the telephone is out of order, the information of a serious accident shall be communicated through the Station Superintendent/Station Master/Assistant Station Master concerned or through any other suitable means at the earliest. The Deputy Chief Controller/Chief Controller and Officer-in-charge of control office shall ensure this.
- (c) The Station Superintendent/Station Master/Assistant Station Master on receipt of information of a serious accident for the purpose mentioned in para(b) above shall communicate the same through telephone and subsequently confirm by written message. If the said offices/officials are not connected through telephone, the information shall be sent by a written message through a special messenger.
- (d) There should be no hesitation in resorting to motor, buses, taxis, cycle, rickshaws, etc. for the purpose of ensuring prompt and speedy action in respect of para(b) and (c) above in absence of Telephonic/Wireless communication.

- 6.03. Information of a serious accident to Zonal Railway. A telephone advice should be relayed to nominated officers in Zonal HQ immediately after the accident in case of following categories of accidents:-
- All train accidents.
- Any yard accident having serious repercussion on movement of traffic on through line resulting in dislocation of traffic more than the threshold value as indicated above.
- Land slides, breaches, OHE breakdown etc. which result in dislocation of traffic more than the threshold value as indicated above.
- (iv) All cases of signal passing at danger and averted collisions.

In addition to this, periodic (monthly) statement of Accidents in all categories shall be submitted to Zonal Headquarter in prescribed proforma.

- (a) Deputy Chief Controller on duty in Divisional Control Office shall be responsible to communicate a detailed information of a serious accident to the Chief Controller or Deputy Chief Controller on duty in Central Control Office at Garden Reach at the earliest. In this message, a brief particulars in regard to the nature of the accident, details of persons killed or injured (if any), extent of damage, prima-facie cause, probable duration of block, relief arrangements made and other useful information shall be furnished. Particulars of information to be relayed in the case of accidents are circulated from time to time.
- After the first information conveyed to all concerned, frequent bulletins at regular intervals are also to be relayed from the Divisional Control Office / Emergency office to the Central Control / Emergency office at Garden Reach as regards progress of injured in hospitals, progress of relief operations estimated cost of damage and probable cause of accident (if not already conveyed) and any assistance that may be required from Headquarters offices or from adjacent divisions, as also the expected time of restoration of communication etc.
- (c) The Chief Controller and Officer-in-charge of the Divisional Control Office / Emergency office will be responsible to ensure regarding para (a) and (b) above.

# 6.04. Information of a serious accident to the officers at Head quarters at Garden Reach.—

- In order to ensure quick mobilisation of resources and attendance of Head quarters Officers at site of accident, a siren has been made effective at Garden Reach and the switch of the same is provided in the Central control.
- when an information is received at Central Control that a serious accident has taken place involving loss of life, grievous injury to persons or intensive damage to Railway Property, the hooter shall be sounded with 5 blasts for 60 seconds each with an interval of 10 seconds between 2 consecutive blasts. Thereafter the Deputy Chief Controller or Chief Controller on duty will inform the CSO/Dy. CSO/SSO/ASO or in their absence STM(c)/CPTM/CFTM who shall decide as to whether the presence of Senior Officers at site of accident is desired.

In such cases the officers concerned shall make arrangements to proceed to the site of accident as considered necessary.

- (c) Prompt information shall also be given to the following officers at the headquarters:
  - Chief Safety Officer.
  - Chief Operations Manager.
  - Chief Passenger Traffic Manager.

#### SERIOUS ACCIDENTS

- (iv) Chief Freight Traffic Manager.
- (v) Senior Deputy General Manager.
- (vi) Additional General Manager.
- (vii) Secretary to General Manager.
- (viii) Chief Medical Director (if any person killed or injured).
- (ix) Chief Mechanical Engineer.
- (x) Principal Chief Engineer.
- (xi) Chief Electrical Engineer.
- (xii) Chief Bridge Engineer (if a bridge is involved).
- (xiii) Chief Commercial Manager.
- (xiv) Chief Public Relations Officer.
- (xv) Chief Security Commissioner.
- (xvi) Chief Signal and Telecommunication Engineer.
- (xvii) Any other officials as considered necessary.
- (d) During office hours at Garden Reach, the Chief Controller or Deputy Chief Controller on duty in Central Control Office or Emergency Control Office will also deliver a copy of the message relating to blocking of important through line or serious accident to the officials as mentioned in para(c) above whose offices are situated at Garden Reach. Outside office hours or on holidays and in absence of Deputy Chief Operations Manager (Works) / Deputy Chief Operations Manager (Safety)/ Senior Transportation Manager (Safety) / STM (Coaching), the Chief Controller / Deputy Chief Controller on duty will inform these officials over telephone.

#### 6.05. Reporting of Accident.-

- (a) To Railway Board: A telephonic advice should be relayed to nominated officer in Railway Board's Office immediately after the accident in case of following categories of accidents:—
  - (i) All consequential train accidents.
  - (ii) Any yard accident having serious repercussion on movement of traffic on through/main line resulting in dislocation of traffic more than the threshold value as mentioned in para 2.04.
  - (iii) Land slides, breaches OHE breakdown etc. which result in dislocation of traffic more than the threshold value as indicated above.
  - (iv) All cases of averted collisions and Signal passing at danger.

In addition to this, periodic (monthly) statement of Accidents in all categories shall be submitted to Railway Board in prescribed proforma.

#### (b) Following system will be followed for reporting of accident to Rail Board :-

- (i) Information regarding all train accidents and any yard accident leading to serious repercussion shall be reported by Divisional Control to Headquarters Central Control of Zonal Railway Headquarters office.
- (ii) In case of accidents as mentioned in para (a) above, Chief Safety Officer the senior most Safety Officer present should thereafter inform nominated officer of Safety Directorate of Railway Board. At Board level, Safety Directorate shall issue the message and take follow up action.

- (iii) In case of land slide, breaches, OHE break down etc. which result in dislocation of more than threshold value and also cases due to public agitation shall be reported by Headquarters Control Office to Punctuality Cell of Railway Board and dealt with by the Coaching Directorate.
- (iv) Case falling under N, P, and Q except Q-6 i.e.; blockade of train services due to public agitation, shall be dealt with by Security Directorate.

#### 6.06. Telephonic information of the accidents to the Commissioner of Railway Safety.—

In terms of Rule 3 of the Railway (Notices and Inquiries in to Accidents) Rules, 1973 and second amendment Rules 1985, when any accidents such as is described in section 113 of the Indian Railway Act 1989 and attended with loss of human life or with grievous hurt or with damage to Railway Property of the value exceeding Rs. 25,00,000/- or accidents to passenger carrying trains or, the cases of landslides, or of breaches by rain or flood, which cause the interruption of any important through line of communication for at least 24 hours, the occurrence should be reported to commissioner of Railway Safety telephonically by the Chief Safety Officer or in his absence, the senior most Safety Officer present.

#### 6.07. Despatch of ARME and ART in the event of serious Accidents .-

- (a) Instructions as regards ordering and despatch of accident relief medical equipments and accident relief train have already been stipulated in para 4.12 of this manual.
- (b) However, in the cases of accidents with injuries where the site of accident is approachable by road, immediate action should be taken to rush with the medical aid if can be reached more quickly by road than train. For this purpose, the Railway's Road Ambulance vans should be kept in proper working condition, so that they are fit to undertake long journeys. Alternative road vehicles of the Railway may also be earmarked for transporting not only medical officers, para-medical staff and disaster equipment to the site of accident but also for shifting injured to the nearest hospital in case of emergency. In case of the ambulance or/and other Railway vehicles are engaged otherwise or not available, there should be no objection in hiring the vehicle by the DMOs themselves or through the Station Master for the purpose mentioned above in emergencies. Para 2425 (8) of Indian Railway Commercial Manual Volume-II permits withdrawals of money from Station Earnings for incurring departmental expenditure necessitated by accident in an emergency, when ever required trolleys and engines should be ordered out for sending medical aid to the site of accident as also for shifting the injured.
- (c) The Railway Medical Officer at a place where scale-II equipment has been provided shall proceed to the site of accident with his medical gang and entire scale-II equipment by first available means. For this purpose, any suitable rail or road vehicle shall be kept nominated normally. In case the nominated vehicle is not available or has become defective, an alternative arrangement must be made to transport the medical team and equipment even as per the procedure as mentioned in sub para(b) above. Considering the type of the accident, a part of the scale-II equipment may also be taken by the medical team with them.

#### 6.08. Maintenance of log in the case of serious accidents.-

(a) Log must be maintained in the Divisional Control Office/Emergency office and in the Central Control/Emergency Office at Garden Reach in which record must be kept in chronological order of all information and action taken in connection with the accident. The log must include the following:—

#### SERIOUS ACCIDENTS

#### (1) In Divisional Control Office / Emergency Office —

- (i) Date and time the control was informed of the accident.
- (ii) Date and time at which the accident occurred.
- (iii) Short description of the accident and detailed particulars of the train(s).
- (iv) Particulars of the assistance called for.
- (v) Time information given to all concerned officials as mentioned in para 3.06 of this Manual.
- (vi) Time medical relief equipment was ordered, left for site of accident and arrived at site, also detention enroute if any.
- (vii) Time relief train was ordered, left for site of accident and arrived at site, also detention enroute if any

NOTE: In regard to items (vi) and (vii), if trains arrived from different stations, particulars of all such trains must be maintained separately.

- (viii) Details of the accident, such as number of persons killed, and of those sustained grievous, simple and trivial injury, number of vehicles derailed, capsized, details of damages, probable suspension of traffic, primafacie cause of accident, approximate cost of damage, etc.
- (ix) Complete record of all important telephonic conversation with the officials concerned in connection with the accident as also with the officials at the site.
- (x) Complete record of all instruction issued or received in connection with the accident.
- (xi) Progress of rescue services and relief operation.
- (xii) Number and description of passenger carrying trains were affected indicating their detention, diversion and cancellation, as also total number of other trains were affected.
- (xiii) Date and time, obstruction was cleared,
- (xiv) How the damaged vehicles were disposed of,
- (xv) Date and time the track was made over for running of traffic,
- (xvi) Date and time of normal working resumed,
- (xvii) Time and number of first train was allowed to pass after resumption of normal working, (xviii) Any other item of interest.

#### (2) In Central Control/Emergency Office at Garden Reach—

- (i) Date and time the control was informed of the accident.
- (ii) Date and time at which the accident occurred,
- (iii) Details of the accident, such as nature of accident with its location, number of vehicles derailed / capsized, number of persons killed and of those sustained grievous, simple or trivial injury, details of damages, probable suspension of traffic, prime facie cause of accident, approximate cost of damage, etc.
- (iv) Details of the assistance called for,
- (v) Time medical relief equipment was ordered and arrived at the site of accident,
- (vi) Time relief train was ordered and arrived at the site of accident.
- (vii) Complete record of all information received and instructions issued,
- (viii) Progress of rescue services and relief operation,

#### ACCIDENT MANUAL

- (ix) Number and description of passenger carrying trains were affected indicating their detention, diversion and cancellation, as also total number of other trains were affected.
- (x) Date and time, obstruction was cleared, track made over for running of traffic and normal working resumed.
- (xi) Any other item of interest.
- (b) Log will be maintained at the site of accident and also at the stations from where the injured will be removed to hospitals, for keeping such details as far as the official at site and at the said station are concerned of the list given in para(a) (i) above. In addition, the details of the killed and injured should also be maintained in the said log with the information as mentioned in para 6.09 below.
- (c) The Chief Controller/Officer-in-charge will be responsible to ensure that the log registers are maintained in the control/emergency offices as per para(a) above. Similarly, the official-in-charge at the site of accident and at the stations will be responsible to ensure maintenance of log registers at site and at Stations respectively as per para (b) above.

#### 6.09. Information regarding killed and injured.-

- (a) It will be the first duty of all Railway Officers and staff on reaching the site of a serious accident to attend the injured and see to their comfort. Rendering first aid and shifting to the nearest hospital, etc.
- (b) However, collection of detailed information of the dead and injured is also most important. The officer in charge at the site of accident will specially nominate an Officer or Senior Subordinate(s) preferably of the Commercial Department to prepare list of killed and injured separately with the following information as far as available.
  - (i) Name.
  - (ii) Approximate age.
  - (iii) Sex.
  - (iv) Home address
  - (v) Ticket No. Class, from and to
  - (vi) Name and address of next of kin or relatives.
  - (vii) Monthly income and source of income.
  - (viii) Particulars of luggage/property recovered and made over to police/relative/safe custody.
  - (ix) Particulars of luggage/property lost or damage.
  - (x) Means of transport by which evacuated to hospital/station,
  - (xi) Train No. if the injured was allowed to continue his journey
  - (xii) A complete list of injuries (as per report/dictation of Doctor).
- (c) The list indicated above should be prepared in conjunction with the police or civil authorities as may be present, and should be signed jointly by the Officer or Inspector nominated and a member of the police or civil authority.
- (d) The figures of the casualties must be accurate and should not be understated or exaggerated.

#### 6.10. Exhibition of lists of dead and injured.-

- (a) A complete list of the dead and injured must be exhibited at a conspicuous place at the site of accident, and if the accident has taken place between two stations, this lists must be exhibited at both the adjacent stations. In addition, lists must also be exhibited at important station(s) on each side for suitable information of relatives and public.
- (b) Responsible officials must be deputed at the station where such list are exhibited to attend to all inquiries made by relatives and public, and to collect further information of the dead and injured where necessary.
- (c) In the case of persons killed who have not been identified, their bodies should be serially numbered by means of small legible number inscribed on placard which should be placed at the head of each body and the bodies with their numbers should be photographed before they are disposed of.
- (d) In the case of unidentified dead bodies, a complete description including approximate age, sex, complex etc. must be noted as also the description of clothing, jewellery and any other marks of scars on the body that may assist later in identification.
- (e) Instructions contained in para (c) and (d) above should be followed in addition to other rules and formalities in regard to the disposal of dead bodies.

#### 6.11. Reporter .-

- (a) In all cases of accidents involving serious injury to or loss of life of passenger or staff, it is essential to collect reliable evidence as soon as possible after the accident has taken place. For this purpose the Divisional Railway Manager will nominate an Officer or Senior Subordinate (Preferably of the Commercial Department) for each ARME/ART as REPORTER on his division. Should it happen that the Officer or Subordinate nominated is not available, when the ARME/ART has to go out, the Senior Divisional Operations Manager or Divisional Safety Officer present shall nominate another officer or subordinate as Reporter.
- (b) Duties of Reporter-
  - (i) The Reporter will be responsible to collect as much accurate information as possible regarding description of accident, primafacie cause of accident, assistance called for, assistance arrived, rescue and relief operation, particulars of dead and injured.
  - (ii) He will record all action taken regarding rendering first aid and shifting the injuries to the hospital, arrangement of their treatment and nourishment etc. as also for removal of dead bodies.
  - (iii) In fact, such information will be useful for the enquiry as also if subsequently required in a Court of Law.
  - (iv) The Senior Divisional Operations Manager / Sr. Divisional Safety Officer should also arrange an intelligent Senior Clerk or Steno to accompany the reporter.
    - This Clerk/Steno will be useful to the reporter in taking down the evidences and facts in shorthand as also a witness.
  - (v) For the purpose of 'Press Notes' on accidents, the persons administered First Aid and subsequently allowed to proceed may be shown separately. The injured who are sent to hospitals for further treatment and observation may also be shown separately viz. persons sustained grievous or simple injuries.

#### ACCIDENT MANUAL

- (c) The following facts are to be collected / recorded by the Reporter -
  - 1) No. of train or trains involved in accident and description,
  - 2) Originating point and destination,
  - 3) Date and time of accident,
  - 4) Location in details.
  - 5) Nature of accident in detail,
  - 6) Weather condition at the time of accident,
  - Name of the station at which received the information of accident, source of information and time.
  - 8) Time control received the information of the accident.
  - 9) Details of damages and approximate cost of damage,
  - 10) Prima facie cause of the accident as far as known.
  - 11) Time Railway Doctor received the information of the accident, and ARME was ordered.
  - 12) Time ARME and other qualified medical aid arrived at the site of accident.
  - 13) Time each Relief trains -
    - (i) was ordered.
    - (ii) was despatched from the base station,
    - (iii) arrived at the site of accident.
  - 14) Brief reasons for any delay to arrive the medical aid and relief train.
  - 15) Names and designations of officers arrived at the site of accident by ARME, ART and by other means, and time of their arrival.
  - 16) Approximate number of passengers on the train(s) etc. at the time of accident, and condition of lights in the train in case of night,
  - 17) Steps taken by the train staff to -
    - (a) render first aid to the injured.
    - (b) shift the injured to the hospital.
  - 18) Particulars of passengers killed
    - (i) Name, age, sex and address,
    - (ii) Name and address of next of kin or relatives,
    - (iii) Particulars of ticket held including its no, class, from and to,
    - (iv) How dead body is disposed of,
    - (v) Details of belonging and luggage and their disposal,
    - (vi) Monthly income and source of income.
  - 19) Particulars of passengers injured-
    - (i) Name, age, sex and address,
    - (ii) Name and address of next of kin and relatives,
    - (iii) Particulars of ticket held including its no., class, from and to.
    - (iv) Monthly income and source of income.
    - (v) Details of belongings and luggages and their disposal,

Mall

#### SERIOUS ACCIDENTS

- (vi) Details of injuries sustained (list must be signed by the Doctor attended the injured),
- (vii) Nature of first aid/medical aid rendered.
- (viii) Train No. by which the injured as allowed to continue his journey.
- 20) Particulars of luggage or property lost or damaged with name and address of the person.
- Particulars of luggage or property recovered and made over to the party or to the police or kept in safe custody.
- 22) Particulars of Railway servants killed or injured. (Separate statement should be made out for the killed or injured as indicated in items 18 and 19)
- Details of the arrangement made for medical assistance and also for the removal of dead bodies.
- 24) Arrangement made for rendering nourishment to the injured as also refreshment arrangement for stranded passengers.
- 25) Particulars of non-Railway medical aid taken part.
- 26) Particulars of other assistance called for and taken part.
- 27) Brief description of experience of two or three passengers regarding the accident and rescue service, with their names and address.
- 28) In case of sabotage or suspected sabotage, details of the relevant evidence, and reliable witnesses with their address.
- 29) Particulars of transhipment arrangements made, if any.
- 30) Names and designations of civil and police officials who were advised and attended the site of accident.
- 31) Particulars of action taken to restore normal running of traffic.
- 32) Date and time restoration work completed.
- 33) Date and time track made over for normal running of traffic.
- 34) A copy of the accident message.

# 6.12. Opening of dealing centres / Enquiry Offices: — In the cases of serious accidents dealing centres / enquiry offices must immediately be opened and manned at.—

- (a) Emergency office at the Headquarters office at Garden Reach,
- (b) the Divisional Control office of the Division concerned.
- (c) the site of accident.
- (d) the stations where the injured and/or dead are shifted for further action
- (e) the important station(s) wherever considered necessary.

#### 6.13. Police attendance.-

(a) When any accident of any description usually attended with loss of human life or with grievous hurt as defined in Indian Penal Code or accident to a passenger carrying train or train wrecking or attempted train wrecking or cases of running over obstruction on line or passenger falling-out of train or fire in train or accident with serious damage to Railway property of the value exceeding Rs.25,00,000/- or in the cases of landslides or of breaches by rain or flood, which cause the interruption of any important through line of communication for at least 24 hours, the District Superintendent of Police of the District in which the accident has occurred or such other Magistrate or police officer as may be appointed in this behalf by the State Government concerned, the

Superintendent of Railway Police, the officer-in-charge of the police station within local limits, the officer-in-charge of the Government Railway Police and the Officer-in-charge or the Railway Protection Force must be intimated by telephone or through special messenger or such other quick means as may be available, with the details of the accident.

- (b) Every facility must be afforded to the civil, police and Medical officials when proceedings to the scene of a serious accident or in the cases as mentioned in sub para (a) above, but the ARME and ART will not be detained on this account.
- (c) Attendance of police and/or civil officials at the scene of the accident must be made as soon as possible in the cases as mentioned in sub-para (a) above in order to observe the disturbance if any, there has been on the line, other evidence as to the cause of the accident and to keep guard over any loose materials which may be lying about as also to safeguard the passengers luggage and mails etc. if any.
- (d) In case of Railway accidents, permission of the State Government or clearance of the Police is not required for launching rescue operations for the purpose of saving human lives which inter alia may also involve handling / shifting the rolling stock (locomotives, wagons and coaches) for extricating the trapped passengers. However, police clearance is required for restoration works at the site of accident, if sabotage is suspected.

