



Development of Disaster Management Plan at Upazila Level

Upazila: Patiya, District: Chittagong

Plan Developed by-
Upazila Disaster Management Committee,
Patiya, Chittagong

Co-ordinate by:



GHARONI

July 2014

Supported by
Comprehensive Disaster Management Program
(CDMP-2)

Ministry of Disaster Management & Relief



Empowered lives.
Resilient nations.

PREFACE

Bangladesh is a disaster prone country. This country has been considered as a country highly vulnerable to disasters in the world. Recently the intensity and havoc of disasters has been gradually mounting. Large scale disasters like flood, cyclone, tidal surge, drought, tornado, river erosion are occurring more frequently in Bangladesh. That is why government of Bangladesh has undertaken appropriate actions underscoring the need to reduce risks. Government has been implementing a program titled "Comprehensive Disaster Management Program -2" realizing its importance. Under this program Disaster Management Committee have been organized from national to district, Upazila and union level.

Local level preparedness for risk reduction and response has been outlined in Standing orders on Disasters (SOD). Here more emphasis has been put on local level planning for Disasters (DM Plan) for risk reduction of disasters and adaptation process.

Necessary actions has been undertaken to develop "Disaster Management Plan" at district, Upazila and unions. To accomplice the task, an NGO named GHARONI has been assigned to support and assist Upazila Disaster Management Committee and Union Disaster Management Committee.


The NGO has undertaken necessary steps and perform different activities in preparing this DM Plan. This Plan has been developed in collaboration and coordination with UzDMCs and UDMCs.

I am convinced that due process has been followed in this respect and a more practical and pragmatic Plan has been come up.

I take this opportunity to convey my thanks to all particularly members of UzDMCs and UDMCs and GHARONI officials and other relevant stalk holders for effective accomplishment of this critical task.

I hope that the disaster risks will be minimized and adaption activities would be more strengthen if this DM Plan is implemented.

Date: 13.09.2014


01.20.14.
Signed মোসাঃ রোকেয়া পারভীন
Mst. Rokeya Parvin উপজেলা নির্বাহী অফিসার
পটিয়া, চট্টগ্রাম।
Upazila Nirbahi Officer, Upazila Parishad, Potiya, Chittagong &
Co-Chairman, Upazila Disaster Management Committee

Contents

Chapter: 1 Introduction to local areas

1.1	Background	..	..	..	..	..	4
1.2	Objectives of the DM Planning	..	..	..	..	..	4
1.3	Introduction to local areas	..	..	..	..	..	5
1.3.1	Geographical locations of District and Upazila	..	..	..	..	..	5
1.3.2	Areas	..	..	..	..	..	6
1.3.3	Population	..	..	..	..	..	7
1.4.	Short description of Infrastructure and information related to Infrastructure..	..	..	..	..	..	8
1.4.1	Infrastructure	..	..	..	..	..	8
1.4.2	Social Assets	..	..	..	..	..	15
1.4.3	weather and Climate	..	..	..	..	..	40
1.4.4	Others	..	..	..	..	..	41

Chapter: 2 Disasters, Hazard and Vulnerability 47

2.1	History of Disasters	..	..	..	..	..	47
2.2	Identification of Hazards and Prioritization	..	..	..	..	..	49
2.3	Different Hazards, its present & future	..	..	..	..	..	49
2.4.	Vulnerability and ability	..	..	..	..	..	50
2.5	Most vulnerable areas	..	..	..	..	..	52
2.6.	Major sectors of development planning	..	..	..	..	..	56
2.7	Social Map	..	..	..	..	..	59
2.8	Hazards and Risk Map	..	..	..	..	..	60
2.9	Monsoon Calendar of Hazards	..	..	..	..	..	61
2.10	Monsoon Calendar of livelihoods	..	..	..	..	..	62
2.11	Vulnerability on lives and livelihoods	..	..	..	..	..	62
2.12	Hazards Sector and description of risks	..	..	..	..	..	63
2.13	Climatic Change and its potential impacts	..	..	..	..	..	72

Chapter 3 Disaster Risk Reduction 74

3.1.	Identification of Causes of Risks	..	..	..	..	..	74
3.2	Identification of means to reduce risks	..	..	..	..	..	78
3.3	Development Plan of NGOs	..	..	..	..	..	82
3.4	Action Plan for Disaster Management	..	..	..	..	..	83
3.4.1	Preparedness of Disaster	..	..	..	..	..	83
3.4.2	During disaster	..	..	..	..	..	84
3.4.3	Post Disaster	..	..	..	..	..	85
3.4.4	During normal period / during low risk period	..	..	..	..	..	86

Chapter 4: Emergency Response	..	..	..	..	..	92
4.1 Emergency Operation Centre (EOC)	..	..	..	..	..	92
4.1.1 Emergency control room	..	..	..	..	..	97
4.2. Plan during disaster	..	..	..	..	..	98
4.2.1 Keep volunteers prepared	..	..	..	..	..	99
4.2.2 Circulate of warning message	..	..	..	..	..	99
4.2.3 Approach to move people	..	..	..	..	..	99
4.2.4 Recovery & delivering primary treatment	..	..	..	..	..	99
4.2.5 Maintenance of Shelters	..	..	..	..	..	99
4.2.6 Keep boats ready	..	..	..	..	..	100
4.2.7 Conduct survey for need assessment & send report	..	..	..	..	..	100
4.2.8 Coordinate relief activities	..	..	..	..	..	100
4.2.9 Collect & keep ready dry foods & life saving medicines	..	..	..	..	..	100
4.2.10 Treatment of domestic animal	..	..	..	..	..	100
4.2.11 Organize rehearsal	..	..	..	..	..	100
4.2.12 Establish and keep in operation of EOC	..	..	..	..	..	100
4.2.13 Shelter centers / safe places	..	..	..	..	..	101
4.3 List of Safe points / places of Upazilas & district	..	..	..	..	..	101
4.4 Formation of Shelter Management Committee	..	..	..	..	..	103
4.5 List of Assets that can be used during disasters	..	..	..	..	..	104
4.6 Funding	..	..	..	..	..	105
4.7 Update & examine Action Plan	..	..	..	..	..	108
Chapter 5: Rescue & Rehabilitation	..	..	..	..	..	108
5.1 Assessment of damage	..	..	..	..	..	109
5.2 Rapid & early recovery	..	..	..	..	..	110
5.2.1 Administrative reorganization	..	..	..	..	..	110
5.2.2 Cleaning garbage/debris	..	..	..	..	..	110
5.2.3 Restoration of public services	..	..	..	..	..	110
5.2.4 Emergency livelihoods support	..	..	..	..	..	110
Annexure 1 Checklist for implementation of plan during disasters	..	..	..	..	..	111
Annexure 2 District & upazila Disaster Management Committee	..	..	..	..	..	113
Annexure 3 District & upazila Disaster Management Committee	..	..	..	..	..	114
Annexure 4 List of members of shelter management committee	..	..	..	..	..	124
Annexure 5 District & Upazila at a glance	..	..	..	..	..	127
Annexure 6 Few important programs broadcast by Bangladesh Bater	..	..	..	..	..	128

Chapter: 1 Introduction to local areas

1.1 Background

Standing orders on Disasters (SOD) has clearly been stipulated to take initiative for formulating Disaster Management Action Plan at District, Upazila , Pourashava and City Corporation level incorporating Disaster Risk Reduction and contingency plan. Ministry of Disaster Management and Relief have taken this with serious focusing. The Disaster Management Plan will be developed for 5 years.

Bangladesh is one of the most disaster prone countries in the world. In each and every year more or less all districts experiences different kinds of disasters. Among most vulnerable districts Chittagong is among them. Due to geographical location and impact of Climatic Change, almost every year this district has been affected by different natural disasters like Flood, excessive rain, Cyclone, tornado, tidal surge, intrusion of Salinity, Arsenicosis etc. As the district is most close to sea, there is huge risks for disasters like Cyclone, tidal surging, flood and all these in some way or other affect and damage this coastal areas.

Among all upazilas of Chittagong, Patiya upazila is more risky and vulnerable to disasters. There are 22 Unions and one Pourashava under this Upazila. Each and every year one union or other has been severely affected by different natural disasters like flesh food, Tornado, water logging, draught, salinity, toxic chemical waste or garbage that is stemmed out from flourishing giant Ship Braking industries along the offshore of this upazila, water stagnation, drought, tidal surging etc.

1.2 Objectives of DM Planning

- Prepare a strategic document for certain areas and time
- It will act as a Comprehensive Plan for relevant all sectors including local and national level Disaster Management Committees.
- This Plan will provide guidance in formulating and implementing plan for all partners relevant to Disaster Management.
- Create effective partnership sense and participation in Disaster Planning of local communities and make development of risk reduction system by using local resources.
- Exercise and use locally developed planning for Need Assessment, Rescue, relief and rapid rehabilitation.
- Create awareness on disaster risks and to develop pragmatic means at union, upazila and district level for disaster risk reduction.

1.3 Introduction to local areas:

Patiya upazila of Chittgaong district was ruled by Kaduk kingship upto 7th century. The upazila was under Paul regime during reign of Dharmapaul during 8th century. In 9th century Patiya including Chittagong became under Haricane empire. From 10th century to 17th century i.e, upto 1666 the whole Chittagong including entire south was under Arakan empire but with little break. Chittagong was during the reign of Buddha era ' known as " Chakrashalla". The Chakrashalla was about two kilometer south from Patiya Sadar. Arakan ruler established their capital at Chakrashala. During the reign (1571-93) of king Meong Falong (Sekandar Shah) ' Chakrashla' was the capital and south of Chittagong and coxsbazar was under his occupied areas. Entire Chittagong including patiya became under Mogul empire during reign of king Auragazeb, after victory of Bangal by in 1666. Before rule of British this areas was known as ' Chakrashala', during Arakan rule, Chakrashala Pargana during Mogul rule. British government establish subdivisional Munsef court at Patiya, a central hub of Chittagong, in 1910 with 5 Munsefs and deploy one Circle Officer (Deputy Megistrate) to execute administrative activities. Rangunia thana was established taking some parts of Raozan and Patiya at the last period of 19th century. Later on, Anwara thana was established in 1898, Boalkhali in 1930 and Chandanaish thana in 1976 bifracating Patiya. Patiya was recognized as ' Patiya Subdivision' during rule of pakistan in 1958. At last Patiya got recognition as ' Patiya Upazila' in 1st February , 1984.