[ Ref: Board's letter No. 2002 / Sec. (Cr.)/45/47 dt. 27.03.2003 ]

#### 6.14. Preservation of clues.-

(a) Officer or senior subordinate of any department who may happen to be present at the time that an accident takes place or who first arrives at the scene of an accident shall, Irrespective of whether he is on or off duty, record the statements of the staff concerned and take whatever steps may be necessary to record or preserve evidence which subsequently might not be available. All clues shall be preserved with a view to enabling reconstruction of the scene at a later date. This is essential even through the civil and police officials may have inspected the scene of the accident and photographs may have been taken. For this purpose, the concerned official shall specially take steps to note the condition and exact position of — (i) Vehicles, (ii) Track, (iii) points, (iv) signals, (v) levers operating the points and signals, (vi) Breakage of axle, spring, locking bolt and cotter etc., (vii) Any obstruction, (viii) Any tampering, (ix) Engine and its speed recorder, etc. This should be done before commencement of actual restoration operation:

Supervisors should record evidence fully and preserve material. Analysis at the time of collecting evidence is not considered desirable as it can result in leaving out some evidence as not relevant, but which latter on, may be required for analysis and arriving at the correct conclusion. Preparation of Joint report of the accident by Sr. Supervisors visiting the site should be analytical and in detail.

- (b) A complete and accurate dimensioned sketch of the accident showing the position of vehicles and their condition, permanent way including any detached damaged components, should be made out by the Engineering official and signed by the Senior Engineering and Operating officials of the Railway as also by the Senior Police officials present. In the case of any signal or level crossing at the site of the accident, at detail position of the same should also be indicated in the sketch. For this purpose, a complete rough sketch should immediately be drawn after the accident by the Engineering official and before any disturbance to the vehicles and track etc. Dubbers of all signals, indicators, brakevan lamps should be touched to feel whether it is warm or cold in case such lamps were found extinguished.
- (c) In case of sabotage and suspected sabotage, every possible action shall be taken to ensure that any finger prints or foot prints observed at the site of accident are not obliterated. Action shall also be taken to note and preserve the foot prints and finger prints carefully for further necessary action.

- (d) Statements of responsible passengers or eye-witnesses with their names and addresses who may have witnessed the scene of accident should be recorded which may have a bearing on the cause of the accident afterwards when an officer bringing out any noteworthy points. These statements should be signed jointly by the passenger/eye-witness, Railway Official and Civil or Police authority.
- (e) The Railway Official/Inspectors / Supervisors who may happen to be present at site at the time of accident or who arrives first at the site of accident, shall also scrutinise, the train register/Logbook, Station Diary, Line Clear Message book, Private number book, Caution Order, Line admission book, etc. and initial them with date and time indicating the irregularities notice. In the cases where these records are connected with the cause of the accident, immediate action must be taken to seize the relevant records and seal. In cases where defects of any instrument or/and interlocking gear may have caused or contributed to an accident, the instrument or/and the interlocking gear concerned shall be sealed and not be opened/used except on the authority of the Divisional Railway Manager or his duly authorised representative.
- (f) In cases of serious accidents with loss of human life or grievous hurt, the restoration work should normally be limited to the removal of dead bodies and injured persons from the debris, if any, and wherever possible communication may be restored by laying a diversion, if it is expected that the Commissioner of Railway Safety may have the benefit of personal examination of the site of accident undisturbed. In any individual case where circumstances compel the removal of debris. In part or whole, before the arrival of the Commissioner of Railway Safety at site, complete and detailed notes should be recorded by the senior most officer present, of the observation made by the officers of the various department concerned, before issuing such orders. The notes should be given to the Commissioner of Railway Safety on arrival. All sleeper, rails, vehicles in part or whole and other fittings removed from the site under the emergent circumstances should be carefully preserved for inspection by the Commissioner of Railway Safety. In such cases, telephonic permission of CRS should be obtained to start the restoration work.
- (g) Whenever possible, photographs of the wreckage shall be taken, which may afford the clue to the cause of the accident. For this purpose, the procedure laid down in para 7.05 of this manual should be followed.
- (h) In all cases of derailments, the marks on the wheels of engine and / or vehicles and marks on the permanent way (rails, sleepers, fish plates etc.) in respect of the wheels mounting on and dropping from the rails, the wheels riding on the ballast, etc. shall be specially looked for and recorded. The position of rails, sleepers, fish plates, fish bolts, lunuts, etc. which bear marks as a result of the accident, especially between the points of mount and drop shall be marked and numbered serially with chalk or paint and carefully preserved. A defects and damages to rolling stock shall be examined in details and recorded immediately after the accident as also the details of the loads i.e. weight, contents, evenly or unevenly loaded etc.
- (i) Any engine, vehicle or other material involved in an accident which is likely to be required for exhibition before any higher official or enquiry committee must be set apart and must on no account be utilised for the purpose of working of the Railway, till it is examined by the said official.
- (j) Speed recorded in the locomotive should be examined including its chart. The same may be seized with the signature of the Driver at the reverse of the chart.
- (k) In case of serious fire accident in train, after the fire is put out, the affected coaches/wagons or the portion of the Railway property which caught fire should be preserved carefully for inspection by Forensic Scientist.

46

The Railway Officials/Inspectors/Supervisors who may happen to be present at the time of accident or who arrive first at the site of accident shall see that the fire is completely put out and nothing which can lead to provide evidence for the cause of fire including affected coaches/wagons is disturbed. However, the Coaches/Wagons may be drawn out from the site cautiously, if position permits in order to clear the obstructed section and be kept on the siding nearest to the accident spot with the permission of competent authority.

(I) One photographer with Camera and necessary equipments should form integral part of the group of staff who accompany the ARME and ART in case of an accident on short notice. All possible action is taken for preservation of the clues in order to enable reconstructing of scene of accident with reliability.

# 6.15. Supply of refreshments, food and beverages to the passengers and staff at the site of accident.—

- (a) Refreshment, food and beverages may be supplied free of charges to the affected passengers in an accident, either they are injured, uninjured or stranded at the site of accident or at stations where they are shifted for further action. These may be arranged from the Railway and / or outside sources as necessary.
- (b) The Senior Divisional Commercial Manager or in his absence the Divisional / Assistant Commercial Manager will be responsible to take all necessary action from any sources for the purpose mentioned in para (a) above. The Station catering officials / Vendors should be called for assistance whenever required.
- (c) Supply of free refreshments, food and beverages to the injured / uninjured passengers of the affected train should be made at a reasonable scale.
- (d) The Senior most Officer at site shall have the powers (i) to arrange conveyance for the affected passengers free of charge by any available mode of transport and (ii) also to incur expenditure if necessary for supplying free food to the injured & uninjured passengers and for carriage of passengers luggage etc.
- (e) Proper account should be kept of the expenditure incurred duly supported by the vouchers to enable post-audit of the same after the event is over. A statement of the expenditure incurred should be signed and put up by the authorised officer to the Divisional Railway Manager within a period of one month after the accident for his sanction duly post-audited with reference to the funds provided for on this account as also the supporting vouchers for the expenditure incurred. In case any specific area where glaring instance of excess expenditure in comparison to the event is observed, it should be specifically brought to the notice of Divisional Railway Manager so that corrective action for non-recurrence of such a situation in future, is taken. The General Manager will lay down, in consultation with the FA & CAO, from time to time, the overall limits for the purpose of sanctioning of expenditure, beyond which specific sanction of the General Manager with Finance concurrence may have to be obtained for regularising the expenditure after the event in such cases. The post-audit report should incorporate the various aspects of item-wise report and observations of Senior DAO/DAO and clarification of the authorised officer for sanction by the competent authority. The check note of the Sr. DAO/DAO should indicate the extent of check that was possible with reference to vouchers submitted.
- (f) Free food will also be supplied to the staff, including Officers, engaged in restoration operation at the site of accident and under the supervision of a responsible official. Where free food is supplied, payment of diet allowance is not permissible. However, no special arrangements will be made for officer separately nor will cash reimbursement in lieu of free food be permissible. Proper account should also be kept by the official arranging food and put up to the competent authority for postfacto sanction. Other necessary facilities required for the staff engaged in restoration may be extended to them for smooth operation of restoration work.
- (g) The existing rates of diet allowance payable to the staff attending breakdown duties under Rules 1420 R-11 is Rs. 20/- per head (Estt. Srl. No. 87/2001, dt. 14.8.2001)

#### 6.16. Despatch of free telegrams, in case of serious accidents.—

Message to the close relatives conveying the news of safety of those travelling by a train involved in a serious accident should be despatched free of cost. However, the circumstances under which such message should be sent free of cost would depend on the merits of the case. The senior-most officer-in-charge of the local arrangement should decide and approve in each case when this facility is to be granted. This message should be issued by most expeditious means of communication to the contact person, the address of which may be found with the injured or dead or from any other source. Other instructions in this regard are issued from time to time.

#### 6.17. Relief to the victims of train accident.-

- (a) Detailed instructions have already been stipulated in para 3.01 to 3.17, 4.12, 4.13 and 6.01 of this manual in respect of different actions regarding relief to the injured and disposal of dead.
- (b) On arrival at the site of accident, the Railway Medical Official after affording medical aid as best as possible, arrange for the removal of the injured promptly from the site of accident to the nearest Railway, Civil, Military or private hospitals considering the seriousness of the injury and with the help of all available assistance. A Railway Medical Officer must as far as possible accompany the injured to the hospital and see that they are properly accommodated for further treatment.
- (c) Each of the seriously injured persons must be given a ticket, showing his name and address, name and address of nearest relative, the time and place of accident, probable diagnosis and treatment given. This ticket may be placed round the neck of the disabled or unconscious for guidance of the hospital and which they may be eventually removed.
- (d) Officers of operating, commercial, engineering departments shall give every possible assistance to the Medical Officer in his effort to reach the site of accident with his team and medical aid as also for removal of the injured.
- (e) Officials of all departments, especially at the site of accident shall keep a close contact with one another and take all necessary action to extricate all injured passengers from the debris.
- (f) Train carrying injured persons from the site of accident shall be given priority over all other trains. The Controller and Deputy Chief Controller on duty of the section shall be responsible to arrange absolute priority for its journey. On non-controlled section or in case of suspension of control system, the Station Master on duty at the Stations concerned must take every action in time to intimate the fact to the station in advance for running of such train on top priority and without any detention at any point.
- (g) In cases, the injured persons are admitted in non-railway hospitals, the seniormost Medical Officer of the division will maintain close liaison with the hospital authority in order to ascertain the latest condition of the injured persons. If necessary, visit shall also be paid to such hospitals.
- (h) The seniormost Medical Officer of the division/Hospital shall be responsible to ensure recording the details of injuries and the treatment undertaken for each case as also the further disposal particulars of the injured.
- (i) A complete list of the injured persons with full particulars of the injuries, etc. shall be sent under a confidential cover by a special messenger to the chief Medical Officer, Chief Operations Manager and Seniormost Divisional Operations Manager. Daily progress report of the injured admitted into Railway or non- Railway hospitals shall be communicated to the Chief Medical Officer and Chief Operations Manager till the seriousness of the injured exist.
- (j) (1) (a) In the event of a train accident resulting in the death of a passenger travelling by the train, compensation should be paid irrespective of whether bonafied authority to travel has been produced or not.

#### **ACCIDENT MANUAL**

(b) The amount of ex-gratia relief payment to the dependents of dead or injured passengers involved in train accidents or untoward incidents as defined under sections 124 and 124A should be as under —

	In case of Train Accident (Sec - 124 of the Act)	In case of Untoward Incident (Sec - 124A of the Act)
(i) In case of death-	Rs. 50,000/-	Rs. 15,000/-
(ii) In case of grievous injuries-	Rs. 25,000/-	Rs. 5,000/-
(iii) In case of simple injuries-	Rs. 5,000/-	Rs. , 500/-

- (2) No ex-gratia payment would be admissible to the trespassers, persons electrocuted by OHE and road users at unmanned level crossings.
- (3) The amount of ex-gratia admissible to road users who meet with an accident due to Railway's Primafacie, liability, at manned level crossings, would be as follows:—

	Hint.	H	In case of Accident at Manned Level Crossing (due to Railway's prima facie liability)
(i)	In case of death	_	Rs. 50,000/-
(ii)	Grievous injuries	-	Rs. 25,000/-
(iii)	Simple injuries	-	Rs. 5,000/-

- (4) Ex-gratia payments should also be made to railway servants killed or injured while on duty by a moving train, for example working on track run over accidentally by a moving train.
- (5) Payments should be sanctioned/arranged preferably on the spot by a senior scale or Higher Officer nominated by the General Manager after making such enquiries as can be reasonably made on the spot after the immediate need by way of medical attendence etc. to injured persons are attended to.
- (6) These ex-gratia payments except, in the case of road-users at manned level crossings, are not to be taken into account at the time of disposal of the formal claims for compensation.
- (7) In order to ensure that the payment is made to the actual person involved in the accident, the officer making the ex-gratia payment should record all evidence in writing after satisfying himself as also regarding the bonafide kith and kins of the injured/dead in the cases the payment is required to be made to them.

**NOTE**: Those walking along the track and whose presence on railway premises is not connected with the business of the Railway are to be treated as trespassers.

#### 6.18. Accommodation of the relatives of the deceased.-

As an additional relief measures to the persons involved in train accidents and to their relatives, who arrive at the site of accident/hospitals, the relatives of the deceased may be allowed to use the waiting rooms and/or retiring rooms free of charge if considered necessary, without detriment to the convenience of other passengers.

#### 6.19. Issue of complimentary passes to the victims of the railway accidents. -

Complimentary passes may be issued to the next of kin of victims who are discharged from the hospital as also to the surviving victims as per the instructions issued from time to time. However, while issuing such passes, sufficient safeguard may be adopted so that these passes are not misused.

# Annexure - III

Action Plan of DVC & CISF and Irrigation Dam Safety

Restricted



# CISF Unit RTPS Raghunathpur, CONTINGENCY/ DISASTER MANAGEMENT MANUAL

#### PROBABLE CONTINGENCIES AND DISASTERS 5.

- Armed Attack by the terrorists/ Maoists/ Naxal Bomb Threat. 1.
- 2.
- Bomb Blast. 3.
- Outbreak of Fire 4.
- Gas leakage(toxic/inflammable/both) 5.
- 6. Riots
- 7. Power failure
- Flood due to choking of drains
- 8. 9.
- Failure of water supply system
  Earthquake or Road, Bridge and Structural collapse 10.
- Strike, Band, Gherao 11.
- Sepoy Mutiny 12.

#### VULNERABLE POINTS/POTENTIAL TARGETS: 6.

The vulnerable points/vital installation of RTPS Plant are as under:-

SL.NO.	VITAL INSTALLATION
01.	Main power house building( Turbine hall, Coal Bunker, Boiler & Electro static precipitators)
02.	DM Plant
03.	Ash Slurry & Ash Pump House
04.	Fuel Oil Pump House and Fuel oil tanks
05.	Circulating water nump house
06.	Coal Handling Plant (Stackers&Reclaimer, Wagon Tripler and control room, Crusher House, Coal yard, TPs etc.)
07.	Fire Water Pump House
08.	Cooling Towers
09.	Chimney
10.	400/220/33 KV Switch yard and substations
11.	Cable galleries
12.	Cable yard
13.	Raw water pipe line from pump house to DM Plant
14.	Reservoir
15.	Chemical Building
16.	Technical Building
17.	Permanent Stores/Central Stores
18.	Admin Building
19.	Dispensary / Hospital
20.	Plant Boundary and Watch Towers
21.	CISF QM stores
22.	CISF Gates and Control room
23.	CISE Office Building and Pass Section
24.	CISF Quarter Guard &CISF Family Complexes and Bachelor Barracks.

#### 7. CRISIS MANAGEMENT GROUP

To deal with situation arising out of various contingencies a Disaster Management Group comprising of following officials will function as and when necessary in occurrence of contingency and will oversee the arrangements of Disaster Management.

#### A) APEX COMMITTEE FOR CRISIS MANAGEMENT

SI. No.	Designation	Mobile No.
01	Sh. Sajal Banerjee, DCE(M)	09434788436
02	Sh. Uday Kumar, DCE(E)	09332559753
03	Sh. S. N. Prasad, DCE(M)	07363959443
04	Sh. Mrinal Bhattacharjee, DCE(E)	07384928511
05	Sh. Santanu Ganguly, DGM(Admin.)	08016890344
06	Sh. Uttam Kumar Das, Asstt. Commandant	08016880889

#### B) CO-ORDINATION COMMITTEE

SI. No.	Designation	Mobile No.
01.	Sh. Alok Gupta, SE (M)	08509025123
02.	Sh. Vijay Prasad, SE(M)	07478521990
03.	Sh. Rajib Saha, SE(C&I)	09434745899
04.	Sh. S.K.Lal, Addl. Director(HR)	09431509252
05	Sh. B. Singh, SE(E)	08116569676
06	Dr. Rupam Ghoshdastidar, MOIC	07583951864
07	Sh. Sukhendu Mandal, Asst. Manager(Safety)	07864826921
08	Sh. Sushil Kumar, Insp/Exe & RI, CISF RTPS	07478521988
09	Sh. A. Kumar, Insp/Fire, CISF RTPS	07585891084
10	Sh. IndranilKar, Insp/Fire, CISF RTPS	09163623916
11	Sh. S. Dutta, Insp/Exe (Coy Commander S/W), CISF RTPS	08170094913

Note: -The Disaster Management Group will work under the direct supervision of DC/AC CISF or next Junior Rank present in the spot.

#### 8. CO-ORDINATION COMMITTEE

To deal with various situations as per direction of Crisis Management Group, a Co-Ordination Committee comprising the following officials will function on occurrence of contingency and will oversee the arrangements of Crisis Management. The Committee will function round the clock and will be in full knowledge of the latest situation at all times. The Committee will keep the co-ordination with CE (HOP) and appraise latest situation from time to time.

SI. No.	Designation	Mobile No.
01.	Sh. Alok Gupta, SE (M)	08509025123
02.	Sh. Vijay Prasad, SE(M)	07478521990
03.	Sh. Rajib Saha, SE(C&I)	09434745899
04.	Sh. S.K.Lal, Addl. Director(HR)	09431509252
05.	Sh. B. Singh, SE(E)	08116569676

	The state of the MOIC	07583951864
06.	Dr. Rupam Ghoshdastidar, MOIC	
07.	Sh. Sukhendu Mandal, Asst. Manager(Safety)	07864826921
08.	Sh. Sushil Kumar, Insp/Exe & RI, CISF RTPS	07478521988
SCHOOL CO.	Sh. A. Kumar, Insp/Fire, CISF RTPS	07585891084
9.	Sh. IndranilKar, Insp/Fire, CISF RTPS	09163623916
10.	Sh. Indramikar, inspirite, old 1777	08170094913
11.	Sh. S. Dutta, Insp/Exe (Coy Commander S/W), CISF RTPS	08170094310

#### **ALARM SYSTEM** 9.

An electrical high alarm system has to be installed at various places and plant Control Room. CISF will be responsible to activate the alarm on occurrence of emergency. Immediately on its activation the security personnel on duty will inform the Co-ordination and other member of the Crisis Management Group / Co-ordination Committee on phone/by messenger regarding the incident giving its location, exact and major damages if any, as soon as possible.

Red Alert: - Continuous up and down siren for more than 1 min. All Clear: - Continuous up siren for 2 min.

#### COMMUNICATION 10.

- PAX network in the plant and township covering all officers of management and CISF and most of 1. the residential house of important officials.
- P&T network covering the residential houses of all senior officials and the important office in the 2.
- Mobile no of all important management and CISF official. 3.
- VHF and HF set in all important departments of plant and CISF. 4.

#### **PUBLIC RELATIONS** 11.

- HR department will be responsible to handle the media teams and ensure proper coverage of 1.
- HR Head and DC/ACCISF will ensure that rumor and panic could not take place among people and 2. they will address media in case of necessity.
- DC/ACCISF will provide help to HR in coverage of activities as and when required. 3.
- DC/ACCISF will ensure unnecessary gathering of media does not hamper rescue work for this he will deploy cordon party in affected sites.

#### ROLE OF CISF AND MANAGEMENT OFFICERS 12.

#### 1. ROLE OF UNIT COMMANDER

# He will act as per the following instructions during normal times:-

- He shall be responsible for the discipline, administration, welfare, training and morale of the Force
  - He shall ensure that the unit is operationally prepared and also tactically and technically proficient to
- He shall formulate the Security standing orders, Camp Security Plan and Contingency Plan and ensure that the personnel under him are well versed with it and also review the same timely.

He shall guide HODs of the entire Plant departments to formulate, review and rehearse Plant protection plan and Evacuation plan.

He shall conduct contingency mock drills regularly. ٧.

He shall be in cordial relations with the Management, Local Police, Civil authorities and all other security and intelligence agencies.

He shall conduct Periodic Penetration Test to check whether their Access Control System is intact vii. and their Security Staff are effective.

He shall be in constant touch with the CE (HOP) and get him brief on security needs and awareness viii. to be created amongst the security personnel manning the gates.

#### ROLE OF INSPECTOR CISF

He will ensure that the Force is operationally and tactically proficient to meet any contingency.

- He will be responsible for the safety, security and maintenance of arms and ammunition in plant kote.
- He will ensure that there are sufficient communication equipments available to tackle normal and exigent situations and he shall also ensure proper maintenance of communication equipments.

iv. He will keep close contact with state police, medical department as well as management officers.

- v. He will be well versed with the standing orders, Camp Security plan and Contingency Plan and make sure that the personnel under him are conversant about it.
- He should bring to notice of the Unit Commander any kind of lapses in the security system.