1.3.1. Geographical locations of Chandanaish Upazila.

Patiya upazila is located at east and south of Chittagong district headquarter and about 42 KM away from it. Its areas are 370 Sq. KM It is consist of 127 Mouzas, 22 unions, and 1 Pourashava. It has about 701 KM surface roads. Among them 219.50 are kacha road, 200 KM paved road and 281.5 KM HBB.

1.3.2 Areas

The Chittagong district was formally created in 1966 and its areas are 5282.98 Sq. KM. There are 14 UpazilaS under Chittgaong district and Patiya is one of them. Its areas are 370 Sq. KM. There are 22 unions and 127 Mouzas under this Upazila. A list of Mouzas are provided below-

Sl. No.	Name of Unions	Union based Mouzas
01.	Charlakha Union	Charlakha & Char Farid
02.	Charpathorghata union	Charpathorghata, Esanagar & Khoajnar
03.	Juldha Union	Juldha & Dangar Char
04.	Barouthan Union	Barouthan, Shah Mirpur & Daulatpur
05.	Kalagoan Union	Kalagoian, Sattatoya, Nalanda, Chapra, Chatori, Banigram & Lakhara
06.	Shikilbaha union	Shikolbaha & Dipkala Moral
07.	Kusumpura Union	Kusumpura, Manasa, Harinkhain, Meherati, Bininihara, Gorkhain & Thana Mohira
08.	Kharna Union	Kharna & Mujafarabad
09.	Barolia Union	Barolia, Kartala, Belkhain, Terela, Melghar, Baroikhana & Oknera
10.	Bhatikhain Union	Bakkhali, Karal & Bagahara
11.	Chanhara Union	Chanhara, Chatra, Guatali, Matpara, Dhaurdanga & Baroiya
12.	Habilashdip Union	Habilashdip, Halimkhan Char, Pachura & Khulain
13.	Haidgoan Union	Haidgoan, Jango haidgoan & North Jangol Srimai
14.	Jangoljhain Union	Jangolkhain, Yakubnagar, Ujairpur, Naikhain, Tirkul, Pairul & Larihara
15	Kachuiyai union	Kachuai, Azirpur, Katha, Parigram, Sreemai, Kamchattar & South Jangol Sreemai
16	Kalishor Union	Kelishor, Ratanpur, Maitla, Sapmara, North Bhursi Sattar Tatula, Lot Satannabai, Jangol Shitol Chari & Pach Gachiya Baro Duara
17	South Bhursi Union	South Bhursi, Degnapara, Banipur, Khanmohana & Kechiyapara
18	Shobhandandi Union	Shobhandandi, Rashidapara, Hatiaghona, Kelishor, Shoyang, Asata, Joara Khankhanabad, Hilichiya, Laouer Khil & Kurangiri
19	Dhalghat Union	Dhalghat, North Samura, South Samura, Alampur, Nanderkhil, Bagdandi, Eshasorkhain, Karankhain, Mukutnaight, Goirala & Tekhota.
20	Kasiyaish Union	Kashiyash, Perpira, Mohira, Mohira Perpira, Bakhain, Bhandargoan, Pingola, Darok & Budpura
21	Asia Union	Asia & Bathua
22	Jiri union	Juri, North Deyang, Kaigram, Maliaya, Mohira, ukhain & Saidair

1.3.3 Population-

Total populations under 22 unions of Patiya upazila are 633150. Among them male are 320218 and women 312148, children 44308, old 28202, and disabled are 4489. Peoples of different levels are exhibited in below table:

Sl No.	Name of Unions	Male	Female	Children (0-15)	Old (60+)	Disabled	Total Population	Househo lds	Total voters
1	Charlakha	14385	13985	1986	1277	244	28370	3212	18120
2	Kachuai	27523	27361	2732	1618	164	54864	8107	20020
3	Bhatikhain	6635	6035	889	583	132	12670	2430	6440
4	Chanhara	9189	9089	1272	819	205	18178	3145	12530
5	Haidgoan	12578	12077	1725	1110	290	24655	4120	15154
6	Kelishor	9306	9264	1391	836	180	18570	4130	13211
7	Habilashdip	16813	16612	2340	1505	77	33425	5240	20930
8	Kolagoan	11033	10833	1531	984	245	21866	4123	15993
9	Jangolkhain	12693	12437	1760	1131	122	25130	3044	11240
10	Kharna	15649	15548	2177	1406	258	31096	4535	17860
11	Charpathorghata	21290	21195	2968	1970	310	42390	7497	26281
12	Shikolbaha	23190	22590	3205	2061	415	45780	7445	29757
13	Barolia	10920	10320	2075	1207	215	21240	2790	11470
14	Barouthan	21235	20835	2945	1894	341	42070	6330	26083
15	Juldha	11620	11220	1599	1028	152	22840	4060	14530
16	Kusumpura	17645	17044	2472	1409	130	34689	5360	22432
17	Jiri	22565	21755	4606	2887	309	44320	7430	28652
18	South Bhursi	9760	9360	793	578	106	19120	3822	7230
19	Dhalghat	10619	10218	1270	906	260	20837	3921	15470
20	Shobhandandi	15395	14795	2114	1360	220	30190	4557	17718
21	Asia	12500	12200	1606	1111	283	24700	4310	9200
22	Kasiyaish	7675	7375	852	522	231	15150	2360	8218
Total		320218	312148	44308	28202	4489	632150	101968	368539

1.4 Infrastructure and brief detail of infrastructures

1.4.1 Infrastructures:

Ka) Embankment-

There are embankments on rivers and Cannels to protect intrusion of flood and tidal water to Patiya upazila. Total length of embankment are 26.5 KM. Number of embankments and its locations are exhibited below-

- There is a 10 KM embankment from Sreemai to Paikpara at 1, 3, 7 & 8 no wards of Kachuyai union. Its height is 10 feet.
- There is a 4.5 KM embankment from Jharna Para to Chankhali at 3, 4, 5, 6 & 7 no wards of Bhatikhain union. Its height is 12 feet.
- There is a 3 KM embankment from Tegarkuni to PP Govt. Primay School at 1 & 3 no wards of Chanhara union. Its height is 10 feet.
- There is a 1 KM embankment from Dattabari to Bhoiddapara at 2,, 3 & 5 no wards of Haidgoan union. Its height is 11 feet.
- There is a 1 KM embankment from Charpathorghata dam at 3, 7 & 8 no wards of Charpathorghata union. Its height is 10 feet.
- There is a 1 KM embankment from Dam at 3 & 7 no wards of Juldha union. Its height is 10 feet.

Kha) Sluice gate

There are 8 sluice gates at 8 unions of Patiya.

- Chanhara union: There is only 1 sluice gate. It is located at Chaturakhal of 9 no ward.
- Jiri union: There are 2 sluice gates at this union. One is on Shikolbaha at 3 no ward and another one is Shikolbaha at wards no 7.

Ga) Bridges:

Union wise list of bridges are exhibited below-

- **Kharna union:** Total number of bridges in this union are 13. One is on the Kharna Khal at 5 no ward, another is on the Bismati khal at ward no 6, another is on the Kharna Khal ward no 7, and another one is on the Danabarischa at 9 no ward.
- **Kachuai union:** Total number of bridges in this union are 8 at ward no 2, 3, 4, 5 & 9 & name of Khal Sreemai khal, Kali Bari road, Mura Khal, Karal Bagachar road & Fayjur Rahman road.

- **Bhatikhain union:** Total number of bridges in this union are 10 at ward no 1, 3, 4, 5 & 8 & name of Khal Sreemai khal, Tutang road, Mura Khal, Karal Bagachar road & Fayjur Rahman road.
- **Chanhara union:** Total number of bridges in this union are 5 at ward no 2 & 8 & name of Khal Chakon Khalifa road & Dauddanga road.
- **Haidgoan union:** Total number of bridges in this union are 7 at ward no 1, 2, 3, 5 & 6 & name of Akramia road.
- **Kelishahor union:** Total number of bridges in this union are 10 at ward no 2, 3, 4, 5, 6, 8 & 9 & name of Khal Sreemai khal, Kali Bari road, Mura Khal, Karal Bagachar road & Fayjur Rahman road.
- **Habilashdip union:** Total number of bridges in this union are 5 at ward no 1, 4 & 8 & name of road Charkanai Village road & Chowdhury road.
- **Kolagoan union:** Total number of bridges in this union are 16 at ward no 1,2, 3, 4, 5, 6, 8 & 9 & name of road Mohi Alam Bari road, Garu Sutai Khal & Mahirkhal khal.
- **Jangolkhain union:** Total number of bridges in this union are 2 at ward no 1, 5 & 6 located at Mahi Alam Bari road & Kagir Khal.
- **Charlakha union:** Total number of bridges in this union are 6 at ward no 2, 3, 4, 5, 6, 8 & 9 located at Shah Aziz Khal & Bangla Bazar road.
- **Charpathorghata union:** Total number of bridges in this union are 20 at ward no 1, 2, 3, 4, 5, 6, 8 & 9 located at Langra Khal 3, Bangla Bazar road 2, Alam Uddin road 5.
- **Shikilbaha union:** Total number of bridges in this union is 8 at ward no 3, 4, 5, 6, 8 & 9 located at Arakan road 4, Saraji road 2, Baktiar road 2, Jele para road 2 & Kalarpul 2.
- **Barolia union:** Total number of bridges in this union are 9 at ward no 2, 4, 5, 6, 8 & 9 located at Belkhain road 2, Kalagagi road 2, Shilpara road 2 & Sayed Hsahagir road 2 Bredge.
- **Juldha union:** Total number of bridges in this union are 2 at ward no 8 & 9 located at Anju Bari road 1 & Juldha Noyar hat 1 bredge.
- **Kusumpura union:** Total number of bridges in this union are 3 at ward no 4 & 6 located at Dilsha road, Sayed Mitra road & Lakh road 1.
- **South Bhurshi union:** Total number of bridges in this union are 2 at ward no 8 & 9 located at Chankahi road & Krishana Khail Khal.
- **Dhalghat union:** Total number of bridges in this union are 3 at ward no 6, 8 & 9 located at Hargoze Khal 1, Krishna Khal 1 & Chankhali Khal 1.
- **Shobhandandi union:** Total number of bridges in this union are 7 at ward no 2, 3, 4, 5, 6, 8 & 9 located at Hosan road3, Karam Ullah road 2, Kharna Khal 2 & Kanti Khal 2.
- **Asia union:** Total number of bridges in this union are 5 at ward no 4, 5, 6, 8 & 9 located at Brammon Khal1 Chankhali Khal 3 & Asia Khal 2.

- **Kasiyaish union:** Total number of bridges in this union are 5 at ward no 5, 6, 8 & 9 located at Bibi road 2, Bakkhaim road 2 & Kasiyaish road 1.

Gha) Calvert:

Patiya Upozila 22 union has total 674 Calvert. These Calvert helps to water flow of river canals. Union based culvert list are given below:

Kharna Union: Total numbers of culverts are 29. Those Culverts are in from 1 to 9 no wards.

Kachuai Union: Total numbers of culverts are 45. Those Culverts are in from 1 to 9 no wards.

Bhatikhain Union: Total numbers of culverts are 21. Those Culverts are in from 1 to 9 no wards.

Chanhara Union: Total numbers of culverts are 44. Those Culverts are in from 1 to 9 no wards.

Haidgoan Union: Total numbers of culverts are 37. Those Culverts are in from 1 to 9 no wards.

Kalishohor Union: Total numbers of culverts are 36. Those Culverts are in from 1 to 9 no wards.

Hablashdip Union: Total numbers of culverts are 31. Those Culverts are in from 1 to 9 no wards.

Kolagoan Union: Total numbers of culverts are 28. Those Culverts are in from 1 to 9 no wards.

Jangolkhain Union: Total numbers of culverts are 41. Those Culverts are in from 1 to 9 no wards.

Charlakha Union: Total numbers of culverts are 31. Those Culverts are in from 1 to 9 no wards.

Shikolbaha Union: Total numbers of culverts are 46. Those Culverts are in from 1 to 9 no wards.

Barolia Union: Total numbers of culverts are 28. Those Culverts are in from 1 to 9 no wards.

Barouthan Union: Total numbers of culverts are 40. Those Culverts are in from 1 to 9 no wards.

Juldha Union: Total numbers of culverts are 35. Those Culverts are in from 1 to 9 no wards.

Kusumpura Union: Total numbers of culverts are 35. Those Culverts are in from 1 to 9 no wards.

Jiri Union: Total numbers of culverts are 15. Those Culverts are in from 1 to 9 no wards.

South Bhursi Union: Total numbers of culverts are 10. Those Culverts are in from 1 to 9 no wards.

Dhalghat Union: Total numbers of culverts are 15. Those Culverts are in from 1 to 9 no wards.

Shobhandandi Union: Total numbers of culverts are 11. Those Culverts are in from 1 to 9 no wards.

Asia Union: Total numbers of culverts are 9. Those Culverts are in from 1 to 9 no wards.

Kasiyaish Union: Total numbers of culverts are 10. Those Culverts are in from 1 to 9 no wards.

Uma) Roads:

There are total 701 KM roads at 22 unions of Patiya upazila of Chittagong. Among them 200 KM are Pucca, 219.5 KM Kacha and 281.5 KM HBB road. Number of roads and location statistics are appended below-

Kharna union: There are 6.5 KM Pucca road in the wards no (5, 6, 8 & 9), 21 KM are kacha & it is in the wards no 1, 2, 3, 4, 5, 6, 7, 8 & 9 and 26.5 KM. HBB in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 10 KM Kucha and 11 KM road are in bad shape.

Kachuai union: There are 13 KM pucca road in the ward no 1, 2, 3, 4, 5 & 8, and 16 KM kacha road in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9 and 19 KM HBB in the wards no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 8 KM Kucha and 10 KM HBB road are in bad shape.

Bhatikhain union: There are 8 KM Pucca road which are in the wards no 3, 4, 5 & 8, 14.5 KM Kacha road which are in the wrd no 1, 4, 5, 6, 7, 8 & 9 and 9 KM HBB which are in the wards no 5, 6, 7, 8 & 9. Among them 7 KM Kucha and 5KM HBB road are in bad shape.

Chanhara union: There are 15 KM Pucca road which are in the ward no 1, 2, 3, 4, 5 & 8, 3.5 KM are kacha whicg are in the ward no 7 & 8 and 19 KM. HBB which are in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 2 KM Kucha and 10 KM HBB road are in bad shape.

Haidgoan union: There are 6 KM Pucca road which are in the ward no 5, 6, 7 & 8, 4.5 KM are kacha which are in the ward no 1, 5, 6, 7, 8 & 9 and 27 KM HBB which are in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 2 KM Kucha and 15 KM HBB road are in bad shape.

Kelishohor union: There are 8 KM Pucca road which are in the ward no 1, 2, 5 & 8, & 10 KM are kacha which are in the ward no 1, 5, 6, 7, 8 & 9 and 11.5 KM HBB which are in the ward no 5, 6, 7, 8 & 9. Among them 2 KM Kucha and 5 KM HBB road are in bad shape.

Habilashdip union: There are 12 KM Pucca road in the ward no 1, 2, 3, 4, 5 & 8, and 19.5 KM Kacha which are in the ward no 1, 2, 3, 4, 5, 6, 7 and 20.5 KM HBB which are in the wards no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 4 KM Kucha and 6 KM HBB road are in bad shape.

Kolagoan union: There are 4 KM Pucca road in the ward no 1, 2, 3, and 14.5 KM Kacha road in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9 and 21.5 KM HBB road in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 2 KM Kucha and 14 KM HBB road are in bad shape.

Jangolkhain union: There are 12.5 KM Pucca road in the ward no 3, 4, 5 & 8, and 12 KM kacha road in the ward no 1, 2, 6, 7, 8 & 9 and 12.5 KM HBB in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 3 KM Kucha and 8 KM HBB road are in bad shape.

Charlakha union: There are 7 KM Pucca road in the ward no 1, 2, 3, 4, 5 & 8, and 15.5 KM Kacha road in the ward no (1, 2, 3, 4, 5, 6, 7, 8 & 9) and 11.5 KM HBB road in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 3 KM Kucha and 5 KM HBB road are in bad shape.

Shikolbaha union: There are 9 KM Pucca road in the ward no 1, 2, 3 & 8, and 4.5 KM Kacha in the ward no 1, 2, 3, 4, 5 and 6.5 KM HBB in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 2 KM Kucha and 6 KM HBB road are in bad shape.

Charpathorghata union: There are 9 KM Pucca road in the ward no 3, 4, 5 & 8, and 15.5 KM kacha road in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9 and 10 KM HBB in the ward no 3, 4, 5, 6, 7, 8 & 9. Among them 8 KM Kucha and 10 KM HBB road are in bad shape.

Barolia union: There are 11.5 KM Pucca road in the ward no 1, 2, 3, 4, 5 & 8, and 10.5 KM Kacha in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9 and 13.5 HBB in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 4 KM Kucha and 5 KM BBB road are in bad shape.

Juldha union: There are 15 KM Pucca road in the ward no 1, 2, 3, 4, 5 & 8, and 13.5 KM Kacha road in the ward no 3, 4, 5, 6, 7, 8 & 9 and 10.5 KM HBB road in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 4 KM Kucha and 7 KM HBB road are in bad shape.

Kusumpura union: There are 2.5 KM Pucca roads in the ward no 1, 2, 3, 4, 5 & 8, and 7.5 KM Kacha road in the ward no 3, 4, 5, 6, 7, 8 & 9 and 8 KM HBB in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 4 KM Kucha and 5 KM HBB road are in bad shape.

Jiri union: There are 15 KM Pucca road in the ward no 1, 2, 3, 4, 5 & 8, and 4 KM Kacha road in the ward no 1, 2, 3, 7, 8 & 9 and 11 HBB road in the ward no 3, 4, 5, 6, 7, 8 & 9. Among them 4 KM Kucha and 3 KM HBB road are in bad shape.

Southbhursi union: There are 4.5 KM Pucca road in the ward no 3, 4, 5 & 8, and 4 KM kacha road in the ward no 6, 7, 8 & 9 and 5 KM HBB road in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9. Among them 2 KM Kucha and 4 Km HBB road are in bad shape.

Dhalghat union: There are 9 KM Pucca road in the ward no 3, 4, 5 & 8, and 9 KM kacha road in the ward no 3, 4, 5, 6, 7, 8 & 9 and 7 KM HBB road in the ward no 1, 2, 3, 4, 5. Among them 4 KM Kucha and 5 KM HBB road are in bad shape.

Asia union: There are 3.5 KM Pucca road in the ward no 4, 5 & 8, and 9 KM Kacha road in the ward no 1, 2, 3, 4, 5, 6, 7, 8 & 9 and 12 KM HBB road in the ward no 1, 2, 3, 6, 7, 8 & 9. Among them 2 KM Kucha and 4 Km HBB road are in bad shape.

Kasiyaish union: There are 7 KM Pucca road in the ward no 1, 2, 3, 4, and 2 KM kacha road in the ward no 8 & 9 and 7.5 KM HBB in the ward no 1, 2, 3, 4. Among them 2 KM Kucha and 3 KM HBB road are in bad shape.