He will ensure that vehicles are in good condition to meet requirement of contingency.

He will ensure that communication sets and CCTV installed plant area are functioning properly.

He will ensure that the Access Control system in plant is flawless and the Perimeter Security is intact.

#### **ROLE OF SUB OFFICERS CISF**

They will discharge the duty of Platoon Commander both during peace and crisis time. i.

They will be responsible for operational preparedness of force members under them. ii.

They will be fully aware of possible threat and hazard for the plant and brief their men about those. iii.

They will keep close contact with management officers under their area so that in case of iv. contingency they can be communicated.

They will bring to notice of the Unit Commander any kind of lapses in the security system. ٧.

They will take security related feedback from member of force under them and communicate to vi. senior officers.

They will exchange information relating to security development and activities occurring in the area vii. with one another.

They will brief all the duty personnel about their duties daily and during shift change. viii.

He will brief the personnel about their area of responsibility and fix the role of each man under his ix. charge during contingency so that his men are clear about the action to be taken in case of any contingency.

#### **ROLE OF BATTALION HAVILDAR MAJORS**

He will prepare a list of personnel available in the Barrack who will be on standby duty in shifts. i.

He will brief his men and keep them always ready for reinforcement. ii.

Mobilize all off duty personals by vehicles as per order. iii.

He will ensure that Kote NCO remains always in ready position to issue arms and ammunition to iv. reinforcement personnel.

On receipt of information/order regarding contingency He will brief his men about incident and keep them in a state of readiness so that they can move in a short notice.

He will collect the orders from R.I. and convey the same to the CHM of all Coys for strict vi.

He will also stay in a close touch with R.I. vii.

ROLE AND RESPONSIBILITIES OF QRT I/C

He will be responsible for the command and control of the QRT personnel under his charge.

He will ensure that the personnel under his charge are alert and vigilant.

- He will conduct recce and be observant about any unusual changes in his area of responsibility ii. iii. during his shift and if noticed convey it immediately to the PCR, and senior officers.
- He will swiftly convey to Insp. in case of any problems faced in the QRT vehicle and the iv. communication equipments.

He will give an hourly situation report to the PCR.

He will brief his men regarding the action taken by his men if contingency arises and his men must V. vi. know how to cordon the area and how to make tactical advancement and counter attack.

ROLE OF Shift I/C

He will be the overall in charge of all QRT in all shifts.

i. Hewill ensure that the QRT personnel on duty to be alert and vigilant. ii.

He must be the first responder officer in case of contingency. iii.

He will collect Area OK report in regular interval and communicate to Unit Commander.

In case of contingency he will move with ready available Force Member and control the situation until the arrival of reinforcement party commander.

#### 7. ROLES AND RESPONSIBILITIES OF PCR DUTY SENTRY

PCR duty sentry will observe the situation through CCTV monitor.

- He will maintain an updated list of all important phone numbers including phone numbers of all CISF units located nearby, Local Police, Fire Officer, NDRF Battalion, Kolkata, Nearby Hospitals and other related emergency services.
- He will keep phone and PAX no. of various department of plant.

He will be aware of the location of plant wide alarm system.

He will get the hourly situation report from the QRT and maintain a register for the purpose.

He will give situation report to the shift i/c at regular intervals. vi.

- If there are any Communication lapses and also any technical problems in the CCTV monitor then he will promptly convey to Insp., Unit i/c and concern department.
- He will record the messages received in the PCR.
- He will give situation report twice a day to the Unit I/C.

#### ROLE OF RESERVE INSPECTOR

On receipt of information/orders, he will brief the men of the Unit about the incident and keep them in a state of readiness to move within a short notice. He will also stay in a close touch with the Unit Commander.

#### 9. ROLE OF M.T.O.

- i. On receipt of information/orders, he will check that all the vehicles are in good condition with
- ii. He will also kept his men alert and ask them to stay in M.T. Section to move within a short notice. He should send the vehicle to the spot after receiving requirement.

#### 10. ROLE OF Q.M./KOTE NCO

- i. QM/Kote NCO will ensure that all the Arms & Ammunition available in the Unit Kote are in service condition so that the same can be utilized as per requirement.
- ii. The proper safety and precaution of the armory should be ensured.

#### 11. ROLE OF INT

i. Collection of information through various source and analyses the information.

- Keep inform unit commander about every suspicious activity inside or surrounding of plant and suggest action to avoid any untoward incident.
- iii. To monitor the activities of trade unions, employee, worker and own CISF personals.
- iv. Evaluate present security status of plant and submit recommendations.
- v. To keep close contact with local police and other sister agencies and share information.
- vi. Conduct penetration test of access control as and when directed by Unit Commander.
- vii. To preserve the evidence and ensure that scene of crime is not tempered till the arrival of Police.
- viii. To record video and still photograph during agitation and after the happening of crime.

#### 12. ROLE OF DVC RTPS MANAGEMENT

- i. Management will furnish all details about the private security agencies and the number of private security guards and Supervisors engaged in the plant and Township to CISF. Whenever there is change of private security agency the same should be intimated to CISF.
- Management will conduct regular Security Awareness Program and may also get the assistance of CISF if necessary.
- iii. Management will formulate contingency protection plan, Evacuation plan and Search plan and Crowed control plan under the guidance of CISF.
- iv. Management officers, employee, worker will immediately communicate to the CISF PCR in case of any unusual activities inside or nearby to plant.
- v. The Safety department of the plant and the unit commander of CISF will take security initiative, draw strategies and tactics to identify suspicious activities in and around the plant and conduct mock exercises and briefing and debriefing of men to increase the response and effectiveness in handling the emergent situations.
- vi. Management will ensure that the ambulances under his control are maintained in good condition.
- vii. Management will be in possession of the list of nearby hospital authorities other than DVC RTPS

  Dispensary, their phone numbers and the details of infrastructure available with them for treatment.
- viii. Management will organize regular monthly meetings of crisis management committee on regular basis.
- ix. Management will provide all necessary equipment's to CISF Command Centre and CISF for its effective functioning as and when suggested by CISF.
- x. Management will take measures to plug the security loopholes as and when recommended by CISF.
- xi. Management will ensure that the security review of the DVC RTPS conducted under the guidance of CISF regularly.
- xii. If by any chance, deployment of additional force from outside the CISF is required, the Management will, as provided in the condition of the deployment, bear all the expenditure incurred towards such arrangements including logistic support.
- xiii. Management will provide necessary assistance to CISF for conducting mock drill at different locations.
- xiv. The Management will arrange to keep all the vehicles along with the drivers ready for move as per the requirement. In case drivers are not available the vehicles will have to be manned by the officers having driving license. A Standby vehicle will be provided to DC/AC CISF.
- xv. Central store to ensure the availability of store keepers at the stores round the clock till the disaster is over
- xvi. Central store to maintain enough stock of diesel and petrol inside the plant and keep the pump stations manned round the clock.

#### 13. ROLE OF ASST. COMMISIONER OF POLICE

0

(in)

- i. He and his men will participate in the Contingency mock drill conducted regularly.
- ii. He will coordinate and cooperate with the CISF whenever his services are called for.
- iii. He will pass the intelligence information received by him about any terrorist/anti-social elements to the CISF.

## STANDARD OPERATING PROCEDURE FOR VARIOUS CRISIS SITUATIONS

# STANDING OPERATING PROCEDURE AGAINST POWER FAILURE

#### SECURITY RELATED PROBLEM DURING POWER FAILURE

- Communication will be failed due to disconnect power supply.
- Miscreants and anti social elements may take the benefit of darkness. 2.
- Access control during night shift may be affected. 3.

#### ACTION TO BE TAKEN

- To find out exact cause of power failure.
- To activate the emergency siren to alert the duty personnel and barrack personnel. 2.
- Re-enforcement to be deployed. 3.
- Arrangement for emergency power source for communication (VHF, HF).
- 4. The sequence of patrolling by QRT should be enhanced in vital installations and perimeter area. 5.

#### ROLE OF PCR DUTY SENTRY

- On receiving the message about power failure he will inform all sec. Comdrs., Coy Comdrs., DC/ACand QRT party.
- He will also inform Fire services, Health Services.
- 2. He will direct QRT party to enhance frequency of checking in vital installation in plant area.
- 3. He will keep inform DC/ACand QRT party about every development and make co ordination 4. among them.

#### ACTION BY INSPECTOR/SW

- Inspector/Security Wing of CISF will be the operational I /C for contingency during power failure.
- He will immediately direct Sec. Commanders to deploy additional man power in their respective 2. areas.
- He will arrange emergency power source for communication, access control, plant security and 3. Quarter guard.
- He will direct all Sec. Comdrs. and QRT to enhance the frequency of checking in their respective-4. area. Foot patrolling with Arms may be introducing during power failure in night hours.
- He will intimate higher formation of CISF and CE (HOP) about the power failure and keep them 5. inform of every event or development.
- He will also inform SDPO Raghunathpur and Local SHOs and seek their help in case of need. 6.
- He may also get extra man power or any other help from nearby CISF Units if required. 7
- He will direct Sec Commanders to deploy mobile Patrolling parties for perimeter security in their 8. respective areas.
- He will depute a suitable sub officer to lead a party of 10 ORs which will be ready to meet any 9. untoward incident during contingency.
- He will liaise Management officers for food and drinking water arrangement for extra manpower, 10. Re- enforcement party and other agencies involved in the contingency.

#### DUTIES OF SEC. COMMANDERS AND COY COMMANDERS

- They will proceed immediately to their respective areas along with reinforcement party and ensure the security of vital installations.
- They will direct Coy CHMs to release extra man power for reinforcement.
- They will keep close liaison with Management officers and help them in crowd control and traffic 3. control.

#### DUTIES OF RI/CHM / BHM/MTO

- The CHM / BHM will ready extra manpower from barracks and Family Qtrs. and provide Arms & other necessary equipments for them.
- MTO will provide vehicle to the re-enforcement party and release stand by vehicle for the checking 2. of plant.

#### STANDING OPERATING PROCEDURE AGAINST LEAKAGE OF TOXIC GASES/SUBSTANCES & **EXPLOSION GAS HOLDERS, PIPELINES**

#### **ACTION TO BE TAKEN**

- Siren to be blown to warn people. 1.
- 2. Inform the Fire Brigade & PMU to be informed for necessary help.
- Find out the exact cause of leakage/spillage. 3.
- Evacuate the leakage/spillage area. 4.
- 5. Cordon the area.
- Try to save the life and property. 6.

#### ROLE OF PCR DUTY

4

600

6

6

1

6

- On receiving the message of Gas leakage, he will inform all Sec. Comdrs, Coy Comdrs, Insp/SW and QRT party.
- He will also inform Fire and medical services. 2.
- He will keep inform DC/AC, Insp/SW and QRT party about every development and make co-3 ordination among them.
- He will generate siren by activating alarm system to alert DVC RTPS Employee, labor and duty 4. Sentries.
- 5. He will inform the HOD of concern Department.

- Inspector/Security Wing, CISF shall be the operational I/C for contingency during gas leakage.
- He will immediately direct Sector Commanders to send off duty personnel for re-enforcement. 2.
- He will depute a suitable SO to lead the re-enforcement party. 3.
- He will intimate higher formation of CISF and CE (HOP) about the Gas leakage and keep them 4. inform of every event or development.
- He will also inform SDPO Raghunathpur and Local SHOs and seek their help in case of need. 5.
- He may also get extra man power or any other help from nearby CISF Units. 6.
- He will depute a suitable SO to assist Management in crowd and traffic control.
- He will liaise Management officers for food arrangement for extra manpower, Re- enforcement party 8. and other agencies involved in contingency.
- He will inform nearby NDRF and seek their help in case of need.
- He will ensure that Fire and Ambulance service may get smooth entry /Exit in plant without any 10. hurdle.
- He will inform operational head of the Plant and suggest him to cut off the Gas/liquid supply. 11.

#### DUTIES OF SEC. COMMANDERS AND COY COMMANDERS

- They will direct Coy CHMs to release extra man power for reinforcement. 1
- They will ensure smooth entry/exit of emergency personnel and vehicle through the gate under their 2. respective area.
- They will ensure that antisocial element cannot take the benefit of situation of disorder during 3. contingency and no any other untoward incident may occurred.
- They will keep close liaison with Management officers and help them in crowd control and traffic 4. control.

#### ROLE OF SO LEADING RE-ENFORCEMENT PARTY

- He will divide the re-enforcement in cordon, rescue and searching party. 1.
- He, after the discussion with safety officials will decide the safe distance from affected place and 2. accordingly deploy cordon party.
- He, after the discussion with safety officer will brief reinforcement party the nature of Gas/substance 3. (inflammable/Toxic/both) and accordingly start searching / rescue operation.
- Search party will locate and remove all items which may ignite fire in case of leakage of inflammable 4.
- He will keep inform Inspector/SW of every development and seek their direction time to time. 5.

He will be responsible for safety and security of reinforcement party.

#### ROLE OF RI/CHM / BHM/MTO

- The CHM / BHM will ready off duty personnel from barracks and Family Qtrs. and provide Arms & other necessary equipments for them.
- 2. RI will be in direct touch with DC/AC leading reinforcement party and provide all necessary help in short notice.
- MTO will provide vehicle to the reinforcement party and release stand by vehicle for rescue
  operation.

#### **ROLE OF MANAGEMENT**

- On being informed the operational head of the plant will direct concern department to stop supply of the gas/liquid substance.
- Safety official will be present with reinforcement party till contingency is over.
- 3. Safety official will brief CISF reinforcement party about the nature of gas/substance and safety precaution while dealing with contingency. In fact reinforcement party will work under the supervision of safety officials.
- 4. Safety department of plant will provide all necessary safety equipment to personals involve in rescue operation.

#### STANDING OPERATING PROCEDURE AGAINST FAILURE OF WATER SUPPLY SYSTEM

#### CAUSES OF FAILURE OF WATER SUPPLY

- Electrical fire or major electrical cable fault.
- Complete breakage of supply lines of water due to earthquake.
- Act of Sabotage
- 4. Contamination of ground water reservoir or fuel leakage into the reservoir.

#### **ACTION TO BE TAKEN**

- Find out the exact cause of water supply failure.
- 2. Informed to related department about water supply failure.
- 3. Necessary water to be brought by Water Tankers.

#### ROLE OF PCR DUTY SANTRY

- On receiving the message, he will inform Insp./SW and Sec. Commanders and QRT Party.
- 2. He will also inform to Water supply department, Fire services and Health services.
- 3. He will keep inform DC/AC and Inspector/SW of every development.
- 4. In case of contamination of ground water reservoir/act of sabotage he will direct QRT I/C to keep cordon the area until the arrival of their replacement.

#### ACTION BY INSPECTOR/SW

- Inspector /SW will be the operational I/C for contingency during water supply failure.
- He will intimate higher formation of CISF and CE (HOP) about the water supply failure and keep them inform of every event or development.
- He will arrange emergency water supply for CISF family Complex and barracks with help of Management.
- He may also use fire tenders for emergency water supply.
- He may also get additional fire tenders from nearby CISF Units especially of the CISF Unit DVC Mithon, CISF Unit DVC Panchet.

#### **DUTIES OF COY COMMANDERS**

2.

They will direct coy barrack and mess for optimum use of water during contingency.

They will ensure emergency water supply in coy barrack and family Qtrs. under them during contingency. For this purpose they will liaise with Management Officers.

In case of contamination of ground water reservoir/act of sabotage concern Sec Comdr will detail 3. duty personals to cordon the reservoir. He will brief cordon party to allow only authorize officials to reservoir.

#### STANDING OPERATING PROCEDURE FOR EARTHQUAKE OR EXTENSIVE DAMAGE TO ROADS / BRIDGES AND STRUCTURAL COLLAPSE

ACTION TO BE TAKEN IN CASE OF DAMAGE TO ROADS AND BRIDGES

Indicate warning signal with the help of red flag and light to alert driver moving toward CollapsedBridge.

Cordon the collapsed/partially collapsed bridge.

- Temporary diversion to be provided wherever possible. 3.
- Make necessary steps and provide temporary support in case of partially DamagedBridge. 4.

Temporary arrangement to the restore the traffic. 5.

## ACTION TO BE TAKEN IN CASE OF STRUCTURAL COLLAPSE

Cordoning of area to be done.

Search and rescue operation to be started. 2.

Structural collapse may be followed by outbreak of fire due to gas leakage and electric short circuit 3. so necessary steps to curb the fire should be taken.

Fire service to be informed. 4.

PMU to be informed and ambulance to be called. 5.

Security personnel to be deployed to restrict the movement of unauthorized persons. 6.

The affected area and surroundings need to be properly illuminated so that it can clearly visible to 7. the passerby in night.

Temporary supports to be provided to the damaged portion depending upon the prevailing condition and some other strengthening arrangement also to be carried out. Adjacent good structures can be utilized for this purpose.

Any hanging, loose, flying parts of structure should be removed on top priority.

Any superimposed additional load i.e. deposited dust, scraps and wear material etc. to be also removed simultaneously.

Mobile cranes and other transports to be arranged for emergency dismantling and handling to the 11. dismantled material.

By pass arrangements to be envisaged for the quick restoration of operation. 12.

#### ROLE OF PCR DUTY SANTRY

On receiving the message, he will inform Inspector/SW, Coy Commanders and QRT Party.

He will generate siren to alert DVC Employee, labor and duty Sentries. 2.

He will immediately call fire service, Dog squad and ambulance.

3. He will keep QRT Party, Inspector/SW and Reinforcement Party Commander inform of every development.

#### **ACTION BY INSPECTOR/SW**

6.

Inspector/SW will be the operational I/C for contingency of damaged Road, bridges & structural collapse.

He will immediately direct Sec. Commanders torelease their off duty personnel for reinforcement. 1.

He will depute a suitable SO to lead reinforcement party.

He will intimate higher formation of CISF and CE (HOP) about the incident and keep them inform of every event or development.

He will also inform SDPO Raghunathpur and Local SHOs and nearby NDRF department. 4.

He may also get extra man power or any other help from Group Center CRPF, Army and nearby 5. CISF Units for rescue operation.

He will liaise Management Officers for additional light source, illumination in case of power failure due to collapse during night hours.

He will liaise Management officers for food arrangement for extra manpower, re-enforcement party 7. and other agencies involved in contingency.

- He will ask management for rescue equipments like crane, vehicle and also ask their Employees and Workers for rescue operation in case of
- He will ensure that ambulance; fire services and other vehicle/agency may get smooth entry and exit inside the plant without hurdle.

#### **ROLE OF SECTOR COMMANDERS**

- They will immediately direct Coy CHMs to release their off duty personnel for reinforcement party and provide all necessary equipment.
- They will keep close liaison with Management officers and help them in crowd control and traffic control.

#### ROLE OF RI/CHMs/BHM/MTO

- The CHM / BHM will ready extra manpower from barracks and Family Qtrs. and provide Arms & other necessary equipments for them.
- MTO will provide vehicle to the re-enforcement party and release stand by vehicle for the checking of plant.

#### **ROLE OF MANAGEMENT**

6.1

- Management will call their employees, workers to vacate the affected building, structure in case of partially damaged and the place surrounding to it.
- Management will assist CISF in rescue work and provide all the equipment, vehicles or any other help asked by CISF.
- 3. The management will provide food, water for people involved in rescue operation.
- For crowd control and traffic control management will follow their contingency plan and get the help of CISF and Local Police.
- 5. Management will call their medical service and Fire department.

#### ROLE OF SO LEADING REINFORCEMENT PARTY

- 1. He will divide reinforcement party into cordon and rescue and searching party.
- He will cordon the area. In case of over bridge outside the plant premises he will take the help of local police for such act.
- 3. He will evacuate the affected place, bridges, building and surrounding area under danger zone.
- He will rescue the victim and provide first aids before sending them to Hospital.
- 5. He will take all necessary steps to minimize the loss.
- 6. He will take the help of Dog Squad to find out the victim buried under collapse structure.
- 7. He will assist management in providing temporary diversion and restore traffic.

#### **ROLE OF POLICE**

- Police will assist CISF in searching and rescue operation.
- Police will control the crowd and insure that medical and fire services may not be delay due to gathering of crowd.
- Police will take all necessary steps to curb any untoward incident at the affected place and plant area.
- 4. Police will ensure the safety and security of costly items at the affected area with the help of CISF.
- Police will find out an alternative route in place of collapsed over bridge so that normal traffic may not be hampered.

#### STANDING OPERATING PROCEDURE TO COUNTER ARMED TERRORIST ATTACK

#### A. ROLE OF CENTRL INDUSTRIAL SECURITY FORCE

#### i) ACTION BY PCR DUTY SENTRY

In case of any armed attack by terrorist/militants/anti-social elements the duty sentry of the PCR will follow the following instructions.

- He will immediately alert the QRT under whose area of responsibility the attack has occurred and also he will provide the following information to the QRT IC.
  - a) How many terrorists have entered?
  - b) What type of weapons they are having?
  - c) What is the color of the dress they are wearing?
  - d) Where is their current location?
  - e) And any other information he has with him. He will take the help of CCTV for the purpose.
- 2. He will immediately inform the Unit Commander, Inspector/SW, concern Sec. Commander.
- 3. He will generate red alert siren.
- 4. He will immediately inform the Dog Squad and Fire Services
- He will keep on passing the information and development to the Inspector/SW, QRT IC, concern Sec. Commander.
- He will be in possession of all important telephone Nos. of Police, local Administration, NDRF
   Battalion, Nearby CISF Units and other sister security agencies who will be informed immediately
   for reinforcement.

#### ii) ACTION BY QRT IC

- 1. He will lead his team to counter the attack immediately till the arrival of the reinforcement team.
- 2. He will direct the QRT personnel under his command to move tactically and take tactical position.
- He will ensure that the personnel under him do not resort to indiscriminate firing as this may exhaust their ammunition. He shall ensure optimum use of ammunition.
- 4. He will ensure that the casualties to the civilians are avoided as far as possible.
- He will be in touch with the PCR duty sentry, to know about the movement of terrorists.
- On arrival of the Company Commander or any other senior officer, QRT IC will act as per the command of the senior officer.
- 7. He will also furnish relevant information to the PCR.

#### iii) ACTION BY INSPECTOR/SW

- He will immediate inform all sec. commanders about the contingency and asked them to keep the Barrack personnel ready and alert for re-enforcement.
- He will immediately depute a SO with a Head Constable to lead the operation to counter the attack, with re enforcement party.
- 3. He will inform DC/AC about the incident and seek his directions.
- 4. He will inform the SDPO Raghunathpur and local SHOs immediately about the incident.
- 5. He will direct all coy to seal all the Entry/Exit points of the Plant.
- He will ensure that the media personnel should not reach to the spot or offices/ PCR, and this he shall take help of Local police.
- He will plan the operation and brief the all sub officers and Head Constables under him about how to go with the operation.
- He will inform the other CISF units nearby like CISF Unit DVC Panchet CISF Unit ECL Sheetalpur, CISF Unit ISP Burnpur and request for reinforcement in case of need.
- 9. He will take all steps to localize the terrorist.

#### iv) ACTION BY CONCERN SHIFT I/C

- On receipt of the contingency message, the Shift I/C will follow the following instructions:-
- He will immediately reach the place where exigency has occurred with ready available force member. While doing so he will be equipped with BP Jackets and Helmets and also Arms and Ammunition and supervise the QRT/Reinforcement to counter the attack until the arrival of re enforcement party.

- He will stay in constant touch with Inspector/SW, Unit Commander and will give information at regular intervals about the contingency and in case of any requirements in the field he may inform him immediately.
- He will deliver the charge to SO leading the reinforcement team on the arrival of reinforcement team.

#### v) ACTION BY THE SO LEADING THE REINFORCEMENT TEAM

- He will divide the Reinforcement team into Inner Cordon Team, Outer Cordon Team, Attack Team, Search Team and Reserve Team and depute separate Inspectors to lead these teams.
- He will deploy the Inner Cordon Team at all the Entry/Exit points of the Plant.
- The Outer Cordon Team will be deployed in the following areas Gutitora opposite to Gutitora Gate, Road opposite to Naragoriagate, Road near Complex Gate, road near RLY, On the Road near Bhaldubi Gate.
- The Outer Cordon Team will restrict all the movements in their location where they are deployed.
- The Attack Team will work as per the direct command of SO leading reinforcement party.
- The search Team and Reserve Team will be ready in case of their requirement they will also act as Attack Team.
- 7. He will keep inform the Inspector/SW and DC/AC about the deployment and any new developments. He will ensure that all teams under him do not resort to indiscriminate firing as this may exhaust their ammunition. He will ensure optimum use of ammunition.
- 8. He will direct his team members to move tactically and take tactical position.
- He will be in touch with the PCR duty sentry to know about the movement of terrorists.
- He will execute the operation as directed by Inspector/SW.

#### vi) ACTION BY RI/MTO/KOTE NCO/MTO

- He will equip all the reinforcement personnel with BP Jackets and Helmets and the required Arms and Ammunition.
- 2. MTO will provide standby vehicle for operation.

#### vi) ACTION BY COY CHMs

- 1. They will immediately mobilize the Off duty personnel in the Barrack by coy vehicles.
- 2. They will also ensure that all the reserved personnel are issued with bullet proof jacket, helmets; required communication equipment's and authorized Arms and ammunition.

#### B. ROLE OF STATE POLICE (ACTION BY THE SDPO RAGHUNATHPUR)

- On receipt of information from CISF, the SDPO will immediately inform the Police Control Room for Reinforcement.
- 2. He will setup Nakabandi in all the entry and exit points of the area under his jurisdiction.
- 3. He will inform his higher formations immediately.
- 4. He will ensure media management.
- 5. He will inform the I/C traffic about the incident and request him to manage the traffic.
- 6. He will be in touch with the CISF Officers.
- He will direct the SHOs of Neturia and Raghunathpur PS under whose jurisdiction DVC RTPS Plant falls to assist CISF Outer Cordon team.
- 8. He will reach the ContingencyCommandCenter and supervise the operations as a part of the Crisis management Committee.

#### C. ROLE OF DVC RTPS MANAGEMENT

- Management will keep the ambulances ready.
- Management will ensure medical assistance on the spot and the casualties if any, be shifted to predefined hospitals/nursing home.

 Management will inform Main hospital and nearby hospital authorities about the contingency and request them to provide their ambulances and also make available their doctors for treating the injured.

Management will provide logistic support to the CISF/Police if necessary.

5. Management will provide administrative support like food arrangement, light etc to the CISF reinforcement team, CISF QRT and the Police Personnel.

Management will ensure that the traffic is regulated as per the traffic management plan.

 Management will provide "follow me" vehicle to ensure that the Emergency services and Reinforcement team shall reach quickly without loss of time to the incident place.

Electrical department will keep the Electricians ready in case of any interruption in power.

### D. ROLE OF INSPECTOR/FIRE / I/C CISF FIRE

 On receipt of the contingency message he will immediately rush to the spot with Fire Tender and be ready to act in case of fire.

He will be in touch with the Inspector/SW while moving to the spot.

He will locate the Fire tenders in such a place so that he and his personnel are safe.

 He will arrange additional fire equipment's as per requirement based both on his assessment on the spot and potential/natureof fire.

### STANDARD OPERATING PROCEDURE TO COUNTER BOMB THREAT

### ACTION BY PCR DUTY SENTRY

On receipt of Bomb threat or message of Bomb threat through telephone, the PCR Duty sentry will act as per the following instructions:-

- 1. He will listen carefully and respond calmly to the caller. He will keep thecaller on the line and attempt to get as much information as possible. If possible, he will record the message. He will ask the following questions to the caller
  - When is bomb going to explode?
  - · Where is it right now?
  - · What does it look like?
  - What kind of bomb is it?
  - · What will cause it to explode?
  - · Did you plant the bomb?
  - · Why?
  - · What is your address?
  - What is your name?
- He will pay particular attention to background noises which may give a clueas to the location of the caller.
- He will carefully listen the voice (male or female), voice quality (calm or excited), accents, and speech.
- He will immediately inform the Insp/SW, Dy. Commandant regarding all the information hehas received and all that he has observed.
- He will immediately inform QRT I/C to cordon the area.
- He will generate red alert siren.

### **ACTION BY INSPECTOR/SW**

- 1. He will immediately call for Dog squad.
- 2. He will direct all Sec. commanders to send off duty personnel.
- 3. He will direct an SO to reach the spot with CISF Cordon and Searchteam along with the Bomb Blanket and start search operation where the Bomb is planted.
- 4. He will inform the SDPO Raghunathpur immediately about the Bomb threat.
- In case the suspicious object is found and confirmed by Dog Squad that it contains explosives, he will immediately order to cover the object with Bomb Blanket or sand bags.
- 6. On Identification of the Bomb, he will immediately call the BDDS team, fordisposal of the Bomb.
- 7. He will determine the danger zone and cordon off the area.

8. He will immediately set up Nakabandi of plant area.

9. He will depute suitable SO to lead the Nakabandi team.

10. He will direct the AC leading the Naka Bandi Team to restrict all themovements.

- 11. He will inform the matter to CEO and take decision about the evacuation asper the Evacuation Plan.
- 12. He will supervise the search operation and give necessary directions as andwhen necessary.

ACTION BY SO LEADING CORDON AND SERCHING TEAM

- He will immediately reach the spot with the cordon team and search team as directed by the DC Plant/ Commandant.
- He will brief the personnel quickly about the bomb threat and also about thesearch operation.

He will start the search operation as per the procedure without delay.

If any suspicious object is identified, he will ensure that no one touches it.

He will inform Operational Head of the Plant and suggest stopping gas and electric supply. 5.

He will carry Blast blanket with him. 6.

He will immediately enclose it with Blast blanket or sand bags. 7.

He will inform the developments to the Inspector/SW at regularintervals. 8.

### ACTION BY SEARCH TEAMS

60

4

The Search teams will use two-person searching team.

When the two-person Search team enters the room they should first stand quietly with their 2. eyes closed and listen for a clockwork device as clockwork device can be quickly detected without the use of special equipment. Even if itis not detected they are now aware of the background noise of the room.

Open door and window and remove objects like gas cylinder etc. which mayincrease intensity of 3. explosion.

The individual in charge of the Searching team should first look around anddetermine how the room is to be divided for searching and at what height thefirst searching sweep should extend. The first items on the floor up to selected height. searching sweep would cover all

The room should be divided into two equal parts based on the number and typeof the objects to be 5.

searched and not on the size of the room.

- The use of radios or other wireless devices and cellular phone during a searchcan be dangerous.
- 7. The radio transmission energy can cause prematuredetonation of an electric initiator (blasting cap).
- Do not touch a strange or suspicious object.

### **ACTION BY RI/MTO**

On receipt of message of Bomb Threat

- RI will immediately make the Cordon team and Search team ready foroperation and provide a 1.
- RI will ensure that they are provided with BP jackets, helmets and otheraccessories required for the 2. operation.
- RI will ensure that Arms/Ammunitions are provided to them without delay. 3.

### ROLE OF DVC RTPC MANAGEMENT

On receipt of message

Management will immediately take steps to evacuate the building or the placewhere there is Bomb 1. threat as per the Evacuation plan.

Management will ensure that the traffic is regulated properly as per the Contingent Traffic 2. Management Plan.

- Management will provide "follow me" vehicles immediately to aid in the movement of Bomb Squad, 3. Local Police and fire department.
- Management will designate suitable personnel who are well aware of the facilityto assistCISF in 4. search operation.

Management will keep the ambulances ready in case of any emergency. 5

Management will also inform the nearby hospital authorities about the Bombthreat and ask them to 6 keep the doctors and other emergency requirementsready.

- Management will provide all necessary assistance to the search team as andwhen called for.
- Management will provide necessary transport for the movement of troops as and when asked for.
  - Management will be responsible for management of traffic within the campusas per the traffic Management plan.

### ROLE OF SDPO RAGHUNATHPUR POLICE

- He will maintain law and order during the crisis situation.
- 2. He will initiate legal action.
- He will cooperate with CISF wherever his services is called for. 3.
- 4. He will assist the CISF where Nakabandi has been setup by CISF.
- He will inform the SHOs about the Bomb threat and ensure for proper Trafficmanagement.
- He will setup Nakabandi in all the entry/exit points of the area under hisjurisdiction. 6.
- He will also inform his higher formations about the Bomb threat. 7.

### ROLE OF INSPECTOR/FIRE / I/C CISF FIRE

- On receipt of contingency information he will immediately rush with the firebrigade to the spot.
- He will also know about the nearest water source to refill if necessary. 2.
- He will also be in touch with the nearest Fire Station other than the one he is incharge and in case of 3. the necessity he may get assistance from them.

### BOMB BLAST/EXPLOSION INSIDE THE DVCRTPS PLANT

### **ACTION BY PCR DUTY SENTRY**

The PCR Duty Sentry will act as per the following instructions:-

- He will immediately inform the incident to the Inspector/SW.
- He will immediately inform the Ambulance, Fire department, Dog squad and Local Police.
- He will generate red alert siren.
- He will immediately direct the QRT to cordon off the area.

### **ACTION BY QRT I/C**

- He will rush to the place of blast and get the area cordoned immediately.
- 2. He will act as per the direction of DGO/DC Plant.
- He will allow only emergency services to the affected place.

### **ACTION BY UNIT COMMANDER**

- He will direct a SO to move to the blast site and cordon the area till thearrival of CISF Cordon team, Local Police and Forensic Expert.
- He will inform all coy commanders about the incident and direct him tomobilize all the off duty personnel.
- He will inform the SDPO Raghunathpur about the incident.
- He will inform the higher formations of CISF.
- He will take steps to preserve the scene of crime till the arrival of Local Police.
- He will direct his men to help in rescue operation.
- He will direct the all Gate I/C allow persons to exit only after proper checking and frisking.
- He will ensure crowd management with the help of earmarked management officers.
- He will plan the search operations inside the plant and execute it through ateam leader and inspector.
- 10. He will supervise various CISF teams.
- 11. He will inform the NDRF Battalion, Kolkata in case of need.

### **ACTION BY INSPECTOR/SW**

- He will divide the reinforcement into Inner Cordon Team, Outer Cordon Team, Search Team, Rescue Team, Crowd Control Team and Reserve Team.
- He will immediately move to the blast site and cordon the area and ensure that the evidence is not tampered.
- He will depute suitable SO to lead the Search Team, Rescue Team.
- He will also depute a suitable SO to lead the crowd control team.
- He will detail a suitable SO CISF to lead Cordon team to completely cordon the area.
- He will ensure that the crowd is managed by the crowd control team.
- On arrival of the search team he will immediately direct them to start the Search operations inside the campus as directed by Unit Commander.
- 8. He will also help in rescue of the injured.
- In case of fire followed by blast he will execute fire fighting drill.

### **ACTION BY COY CHMs**

- They will immediately mobilize the off duty personnel in the Barrack for reinforcement.
- They will equip off duty personnel with required communication equipment's and other equipments.

### **ACTION BY SOS LEADING THE REINFORCEMENT TEAM**

- The Outer Cordon Team will cut off all routes connecting main road to plant.
- The Inner Cordon team will cordon the blast site and ensure that the evidence is not tampered till
  the arrival of Local Police and Forensic Experts.
- The Rescue Team will help in rescue of the casualties/injured in the Blast Site.
- The Crowd Control Team will control the crowd inside the plant.

- The Search Team will start searching the whole plant to detect any more suspicious objects/unexploded bombs inside the plant.
- Team leaders will be in touch with the Inspector/SW and inform them about the deployment and any new developments in the area.
- Team leaders will act as per the directions of the Inspector/SW from time to time.

### **ROLE OF MANAGEMENT**

- 1. Management will assist CISF in cordoning off the area and for crowd management.
- Management will provide other logistic support to cordon the area.
- 3. Management will call his ambulances immediately to the spot.
- Management will immediately call for the Emergency Services for shifting of casualties/injured to the hospital and fire services in case of fire.
- Management will ensure that the traffic team regulates traffic as per management plan with the help of Local Police.
- Management will provide all necessary support to the CISF Search team.
- Management will provide water resources for the Fire services.
- Management will provide food and other essential requirements for the various agencies involved in the Search and Rescue.

### **ROLE OF STATE POLICE**

- i) ACTION BY SDPO RAGHUNATHPUR
- 1. He will inform his higher formations immediately.
- He will also call the Forensic Experts.
- He will take steps to preserve the scene of crime. He will be assisted by the CISF Cordon Team, if necessary.
- 4. He will ensure Law and order in his area of jurisdiction.
- 5. He will inform the traffic department about the incident and ensure management of traffic.
- 6. He will make search operation inside the area with the help of CISF Search team and Dog Squad.
- 7. He will setup Nakabandi in all the entry/exit points of the area under his jurisdiction.
- ii) ACTION BY SHOs
- They will immediately rush to the spot and cordon the blast site to preserve the area of crime. He
  will take the help of CISF Cordon team.
- They will setup Nakabandi in all the entry/exit points of the area under his jurisdiction.
- 3. They will assist the CISF Outer Cordon Team
- They will conduct search operation with the help of CISF Search Team, Dog Squad and Infosys Security
- They will extend all his assistance to CISF to counter the exigency.

### ROLE OF INSPECTOR/FIRE / I/C CISF FIRE

- He will immediately reach the spot with the fire tenders and other rescue equipment's to the spot.
- He will help in rescue operation along with the CISF rescue team.

### DISASTER MANAGEMENT AGAINST FIRE

### TYPE OF FIRE

SI. No.		COMBUSTIBLE ITEM	EXTINGUISHER TO BE USED		
1	A Type	Paper, Wood, Grass etc	All type of extinguisher		
2	В Туре	Flammable liquid, oil	Foam/CO2 Extinguisher		
3	C Type	Gas	CO2 Extinguisher		
4	D Type	Metal	DCP /CO2 Extinguisher		
5	Electric	Electrical Wire	DCP/CO2 Extinguisher		

### **ACTION TO BE TAKEN**

En-

€

- Find out exact cause of Fire.
- 2. Inform Fire and Medical Services.
- 3. Use Fire safety system according to the nature of Fire,
- 4. Cordon the affected area.
- 5. Start search and rescue operation
- 6. To defuse the Fire cut off any one of the Fire Triangle.(Air, Fuel & Heat)
- Remove items which may intensify fire eg. Electric wire, LPG, DA cylinder etc.

### ROLE OF PCR DUTY SENTRY

- On receiving the message, he will inform Fire Control Room, Inspector/SW, Sec. Commanders, Coy Commander/Fire and QRT Party.
- 2. He shall immediately direct the QRT to cordon off the area.
- He will inform and direct concern department to generate siren to alert DVC RTPS Employee, labor and duty Sentries:
- 4. He will inform plant Fire service, Medical Service.
- 5. He will also inform to State Police.
- 6. He will keep inform inspector/SW and ConcernedManagement officers.
- He will generate red alert siren.

### **ACTION BY INSPECTOR/FW**

- 1. Inspector/FW shall be the operational I/C for contingency due to Fire.
- 2. He will immediately direct Sec. Commanders tosend their off duty personnel.
- 3. He will intimate higher formation of CISF and CE (HOP) about the Fire.
- He will suggest concern department to stop supply of fuel (Coal/Fuel Oil/electricity).
- He will inform Electric Department to stop power supply of current for Fire Hydrant Pumps.
- 6. He will also inform SDPO Raghunathpurand NDRF Kolkata and seek their help in case of need.
- He may also get extra man power, fire contingent or any other help from nearby CISF Units.
- 8. He will depute a suitable SO to lead reinforcement party.
- He will request to Inspector/SW to depute a suitable SO with 10 Ors fully armed to meet any untoward incident during contingency.
- 10. He will liaise Management officers for food arrangement for extra manpower, re-enforcement party and other agencies involved in contingency.
- 11. He will ensure smooth entry and exit of Fire and Medical service in plant area.
- He will ensure that unnecessary crowd could not gather at DVC RTPS Dispensary. Help of Police to be taken for crowd control.

### **DUTIES OF SEC. COMMANDERS**

- They will proceed immediately to their respective areas along with re- enforcement party and ensure the security of vital installations.
- 2. They will direct Coy CHMs to release extra man power for reinforcement.
- They will keep close liaison with Management officers and help them crowd control and traffic control.

DUTIES OF RI/CHM / BHM

- The CHM / BHM will ready extra manpower from barracks and Family Qtrs. and provide Arms & other necessary equipments for them.
- RI will provide vehicle to the re-enforcement party and release stand by vehicle for the checking of 2.

ROLE OF SO LEADING REINFORCEMENT PARTY

- He will divide reinforcement party into cordon team and searching and rescue team.
- The CISF Cordon team will cordon off the area and restrict the movements by allowing only the necessary emergency services personnel.
- Searching and rescue team with the help of Dog Squad will start action to save life and property 3. and assist Fire personnel. 4

He will arrange first aid for victims.

He will direct management officer to cut off the supply of gas, electricity or water as per the need. 5.

He will evacuate nearby building or offices.

- While dealing with fire hazard he will ensure the safety of rescuer/fire fighter against noxious gasesCable Galleries.
- In case of Fire at FOT area he will ensure the safety of Fuel Oil storage Tanks and he will take all 8. step to segregate these from Fire affected area.

ROLE OF QRT I/C

On receiving the message, he will immediately rush to the spot and cordon off the area.

He will keep inform Unit Commander, PCR and Inspector/SW of their movement. 2.

- He will take initial steps to minimize the loss until the arrival of fire department and reinforcement 3.
- After the arrival of reinforcement party he will continue his normal function and be more vigil to 4. avoid any other untoward incident into the plant.

**ROLE OF MANAGEMENT** 

- Management will alert nearby hospital authorities to keep their medical officers ready to treat the burn injuries.
- Management will request nearby hospital authorities to provide more ambulance in case of need. 2.

3. Management will inform city fire department in case of need.

- Management will ensure water supply in nearest water source for refilling of fire tenders. 4.
- Management will provide proper illumination in case of incident during night hours. 5.

6. Management will follow its traffic and crowed control plan.

Management will provide any other support as asked by CISF and other agency involved in rescue 7. work.