Ca) Irrigation system:

Use of tube wells for crop production is not much in Patiya Upazila. Most deep tube wells are used as sources of drinking water and used in homes and some are used for crop production. Total number tube wells in 22 unions of Patiya Upazila are 48760. Among them deep tube wells are 243, Non-deep tube wells 48760, Shallow tube wells are 42. Detail description are provided below-

Sl. No.	Sources of Irrigation	Number	Area covered by Irrigation (Hectors)	Areas of land affected by Flood	Post flood condition
1	Deep tubewells	243	About 27590 acres	About 38190 acres	If they get help from the state flood co-operation from the next condition will be easy to get out.
2	Shallow deep tube wells	78760	-	-	-
3	Hand driven tube wells	42	About 4890 acres	-	-
4	Shallow tube wells	-	-	-	-

Cha) Hat & Bazaars:

There are 33 Hat & bazaars in 22 unions of Patiya Upazila. According to field report Hats are sit 2 days in a week and Bazaars 7 day in a week. There are total 2811 shops in all hat and Bazaars of this Upazila. Detail information of hat and bazaars is provided below-

Sl no.	Name Union	Name of Bazar	Markets	Number of shop
1	Kharna	Haji Nuruzaman Hat	2 days / week	105
2	Kachauai	Alir Hat	2 days / week	126
		Kamal Munsir Hat	2 days / week	155
3	Bahtikhain	Bhatikhain Hat	2 days / week	96
4	Chanhara	Murali Bazar	2 days / week	45
5	Haidgoan	Senerhat	2 days / week	25
		Tilerdighar hat	2 days / week	74
6	Kelishohor	Bhattacharya hat	2 days / week	130
		Ramesh Babu hat	2 days / week	85
7	Habilashwip	Sadar Ali hat	2 days / week	150
8	Kolagoan	Kanto Fakir hat	2 days / week	76
9	Jangolkhain	-	2 days / week	-
10	Charlakha	Boad Bazar	2 days / week	405

		Abul market	2 days / week	110
11	Charapathorghata	Totar hat	2 days / week	53
12	Shikilbaha	Madter hat	2 days / week	55
		College market	2 days / week	35
		Karachilo hat	2 days / week	40
13	Barolia	Molavi hat	2 days / week	60
		Budpura hat	2 days / week	140
14	Barauthan	Fakirhat	2 days / week	30
		Jamil hat	2 days / week	200
		Miyarhat	2 days / week	150
15	Juldha	Juldha hat	2 days / week	154
		Juldha Jamtola hat	2 days / week	100
16	Kusumpura	Shantir hat	2 days / week	175
		Munsarhat	2 days / week	60
17	Jiri	Maliyarahat	2 days / week	120
		Fakir hat	2 days / week	45
18	South Bhurshi	-	2 days / week	-
19	Dhalghat	Gosai hat	2 days / week	64
20	Shobhandnadi	Mohajan hat	2 days / week	60
21	Asia	Bahgla Bazar hat	2 days / week	53
22	Kasiyaish	Budhpura hat	2 days / week	45
		Kashiyaish hat	2 days / week	37

1.4.2 Social Assets

(ka) House/homes- There are 101968 houses in 22 unions of Patiya upazila. Among them 56524 are Kacha, 13057 are Pucca and 43685 are semi pucca. Pucca houses are made of bricks, sand, cement and rod and kacha houses are made of Bamboo, trees, tin, Chan, wire and nails, rope, and bamboo fencing. Kacha houses are not disaster resilient. About 40% houses are below flood level. Unionwise detail of houses are provided below-

Sl.No.	Name of union	Number of Homes			Material that are used for making homes
		Kucha	Pucca	Semi-pucca	
1	Kharna	3090	610	2035	Kacha houses are made of Clay, Bamboo fence, timber, and chan or tin on the roof, and Pucca homes are made of bricks, sand, cement and rods
2	Kachauai	6209	1030	2868	
3	Bahtikhain	1624	276	730	
4	Chanhara	1760	422	963	
5	Haidgoan	2090	520	1510	
6	Kelishohor	2180	315	1635	
7	Habilashwip	2980	847	1913	
8	Kolagoan	2760	944	1419	
9	Jangolkhain	1721	432	891	
10	Charlakha	1238	218	1756	
11	Charapathorghata	3878	1021	3698	
12	Shikilbaha	3487	980	4978	
13	Barolia	1479	326	985	
14	Barauthan	3299	879	2752	
15	Juldha	1980	367	1713	
16	Kusumpura	2957	844	1857	
17	Jiri	3295	921	4214	
18	South Bhurshi	2190	437	1195	
19	Dhalghat	1455	218	2248	
20	Shobhandnadi	2985	648	1424	
21	Asia	2318	478	2114	
22	Kasiyaish	1549	324	787	
Total		56524	13057	43685	

(Kha) Water:

Main sources of drinking water of 22 unions of Patiya Upazila are deep tube well, shallow tube wells, water deriving from river/channels. Total tube wells are 48760. Among them deep tube wells are 243 and shallow tube wells are 42.

Number of tube wells are 48760, among them 45700 are in good condition, number of out of order tube wells are 48760, 31500 are above flood level. Number of usable tube wells during flood are 3060. About 80% inhabitant use tube well water for their day to day use. Scarcity of safe drinking water is seen during flood.

(Ga) Sanitation situation-

Total number of latrines at 22 unions of Patiya upazila are 97500. Among them Pucca latrines are 56742 and kacha are 45226. According to survey kacha latrines have been badly affected by various disasters.

(Gha) Educational Institutions/ Libraries:

There are total 274 educational institutions in 22 unions of Patiya Upazila. Among them 12 colleges, 45 Madrashes, 46 High schools, 171 Government Primary school, 4 Resi. Primay School, & 2 Junior High school. Union wise information is exhibited below-

Educational Institution	Govt./ non-govt./Resi	Name of the institution education	Position/Ward	No. of student	Teacher/Teacher
College	Non-govt.	Manasa School and College	Kusumpura	934	14
College	Non-govt.	Ayub Bibi City Corporation School and College	harpathorghat	976	13
College	Non-govt.	Khalimiyar Degree College	Jiri	1080	16
College	Non-govt.	Dhalghat School and College	Dhalghat	8942	15
College	Non-govt.	A.J Chowdhury College	Shikilbaha	938	13
College	Non-govt.	Chobhandandi Public School and College	Shobhondnadi	876	14
College	Non-govt.	Hulayan Shahenur Degree College	Habilashdip	960	17
Secondary School	Non-govt.	Asia High School	Asia	620	11
Secondary School	Non-govt.	Bathuya High School	Kachuyai	760	10
Secondary School	Non-govt.	Chakarasala Agricultural High School	Kachuyai	650	11
Secondary School	Non-govt.	Azimpur High School	Kachuyai	635	9
Secondary School	Non-Govt.	Kasiyaish High School	Kasoyaish	786	10
Secondary School	Non-Govt.	Poingola Budhpura High School	Kasoyaish	510	11
Secondary School	Non-govt.	Kusumpura High School	Kusumpura	790	9

Secondary School	Non-govt.	Kelishohor High School	Kelishohor	500	10
Secondary School	Non-govt.	Ratanpur High School	Keloshohor	665	9
Secondary School	Non-govt.	Lakhara High School	Kolagoan	580	10
Secondary School	Non-govt.	Mojaffarbad Girls' High School	Kharna	610	12
Secondary School	Non-Govt.	Mojaforabad N, J. High School	Kharna	765	10
Secondary School	Non-Govt.	Chanhara High School	Chanhara	510	11
Secondary School	Non-Govt.	Dhaurdanga Sharada pedicure High School	Chanhara	670	10
Secondary School	Non-Govt.	Union agriculture High School	Jangolkhain	830	9
Secondary School	Non-Govt.	Jangolkhain High School	Jangolkhain	770	10
Secondary School	Non-Govt.	Jiri high school	Jiri	565	9
Secondary School	Non-Govt.	S, A Noor High school	Jiri	534	10
Secondary School	Non-Govt.	Mohira High School	Jiri	590	11
Secondary School	Non-Govt.	South Bursi High School	South Bhursi	675	10
Secondary School	Non-Govt.	Kartala High School	Barolia	750	11
Secondary School	Non-Govt.	West Barikhara High School	Barolia	544	9
Secondary School	Non-Govt.	Karal Girls' High School	Shikolbaha	695	9
Secondary School	Non-Govt.	Bhatikhain High School	Shikolbaha	785	10
Secondary School	Non-Govt.	Haji Omra Kalarpul Mia High School	Shikolbaha	790	11
Secondary School	Non-Govt.	J. Chow multiple High School	Shikolbaha	695	12
Secondary School	Non-Govt.	PDB High School	Shikolbaha	675	10
Secondary School	Non-Govt.	Arfa Karim High School	Shobhandandi	786	11
Secondary School	Non-Govt.	Shobhandandi High School	Shobhandandi	760	10
Secondary School	Non-Govt.	Joara Govt. High School	Shobhandandi	537	11

School			i		
Secondary School	Non-Govt.	Habilash Girls' High School	Habilashdip	645	10
Secondary School	Non-Govt.	Haidgoan High School	Haidgoan	830	10
Secondary School	Non-Govt.	Charpathoghata High School	Charpathorghata	720	9
Secondary School	Non-Govt.	Dhalghat High School	Dhalghat	765	11
Secondary School	Non-Govt.	Alampur High School	Dhalghat	675	9
Secondary School	Non-Govt.	Nandarkhil High School	Dhalghat	820	10
Secondary School	Non-Govt.	Juldha Shahamir High School	Juldha	895	9
Secondary School	Non-Govt.	Juldha Rahmania High School	Juldha	710	9
Secondary School	Non-Govt.	Mary Ashram High School	Barouthan	640	9
Secondary School	Non-Govt.	Daulatpur multiple High School	Barouthan	680	10
Secondary School	Non-Govt.	Charlakha multiple High School	Charlakha	595	9
Secondary School	Non-Govt.	Habilashdip boys/Girls' High School	Habilashdip	620	10
Secondary School	Non-Govt.	Habilashdip multiple High School	Habilashdip	587	9
Secondary School	Non-Govt.	Charkanai multiple High School	Habilashdip	621	9
Junior School	Non-Govt.	Asia Motaleb junior high school	Juldha	255	7
Primary School	Government	Asia Govt. Pri. School	Asia	235	5
Primary School	Government	Bathuya Govt. Pri. School	Asia	345	7
Primary School	Government	South Asia Govt. Pri. School	Asia	320	6
Primary School	Government	Pingola Govt. Pri. School	Kasiyaish	310	8
Primary School	Government	Kasiyaish Govt. Pri. School	Kasiyaish	270	7
Primary School	Government	Bhandargoan Govt. Pri. School	Kasiyaish	230	6
Primary School	Government	Government প্রাঃ বাকখাইন বিঃ	Kasiyaish	310	7