ROLE OF POLICE

- SDPO will immediately direct local SHOs to maintain law and order.
- Police will control crowd and traffic in and outside of plant so that fire and medical services may 2. work smoothly.

### DISASTER MANAGEMENT AGAINST STRIKE

### LIST OF SENSITIVE PLACES

- 1. Office of the Chief Engineer & Project Head
- 2. Technical Building
- Boiler area
- 4. DM Plant
- 5. Crusher House
- 6. Switch yard
- 7. Water Pump houses
- 8. Ghutitora Gate
- 9. Complex Gate
- 10. Naragoria Gate
- 11. Weigh bridge
- 12. Reservoir
- 13. Fuel Tanks
- 14. CHP area
- 15. DVC RTPS Dispensary
- 16. PCR
- 17. Ash Pond
- 18. Water reservoir

### ACTION TO BE TAKEN BY INTELLIGENCE

- 1. Collection of the information and program of trade unions involve and not involved in strike.
- 2. Earmark the possible place of gathering of protester.
- Analyses and anticipate the condition during strike and possible security threats.
- Keep proper liaison with union leaders, management officers by which be informed every step or action taken or supposed to be taken by them.
- 5. Keep proper liaison with Police and other agency involved in control of law and order.
- 6. Suggest Precautionary measures to be taken by CISF and Management.
- 7. Keep informed concern CISF officers and sub officers to avoid any untoward incident.

### ACTION TO BE TAKEN BY UNIT COMMANDER

Having confirmed about contingency and after ascertaining the root cause of it Unit Commander CISF shall take the following steps.

### PRECAUTIONARY STEPS

- Analyze the information submit by Int. I/C and discuss with Coy Commanders and Sec. Commanders.
- Direct Coy. Commander/SW to deploy striking reserve and off duty personals during strike.
- Deploy men or mobile patrol or fixed sentry at the vital installation and sensitive place of possible incident/dispute.
- 4. Detailment of SO to maintain close liaison with civil authorities under guidance of Sr. Manager (HR).
- All entry gates to the plant and entry to the CE(HOP) office should be sufficiently strengthened taken into account availability of CISF personnel to ensure very strict checking of the entry into the prohibited area.
- 6. He will also inform SDPO Raghunathpur and Local SHOs and seek their help.
- He may also get extra man power or any other help from nearby CISF Units.
- 8. He will intimate higher formation of CISF and CE(HOP) and keep them inform of every event or development
- He will detail CISF contingent to assist Police for escorting DVC RTPS Vehicles carrying loyal workers to the place of work to keep the work in running condition.

### **DURING CONTIGENCY**

1. In the event that the assistance of the local police could not be possible in the reasonable time, the Unit Commander CISF shall analyses the situation and after judging the assembly, should intimate

the SDPO Raghunathpur over Telephone and take appropriate action for declaring the assembly as Unlawful and order for its dispersal with the minimum necessary force.

Unit Commander of CISF Unit RTPP Purulia shall ensure that employees involved with the 2. destruction of property or in assault are arrested promptly and handed over to the Local Police for further legal action.

### ACTION BY INSPECTOR/SW

Inspector/SW of CISF shall be the operational I /C for contingency during Strike.

He will direct all Sec. Comdrs. and QRT to enhance the frequency of checking in their respective 2. area. Foot patrolling with Arms may be introduced during strike period.

He will depute suitable sub officers to lead mobile or fixed parties of 4-10 ORs each. 3.

He will provide necessary equipment to their parties.

- He will arrange vehicles for mobile parties either through MTO or by management. 5. He will keep proper liaison with local police and seek their help in case of need. 6.
- He will liaise Management officers for food arrangement for extra manpower, reinforcement party 7. and other agencies involved in contingency.

8. He will always close touch with Unit Commander during the contingency.

### **DUTIES OF SEC. COMMANDERS**

They will direct Coy CHMs to release extra man power for reinforcement.

They will deploy additional duty sentry on the posts as directed by Inspector/SW.

- They will brief their men to inform coy commander or Sec. commanders or PCR in case of any 3. gathering of people in their duty area so that necessary steps may be taken to avoid any untoward incident.
- They will keep close liaison with Management officers and help them for special entry of loyal 4. employees.
- They will keep inform Inspector/SW about every development and seek their direction time to time. 5.

They will remains at their respective areas till end of the contingency.

### DUTIES OF RI/MTO/CHM / BHM

- The CHMs / BHM will ready extra manpower from barracks and Family Qtrs. and provide Arms & riot drill equipments for them.
- 2. MTO will ensure that all the vehicles are in good condition with sufficient fuel.

MTO will release stand by vehicle for the vehicle patrolling parties. 3.

Since contractor driver running CISF vehicle in coys might go in support of strike so MTO will keep 4. ready all standby drivers in ready position.

### **ROLE OF SO'S LEADING VEHICLE PATROLLING PARTIES**

- They will keep proper vigil in their respective areas and keep inform their Sec commander of every development.
- In case of any dispute and unlawful assembly inside of plant they will assist police personnel to 2. tackle situation.
- 3. They will be responsible for the safety and security of employee, worker and plant property until the arrival of reinforcement party.

### ROLE OF MANAGEMENT

- Management will not grant permission for staging demonstration in the close proximity of the installation. Instead they may be allowed outside of the perimeter wall of the plant / CE(HOP) office of DVC RTPS.
- 2. Management will prepare a list of loyal employees whose service may be utilized for important and essential service.
- Management shall arrange to install public address system to address the striking employees in the 3. event that their assembly has been declared "Unlawful".
- Management will depute a Photographer to cover the assembly and their activities in case the said assembly becomes "Unlawful". This will help in justifying and providing the use of the Force to disperse them.
- 5. The management shall in advance, prepare a number of banners in Bengali, Hindi and in English language mentioning that this assembly has been declared "Unlawful" and the assembly should

immediately failing which force will be used against them to disperse. This will be prominently displayed.

Management will selected places where from workers willing to perform duty can be assembled and 6. boarded the DVC Vehicles. The list of such selected places will be prepared by the Sr. Manager

(HR) and handed to Police and CISF. If it is required, special passes for the occasions may be issued to Officers / persons who may be allowed by the personal to enter into the Plant premises / Office premises and do their work. These passes will be got printed in advance and supplied to the CISF. The number of passes required will be decided by the personal department in close consultation with the Unit Commander, CISF Unit RTPP Purulia.

Immediately after cessation of the contingency, Management will lodge FIR with the Local Police for 8. action against the employees involved the agitation.

### **ROLE OF POLICE**

- Local Police shall ensure that sufficient and necessary picketing has been made in order to prevent the agitations from approaching the DVC RTPS Plant. They shall take all necessary action to prevent such move.
- SDPO will share information related with strike with CISF. 2.

### DISASTER MANAGEMENT AGAINST NATURAL FLOOD AND CHOKING OF DRAINS

### ACTION TO BE TAKEN IN CASE OF CHOKING OF DRAINS/FLOOD

- 1. Remove all the obstruction of drains.
- 2. Digging temporary channels for easy drainage of obstructed water.
- 3. Pumping of stagnant water with the help of Fire Tender Pump.
- Nearby power lines in underground tunnels should be switched off.
- Deploy the Force personnel to cordon affected area.
- 6. To stop drains water in mill area or vital installation a wall of sand bagsmay be constructed.
- Start rescue operation to save life and property.
- Provide drinking water from other sources.

### **ROLE OF PCR DUTY**

- 1. On receiving the message, he will inform Inspector/SW, Sec. Commanders and QRT Party.
- 2. He will generate alarm to alert employees, worker etc so that they may vacate the affected place.
- 3. He will inform concern department to stop the supply drain water.
- He will also inform to Civil Works department, Fire services and Medical services.
- 5. He will keep inform Inspector/SW and Management officers of every development.
- 6. He will inform electrical department so that cable in tunnels may not affected.
- He will activate siren.

### **ACTION BY INSPECTOR/SW**

- 1. Inspector/SW shall be the operational I/C for contingency during choking of drains/ Flood.
- 2. He will immediately direct Sec. Commanders and tosend their off duty personnel for reinforcement.
- 3. He will depute a suitable SO to lead reinforcement party.
- 4. He will intimate higher formation of CISF and CE (HOP) about the choking of drains/ Flood.
- 5. He will also inform SDPO Raghunathpur and Local SHOs and seek their help in case of need.
- 6. He may also get extra man power or any other help from nearby CISF Units.
- He will liaise Management officers for food arrangement for extra manpower, re-enforcement party and other agencies involved in contingency.
- He will be the member of crisis management committee of DVC RTPS and coordinate management officers.
- He will inform plant power department and direct to cut off power supply in underground cable comes under affected area.

### **DUTIES OF SECT.COMMANDERS**

- They will direct coy CHMs to release off duty personnel for reinforcement party and provide all available equipment to them.
- 2. They will ensure the security of vital installations in their respective areas.
- They will keep close liaison with Management officers and help them crowd control and traffic control.

### DUTIES OF MTO/ RI/CHMs / BHM

- The CHMS / BHM will ready extra manpower from barracks and Family Qtrs. and provide Arms & other necessary equipments for them.
- 2. MTO will provide vehicle to the reinforcement party and release stand by vehicle for rescue work.

### ROLE OF SO LEADING REINFORCEMENT PARTY

- He will divide reinforcement party into cordon team, search and rescue team.
- 2. Cordon team will seal the area and allow only emergency services and personnel.
- Search and rescue team will start searching of victim with the help of Fire personnel and refer them
  after providing first aid.
- 4. He will take all necessary steps to divert drain water away from vital installation.
- He will assist management officers for digging temporary channels for easy drainage of obstructed water.
- 6. He will ensure safety precaution around uncovered manholes.

### ROLE OF CISF FIRE SERVICE

- They will assist reinforcement party in rescue and rehabilitation of victims.

  They will assist reinforcement party in dewatering and other salvage work if necessary.

### ROLE OF MANAGEMENT

- 2.
- Management will mobilize civil work department for cleaning of obstruction of drains.

  Management will cut off power supply in underground power cables.

  Management will assist CISF in rescue operation.

  Management will arrange food packet for personals involved in operation.

  Management will provide lights for proper illumination during night.

  Management will follow contingency traffic and crowed control plan. 4.
- 5.
- 6.

### DISASTER MANAGEMENT AGAINST RIOTS AND COMMUNAL VIOLENCE

### LIST OF SENSITIVE PLACES

- 1. Office of the Chief Engineer & Project Head
- 2. Technical Building
- 3. Boiler area
- 4. DM Plant
- Crusher House
- 6. Electric switch yard
- 7. Water Pump houses
- 8. Ghutitora Gate
- 9. Main Complex Gate
- 10. Naragoria Gate
- 11. Bhaldubi Gate
- 12. Weigh bridge
- 13. Reservoir
- 14. Fuel Tanks
- 15. CHP area
- 16. DVC RTPS Dispensary
- 17. PCR

### ACTION TO BE TAKEN BY INTELLIGENCE

- Collection of information and exchange of information with Police and management officials.
- 2. Earmark the possible place of dispute.
- Analyse and anticipate the possible security threats during contingency.
- Suggest precautionary measures to be taken by CISF and Management.
- Keep informed the concerned CISF officers and sub-officers to avoid any untoward incident.

### **ACTION TO BE TAKEN BY UNIT COMMANDER**

Having confirmed about contingency and after ascertaining the root cause of it, the Unit commander, CISF shall take the following steps.

### PRECAUTIONARY STEPS

- Analyze the information submit by Int. I/C and discuss with Coy Commanders and Sec.
  Commanders and Direct all coy to deploy their striking reserve and off duty personnel during
  contingency.
- Deploy men or mobile patrol or fixed sentry at the vital installation and sensitive places of possible incident/dispute.
- 3. Detailment of SO to maintain close liaison with civil authorities under guidance of Sr. Manager (HR).
- 4. All entry gates to the plant and entry to the CE (HOP) office should be sufficiently strengthened taken into account availability of CISF personnel to ensure very strict checking of the entry into the prohibited area.
- 5. He will provide escort for important plant officer.
- He will also inform SDPO Raghunathpur and Local SHOs and seek their help.
- He may also get extra man power or any other help from CISF Reserve Batalian Ranchi, Army, CRPFand nearby CISF Units.
- 8. He will intimate higher formation of CISF and CEO and keep them inform of every event or development.
- He will detail CISF contingent to assist Police for escorting buses carrying employees to the place of work to keep the work in running condition.

**DURING CONTIGENCY** 

- In the event that the assistance of the local police could not be possible in the reasonable time, the DC CISF shall analyses the situation and after judging the assembly, should intimate the concerned SDPO Raghunathpur over Telephone and take appropriate action for declaring the assembly as Unlawful and order for its dispersal with the minimum necessary force.
- DC CISF of CISF Unit RTPP Purulia shall ensure that employees involved with the destruction of 2. property or in assault are arrested promptly and handed over to the Local Police for further legal

6

6

6

He will keep close liaison with IB and other sister agencies.

ACTION BY INSPECTOR / SECURITY WING

- Inspector/SW, CISF shall be the operational I /C for contingency during riot or communal violence.
- He will direct all Sec. Comdrs. and QRT to enhance the frequency of checking in their respective 2. areas. Foot patrolling with Arms may be introduced during contingency.

He will depute suitable sub officers to lead mobile or fixed parties of 4-10 ORs each. 3.

He will provide necessary equipment and call signs to their parties. 4.

He will arrange vehicles for mobile parties either through MTO or by management. 5.

He will also detail a party lead by a sub officer to escort ambulence and fire tender of CISF Unit 6. RTPP Purulia.

He will keep proper liaison with local police and seek their help in case of need. 7.

He will direct his men to assist Police as and when asked by Police.

He will liaise Management officers for arrangement of food for extra manpower, Re- enforcement 9. party and other agencies involved in the contingency.

He will always close touch with DC/CISF Unit RTPP Purulia during the contingency. 10.

DUTIES OF SECT.COMMANDERS AND COY COMMANDERS

They will direct Coy CHMs to release extra man power for reinforcement.

They will deploy additional duty sentry on the posts as directed by Inspector/SW.

2. They will brief their men to inform PCR in case of any gathering of people in their duty area so that 3. necessary steps may be taken to avoid any untoward incident.

They will keep close liaison with Management officers and help them as and when required.

4. They will keep inform Inspector/SW about every development and seek their direction time to time. 5.

They will remain at their respective areas till the end of the contingency. 6.

DUTIES OF RI/MTO/CHM / BHM

The BHM will ready extra manpower from barracks and Family Qtrs. and provide Arms & riot drill equipments for them.

MTO will release stand by vehicle for the vehicle patrolling parties. 2.

RI will supervise and ensure all the above.

ROLE OF SO'S LEADING VEHICLE PATROLLING PARTIES

They will keep proper vigil in their respective areas and keep inform their Sec commander of every development.

In case of any dispute and unlawful assembly inside of plant they will assist police personnel to 2. tackle situation.

They will be responsible for the safety and security of employee, worker and plant property until the 3. arrival of reinforcement party.

ROLE OF MANAGEMENT

2.

Management will not grant permission for staging demonstration in the close proximity of the installation. Instead they may be allowed outside of the perimeter wall of the plant / CE(HOP) RTPP Management shall arrange to install public address system to address the protesting employees in Purulia office.

the event that their assembly has been declared "Unlawful".

- Management will depute a Photographer to cover the assembly and their activities in case the said
  assembly becomes "Unlawful". This will help in justifying and providing the use of the Force to
  disperse them.
- 4. The management shall in advance, prepare a number of banners in Bengali, Hindi and in English language mentioning that this assembly has been declared "Unlawful" and the assembly should immediately failing which force will be used against them to disperse. Such banners will also be handed over to CISF.
- Management will selectplaces where from workers willing to perform duty can be assembled and boarded on the duty buses. The list of such selected places will be prepared by the Sr. Manager (HR) and handed to Police and CISF.
- Immediately after cessation of the contingency, Management will lodge FIR with the Local Police for action against the employees involved the agitation.

### **ROLE OF POLICE**

- Local Police shall ensure that sufficient and necessary picketing has been made in order to prevent the agitations from approaching the RTPS Plant. They shall take all necessary action to prevent such move.
- 2. SDPO Raghunathpur will share information related with strike with CISF.
- SDPO Raghunathpur will make arrangement for escorting RTPS buses, ambulance and fire tenders with the help of CISF.

## STANDARD OPERATING PROCEDURESAGAINST SEPOY MUTINY OR DESERTION BY CISF PERSONNEL

### DEFINITION

Both Mutiny and Desertion are serious offences and are defined as under:-

### A. DESERTION / AWL

- Any member of the Armed Forces who deserts or attempts to desert the service when on active duty or when under orders for active duty under any other circumstances.
- This scheme shall come into existence when large Nos. of CISF personnel of the Unit in a group or otherwise deserts or attempts to desert.
- Any member of the Armed Forces who knowingly harbors any such deserter.
- 4. Any member of the Armed Force who, being cognizant of any desertion or attempt at desertion of any other member of the Armed Force does not forthwith give notice to his own or some other superior officer, or take any steps in his power to cause such person to be apprehended.
- 5. Any member of the Armed Forces who uses criminal force to or assaults his superior officers or uses threatening language to such officer or uses insubordinate language to such officer.
- Any member of the Armed Forces who disobeys in such manner as to show a willful defiance of authority for any lawful command given personally by his superior officer in the execution of his office whether the same is given orally, or in written or by signal or otherwise.

### B. MUTINY OR SEDITION

- Any member of the Armed Forces who commits any of the following offences, that is to say:-
- 1. begins, incites, causes or conspires with any other person to cause any mutiny in the Force or in the Military, Naval or Air Forces of India or any Forces co operating therewith: or
- 2. joins in any such mutiny; or
- 3. being at any such mutiny, does not use his utmost endeavor to suppress the same ; or
- knowing or having reason to believe in the existence of any such mutiny, or of any intention to mutiny or of any such conspiracy, does not, without delay, give information thereof to his Commandant or other superior officer; or
- endeavor to seduce any person in the Force or in the military, naval or air fore of India or any forces co-operating therewith from his duty or allegiance to the Union.\State.
- 6. intelligence Wing is to be geared-up to collect advance information about such plan of mass scale desertion. Proper preventive measure is to be adopted to stop desertion. Immediately Civil authority and Local Police shall be informed. The assistance of other Paramilitary Force, Army Naval or Air Forces can be taken in consultation with civil authorities. Even the intervention of the Central Government can be sought.

### **POTENTIAL TARGETS**

- 1. VIPs
- 2. Senior Officers/Commanders of the Unit/Bn./Force of the undertaking etc.
- Kote/Armory of Unit.
- 4. Vital Installation
- :In respect of the Plant RTPS (DVC) Raghunathpur, the following vital installations may be the potential targets in the eye of Mutineers/Deserters etc.
- a. Fuel Oil storage Tanks
- b. Boiler House and Turbine Hall with UCB
- c. Water Storage
- d. Water Treatment Plant
- e. Switch Yard and Electrical Sub-stations
- f. AdministrationBuilding
- g. Technical Building

### **REACTION TO AN INCIDENT**

- The entire Plant can be divided into two parts. Pro-active and Active:
- Loyal workers may be deployed at QuarterGuard and all the keys be taken in custody. Duplicate
  keys should also be taken in safe custody.

PRO-ACTIVE PART

- Behavior dealing and use of languages of the supervisory officers of the local bodies should be b)
- CIW is to find out and isolate such personnel who exhibit abnormal behavior either due to work related stress or other problem.
- The activities of the CISF personnel working under each Companies should minutely be watched C) and information about their intimacy with fertile groups, anti-social elements, trade union leaders etc.
- Quarter Guard and Kote duty personnel to be formed amongst the loyal and efficient staffs. d) e)
- CISF intelligence work should be geared-up properly so that they are in a position to collect the most up to date and authentic information. Emphasis should be laid on area intelligence i.e.
- Proper training and intelligence input to the CISF personnel at all levels from constabulary to the f) Unit Commanders. Exchange of views on such matters.
- Timely collection. Collation, evaluation, interpretation and dissemination of information are to be g)
- A quick reaction team or striking reserve Forces are to be formed amongst the loyal and efficient h) staff. They should be available to counter any attack. The QRT should not be over stressed and should be thorough with handing of Arms.
- Close watch, vigil are to be kept on disgruntled and on doubtful antecedent/characters.
- If needed, personal CR dossier/files are to be maintained. j)

### **ACTIVE PART**

- A list of disciplined and loyal staff be prepared.
- Another way of operation would be to make the top Officials/VIPs shielded from any kind of attack. In these circumstance and QRT should be activated. Moreover the access points leading to Administrative Building should be thoroughly limited and all probable loop holes are to be plugged. The loyal and trust worthy team are to be assigned with the task to safeguard the top
- All information should be percolated down to Control Room. Co-ordination with other agencies in the c) event of attack should be made. The Contral Room of CISF should be activated. The Civil authorities, local police should informed by quickest possible means. Immediately the QRT, Fire Control Room should be alerted. Tactical information shall be collected by C&I wing and DIB about Nos. of personnel involved in Mutiny/desertion with types of arms, transport and communication being carried out by them, direction and route are to be ascertained.
- The main objective of the QRT should be to catch the mutiny personnel alive only as far as possible. e)
- In case of any attack QRT should immediately reach the spot & act as back-up.
- Civil authorities and Local Police require to be intimated immediately. f)
- Control Room should inform the nearest Hospitals, Ambulance & Nursing Home to receive the g)
- In case of any Officer made hostage a negotiating team should be immediately formed with the help h)
- The Complete access Control should be maintained.
- No interaction with the press except the Unit Commander, to avoid rumors.
- The Control Room of FHQ would be informed immediately by available Senior most Officer.

### ASSISTANCE FROM OTHER MINISTRIES/AGENCIES

The Nodal Officer with the help of FHQ shall tie-up arrangement with Central Ministries as well as the State Government to make following arrangement.

To deploy adequate Force at time of such crises as a mutiny and to provide specialized teams for emergency first aid. Search, Cordon, Bomb Disposal, Investigation, Aircraft and Choppers for transportation men and materials and evacuation.

HEALTH/ADMINISTRATION CONTROL Zonal DIG/Group Commandant in any Zone may be nominated as a Nodal Officer who in time of crisis would guide the CPMFs with regard to emergency treatment, other administrative requirements. It would be expedient if nodal hospitals are nominated in different regions of the state for handling and overcoming such critical situation. State and Central Govt. should detail Nodal Officer in this respect.

### ASSISTANCE FROM FIRE BRIGADE

As soon as any mutiny is taken places in CISF at any place, Fire Brigade Stations should be alerted to meet any eventuality.

### ROLE OF DY. COMMANDANT

- On receipt of information, DC/Unit Commander should take utmost efforts to handle the situation.
- 2. He should call a meeting with Senior SOsof CISF of the Unit, Management and Civil authorities to decide how to tackle the situation and passed the order accordingly.
- 3. He should also inform the matter to highly formation by quickest possible means i.e. Telephone, Fax, Wireless, E-mail etc.
- He will also conduct an inquiry about the matter and shall analysis the causes of the incident to take 4. preventive measure. Any flop or failure is to be taken into account. The necessary rectification is required to be made to avoid any such similar error in future emergency.

### ROLE OF INSPECTOR/SW

6

(

Cont

- On receipt of information, Inspector/SW of the Unit will remain in constant touch with the DC/Unit Commander.
- Any orders passed by the DC/Unit Commander will communicate the same to his subordinate and he will ensure that all orders are being complied with true spirit.

### ROLE OF SEC. COMMANDERS

- On receipt of information/message, Sec. commanders will react immediately. They will brief their men about the incident and ask them to stay in readiness.
- 2. They will also remain present in their respective areas to tackle the situation.
- Information/Orders received from the higher formation must be communicated to their subordinate 3. immediately.
- 4. They will also intimate the development of the situation to the DC/Unit Commander.

### ROLE OF RESERVE INSPECTOR

- On receipt of information/orders, he will brief the men of the Unit about the incident and keep them in a state of readiness to move within a short notice.

  He will also stay in a close to prove with the Unit Commander.
- 2. REPS. DVC. Regrandingm. Purulo (MB)

### ROLE OF M.T.O.

- On receipt of information/orders, he will check that all the vehicles are in good condition with sufficient fuel.
- 2. He will also kept his men alert and ask them to stay in M.T. Section to move within a short notice. He should send the vehicle to the spot after receiving requirements.

### ROLE OF Q.M./KOTE NCO

- QM/Kote NCO will ensure that all the Arms & Ammunition available in the Unit Kote are in serviceable condition so that the same can be utilized as per requirement.
- The proper safety and precaution of the armory should be ensured.

### ROLE OF B.H.M.

- On receipt of information/orders, he will gather all personnel of the Unit and brief about the incident.
- He will collect the orders from R.I. and convey the same to the all personnel for strict compliance.
- He will also stay in a close touch with R.I.

### POLICE/DISTRICT ADMINISTRATION

The SDPO Raghunathpur and DM Purulia must be alerted at the very onset of mutiny.

### HOSPITAL

Nearest Hospitals are to be alerted to remain ready for any contingency.

### **NEARBY ARMY AND CRPF**

Nearest Army base shall be informed about the any emergency situation. CRPF Group Centre is also to be informed.

### POST INCIDENT ACTION

- Unit Commander shall conduct an inquiry into the matter and shall analysis the causes of the incident and to take such preventive steps as are considered necessary and shall also assist civil authorities in conducting enquiries. Any flop or failure are to be taken into account, the necessary rectification is to be made to avoid the similar error in future emergency.
- MHA shall be informed about the creation of the enquiry any corrective steps are being taken b) thereof.
- FHQ shall submit a detailed report on the incident to the Home Ministry in the matter. The report will c) also be sent to JS (DM) for apprising National Crisis Management Committee.

### LIST OF PHONE NUMBERS

### POLICE

SI.No.	Particulars	Phone No.	Mobile No
1	DM, Purulia	03252-222302	
2	Raghunathpur Police Station	03251-255231	+919434001122
3	Neturia Police Station	03251-252340	+918145500395
4	Asansol Police Station	0341-2302225 0341-2270149	+918145500398
5	Mobile Police Assistance	100	
6	Raibandh Police Camp I/C	100	+919002300440
7	Commissioner of Police, Asansol	0341-2250347	+918116604444
8	SDPO Raghunathpur	03251-255338	+918145500327
9	Cl Raghunathpur	03251-355386	+918145500357
10	IB Office Purulia (under Durgapur)	03231-355366	+919051432500

### CISF

SI.No.	Particulars	Office	Mobile
1	DO/AG CISF	03251201467	+918016880889
2	Plant Control Room		+919679703754
3	Insp/FW		+918509548199
4	Inspector/SW	-	+918170094913
5	Fire Control Room	03251201482	+918509548199
6	Reserve Inspector	-	+917478521988
	I/C CIVV	_	+917797081798

### MANAGEMENT OFFICERS

JANAG	SEMENT OFFICERS		ale	
SI.No	Particulars	Office	Mobile	1 a lier
1	Sh. Ashish Kr. Banerjee, CE & HOP		094340 <b>646</b> 91	Lell
2	Sh. P. P. Chakraborty, CE(O&M)		099329 <b>426</b> 9	Dr-V
3	Sh. Sajal Banerjee, DCE(M)		09434788436	9/
4.	Sh. B. Dhol, DCE(M)		7679162363	
5.	Sh. S. N. Prasad, DCE		07363959443	
6.	Sh. Uday Kumar, DCE (E)	me and	0933255975	
7.	Dr. S. Saha, DCMO, RTPS		0943112669	
8.	Sh. Santanu Ganguly, DGM(Admin.)		08016890344	
9.	Sh. S. Mondal, Asst. Manager(Safety)		0786482692	

### HOSPITAL

SI.No.	Particulars	PAX	P&T
1	Raghunathpur MainHospital Emergency.	03251-255672	
2	Plant Medical Unit.		+919002567704 +919476329825
3	Hill Hospital DVC Panchet.	06540-287204	+91933289 7
4	Mission Hospital Durgapur.	0343-2535555	+91923335 5
5	Chaudhary Diagnostic and Hospital, Adra.	03251-201510 03251-201519	+91943401

### FIRE

SI.No.	Particulars	PAX	P & T
1	CISF Fire Station RTPP Purulia	+918145419294 (cell)	+918509548199
2	CISF Fire Station DVC Panchet	06540-28740	+918986619146
3	CISF Fire Station ISP Burnpur	+919434777661 (cell)	+919434777136
4	Raghunathpur Fire Station	03251-201453	+919474524891
5	Asansol Fire Station	0341-2304506	+918584027328 +9185 7327

### FORCE

SI.No.	Particulars	P&T
1	Army	2524298, 2524297
2	Army Exchange	244298
3	DIG. CRPF	2500559 (O) 2500558 (R)
4	Control Room, CRPF	2500529

36

# IRRIGATION AND WATERWAYS (DAM SAFETY)



DDM 7-3-19 Dr Helintile

GOVERNMENT OF WEST BENGAL RRIGATION & WATERWAYS DIRECTORATE OFFICE OF THE OFFICER-ON-SPECIAL DUTY

(SUPERINTENDING ENGINEER) BHATBANDH IRRIGATION COLONY RANCHI ROAD, PURULIA - 723101

E-MAIL :- osdse.purulia@gmail.com

To,

The Addl. District Magistrate (Gen), Disaster Management Department, Purulia.

Sub: - Submission of information/proposal to be included in the draft District Disaster Management Plan, 2019-20 of this District.

Ref:- Your Memo No.20/DRMP/PRL, dated 24.01.2019 and 32/DRMP/PRL, dated 04.02.2019

In reference to above, a draft information under purulia district which has been taken up for renovation & up gradation of major and minor irrigation schemes and safety measures as per recommendation of dam safety organisation of Irrigation & waterways Department are included for submission for your ready reference.

Enclo: - As stated

OFFICER-ON-SPECIAL DUTY (SUPERINTENDING ENGINEER) IRRIGATION & WATERWAYS DIRECTORATE **PURULIA** 

MEMO No.

Date :-

Copy forwarded for information & necessary action to:-

- 1. The Executive Engineer, Purulia Irrigation Division, purulia.
- 2. The Executive Engineer, Purulia Construction Division (Irrigation), Purulia.
- 3. The Executive Engineer, Purulia Investigation & Planning Division, Purulia.

OFFICER-ON-SPECIAL DUTY (SUPERINTENDING ENGINEER) **IRRIGATION & WATERWAYS DIRECTORATE** PURULIA

Total 32 nos. of Medium & Minor Irrigation Schemes have been taken up for renovation & upgradation in district Purulia mainly through three funding system i.e. Gap Infrastructure Fund, Core sector Plan and RIDF-XXIV. Out of these 32 nos. of schemes 2 nos. schemes have already been completed. The target of ultimate irrigation potential through these 32 irrigation projects has been fixed at 43785 Ha. By execution of these schemes 6992 Ha. gap of irrigation potential can be achieved and these will benefit 15 nos. blocks under this district.

Moreover 134 nos. Check dams were constructed since last four years for development of waterside and recharging of ground water table. This type of water retention structure will be operated by the water users associations. If the system works properly, a great benefit will be achieved. It will also act to alleviate draught like situation in the vicinity of the water retention structure.

Sd/Officer-on-Special Duty (Superintending Engineer)
Irrigation & Waterways Directorate, Purulia

### Dam safety

This Department has separate dam safety wing. The officers of dam safety visited the dam site at a regular interval and provide requisite suggestions and observations to the executing division. Accordingly the executing division executes the work of remedial measures as suggested by them. In 2019-20 a separate agency was engaged by the Department for rigorous study relating to dam safety measure by different types of in-situ and laboratory test. After completion of their study they will provide the suitable remedial measure to safe guard the dam. Accordingly the department will execute the rectification and repair work as per their recommendation. Furthermore this department has separate River Research Institute. The reservoir survey has been done by them. They provide us the siltation report of reservoir. If the de-siltation of any dam is feasible and viable, then the department will instruct the executing division for de-siltation of the reservoir.

Sd/-Officer-on-Special Duty (Superintending Engineer) Irrigation & Waterways Directorate, Purulia

sd/-Officer-on-Special Duty (Superintending Enginee Irrigation & Waterways Directorate, Purulia

30 L	29 1	28 L	27 M	26 1	25	24	23	22		21	20	19	18	17		16	15	14	13	12	=	10	9	∞	7	6	5	4	S	2	-	Г	T	0.
30 Lipania (I) Scheme	29 Taragonia Irrigation Scheme	28 Bandajore Irrigation Scheme	27 Moutorejore (I) Scheme	26 Dangra Irrigation Scheme	25 Futiary Irrigation Scheme	24 Majra Irrigation Scheme	23 Fuljore Irrigation scheme	Tatko Irrigation Scheme	Purulia Investigation & Planning Division	21 Barabhum Irrigation Scheme	20 Hanumata Irrigation Scheme	Bandhu Irrigation Scheme	18 Beko Irrigation Scheme	17 Ramchandrapur Irrigation Scheme	Purulia Construction Division	16 Fakidi Irrigation Scheme	15 Sankha Irrigation Scheme	14 Kumari Irrigation Scheme	13 Golamara Irrigation Scheme	12 Tara Irrigation Scheme	11 Kansai Irrigation Scheme	10 Dimu Irrigation Scheme	Khairabera Irrigation Scheme	Turga Irrigation Scheme	Kulbera Irrigation Scheme	Kestobazar Irrigation Scheme	Rupai Irrigation Scheme	Buridumur Irrigation Scheme	Saharajore Irrigation Scheme	Parga Irrigation Scheme	Karrior Irrigation Scheme	Purulia Irrigation Division	2	Name of Scheme
Jibananda Acharya	Tapas Choudhury	Abhijit Pratihar	Abhijit Pratihar	Goutam Goswami	Goutam Goswami	Pijush Dey	Sumita Hazra	Sunirmal Ghosh, Dipak Mandal	ning Division	Pranab Saha	Dipankar Ghosh	Mrinmay Mandal, Pratik mandal	Anirban Chatterjee	Abhijit Dey		Kanchan Banerjee	Susanta Nandi	Manojit Mahato	Soumitra Mandal	Sanjay Bhattacharya	Avijit Das	Avishek Das Gajendra Mahapatra	Sudipta Mallick	Pradip Gorai	Nirupam Roy	Arunavo mandal	Kartick Ghosh	Kajal Mahato	Kajal Mahato	Kanchan Banerjee	Deb Kr. Pal		3	Name of Concerned Junior Engineer
9434997627	8240807386	9679189869	9679189869	9832174035	9832174034	9775245742	9476125703	7797636151/9474990479		9734227178	7699721970	8927777001/9732112135	9474559518	9433335694		9734275821	9547059131	9836689636	8653648150	9474392257	7908098144	9735445234	9163774929	9932506558	9733555006	9775097277	8617097706	8001507257	8001507257	9474488350	9635325309		5	Mobile No.
	Indianii Sarkar				Kamal Biswas		Anup kr. Sana	Anim la Caka			Soumendu Chatterjee		Soumen panerjee	8		DISWanam Mani	D		Mausumi Mallick		Jaydeb Duary			Pranay Dey	,				Ayan Chatterjee				6	Assistant Engineer
	9007771404	000000000000000000000000000000000000000			9434451922		1001323291	7001777701			9474586980		94343UZZ93	200000000000000000000000000000000000000		9932642874	000000000000000000000000000000000000000	2660641100	9204006244/		8240013019	8902363743/		7908185712					9083973833			101	7	Mobile No.
				Sumanta Nag								Sanjay Majumder											Partha Sarathi Das										8	Executive Engineer
			7,0011100	863782679179								9083973938/9												8697641940/9									9	Mobile No.

# **Annexure – IV**

Action Plan of Police, DI and ARD

# OTHER LINE DEPARMENT

(POLICE, DI AND ARD)

# Office of the Superintendent of Police Purulia

Memo. No. 403 /DEB

Dated. 13 / 02/2019

To

The Addl. District Magistrate (G)

Purulia.

Ref

Memo. No. 29(36)/DRMP/PLA dtd. 01.02.2019.

In connection with above noted reference, sending herewith Draft Disaster Management plan 2019- 20.

For information.

Enclo: As above.

Superintendent of Police, Purulia

### **SOP for Police during Natural Disaster**

Police organisation has to see itself as a major player in disaster management. It will continue to have the first responder role for its proximity to the incident site and relationship with the people. State & district level authorities cannot afford to wait for response specialized forces such as NDRF all the time.

The local police must be trained, equipped and supported with legislation and subsequently they can play supporting role to the specialist forces if and when they come in bigger emergency cases.

The Police are among the first responders in any crisis because,

- > LOCAL POLICE ARRIVES FIRST
- > LOCAL POLICE POSSESSES WELL DEVELOPED COMMUNICATION SYSTEM
- > LOCAL POLICE IS FAMILIAR WITH LOCAL TERRAIN
- > LOCAL POLICE HAS BETTER KNOWLEDGE OF LOCAL PEOPLE FEELINGS AND MIND-SETS
- ➤ PEOPLE RECOGNISE POLICE AS FIRST RESPONDER
- > POLICE IS UNIFORMED, DISCIPLINED.

Hence it becomes necessary to frame **SOPs** that can help the police forces respond appropriately whenever any disaster happens.

# Role of Police before disaster-Prevention [PREVENTION & PREPAREDNESS PHASE]

- Contingency planning:- The police familiar with the local terrain and the resources available in the locality. They can plan the actions to be taken at the time of the disaster before hand.
- Emergency Traffic Plan:- Being familiar with the local terrain, Police should prepare emergency traffic plan including detail mapping with focus on strategic points, which may be used at the time of incident for safe transporting of personnel, resources and relief goods to and from the affected area.
- Detail communication Plan:- Police can propagate information and warning relating to disaster through Village Police & Civic Volunteers those who are available in villages and could play an important role to collect sensitive information and disseminate emergency warning and other information.
- 4. Identification of Building:- PS personnel travel in their area frequently. They can be of great help in identifying buildings and campus which are easy to access and could be used as relief centres/relief camps and godown for storage of food grain, sand other rescue and relief materials.
- Security Plan:- At the time of any serious incident it becomes inevitable to provide security to victims, responders and also to the relief materials at storage point as well as during transit.
- Resource Mapping:- police could identify & locate the general essential elements useful for different kind of disasters. It is very important to locate essential resources at very beginning of search and rescue works.
- 7. Training:-Men in uniform (Police) are most visible and reliable government agency nearest to the people in difficult times. Police should conduct mock exercises with various stakeholders and should test and update their different plans.

### Role of police during disaster- [EMERGENCEY RESPONSE PHASE]

The primary role of police is evident during the management of the actual disaster situation. It includes:

- Search and Rescue (SAR):- The primary function during a disaster: Policemen must take necessary
  relief to the victims till specialized forces arrive. Deployment of policeman on the boat plying in
  floods helps prevent overcrowding of boats and prevent capsizing. Such boats need to be provided
  with handheld wireless sets to keep tracking its movements and provide help in disasters.
- Deployment of resources:- Police can help in deployment of resources, provide safety and security to the resources and the persons manning them.
- 3. Restoration of communication system / liasoning with rescue teams:-Telephonic communication may a times breaks down, hence Wireless communication might be the only means left. The army, navy and the NDRF had their own communication systems but it needed to be integrated with the district communication setup so that information of any emergency could be disseminated quickly and support reached at the earliest. Wireless can be provided to rescue and relief teams.
- 4. Prevention of commission of cognizable offences including all offences against property, human body and public tranquility:- During disaster situation, people are to abandon their houses. The anti social elements commit cognizable offences i.e. looting etc., against property and

- also against body i.e., against the vulnerable section of society particularly women and children. Police can provide safety to such persons.
- 5. Security during Relief distributions/ Relief management:- Relief distribution is an important aspect of disaster management: Police is required to provide security of the Cash and or ATMs. Likewise the security of grains and other relief material e.g., food packets being transported from different places to distribution centers is also important. Dedicated escorts are needed from the FCI Go-downs, railway stations to temporary storage/ distribution centers. During the actual distribution of relief, large numbers of people gather at the relief centre. The crowd management becomes important. The regulation of the process of distribution of relief can help in maintaining law and order.
- 6. Camp management:- Security of camp inmates, officials and volunteers engaged in running of camps including health workers is core function. Hundreds of government and non government employees/volunteers are engaged in running of kitchens, medical centers, sanitation units etc. They require protection all the time.
- 7. Emergency transportation and Traffic Regulation: Police has to facilitate the movement of rescue, medical, fire and other essential services. Highways roads had to be kept free for movement of rescue teams and relief material. Check posts need to be set up, road patrol to be arranged for safe passage of army convoys, boats and other resources sent from outside.
- 8. Coordination with various agencies:- During disasters various agencies such as NDRF, SDRF, Paramilitary forces such as BSF, CRPF, CISF etc, Army, IAF, Cost Guard, medical teams from outside the state arrive at the disaster sites. These external agencies are not informed about the physical terrain, Route Charts etc. The police can coordinate the activities of these agencies. The coordination among police and other agencies needs to be standardized in clear procedures.
- 9. Casualty information/ Disposal of dead:- The identification of people involved in accidents/emergencies is a Police responsibility. Police is to trace the missing persons and notify to their kin, dispose of the dead bodies, document of those as well as the missing persons for the benefit of their kin to claim the compensation and ex-gratia.
- 10. Family Liaison Officers:- The Police could appoint family liaison officers (FLOs) to the families of those who have died. The FLOs must be specially trained police officers who, if required, will liaise between the families and the media as a way of minimizing intrusion and distress.
- 11. Media management:- During any disaster situation information flow through the audio-visual as well as print media. The reports need to be verified as soon as possible for quick response. The police can not only verify the facts of the information but also play an important role in briefing the media regarding the actual situation. This can help in checking the spread of rumours.
- 12. VIP Security:- VIPs visit the affected area and relief camps frequently. Many a times, politically opposed/ dissatisfied persons resort to protest thereby pose threat to VIP and law and order. This must be handled by police.
- 13. Crowd Management: Both at disaster site as well as at the relief distribution centre a large number of people gather as on lookers as well as the kith and kin of the victims. Sometimes the dissatisfied people disrupt the traffic, ; road and rail. The police can play important role in management of the crowd.