Primary School	Government	Budphira Govt. Pri. School	Kasiyaish	390	6
Primary School	Government	Mohira Govt. Pri. School	Kasiyaish	330	7
Primary School	Government	Darok Govt. Pri. School	Kasiyaish	295	8
Primary School	Government	Kusumpura Govt. Pri. School	Kelishohor	310	6
Primary School	Government	Kelishihor Govt. Pri. School	Kelishohor	375	7
Primary School	Government	Kelishihor Govt. Pri. School	Kelishohor	245	5
Primary School	Government	Kolagoan Kelishihor Govt. Pri. School	Kolagoan	365	7
Primary School	Government	Kartala Kelishihor Govt. Pri. School	Kolagoan	345	6
Primary School	Government	Abul Kasem Kelishihor Govt. Pri. School	Kolagoan	310	7
Primary School	Government	Kolagoan Kelishihor Govt. Pri. School	Kolagoan	390	5
Primary School	Government	Lahara Kelishihor Govt. Pri. School	Kolagoan	330	6
Primary School	Government	Chatra Kelishihor Govt. Pri. School	Kolagoan	295	5
Primary School	Government	Government প্রাঃবিঃ Daulotodia	Kolagoan	310	6
Primary School	Government	Chapuri Kelishihor Govt. Pri. School	Kolagoan	375	5
Primary School	Government	Banigram Kelishihor Govt. Pri. School	Kolagoan	245	6
Primary School	Government	Charpathorghat Kelishihor Govt. Pri. School	Charpathorghata	405	8
Primary School	Government	Chatra Noya Kelishihor Govt. Pri. School	Chanhara	370	7
Primary School	Government	TP Kelishihor Govt. Pri. School	Chanhara	345	7
Primary School	Government	Chanhara Kelishihor Govt. Pri. School	Chanhara	310	5
Primary School	Government	Nomani Kelishihor Govt. Pri. School	Chanhara	390	6
Primary School	Government	B oatali Kelishihor Govt. Pri. School	Chanhara	330	5
Primary School	Government	Mathpara Kelishihor Govt. Pri. School	Chanhara	295	6
Primary	Government	Daud dryland Kelishihor	Chanhara	310	5

School		Govt. Pri. School			
Primary School	Government	Barima Kelishihor Govt. Pri. School	Chanhara	375	6
Primary School	Government	A strology Govt. Pri. School	Chanhara	245	8
Primary School	Government	Yeakubdnadi Govt. Pri. School	Jangokhain	405	7
Primary School	Government	East Jiri Govt. Pri. School	Jiri	320	6
Primary School	Government	North Derang Govt. Pri. School	Jiri	310	5
Primary School	Government	South Kaya Govt. Pri. School	Jiri	395	5
Primary School	Government	Saidar Govt. Pri. School	Jiri	310	6
Primary School	Government	Nischantapur Govt. Pri. School	Jiri	180	5
Primary School	Government	Jiri Govt. Pri. School	Jiri	310	6
Primary School	Government	Ahasania Govt. Pri. School	Jiri	379	8
Primary School	Government	East Juldha Govt. Pri. School	Juldha	326	5
Primary School	Government	India's Govt. Pri. School	Juldha	321	8
Primary School	Government	Alam Govt. Pri. School	Juldha	307	6
Primary School	Government	North Juldha community Govt. Pri. School	Juldha	284	5
Primary School	Government	South Bhurshi Govt. Pri. School	South Bhursi	315	7
Primary School	Government	Denga Govt. Pri. School	South Bhursi	287	6
Primary School	Government	Banipur Govt. Pri. School	South Bhursi	278	5
Primary School	Government	Khan Khanabad Govt. Pri. School	South Bhursi	420	8
Primary School	Government	Dhalghat Govt. Pri. School	Dhalghat	434	8
Primary School	Government	North Sapura Govt. Pri. School	Dhalghat	310	6
Primary School	Government	South Samura Govt. Pri. School	Dhalghat	213	5
Primary School	Government	Alampur Govt. Pri. School	Dhalghat	376	8

Primary School	Government	Nandarkhil Govt. Pri. School	Dhalghat	313	7
Primary School	Government	Bagdandi Govt. Pri. School	Dhalghat	43	8
Primary School	Government	God Govt. Pri. School	Dhalghat	389	7
Primary School	Government	Alailash Govt. Pri. School	Dhalghat	365	7
Primary School	Government	Kharan Khain Govt. Pri. School	Dhalghat	356	6
Primary School	Government	Mukutnai Govt. Pri. School	Dhalghat	376	7
Primary School	Government	Tekota Govt. Pri. School	Dhalghat	314	8
Primary School	Government	East Tekota Govt. Pri. School	Dhalghat	420	9
Primary School	Government	Rashidabad Govt. Pri. School	Shobhandandi	335	7
Primary School	Government	Kanchanpur Govt. Pri. School	Shobhandandi	310	6
Primary School	Government	Joara Govt. Pri. School	Shobhandandi	379	8
Primary School	Government	Shobhandandi Govt. Pri. School	Shobhandandi	396	8
Primary School	Government	Asata Govt. Pri. School	Shobhandandi	385	8
Primary School	Government	Kaliyaish Govt. Pri. School	Shobhandandi	356	7
Primary School	Government	East Kaliyaish Govt. Pri. School	Shobhandandi	295	7
Primary School	Government	Medium-seat Kalia Govt. Pri. School	Shobhandandi	414	8
Primary School	Government	Hilichiya Govt. Pri. School	Shobhandandi	417	8
Primary School	Government	Sahebnagar Govt. Pri. School	Shobhandandi	387	7
Primary School	Government	Shohang Govt. Pri. School	Shobhandandi	280	5
Primary School	Government	Kuranggiri Govt. Pri. School	Shobhandandi	456	9
Primary School	Government	East Mujafarabad Govt. Pri. School	Kharna	410	7
Primary School	Government	Majhi Govt. Pri. School	Kharna	310	9
Primary	Government	Government প্রাঃবিঃ শ্রীমাই	Kharna	470	8

School					
Primary School	Government	Badar Aulia Govt. Pri. School	Kharna	315	7
Primary School	Government	Lalarkhil Govt. Pri. School	Kharna	298	6
Primary School	Government	West Mojafarabad Govt. Pri. School	Kharna	421	9
Primary School	Government	Srity Govt. Pri. School	Kharna	345	9
Primary School	Government	South Mojafarabad Govt. Pri. School	Kharna	188	5
Primary School	Government	Kartalkia Govt. Pri. School	Barolia	356	7
Primary School	Government	Sarkaer Govt. Pri. School	Barolia	260	6
Primary School	Government	West Barikhara Govt. Pri. School	Barolia	378	7
Primary School	Government	Sukh Govt. Pri. School	Barolia	384	8
Primary School	Government	Barolia Govt. Pri. School	Barolia	298	6
Primary School	Government	Okniera Hossain Khan Govt. Pri. School	Barolia	397	7
Primary School	Government	East Barolia Govt. Pri. School	Barolia	284	6
Primary School	Government	Melghor Govt. Pri. School	Shikolbaha	314	8
Primary School	Government	Dipkalamor Govt. Pri. School	Shikolbaha	495	10
Primary School	Government	Aman Govt. Pri. School	Shikolbaha	445	8
Primary School	Government	Government প্রাঃবিঃ আহাছানীয়া	Shikolbaha	386	7
Primary School	Government	North Shikilbaha Govt. Pri. School	Shikolbaha	376	8
Primary School	Government	Mid-Ranking Govt. Pri. School	Shikolbaha	310	7
Primary School	Government	South Shikilbaha Govt. Pri. School	Shikolbaha	285	6
Primary School	Government	West Shikilbaha Govt. Pri. School	Shikolbaha	356	7
Primary School	Government	Kalarpol Govt. Pri. School	Shikolbaha	249	5
Primary School	Government	PDP Govt. Pri. School	Shikolbaha	418	8

Primary School	Government	Kader Govt. Pri. School	Shikolbaha	413	7
Primary School	Government	Barauthan Govt. Pri. School	Barauthan	376	6
Primary School	Government	H. to Khan Govt. Pri. School	Barauthan	265	5
Primary School	Government	Daulatpur highway Bank Govt. Pri. School	Barauthan	275	6
Primary School	Government	Daulatpur Govt. Pri. School	Barauthan	263	7
Primary School	Government	Daulatpur Govt. Pri. School	Barauthan	386	8
Primary School	Government	Daulatpur Darpara Govt. Pri. School	Barauthan	377	7
Primary School	Government	East Shah Mirpur Govt. Pri. School	Barauthan	265	6
Primary School	Government	Shahamirpur Govt. Pri. School	Barauthan	387	7
Primary School	Government	West Sahamirpur Govt. Pri. School	Kusumpura	279	6
Primary School	Government	Deer Khain Govt. Pri. School	Kusumpura	381	7
Primary School	Government	Burankhain Govt. Pri. School	Kusumpura	376	6
Primary School	Government	South deer Govt. Pri. School	Kusumpura	420	7
Primary School	Government	Manasa Asfaskia Govt. Pri. School	Kusumpura	445	6
Primary School	Government	West Manasa Govt. Pri. School	Kusumpura	305	7
Primary School	Government	West police station Govt. Pri. School	Kusumpura	287	6
Primary School	Government	Bininnihara Govt. Pri. School	Kusumpura	171	7
Primary School	Government	Musumpura Govt. Pri. School	Kusumpura	211	7
Primary School	Government	Ati Govt. Pri. School	Kusumpura	178	6
Primary School	Government	Charfarid Govt. Pri. School	Charlakha	325	5
Primary School	Government	North Charlakha Govt. Pri. School	Charlakha	389	6
Primary School	Government	College Niyamat Shah Govt. Pri. School	Charlakha	269	6
Primary	Government	Haji Ali Ahmed Govt. Pri.	Charlakha	441	6