### Role of police After disaster- [RESTORATION PHASE]

- Appropriate arrangement of accommodation: Persons specially the small children, disabled prsons, pregnant women and mothers with nursing infants etc with special medicines in evacuation shelters requires utmost care. In a limited shelter space it is very important to provide special rooms for them.
- Issues related to hyglene, infectious disease: After the disaster, the infectious disease ges spread rapidly. Hence this issues should be looked after carefully other wise it creates serious problems.
- Government Ex-gratia /beneficiaries of houses and other assets: Police can play an important
  role in selection of beneficiaries of houses and other assets to the victims to avoid complications
  and litigation.
- 4. Restoration of Critical infrastructure:- Disaster usually affects the critical infrastructure such as road, telecommunication, health centers, school, electricity supply etc. Police can provide protection to the agencies which are involved in restoration of such infrastructure because people who are rendered jobless after disaster may hinder the process.
- 8. Safe exit of the personnel involved in disaster management:- After the disasters due to fatigue laxity might seep through the system. Although the overall law and order situation is monitored and maintained by the police, it becomes very important after the disaster to ensure safe exit of the personnel from outside agencies involved in management of the disaster i.e People from NGOs, INGOs, medical teams etc.
- Feedback/assessment: Since the police is the key factor in managing the disaster, their feedback/ assessment is very important in updating the plans for the future.

# Contact details of Police officers of Purulia District

SL No.	Name	Designation	Official Internet e-mail ID	Telephone No.	Mobile No.
1	Shri Akash Magharia, IPS	Superintendent of Police, Purulia	sppla7@gmail.com	03252-222304, 03252-223588 (Fax)	9083269400 9609644999
2	Shri Dhritiman Sarkar, IPS	Addl. S.P(Operations), Purulia	addlspopspla@gmail.com	03252-224343	9083269584 8145500719
3	Shri Chandra Shekhor Bardhan, WBPS	Addl. S.P. (HQ), Purulia	adlsppla@gmail.com	03252-224379 (Fax)	9083269401
4	Shri Durbar Bandyopadhyay, WBPS	S.D.P.O. Raghunathpur	sdpompur@gmail.com	03251-255338 (Fax)	9083269402
5	Shri Sumanta Kabiraj, WBPS	S.D.P.O. Jhalda	sdpojhalda@gmail.com	03254-255255	9083269444
6	Shri Afzal Abrar, WBPS	S.D.P.O. Manbazar	sdpomanbazar@gmail.com	03253-255789	9083269478
7	Shri Bidyut Tarafder, WBPS	Dy. S.P. (HQ)	dysphqpla@gmail.com	T 03252-223208	9083269403
8	Shri Sumohan Roy Chowdhury, WBPS	Dy. S.P. (D&T)	dyspdntpla@gmail.com	03252-223208	9083269404
9	Shri Gopal Ch. Goswami, WBPS	Dy. S.P. (DIB)	dspdibpurulia@gmail.com	03252-223212	9083269406 8145500340
10	Shri Atul Kumar Chattopadhyay, WBPS	Dy. S.P. (DEB)	dspdebpurulia@gmail.com	03252-223208	9083269405 8145500413
11	Shri Durlav Sarkar, WBPS	Dy. S.P. Traffic, Purulia	dysptrafficpla@gmail.com	03252-222031	9143475363
12	Shri Abhijit Sinhamahapatra, WBPS	A.C. Commando, Purulia	accommandopla@gmail.c		7407665947
13	Shri Suprakash Das, WBPS	Dy. S.P. (Operations), Purulia	dyspopspurulia@gmail.com		9851068377
14	Shri Partha Sarathi Paul	CI, Sadar Purulia	cisadarpla@gmail.com	03252- 223888	9083269407
15	Shri Partha Kr. Singha	CI, Balarampur	cibalarampurpla@gmail.co m	03252-244431	9083269408 8145500345
16	Shri Sukanta Banerjee	CI, Raghunathpur	cirnpur@gmail.com	03251-255386	9083269409 8145500357
17	Shri Rajat Kanti Pal	Cl, Kashipur	cikashipurpla@gmail.com	03252-244251	9083269411 8145500356
18	Shri Joyguru Mondal	CI, Manbazar (In-Charge)	cimanbazarpla@gmail.com	03253-255237	9083269410 8145500349
19	Shri Prasenjit Das	IC Santaldih PS	santaldihps@gmail.com	03251-260235	9083269412 8145500346
20	Shri Sanjib Ghosh	IC Jhalda PS	jhaldaps@gmail.com	03254-255233	9083269413 8145500350
21	Shri Sougata Ghosh	IC Barabazar PS	barabazarps@gmail.com	03253-258235	9083269414 8145500371
22	Shri Mahakash Chowdhury	IC Joypur PS	joypurps1@gmail.com	+ 03254-252234	9083269415 8145500351
23	Shri Sanjoy Kumar Chakraborty	IC Purulia (M) PS	puruliamps@gmail.com	03252-223205	9083269420 8145500380
24	Shri Sandip Chattaraj	IC Raghunathpur PS	raghunathpurps@gmail.co m	03251-255231	9083269423 8145500395
25	Shri Koushik Das	RI Purulia	ripurulia@gmail.com	03252-224390	9083269440 8145500364
26	Shri Biswajit Ghoshal	DIO-I Purulia	dibpla@gmail.com	03252-223203	9083269439 8145500753

. 27	SI Ashoke Kr. Mondal	RO Purulia	ropla7@gmail.com	03252-224390	908326944
28	SI Amit Masanta	O/C Kotshila PS	hetshiles 2000 1		814550036 908326941
	or and majoring	O/C KOISI III G FS	kotshilaps29@gmail.com	03254-260565	814550036
29	SI Dipankar Sarkar	O/C Purulia (T) PS	puruliatps@gmail.com	03252-223202	908326941 814550037
30	SI Tarapada Mondal	O/C Arsha PS	Arshaps5@gmail.com	Note that the last of the last	908326942 814550036
31	SI Partha Kumar Bhunia	O/C Manbazar P\$	manbazarps@gmail.com	03253-255237	9083269422
32	SI Palash Kumar Barik	O/C Santuri PS	santurips2@gmail.com	7000000	908326942
33	SI Anup Ghosh	O/C Neturia PS	neturiaps07@gmail.com	• 03251-252340	908326942
34	SI Mithun Kumar Sar	O/C Kashipur PS	kashipurps7@gmail.com	03251-246222	908326942
35	SI Biswajit Banerjee	O/C Para PS	paraps08@gmail.com		9083269427
36	SI Debasis Bandyopadhyay	O/C Hura PS	huraps@gmail.com	03252-240229	9083269428 8145500379
37	SI Biswajit Mondal	O/C Puncha PS	punchaps3@gmail.com	03253-259236	9083269429
38	SI Gopika Sundar Dutta	O/C Kenda PS	kendaps15@gmail.com		9083269430 8145500403
39	SI Tufan Kumar Dawn	O/C Boro PS	psboro38@gmail.com	03253-252235	9083269431
40	SI Pankaj Singh	O/C Balarampur PS	Balarampurps1@gmail.com	03252-244221	9083269432 8145500374
41	SI Sudip Hazra	O/C Baghmundi PS	bagmundips@gmail.com	03252-250240	9083269433 8145500373
42	SI Mukul Karmakar	O/C Bandwan PS	bundwanps@gmail.com	03253-257262	9083269434 8145500376
43	SI Kousik Banerjee	O/C Adra PS	adraicpla@gmail.com	03251-244251	9083269435 8145500397
44	LSI Paromita Samaddar	O/C Purulia Sadar Women PS	womenpspla@gmail.com	03252-223562	9083269418
45	LSI Arpita Bhatta	O/C Raghunathpur Sub- Divisional Women PS	rnpurwps@gmail.com	03251-255230	9083269419
46	SI Nitish Goswami	O/C Baglata IC	baglataic2017@gmail.com		9083269437 8145500401
47	SI Jyotilal Mahato	O/C Jamtoria IC	icjamtoria@gmail.com		9083269436
48	SI Rajat Chowdhary	O/C Traffic	sadartrafficpla@gmail.com	03252-222031	9083269438 8145500714
19	SI Goutam Sinha	M.T.O. Purulia	mtopurulia@gmail.com	03252-224390	9083269441 8145500383
50	SI Ashok Kr. Moulick	O/C D.C.R.		03252-223209 + 03252-223210 (Fax)	9083269443 8145500734

# DISTRICT INSPECTOR OF SCHOOLS



DISASTER MANAGEMENT PLAN 2019-20, EDUCATION DEPARTMET- PURULIA				
SL NO	SUBJECT	ACTION TAKEN PLAN	ORGANISE TRAINING	REMARKS
1	ADOLESENCE STUDENTS	ORGANISED TRAINING PROGRAMME FOR ADOLESENCE STUDENTS IN EVERY SCHOOL IN REGULAR BASIS	AT SCHOOL LEVEL	
2	FIRE SAFETY	DIFFERENT KIND OF HAND EXTINGUISER	SUPPLY OF FIRE FIGHTING EXTINGUISER IN EVERY SCHOOL AND ORGANISED TRAINING HOW TO HANDDLING	
3	SNAKE BITE	AWARNESS CAMPAIGN AND FIRST AID TRAINING REGARDING SNAKE BITE	SUPPLY ANTIVENUM SERUM TO EVERY RURAL HOSPITAL	
4	MENTAL TRUMA	SOCIAL SUPPORT , PSYCHOLOGICAL SUPPORT & TREATMENT	TRUMA AND ITS MANAGEMENT	
5	WATER SAFETY & SECURITY	WATER TREATMENT PLAN AND TESTING IN REGULAR BASIS AT SCHOOL LEVEL	PLAN FOR IMPROVED WATER SUPPLY SERVICES	
6	STRUCTURAL AND NON STRUCTURAL MITIGATION	CONSTRUCTION OF SCHOOL BUILDING	STRUCTURAL PLAN MAY BE APPROVED FROM DISTRICT LEVEL	
7	EARTHQUAKE	AWARNESS REGARDING EARTHQUAKE		AS PER REPORT PURULIA IS NOT EARTHQUAKE PRONE AREA

District Inspector of Schools (S.E)

Purulia

## ANIMAL RESOURCE DEVELOPMENT

### Government of West Bengal

Office of the Deputy Director, Animal Resources Development & Parishad Officer, Purulia State Poultry Farm Campus, Belguma, Purulia, Pin: 723101

Phones -03252-222514/222561 emails: ddardpurulia@darahwb.org

Memo no: 102/1(2)/DDARD/PRL

Dated:24/01/2019

The Director of Animal Husbandry & Veterinary Services, West Bengal

Prani- Sampad Bikash Bhawan

LB-2, Sector-III, Salt Lake, Kolkata -106

Sub: Action Plan in respect of Disaster Management Plan for 2019-20. [Ref no: 216 /2F-6/2010(P-II) Dated Kolkata the 9th January 2019]

Most respectfully, I do hereby submitting the action plan of Natural Calamity like Drought, Cyclone etc. in the district of Purulia to combat such incidence if condition arises. The work plan in respect of Animal Resources had been divided in three phases as done in earlier years.

- A) Preparedness in Anticipation
- B) Immediate Action.
- C) Delayed Action.

- 1) All the officers and staff at District and Block level were informed in well advance to keep themselves ready A) Preparedness in Anticipation: regarding identification of vulnerable areas and livestock shelters and keep close liaison with local elected bodies and block general administration in regular manner to keep updating information of such calamities.
- 2) Vaccination of birds and animals in the endemic zones against bacterial and viral diseases, to minimise economic
- 3) The Deputy Director of Agriculture (General) , Purulia is already been requested to keep reserve stock of paddy straw if and when required during such calamity.
- 4) The MD, DAIRPOUL, Durgapur Feed Plant is also been requested to keep reserve stock of concentrate Feed for livestock if and when required during such calamity.
- Procurement of necessary medicines to combat such situations.
- Storage of necessary biological products.
- Manning of control room at District /Subdivision/Block level.

- a) The assessment of requirement of feed & fodder ,medicine ,biological products would be made on consultation wit the block level officers as situation arises and definitely would be conveyed to the Directorate in due time .
- b) The affected area would be covered with medicines and vaccines through Animal Health Camps as well as assessmen of losses in respect of Animal Resources.

C) Delayed Action:

a) Revaccination of Animals & Birds in the endemic areas to prevent loss.

b) Economic rehabilitation of affected livestock farmers with small units of birds or livestock as and when fund allotment provided from Directorate or the District general administration.

This is for your kind information and necessary action please.

Deputy Director Animal Resources Development & Parishad Officer, Purulia

(Enclosed here with Annexure I &II )

llock evel commi tee ( anturi	Dr Biswajit Sena	BLDO,	7604010675
	Ganesh Ch. Bauri	LDA	
S tt C Le	Santosh Singh	Peon	

### Annexure - II

### Stock of Medicine & Vaccines kept for disaster management -2019-20

Sl.no	Name of Vaccine /Medicine	Presentation	Quantity	Remarks
1	lnj Oxytetracyclin 200mg /ml	50ml vial	30	
2	Inj Sulphadimidine 33.33%	100 ml bottle	200	
3	Inj.lvermectin 1%IP	10 ml vial	100	
4	Inj. Meloxicam-Smg+ Paracetamol 150mg (DOLOVET)	30ml vial	100	
5	Inj. Amoxicillin 2gm+ Sulbactum 1 gm ( (Quimox-3 gm)	3GM VIAL	50	
6	Tablet Enrofloxacin 50mg	10tab strip	1000	
7	Tablet Fenbendazole 150mg	10 tab strip	1000	
8	Fenbendazole 1.5gm Bolus	2 Bol.strip	500	
9	Sulphadimidine Bolus 5 gm ( SULFASYS)	4 BOLSTRIP	200	
10	Stomachic Powder (INDIAN BATISA)	1 KG POLY	500	
11	Appetonic vet Bolus	4bol.strip	500	1
12	Himfertin vet capsule	6 bol./ Pouch	300	
13	Acid Salicylic	50Gm pack.	50	
14	Light Magnesium Carbonate I.P.	500 Gm pack.	50	
15	Sodium Bi-Carbonate IP	450GM PACK	50	
16	Light Kaolin IP	500 Gm pack.	50	
17	Calcium Carbonate IP	500 Gm pack.	50	
18	Magnesium Sulphate IP	10KG BAG	2	
19	Oil Turpentine ( Medicinal)	450ml bottle	50	
20	FMD Vaccine	50dose vial	10	
21	HS Vaccine	20 Dose vial	10	
22	F.D.P.P.R.	100 dose vial	10	
23	FDRD R2B	200 dose vial	10	
24	FDRD F1 strain	100 dose vial	10	
25	BQ Vaccine	20 dose vial	10	

Deputy Director

Animal Resources Development
& Parishad Officer, Purulia

Memo No: 102/1(2)/DDARD/PRL

Copy forwarded for information & necessary action to:

1) The District Magistrate , Purulia

2) The District Veterinary Officer , Purulia

3) The Asst. Director, ARD (D.I), Purulia.

Dated: 24/01/2019

Deputy Director

Animal Resources Development & Parishad Officer ,Purulia

	Muktarani Mahato	Peon	
	Dr Subrata Pramanik	1/c BLDO	7604010667
el se se	Dr. Suman Podder	VO, BAHC	
Lev	Sovan Maity	LDA	***************************************
Block Level Committee (Barabazar)	Dinabandhu Hasda	LDA	
	Arbindra Chaudhury	Peon	
	Sujan Ch.Mahato	Peon	
- 0 -	Dr Kaushik Barua	BLDO	7604010660
Block Level Committee Bunswan)	Goutam Das	LDA	
imi nsw	Rajesh Sing	LDA	
Bu Bu	Nilimesh kr Bhuiya	LDA	
900	Bubun Chakrabarty	peon	
	Dr Anupam De	BLDO	7604010661
	Dr. Jagannath Majhi	VO, BAHC	
eve ttee a)	Dr. Nirmalya Ranjan Sarkar	VO, ABAHC	
lock Lev ommitte ( Hura)	Sukhdeb Mahato	LDA	
Block Level Committee ( Hura)	Sabyasachi Mahat	Animal attendant	
W 0	Aniket Sarkar	SCNW	
	Tapan Kr Modi	Peon	
_ ~	Dr Jyoti Chanda	BLDO	7604010663
Biock Level Committeel Ihalda-I)	Dr. Anupam Gabur	VO, ABAHC	7004010003
Slock Level Committeel Jhalda-I)	Madhumita Sur	LDA, BAHC	
loc om Jha	Parikhit Kumar	LDA ,ADAC Pusti	
8 0	Gobinda Mhato	Group-D	
11	Dr Tapas Dasgupta	BLDO	7604010664
	Chandan Bhunia	LDA, BAHC	
rel ald	Rabishankar Mahapatra	LDA, ABAHC	
(Inh	Debendra Nath Mahato	LDA	
Block Level nittee( Jhalo	Arjun Ch. Mahato	Group D	
BI	Dipali Dey	Group D	
Block Level Committee( Jhalda –II)	Nagendra Mahato	Group D	
	Dr Susil Buskey	BLDO	7604010662
vel ee(	Biplab Halder	LDA	
r Le nitt pur	Ramcharan Acharjee	LDA	
Block Level Committee( Joypur)	Inul Ansary	Group D	
8 8	Bhaskar Mahato	Group D	
	Bibhas Mahato	SCNW	
	Dr Arunangsu De	BLDO	7604010665
- 01 -	Dr.Himansu Sekhar Patra	VO, BAHC	
eve tte	Tarak Nath Goswami	LDA	
Block Level Committee ( Kashipur)	Nilkamal Mandal	LDA	
Slock Level Committee (Kashipur)	Dibyajyoti Roy	Vety. Pharmacist	
400	Abatar Mahato	Group D	
	Sandip Kr Mahato	Group D	
7 0 7	Dr Subhankar Mahato	BLDO	7604010666
Biock Level Committee Aanbazar-I	Santosh Kumar Mahato	LDA	
Block Level Committee( Manbazar-I)	Kiran Ch. Mandi	Vety. Pharmacist	
Jan	Sanjoy Mahato	LDA	
~ ~	Manas Paul	LDC	

grand will be a second

	Khagendra Nath Paramanik	Group D	
	Dr Subrata Pramanik	BLDO	7604010667
el -III)	Dr. Suman Podder	VO, ABAHC	
Block Level Committee( Manbazar –II.	Ujjwal Mahato	LDA	
nm ba	Amarjit Singh	LDA	
Blo	Debnath Bera	V.Pharmacist	
<	Krishnachandra Tudu	Peon	
	Dr.Sabyasachi Roy	BLDO	7604010668
need to	Dr. Sanjoy Goswami	VO, BAHC	
Block Level Committeel Neturia)	Atul ch Mahato	LDA	
Com	Aloke kr Majeei	LDA	
	Bibekanda rai	LDA	
	Dr Subharanshu Sarkar	BLDO	7604010669
100	Dr. Mousam Das	VO, ABAHC	
lev ritte	Basanta Kuiri	LDA	
Block Level Committee ( Para)	Phatik Ch. Majee	LDA	
CO	Magaram Majee	LDA	
	Patit paban Mahato	Peon	
	Dr Probodh Maji	BLDO	7604010670
	Dr.Anik Bisui	VO, BAHC	
tte	Madhurima Sarkar	VO, ABAHC	
l (	Naran Chatterjee	LDA	
evel Com ( Puncha)	Raju Karak	Vety. Pharmacist	
uni	Santosh Mahato	LDA	
Les (P	Jagannath Mahato	LDA	
Block Level Committee ( Puncha)	Chandan Kr Chakrabarty	LDA	
89	Rudrajyoti Mitra	Group D	
	Shyamol Das	SCNW	
	Dr Atanu Baran Guha.	BLDO	7604010671
	Dr.Subhanda Bhattacharya	VO, BAHC	
evel ttee a-1)	Gouri Shankar Layek	VFS	
mit ulic	Kurban Ansary	Group D	
Block Level Committee ( Purulia –1)	Parul Auddy	Group D	
B C C	Ajit Kumar	Group D	
# ~	Dr Kashinath Mahato	BLDO	7604010672
Block LevelCommit tee ( Purulia -!!)	Dr. Abanish Biswas	VO, BAHC	
Block elComr tee urulia -	Tarani Sen Das	LDA	
B	Paresh nath khunberkar	LDA ,Bhungra	
1)	Kajal Banerjee	Group D	
- 0. Q	Dr Anjan Dandapat	BLDO	7604010673
eve tter ath	Dr. Ayan Mukherjee	VO, ABAHC	
Block Level Committee ( Raghunathp ur-l)	Pradip Dasgupta	LDA	
sloc com agh u			
2 C B	Sanjoy Acharjee	Group D	
e + -	Dr Debabrata Biswas	BLDO	7604010674
ck nitt und Ll,	Gouranga Bauri	VFS	
Block Level Committe e( Raghunat	Debendranath Mahato	LDA	
D 20	Bikash Rai	LDA	

llock evel ommi teef anturi	Dr Biswajit Sena	BLDO,	7604010675
	Ganesh Ch. Bauri	LDA	
- x t o c B	Santosh Singh	Peon	

### Annexure - II

### Stock of Medicine & Vaccines kept for disaster management -2019-20

Si.no	Name of Vaccine /Medicine	Presentation	Quantity	Remarks
1	Inj Oxytetracyclin 200mg /ml	50ml vial	30	
2	Inj Sulphadimidine 33.33%	100 ml bottle	200	
3	Inj.Ivermectin 1%IP	10 ml vial	100	1
4	Inj. Meloxicam-5mg+ Paracetamol 150mg (DOLOVET)	30ml vial	100	1
5	Inj. Amoxicillin 2gm+ Sulbactum 1 gm ( (Quimox-3 gm)	3GM VIAL	50	1
6	Tablet Enrofloxacin 50mg	10tab strip	1000	7
7	Tablet Fenbendazole 150mg	10 tab strip	1000	
8	Fenbendazole 1.5gm Bolus	2 Bol.strip	500	
9	Sulphadimidine Bolus 5 gm ( SULFASYS)	4 BOLSTRIP	200	1
10	Stomachic Powder (INDIAN BATISA)	1 KG POLY	500	
11	Appetonic vet Bolus	4bol.strip	500	
12	Himfertin vet capsule	6 bol./ Pouch	300	
13	Acid Salicylic	50Gm pack.	50	
14	Light Magnesium Carbonate I.P.	500 Gm pack.	50	
15	Sodium Bi-Carbonate IP	450GM PACK	50	1
16	Light Kaolin IP	500 Gm pack.	50	
17	Calcium Carbonate IP	500 Gm pack.	50	
18	Magnesium Sulphate IP	10KG BAG	2	
19	Oil Turpentine ( Medicinal)	450ml bottle	50	
20	FMD Vaccine	50dose vial	10	
21	HS Vaccine	20 Dose vial	10	
22	F.D.P.P.R.	100 dose vial	10	
23	FDRD R2B	200 dose vial	10	
24	FDRD F1 strain	100 dose vial	10	
25	BQ Vaccine	20 dose vial	10	

Deputy Director

Animal Resources Development

& Parishad Officer, Purulia

Memo No: 102/1(2)/DDARD/PRL

Copy forwarded for information & necessary action to:

1) The District Magistrate , Purulia

2) The District Veterinary Officer ,Purulia

3) The Asst. Director, ARD (D.I), Purulia .

Dated: 24/01/2019

Deputy Director

Animal Resources Development

& Parishad Officer , Purulia

### Annexure – V

**Profile of Chemical Industries** 

## CHEMICAL INDUSTRIES

### INFORMATION

The information to be included in the draft District Disaster Management Plan, 2019-20.

### Point 1-- Most vulnerable effect to people.

- i) Drought
- ii) Fire House & Forest
- iii) Heat-wave- Sun stroke
- iv) Water crisis in Summ

### Point 6:- Large crowd gather in Mela of Kashipur block

- i) Shib ganjan- Napara, Kashipur, 17th April to 19th April
- ii) Makar Sankaranti, Kalidaha Damp. 14 & 15 January.
- iii) Kroshjuri Shib Gajan. 14 April.
- iv) Ketankiyari Shib Gajan.

### Point 7:- List of Petrol Pump & LPG gass

- i)Narayangarh,Kashipur Petrol Pump.
- ii) Napara, Kashipur Petrol Pump.
- iii) Rangiladih, Kashipur Petrol Pump.

### Point 8:- Chemical & Industrial Hubs not available.

### Point 9:- List Relief Go down,

i)Kashipur Block Relief Go down

ii) List of Flood Shelter & Cyclone Shelter) Kashipur Community Hall,-100, b) Sonathali Community Hall,-120, c) Gagnabad Community Hall,-150, d) Kishan Mandi, Kashipur.-200.

Point 10:- Communication in case of failure of mobile network. - Small Vehicle.

Point 5:- List of Dam - !. Kalidaha Dam 2. Jorisha Dam 3. Majura-Bhuyadih Dam. Etc.

Joseph 1

### Point wise information for draft Disaster Management Plan – 2019 – 20 Sub-Divisional Office, Purulia Sadar (Compilation)

Point-I	Analysis of block wise vulnerability to Disaster Based on past twenty years experience
	No major Disaster

	Block	List of oil terminus or bottling plant with location mapped
	Purulia-I	Petrol Pump 1: - Sankar Petrol Pump, Ranchi Road Petrol Pump 2: - Sunil Mahato Petrol Pump, Will Cox Road, Purulia L.P.G Indian Gas, Will Cox Road, Purulia
Point –VII	Purulia-II	Petrol Pump 1: - Chharra Filling Station at Chharra Petrol Pump 2: - S/M Shyam Automobile at Gengara Petrol Pump 3: - Dev Filling Station at Birgiri L.P.G. 1: - Raghabpur Indane Gas at Raghabpur, L.P.G. 2: - Podlara HP
	Hura	Petrol Pump 1: - Hura Petrol Pump near Hura P.S. Petrol Pump 2: - Ladhurka Petrol Pump Petrol Pump 3: - Daldali Petrol Pump L.P.G Hura on Kashipur Road
		Petrol Pump 1: - Sitaram Saraf, Tata Road Petrol Pump 2: - Manbhum Fuel Pump, Tata Purulia Road L.P.G Station Road Balarampur

	Block	List of Chemical & Industrial hubs and inflammable industry
Point-VIII	Purulia-I	Pragati Cement, Will Cox Road, Purulia     Ashirbad Atta, Tamna, Purulia     Chira Factory, Will Cox Road
	Purulia-II	1. S/M Shyam Millers PVT. LTD (Podlara), Rice Mill

	Block	List of Chemical & Industrial hubs and inflammable industry
Deint VIII	Purulia-II	<ol> <li>Purulia Miller Pvt. Ltd (Surulia) Rice Mill</li> <li>Bandhan Cement (Chharra) Cement Factory</li> <li>Bharat Hi Tech Cement Pvt. Ltd (Bongabari) Cement Factory</li> <li>Purulia Metal Casting Pvt. Ltd (Bongabari) Sponge Iron</li> <li>Karani Industries (Amjora) Tobaco Processing</li> </ol>
Point - VIII	Hura	<ol> <li>Kamala Millers Pvt. Ltd (Hura) Rice Mill</li> <li>Mahamaya Millers Pvt. Ltd (Hura) Rice Mill</li> </ol>
	Balarampur	<ol> <li>Sri Sanjoy Pasari Pvt. Lac. Manufacture</li> <li>Sri Pradip Singhania Private Lac. Manufacture</li> <li>Sri Gayan Shankar Jaiswal Private Lac, Manufacture</li> <li>Dilip Kumar Paul Private Lac. Manufacture</li> </ol>
in et et	Arsha	<ol> <li>Rice Mill Manpur</li> <li>Spong Iron, Korang</li> </ol>

	Block	List of Relief Godown, Flood Shelter & Cyclone Shelter
		with the year of construction
		Relief Godown at Block Office Premises Completed in
	- I	Flood Shelter - Chakda High School, Chakda, Chipida
		G.P. Office, Bhandarpuara, Garafusra H.S., Garafusra,
	Purulia-I	Sindri Chas Road H.S., Chas Road, Garafusra
		Cyclone Shelter: Chakda High School, Chakda,
		Chipida G.P. Office, Bhandarpuara, Garafusra H.S.,
		Garafusra, Sindri Chas Road H.S., Chas Road, Garafusra
		Relief Godown at Block premises completed in the year 2014
		Flood Shelter: - a) Chharra High School, b) Belma RN
	-	High School, 3) Ghonga High School, d) Golamara High
		School, e) Batikara High School, f) Hutmura High School g) Gengara High School, h) RKTM High School, I) Bongabari Girls High Schools
Point – IX	Purulia-II	
	ruruna-n	
		Cyclone Shelter: - a) Chharra High School, b) Belma RN
		High School, 3) Ghonga High School, d) Golamara High
		School, e) Batikara High School, f) Hutmura High School,
		g) Gengara High School, h) RKTM High School, I)
		Bongabari Girls High Schools
		Relief Godown at Block Preises Constructed in the year
		2014
		Flood Shelter: - a) Arjunjora High School b) Keshargarh
	Hura	High School, c) Kulabahal High School, d) Jabarrah High
	11010	School
		Cyclone Shelter: - a) Arjunjora High School b)
		Keshargarh High School, c) Kulabahal High School, d)
		Jabarrah High School

Bharat Hi-Tech Cement PVT. LTD (Bongabrai)	Private	Cement Factory	80
Purulia Miller PVT. LTD ( Surulia)	Private	Rice Mill	32
Panchamukhi Granite (Bhangra)	Private	Marble	20
Karani Industries (Amjora)	Private	Tobaco Processing	15
Kamad Giri Metal Pvt. Ltd. (Kustaur)	Private	Fly Ash Bricks	25
Appolo Tiles & Bricks Ltd. ( Kustaur)	Private	Fly Ash Bricks	30
Eco Green Bricks (Barasini)	Private	Fly Ash Bricks	30
S/M Shyam Automobile (Gengara)	Private	Petrol Pump	15
Dev Fillings Station (Birgiri)	Private	Petrol Pump	25
Raghabpur Indan Gas (Raghabpur)	Private	LPG	10

	Cement
L	Production
	Rice
	Marble
ŀ	Tobaco
L	Processing
	Fly Ash Bricks
	Fly Ash Bricks
	Fly Ash Bricks
İ	Selling of
١	Petroleum
1	Products
	Selling of
	Petroleum
	Products
	Distribution of
	LPG Gas

	and a second residence	Y4 481	Mis. 1975 420 120
1	UBI	Vill-Bongabari, PO-V. Nagar	
2	UBI,	Vill+P.O Chharra	
3	Canara Bank	Vill+P.O Chargali	
4	Central Bank of India	Vill+P.O- Golamara.	
5	BGVB	Vill-Karcha, PO-Bhangra	
6	UBI	Vill+P.O Kustaur	
7	UBI	Vill+P.O Hutmura	

18. Communication Facilities

SI. No.	Name of the Block	Telecom municatio	No. Boa		No. Bus		No. o Track		No.		No.		No. two whe	of elers
		n (Y/S)	G	P	G	P	G	P	G	P	G	P	G	P
1	Purulia-II	Yes	NIL	NIL	10	20	NIL	1	NIL	53	NIL	NIL	NIL	217

### <u>List of LPG distributorship of Manbazar Sub-Division</u>

Sl. No.	Name of the LPG Distributor	Licence No.	Name of Sub- Division
1	Puncha Indane Gramin Vitrak, Puncha	3/2017	
2	M/S Bandwan Indane Gramin Vitrak, Bandwan	1/2012	
3	M/S Arko Hp Gas Gramin Vitrak, Barabazar	2/2017	Manbazar
4	Siddh Bharat Gas Gramin Vitrak, Barabazar	1/2017	
5 *	M/S. Maa Tara Indane Service, Manbazar	5/2011	



### Manbazar Sub-Division

Sl	Name with address of Outlet of MS/HSD	Name of Proprietor.	Licence No.
No.	(Petrol Pump)/Storing of MS/HSD/K.Oil	Sri Pradyut Kr. Das,Purulia	19/1997
1	M/S Jyotirmoy Service station, Manbazar	Sandip Kumar Halder of Puncha	1/13
3	Halder Fuel Centre at Puncha M/s Saraswati Filling Station, Barabazar,	Banshidhar Banerjee, Barabazar, Purulia	6/2012
	Purulia	Mithu Agarwal, Bandwan	7/12
4	Sardar Filling Station Bandwan	Susanta Kr Duary, Puncha	3/16
5	Duary Kishan Seba Kendra Puncha	Rajendra Pd. Sen, Manbazar	6/15
6	Maa Tara Filing Station, Manbazar	Vivek Kedia, Barabazar	02/16
7	Maa Jagadamba Filling Station, Barabazar	Y I Y CAR A LOS OF THE STATE OF	

60020 19

### Annexure – VI

Different Mela in Purulia

### MELA

GOVERNMENT OF WEST BENGAL OFFICE OF THE BLOCK DEVELOPMENT OFFICER JOYPUR DEVELOPMENT BLOCK P.O.: Garh Joypur; Dist.: Purulia, Pin: 723 201,

Tele - Fax : (03254) - 252231 e-mail: bdo.jaypur@gmail.com

04 /02/2019

Dated:

Memo No. 49/ /BDO/JDB

To The Sub - Divisional Officer Jhalda Sub Division, Purulia

Subject:

Submission of Information to be included in the Draft Disaster Management Plan

Reference:

Memo No 18(14) DRMP/PRL Dt.24.01.2019 of ADM (G), Purulia

Sir.

In reference to the above I am sending herewith the point wise report of Disaster Management Plan. 2019 -2020 of this District.

Point - 1	NIL	
Point - 6	MELA	1) Chatatard Mela 2) Ras Mela 3) Makar Mela (Deolghata) 4) Simultard Chhoto Chorgai 5) Nabakunja Mela – Mirdih 6) Raban Pura – Barabendya 7) Agharpur Mela 8) Gainn Mela – Saine
Point 7		- Siliampur
Point – 8	NIL	Bablu Alam L.P. G. Gas Godown (Joypur Mouza)
Point - 9	NIL	(co)par Mouza)
n		
Point - 10	Mobile Net Work available	Jio Mobile Net Work available in all areas under this Block

This is for your kind perusal and taking necessary action please. Thanking you

Yours faithfully

BLOCK DEVELOPMENT OFFICER JOYPUR DEVELOPMENT BLOCK

মাঠে-ঘাটে মলত্যাপ বন্ধ কৰুন নিৰ্মল জন্তপুর পড়ার লক্ষে ৰাড়ীতে শৌচাপার বাদান এবং ব্যবহার করুণ।

# EVENTS OR MELAS WHERE LARGE CROWD GATHER UNDER JHALDA-II DEV. BLOCK

ĸ	NAME OF MELA	VILLAGE	NAME OF THE G.P.	PROBABLE TIME	NO OF DAYS	APPROX. PERSON GATHER PER DAY
1	SAHID BRIHASPATI MELA	NOWAHATU	NOWAHATU	MAGH MONTH	11	4000-5000
2	ADARDIH (NEAR BRIDGE)	ADARDIH	H-ADARDIH	14-16 JANUARY	3	2000-3000
3	DIMU MELA	DIMU	RIGID	MAKAR	1	2000
4	CHARGALI DAM	CHARGALI	TATUARA	MAKAR	1	2000
2	CHITORPUR MAGHI MELA	CHITORPUR	H-ADARDIH	MAGH-1,5,7	m	1000
9	KARRIOR SHIV PUJA	KARRIOR	RIGID	CHAITRA SANKRANTI & FALGUN CHATURDASHI(MARCH)	30 DAYS	2000
7	HARAGOURI MELA	MOHANPUR	RIGID	MAKAR	1	500-1000
8	SAIDERA MELA	SIMNI-JABAR	RIGID	FALGUN	1	1000
6	SAHID MELA WAHAB ANSARY	KOCHAHATU	NOWAHATU	CHAITRA	1	2000
10	BAMNIA CHOW UTSAV	BAMNIA	B-BELYADIH	NOV-DEC	7	2000
11	RADHANATH SMRITI MELA	BAMNIA	B-BELYADIH	FALGUN-24,25,26	3	4000
12	KINKAR MELA	NALKUPI	B-BELYADIH	FALGUN-9,10,11	8	3000
13	RASH MELA	BEGUNKODAR	BEGUNKODAR	NOVEMBER	æ	4000
14	KANUDI JORAI MELA	KANUDI	B-BELYADIH	CHAITRA	æ	1000
15	TAPAN MELA	PATRAHATU	CHEKYA	CHAITRA	3	1500
16	PANDUA JHARKHAND MELA	PANDUA	B-BELYADIH	CHAITRA	3	2000
17	PRABHUDAS MELA	ARKALI	8-BELYADIH	CHAITRA	"	1000

BLOCK DEVELOPMENT OFFICER JHALDA-II DEV. BLOCK

### INFORMATIONS REGARDING DISASTER MANAGEMENT PLAN 2019-20

- 1. LIST OF OIL TERMINALS : NIL
- LIST OF PETROL PUMP: 01 (MAJHI LUBRICANT CENTRE --- OWNER: SRIRAM CHANDRA MAJHI = 9732002926)
- 3. LIST OF RELIEF GODOWN: 1 (IN BLOCK CAMPUS)
- 4. LIST OF FLOOD SHELTER: NIL
- 5. LIST OF CYCLONE SHELTER: NIL
- 6. LIST OF L.P.GAS GODOWN: NIL
- 7. LIST OF CHEMICAL AND INDUSTRIAL HUB: NIL
- 8. LIST OF NURSING HOME: NIL
- 9. LIST OF PRIMARY HEALTH CENTRE: PATHARDIH BLOCK PRIMARY HEALTH CENTRE
- 10. LIST OF PRIMARY SUB HEALTH CENTRE: (I) TUNTURI (II) KORENG (III) AJODHYA HILL TOP
- 11. LIST OF MELAS:

SL. NO	NAME OF THE MELA	LOCATION	DATE
1	SUBHASH MELA	NETAJI SUBHASH ASHRAM MAHAVIDYALAYA CAMPUS	22 TO 24 TH JANUARY
2	SUBHASH MELA	DUARSINI (MATHA GP)	23 & 24 TH JANUARY
3	CHHATA MELA	CHHATATANR MAIDAN (BAGHMUNDI)	VISWAKARMA PUJA
4	MATHA BURU	BESIDE MATHA FOREST OFFICE	THE NEXT DAY AFTER MAKAR SANCRANTI
5	TUSU MELA	THURGA (BAGHMUNDI)	THE DAY OF MAKAR SANCRANTI
6	DARKY BURU	MADLA (BAGHMUNDI)	THE 3 <sup>RD</sup> DAY AFTER MAKAR SANCRANTI
7	SATI MELA	KARRU (SINDRI GP)	THE 3 <sup>RD</sup> DAY AFTER MAKAR SANCRANTI
8	HARUP MELA	ATNA (TUNTURI-SUISA GP)	THE LAST DAY OF JAISTHA MONTH
9	MANBHUM MELA	SARASWATI LOWAKUI SISHU MANDIR (NEAR MATHA FOREST OFFICE)	HOLY

### 12. LIST OF AMBULANCE :

SL NO	VEHICLE NO OF AMBULANCE	PLACE OF GARAGE	NAME OF THE DRIVER	CONTACT NO
1	WB558307	PATHARDIH BPHC	FALGUNI KUMAR	8001566842
2	WB55A0857	KORENG PHC	BHAGYADHAR MAHATO	9635296375
3	WB55A5433	PATHARDIH BPHC	MAHADEB BHATTACHARYA	9732209251
4	WB55A4625	TUNTURI PHC	JAYANTA KUIRY	9732363140
5	WB56J9357	AJODHYA PHC	BABULAL MANDI	9641262400

Block Development Officer Baghmundi Development Block

OFFICE



### GOVERNMENT OF WEST BENGAL OFFICE OF THE BLOCK DEVELOPMENT OFFICER Jhalda-I Development Block P.O: MOSINA, JHALDA, PURULIA



Date: 14/03/2019

Memo No. 585 /BDO/Jld-I

The Sub-Divisional Officer Jhalda, Sub-Division, Purulia

> Sub: Submission of information to be included in the draft District Disaster Management Plan, 2019-20 of this Disaster Block. Referance: Memo No. 18(4) /DRMP/PRL, Dt-24/01/2019

Sir,

In reference to the above I am sending herewith the point wise report of Disaster Management Plan, 2019-20 of this District

Point - 1	NIL	1) Satya Mela, Dt-17-01-2019, Gokulnagar, Ichag G.P.
Point – 6	MELA	<ol> <li>Makarsankranti Mela, Dt-14-01-2019, Tulin Koad, Tulin G.</li> <li>Kanta Mela, Dt-21-01-2019, Kansra, Kalma G.P.</li> </ol>
Point – 7	Petrolium Pump & L.P. Gass Godown	Petrol Pump, Indian Oil, Masina     Hindustan Petroleum, Ranchi Purulia main Road, Jhalda-Darda G.P.     L.P. Gass Godown, (H.P.), Masina     L.P. Gass Godown, (H.P.), Old Baghmundi Road     L.P. Gass Godown, (Indian), Uhupiri     Kushal Polysacks Private Ltd., Ranchi Purulia main Road,
Point - 8	Industrial Hubs & Chemical	Jhalda-Darda G.P.  2) Meghna Biri, Old Baghmundi Road  3) Mother India Biri, Old Baghmundi Road  Nilkanta Biri, Kuirypara, Jhalda
Point - 9	Relief Godown	Relief Godown, Jhalda-I Dev. Block     Jio Mobile Net Work Available in all G.Ps under this Block
Point - 10	Mobile Network Available	1) Jio Mobile Net Work Avanable in all 3.13 and

This is for your kind information and necessary action.

Thanking you,

Yours faithfully,

**Block Development Officer** Jhalda-I Development Block

### THERE IS NO AIRPORT IN PURULIA DISTRICT