School		School			
Primary School	Government	Laripara Govt. Pri. School	Habilashdip	171	5
Primary School	Government	Kavhani Govt. Pri. School	Habilashdip	211	7
Primary School	Government	Habilashdip Govt. Pri. School	Habilashdip	178	6
Primary School	Government	East Hilain Govt. Pri. School	Habilashdip	325	7
Primary School	Government	Amin Sharif Govt. Pri. School	Habilashdip	389	7
Primary School	Government	Belhari Govt. Pri. School	Habilashdip	269	6
Primary School	Government	Halimdar Govt. Pri. School	Habilashdip	441	7
Primary School	Government	Charkanai Govt. Pri. School	Habilashdip	345	6
Primary School	Government	Pachuria Shah newaz Chowdhury Govt. Pri. School	Habilashdip	328	6
Primary School	Government	Pachuriya Govt. Pri. School	Haidgoan	280	5
Primary School	Government	South Haidgoan Govt. Pri. School	Haidgoan	310	7
Primary School	Government	Chowdhurypara Govt. Pri. School	Haidgoan	268	6
Primary School	Government	Joint Govt. Pri. School	Haidgoan	257	5
Primary School	Government	Chowdhury Govt. Pri. School	Haidgoan	322	5
Primary School	Government	Mohiduddin Govt. Pri. School	Haidgoan	270	6
Primary School	Government	Hand;s Govt. Pri. School	Haidgoan	300	5
Primary School	Government	Kagipara Govt. Pri. School	Kachuai	275	7
Primary School	Government	Monihara Govt. Pri. School	Kachuai	268	6
Primary School	Government	Matibini Govt. Pri. School	Kachuai	257	5
Primary School	Government	Sitabindu Govt. Pri. School	Kachuai	322	5
Primary School	Government	Azimpur graveyard Govt. Pri. School	Kachuai	270	6
Primary School	Government	North Govt. Pri. School	Bhatikhain	300	5

Primary School	Government	Chakrachala Govt. Pri. School	Bhatikhain	275	6
Primary School	Government	Sreemangol Govt. Pri. School	Bhatikhain	268	5
Primary School	Government	Abdul Hakim Govt. Pri. School	Bhatikhain	257	6
Primary School	Government	East Govt. Pri. School	Bhatikhain	322	5
Madrasa	Non-govt.	Bari Jaglul Hassan Madarasa	Barouthan	387	7
Madrasa	Non-govt.	West Bari Khara Dahilk Madrasa	Barolia	276	6
Madrasa	Non-govt.	Hazrat Ali Shah Dahilk Madrasa	Chanhara	335	8
Madrasa	Non-govt.	Charlakha Goucha Dahilk Madrasa	Charlakha	315	7
Madrasa	Non-govt.	Dardaria Madrasah	Kolagoan	676	9
Madrasa	Non-govt.	Kilagoan Madrasah	Kolagoan	556	8
Madrasa	Non-govt.	Manasa senior Fazil Madrasah	Kusumpura	478	9
Madrasa	Non-govt.	west Bari Dahilk Madrasa	Barolia	566	8
Madrasa	Non-govt.	Haji Sultan Ahmed Monihira Dahilk Madrasa	Shikilbaha	456	7
Madrasa	Non-govt.	Mohammad Ali Shah Dahilk Madrasa	Shikilbaha	576	9
Madrasa	Non-govt.	Kalarpol Ohidia senior Madrasa	Shikilbaha	410	8
Madrasa	Non-govt.	Rafia Girls' Madrasa	Shobhandandi	502	7
Madrasa	Non-govt.	Kazi ebadullah Bin Siddiqi Dahilk Madrasa	Shobhandandi	676	9
Madrasa	Non-govt.	Hilchaia Dahilk Madrasa	Shobhandandi	565	7
Madrasa	Non-govt.	Abu Bakkar Siddique Madrasa	Shobhandandi	756	9
Madrasa	Non-govt.	Asata Kashemful Ullum Madrasah	Shobhandandi	486	10
Madrasa	Non-govt.	Rasidabad Madrasah	Shobhandandi	585	7
Madrasa	Non-govt.	Holy Quran Rashidabad Dahilk Madrasa	Shobhandandi	621	8
Madrasa	Non-govt.	South Samura Fazil Madrasah	Dhalghat	474	7

Madrasa	Non-govt.	Alia Khain Dahilk Madrasa	Dhalghat	554	8
Madrasa	Non-govt.	Khain Madrasah	Dhalghat	639	9
Madrasa	Non-govt.	Dhalghat Alia Madrasa	Dhalghat	567	8
Madrasa	Non-govt.	Asia Emdadul Ullul Dahilk Madrasa	Asia	448	9
Madrasa	Non-govt.	South Asia Dahilk Madrasa	Asia	665	9
Madrasa	Non-govt.	Asia Madrasa	Asia	612	7
Madrasa	Non-govt.	S. M. Naseem Begum Madrasah	Asia	576	9
Madrasa	Non-govt.	South Asia Gouchaia	Asia	570	7
Madrasa	Non-govt.	Model Baitun Nurani Dahilk Madrasa	Asia	585	8
Madrasa	Non-govt.	Aslam Barkandaz Noorani Madrashah	Kashiyaish	690	6
Madrasa	Non-govt.	Tafazul Darul Dahilk Madrasa	Kashiyaish	512	7
Madrasa	Non-govt.	Kashiyaish Dahilk Madrasa	Kashiyaish	798	8
Madrasa	Non-govt.	Kusumpura Dahilk Madrasa	Kusumpura	656	6
Madrasa	Non-govt.	Kelishohor Dahilk Madrasa	Keloshohor	710	8
Madrasa	Non-govt.	Kilagoan Dahilk Madrasa	Kolagoan	765	10
Madrasa	Non-govt.	Hazrat Khalifa Siddique Ahmed Madrasah	Chanraha	686	8
Madrasa	Non-govt.	Orphanages Alamdar Dahilk Madrasa	Chanhara	889	8
Madrasa	Non-govt.	Jangolkhain Madrasah	Jangolkhain	520	11
Madrasa	Non-govt.	Jiri Paroubek Dahilk Madrasa	Jiri	620	8
Madrasa	Non-govt.	Saidar Madrasah	Jiri	510	11
Madrasa	Non-govt.	Sabiria Alia Madrasa	Jiri	612	9
Madrasa	Non-govt.	Fatima Nurani Dahilk Madrasa	Juldha	697	10
Madrasa	Non-govt.	south bhursi Madrasa	South Bhursi	565	9
Madrasa	Non-govt.	Badar Aulia Madrasah	Kharna	548	9
Madrasa	Non-govt.	Shahjahan Aulia Dahilk Madrasa	Kharna	548	8
Madrasa	Non-govt.	Kharna Dahilk Madrasa	Kharna	556	10
Madrasa	Non-govt.	South Hulain Ayesha Siddiqui	Habilashdip	680	8

Madrasa	Non-govt.	Hazrat Yasin Abdullah Fazil Madrasah	Habilashdip	670	9
Madrasa	Non-govt.	Shah Akbaria Madrasah	Haidgoan	576	10
Madrasa	Non-govt.	Haidgoan Senior Madrasa	Haidgoan	630	11
Institute	Non-govt.	Nalinikanto Memorial Institute	Bhatikhain	585	10

(Uma) Religious Institutions/Religious gatherings (Eidgah) –

There are 593 mosques in 22 unions of Patiya Upazila. Number of EIDGAH are 593 , 140 number temples. It may be mentioned here that people offer their Eid prayer at mosques as the number of Eidgah are less. Union wise information are outlined below-

Sl. No.	Name of Union	Mosque/ Temples/ Eidgah	Locations
1	Kharna	Mosque	Total number of mosques at Kharna union are 16. Those mosque are in from 1 to 9 no wards.
	Kharna	Idgah ground	This Union eidgah field is 1.
	Kharna	Temple	This Union total no of Temple - 3. 2 temple are in ward no 4, 1 temple are in ward no 5 & 1 temple are in ward no 9
2	Kachuyai	Mosque	Total number of mosques at Kachuai union are 47. Those mosque are in from 1 to 9 no wards.
	Kachuyai	Idgah ground	This Union eidgah field is 1.
	Kachuyai	Temple	This Union total no of temple - 18. Those Temple are in 1 to 9 no wards.
3	Bhatikhain	Mosque	Total number of mosques at Bhatikhain union are 13. Those mosque are in from 1 to 9 no wards.
	Bhatikhain	Idgah ground	There is no Idgah grand in this Union.
	Bhatikhain	Temple	This Union total no of temple - 18. Those Temple are in 1 to 9 no wards.
4	Chanhara	Mosque	Total number of mosques at Bhatikhain union are 13. Those mosque are in from 1 to 9 no wards.
	Chanhara	Idgah ground	There is no Idgah grand in this Union.
	Chanhara	Temple	This Union total no of temple – 5 & no of wards 2, 7, 8 & 9.
5	Haidgoan	Mosque	Total number of mosques at Haidgoan union are 38. Those mosque are in from 1 to 9 no wards.
	Haidgoan	Idgah ground	There is no Idgah grand in this Union.
	Haidgoan	Temple	This Union total no of temple - 9. Those Temple are in 1 to 9 no wards.
6	Kelishohor	Mosque	Total number of mosques at Kelishohor union are 20. Those mosque are in from 1 to 9 no wards.
	Kelishohor	Idgah ground	This Union eidgah field is 1. No of ward 7.
	Kelishohor	Temple	This Union total no of temple - 8. Those Temple are in 1 to

Sl. No.	Name of Union	Mosque/ Temples/ Eidgah	Locations
			9 no wards.
7	Habilashdip	Mosque	Total number of mosques at Habilashdip union are 45. Those mosque are in from 1 to 9 no wards.
	Habilashdip	Idgah ground	This Union eidgah field is 1. No od ward 4.
	Habilashdip	Temple	This Union total no of temple - 13. Those Temple are in 1 to 9 no wards.
8	Kolagoan	Mosque	Total number of mosques at Kolagoan union are 38. Those mosque are in from 1 to 9 no wards.
	Kolagoan	Idgah ground	There is no Idgah grand in this Union.
	Kolagoan	Temple	This Union total no of temple - 9. Those Temple are in 1 to 9 no wards.
9	Jangolkhain	Mosque	Total number of mosques at Jangolkhain union are 37. Those mosque are in from 1 to 9 no wards.
	Jangolkhain	Idgah ground	This Union eidgah field is 2. No of ward 2 & 7.
	Jangolkhain	Temple	This Union total no of Temple - 5. Those Temple are in 6 & 9 no wards.
10	Charlakha	Mosque	Total number of mosques at Charlakha union are 31. Those mosque are in from 1 to 9 no wards.
	Charlakha	Idgah ground	There is no Idgah grand in this Union.
	Charlakha	Temple	This Union total no of temple - 6. Those Temple are in 2, 4 & 6 no wards.
11	Charpathorg hat	Mosque	Total number of mosques at Charpathorghata union are 20. Those mosque are in from 1 to 9 no wards.
	Charpathorg hat	Idgah ground	There is no Idgah grand in this Union.
	Charpathorg hat	Temple	There is no Temple in this Union.
12	Shikolbaha	Mosque	Total number of mosques at Shikilbaha union are 38. Those mosque are in from 1 to 9 no wards.
	Shikolbaha	Idgah ground	There is no Idgah grand in this Union.
	Shikolbaha	Temple	This Union total no of Temple - 7. Those Temple are in 2, 4 & 6 no wards.
13	Barolia	Mosque	Total number of mosques at Boralia union are 21. Those mosque are in from 1 to 9 no wards.
	Barolia	Idgah ground	There is no Idgah grand in this Union.
	Barolia	Temple	This Union total no of Temple -7. Those Temple are in 3, 4 & 9 no wards.
14	Barouthan	Mosque	Total number of mosques at Barouthan union are 33. Those mosque are in from 1 to 9 no wards.
	Barouthan	Idgah ground	This Union eidgah field is 1. No of ward 5.
	Barouthan	Temple	This Union total no of Temple - 4. Those Temple are in 4, 6 & 8 no wards.
15	Juldha	Mosque	Total number of mosques at Juldha union are 20. Those

Sl. No.	Name of Union	Mosque/ Temples/ Eidgah	Locations
			mosque are in from 1 to 9 no wards.
	Juldha	Idgah ground	This Union eidgah field is 2. No of wards 3 & 9.
	Juldha	Temple	This Union total no of Temple - 5. Those Temple are in 4, 6 & 8 no wards.
16	Kusumpura	Mosque	Total number of mosques at Kusumpura union are 31. Those mosque are in from 1 to 9 no wards.
	Kusumpura	Idgah ground	There is no Idgah grand in this Union.
	Kusumpura	Temple	This Union total no of Temple -1. Those Temple is in 9 no ward.
17	Jiri	Mosque	Total number of mosques at Jiri union are 19. Those mosque are in from 1 to 9 no wards.
		Idgah ground	There is no Idgah grand in this Union.
		Temple	This Union total no of Temple 2. Those Temple are in 5 & 8 no ward.
18	South Bhursi	Mosque	Total number of mosques at South Bhursi union are 20. Those mosque are in from 1 to 9 no wards.
		Idgah ground	There is no Idgah grand in this Union.
		Temple	This Union total no of Temple 4. Those Temple are in 1, 3, 5 & 9 no wards.
19	Dhalghat	Mosque	Total number of mosques at Dhalghat union are 31. Those mosque are in from 1 to 9 no wards.
		Idgah ground	There is no Idgah grand in this Union.
		Temple	This Union total no of Temple 6. Those Temple are in 1, 3, 5, 8 & 9 no wards.
20	Shobhandandi	Mosque	Total number of mosques at Shobhandandi union are 31. Those mosque are in from 1 to 9 no wards.
		Idgah ground	There is no Idgah grand in this Union.
		Temple	This Union total no of Temple 1. Those Temple is in 9 no ward.
21	Asia	Mosque	Total number of mosques at Asia union are 20. Those mosque are in from 1 to 9 no wards.
		Idgah ground	There is no Idgah grand in this Union.
		Temple	This Union total no of Temple 2. Those Temple are in 8 & 9 no wards.
22	Kasiyaish	Mosque	Total number of mosques at Kashiyaish union are 15. Those mosque are in from 1 to 9 no wards.
	Kasiyaish	Idgah ground	There is no Idgah grand in this Union.
	Kasiyaish	Temple	This Union total no of Temple1. Those Temple are in 8 no ward.

(Ca) Health Service: There are 33 health and family welfare centers at 22 unions of Patiya Upazila. Among them 1 is health complex, Union level health and family welfare centers are 11, Community clinics 38, and union satellite clinics are 15. There are total 42 doctors serving in these centers. It may be mentioned here that there are other staff other than doctors in those health centers. But number of doctors and staff are not sufficient in those health centers particularly Satellite and community health clinics. So the quality of health services is not up to the mark. To take special care for aged and pregnant women during disaster is very crucial but this hamper due to lack of sufficient doctors and nurses. So sufficient doctors, nurses and medicines should be make available.

Health Centers	Locations	Number of Doctors in each center	Number of Nurses in Each center	Quality of Services
Health and Family Welfare Center	Kharna Union 1	1	There is no	It is not very good
Health and Family Welfare Center	Kachuai union 1	1	1	Good
Health and Family Welfare Center	Bhatikhain	1	1	Good
Health and Family Welfare Center	Chanhara	1	1	Good
Health and Family Welfare Center	Haidgoan	1	There is no	Good
Health and Family Welfare Center	Kelishohor	1	There is no	Good
Health and Family Welfare Center	Habilashdip	1	There is no	Good
Health and Family Welfare Center	Kolagoan	1	There is no	Good
Health and Family Welfare Center	Jangolkhain	1	There is no	Good
Health and Family Welfare Center	Charlakha	1	There is no	Good
Health and Family Welfare Center	Charpathorghata	1	There is no	Good
Health and Family Welfare Center	Shikolbaha	1	There is no	Good
Health and Family Welfare Center	Barolia	1	There is no	Good
Health and Family Welfare Center	Barouthan	1	There is no	Good
Health and Family Welfare Center	Juldha	1	There is no	Good
Health and Family Welfare Center	Kusumpura	1	There is no	Good
Health and Family Welfare Center	Jiri	1	There is no	Good
Health and Family Welfare Center	South Bhursi	1	There is no	Good
Health and Family Welfare Center	Dhalghat	1	There is no	Good
Health and Family Welfare Center	Shobhandandi	1	There is no	Good
Health and Family Welfare Center	Asia	1	There is no	Good
Health and Family Welfare Center	Kasiyaish	1	There is no	Good
community clinics	All Union	10	There is no	More or less

(Cha) Bank & Post Office:

Total number of Banks in Patiya upazila are 22. Banks have been providing loans, SME loans and other banking transaction service. Union wise detail information of Banks is provided below-

Sl no.	Union	Name of Bank
1	Kharna	-
2	Kachauai	-
3	Bahtikhain	-
4	Chanhara	1) Grameen Bank Limited
5	Haidgoan	-
6	Kelishohor	-
7	Habilashwip	Bangladesh Krishi Bank
8	Kolagoan	Sonali Bank Limited
9	Jangolkhain	-
10	Charlakha	-
11	Charpathorghata	Agrani Bank Limited
12	Shikilbaha	Bangladesh Krishi Bank
13	Barolia	-
14	Barauthan	Bangladesh Krishi Bank
15	Juldha	-
16	Kusumpura	1) Union Bank and 2) Pubali bank
17	Jiri	-
18	South Bhurshi	-
19	Dhalghat	1) Sonali Bank 2) Grameen Bank
20	Shobhandnadi	Grameen Bank
21	Asia	1) Grameen Bank Ltd. 2) Bangladesh Krishi Bank
22	Kasiyaish	Grameen Bank Ltd.

Union wise Post office:

There are 31 post offices in 22 unions of Patiya Upazila. Many kinds of services are provided including money transactions. Union wise detail of post offices is exhibited below-

SI No	Union	Name of Post Office
1	Kharna	Kharna Post Office
2	Kachauai	Alirhat post office & Chakrashala post office
3	Bhatikhain	Mobin Sadagar Bari post office
4	Chanhara	Alir hat post office, Chanhara post office
5	Haidgoan	Haidgoan Post Office
6	Kelishohor	Lelishohor Post Office
7	Habilashwip	Charkanai post office & Hulain post office
8	Kolagoan	Kalarpol Post Office
9	Jangolkhain	Wazirpur post office, Naikhain post office & Yakubdandi post office
10	Charlakha	Boad Bazar Post Office
11	Charpathorghata	Charpathorghata post office
12	Shikilbaha	Master hat Post Office
13	Barolia	Maulavir hat Post Office
14	Barauthan	Fazilhat post office & Fakirnihat post office
15	Juldha	Juldha Post Office
16	Kusumpura	Manasa post office
17	Jiri	Maliyara Post Office
18	South Bhurshi	South Bhursi Post Office
19	Dhalghat	Dhalghat post office
20	Shobhandnadi	Shobhandandi Post Office
21	Asia	Bangla Bazar post office & Tasngerpul post office
22	Kasiyaish	Kasiyaish post office, Pingola Post office & Bhandargoan post office

(Ja) Clubs & Cultural centers:

There are 81 clubs in 22 unions of Patiya Upazila. Activities of some clubs have close. All these clubs support in many social development activities. Union wise information of those clubs are provided below-

Sl No	Name of Union	Name of Club & Cultural centers	Support to development & Social dev. Activities
1	Kharna	Russell Memorial Sangshad	They support in organizing various social cultural events and help in the different welfare activities
2	Kachuai	San flowers star Club	
		Youth Vision Club	
		Udayan Shangha	
3	Bhatikhain	Bhatikhain Jana Kallan Sangshad	
		Abdul Nabi Al-Hajj's Memorial foundation	
		Bhatikhain Nabo Jagran Club	
		Ujjibon Sangshad	
		Karal Progati Shangshad	
4	Chanhara	Bakkhali Arjomitra Shangho	
		Satarupa Shangho	
		Boiling United Nations	
		Russell Memorial United Nations	
		Young United Nations	
5	Haidgoan	Satarupa Shangho	
		Muktalata Club	
		Abu Syed memorial library	
		Akbaria Sriti Club	
6	Kelishohor	Russell Memorial United Nations	
		Udayan young United Nations	
7	Habilashdip	Green Voice Club	
		People welfare United Nations	
		Habilashdip Youth Development United Nations	
		Young star Club	
		Rainbow Club	
8	Kolagoan	Anirban Club	
		Sunrise Children's club	
		Green United Nations	
		United Nations protest	
		Tiger club	

9	Jangolkhain	Ideal organization Club
		SagirMemory
		Nabaran United Nations
10	Charlakha	Zia Smriti Sangho
		Sheikh Russell Memorial Parliament
		Calantika United Nations
11	Charpathorghata	United Nations
		Jagarani United Nations
		Mukta Bihango
		Pratay Shangho Nabin Shangho
		The new United Nations Club
		United Nations
		Duranta Club
		Sheikh Russell Memorial Parliament
		Young generation
12	Shikilbaha	Bangabandhu Memorial Parliament
		Darbar Hall Kagtiya Aliya gaichul Azam
		Amar Zia Smriti Club
		Hazrat Siddique Akbar Sanshad
13	Barolia	Rally United Nations Club
		Hilful Shangho
		Fatunta Club
		Abahani Club
		Bangabandhu Club
14	Barouthan	Sheikh Russell Memorial Parliament
		Daulatpur Club
		Daulatpur Gold star C.
		Youth welfare Parliamentary vision Club
15	Juldha	Naba Tarango Club
		Nawjan Club
		Akata Club
		Tiger club
		Russell Memorial club
16	Kusumpura	Adarsha Club
		Manasa Surja young Cub
		B&J Club
17	Jiri	Akata Shangho

		Russell Memorial United Nations	
18	South Bhursi	Youth Development United Nations	
		Udayan United Nations	
19	Dhalai	Trust United Nations	
		Pratay Club	
20	Shobhandandi	Durbar Shangho	
		Jagorani Shangho	
21	Asia	Asia Jagorani Shangho	
		Nabin Shangho	
22	Kashiyash	Young United Nations	
		Green United Nations	

(GHA) NGO/ Voluntary organizations:

Sl. No.	Name of NGO	Activities	No of beneficiaries	Duration of project
1	Proshika	Education, Health, Risk Reduction & Micro-Credit	930 people	long-term
2	Hope	Sanitation , Awareness, Health and Micro-Credit	1030 people	long-term
3	BRACK	Development of the women, Education, Health, Risk Reduction & Micro-Credit	2750 people	long term
4	Blast	Health, Awareness & Micro-Credit	1120 people	long term
5	Karitas	A small loan, to raise awareness	890 people	long term
6	T M S S	Development of the women, Education, Awareness, Health and Micro-Credit	1530 people	long term
7	Bangladesh Bureau	Raise awareness & Micro-Credit	640 people	long term
8	GHARONI	Education and Disaster Management Program	2112 people	3 year
9	NASS	Raise awareness, Risk Reduction and disaster management.	650 people	For long-term
10	Plan Bangladesh	Education, Risk Reduction and Awareness	some 7,500 persons are under sentence	5 year plan
11	Grameen Bank	Micro-Credit and various awareness programs	1160 people	long term
12	AIMa	Health, Awareness and Micro-	790 people	long term

Sl. No.	Name of NGO	Activities	No of beneficiaries	Duration of project
		Credit		
13	Bishab	Micro-Credit & Raise Awareness	675 people	long term
14	Ghasful	Education, Awareness, and Micro-Credit	780 people	long term
15	Barnali	Health, Awareness and Micro-Credit	695 people	long term
16	Uddipon	Health, Awareness and Micro-Credit	985 people	long-term
17	Pratashi	Disaster Management, Disable and Micro-Credit	1020 people	long-term
18	Mamata	Health, Awareness and Micro-Credit	760 people	long term
19	Nojoyan	Micro-Credi & Rise Awareness	376 people	long term
20	Niskriti	Sanitation , Awareness, Health and Micro-Credit	640 people	long-term
21	Nari Jagaran Sangstha	Development of the women, Education, and Awareness	840 people	long-term
22	Surjer Hasi	Micro-Credit & Health related activities	500 people	long-term

(Umo) Playground:

There are 49 playgrounds for leisure and game at Patiya Upazila. Union wise detail is provided below-

Sl. no	Name of unions	Locals of playgrounds	Use in disasters
1	Kharna	1) Shahid Zia Memorial field	Human & livestock can use during Disasters
2	Kachuai	Chakarasala High School	
3	Bhatikhain	Bhatikhain High School	
4	Chanhara	Saroda Charan High School	
5	Haidgoan	Haidgoan High School, East Hiadgoan Pri. School	
6	Kelishohor	Kelishohor High School, Ratanpur Hogh School	
7	Habilashpur	Salehpur Degree College, Habilashpur High School	
8	Kolagoan	Lakhara High School, Kolagoan Pri. School	
9	Jangolkhain	Naikhanin Government Primary School, Jangolkhain High School	

10	Charlakha	Charlakha High School
11	Charpathorghat	S. Alam play ground
12	Shikolbaha	A.K. Chowdhury High, Kalarpol High School
13	Barolia	Belkhain High School
14	Barouthan	Lalmatia Play ground, Talukdar Play ground
15	Juldha	Wwestern Juldha Government Primary, Juldha Govt. Pri. School
16	Kusumpura	Kusumpura Govt. Pri. School
17	Jiri	S.A. Nur Uddin High School, Sahira High School
18	South Bhursi	South Bhursi High School
19	Dhalghat	Dhalghat High School, Alampur High School
20	Shobhandandi	Shobhansandi College
21	Asia	Asia High School, Bathuya High School
22	Kasiyaish	Kasiyaish High School, Budphura High School

(Ta) Graveyard/ cremation ground-

There are 767 small and large graveyards at 22 unions of Patiya Upazila. In addition, there are few homestead graveyards which are located beside homes, mosques and mazars. Detail of union wise graveyards are exhibited below-

Kharna union: Total number of homestead graveyards are 33. Those graveyard are in from 1 to 9 no wards.

Kachuai union: Total number of homestead graveyards are 50. Those graveyard are in from 1 to 9 no wards.

Bhatikhain union: Total number of homestead graveyards are 19. Those graveyard are in from 1 to 9 no wards.

Chanhara union: Total number of homestead graveyards are 34. Those graveyard are in from 1 to 9 no wards.

Haidgoan union: Total number of homestead graveyards are 36. Those graveyard are in from 1 to 9 no wards.

Kelishohor union: Total number of homestead graveyards are 38. Those graveyard are in from 1 to 9 no wards.

Habilashdip union: Total number of homestead graveyards are 33. Those graveyard are in from 1 to 9 no wards.

Kolagoan union: Total number of homestead graveyards are 32. Those graveyard are in from 1 to 9 no wards.

Jangolkhain union: Total number of homestead graveyards are 27. Those graveyard are in from 1 to 9 no wards.

Charlakha union: Total number of homestead graveyards are 29. Those graveyard are in from 1 to 9 no wards.

Charpathorghat union: Total number of homestead graveyards are 24. Those graveyard are in from 1 to 9 no wards.

Shikolbaha union: Total number of homestead graveyards are 24. Those graveyard are in from 1 to 9 no wards.

Barolia union: Total number of homestead graveyards are 18. Those graveyard are in from 1 to 9 no wards.

Barouthan union: Total number of homestead graveyards are 31. Those graveyard are in from 1 to 9 no wards.

Juldha union: Total number of homestead graveyards are 27. Those graveyard are in from 1 to 9 no wards.

Kusumpura union: Total number of homestead graveyards are 32. Those graveyard are in from 1 to 9 no wards.

Jiri union: Total number of homestead graveyards are 29. Those graveyard are in from 1 to 9 no wards.

South Bhursi union: Total number of homestead graveyards are 33. Those graveyard are in from 1 to 9 no wards.

Dhalghat union: Total number of homestead graveyards are 37. Those graveyard are in from 1 to 9 no wards.

Shobhandandi union: Total number of homestead graveyards are 30. Those graveyard are in from 1 to 9 no wards.

Asia union: Total number of homestead graveyards are 22. Those graveyard are in from 1 to 9 no wards.

Kashiyaish union: Total number of homestead graveyards are 27. Those graveyard are in from 1 to 9 no wards.

Ta) Crematories:

There are 67 crematories in 22 unions of Patiya Upazila. In addition, there are small family crematories and crematories close to temples. Union wise detail of crematories is provided in below –

- Kharna union: Total number of homestead crematories is 4. ward no 2, 5 & 9.
- Kachuyai union: Total number of homestead crematories is 6. ward no 1, 2, 3, 5 & 8.
- Bhatikhain union: Total number of homestead crematories is 3. ward no 5, 7 & 9.
- Chanhara union: Total number of homestead crematories is 5. ward no 5, 7, 8 & 9.
- Haidgoan union: Total number of homestead crematories is 5. ward no 3, 5 & 8.
- Kelishohor union: Total number of homestead crematories is 3. ward no 3, 6 & 8.
- Kilagoan union: Total number of homestead crematories is 5. ward no 1, 2, 3, 5 & 8.
- Jangolkhain union: Total number of homestead crematories is 6. ward no 2, 4, 5, 8 & 9.
- Charlakha union: Total number of homestead crematories is 1. ward no 2.
- Shikolbaha union: Total number of homestead crematories is 16. ward no 7.
- Barolia union: Total number of homestead crematories is 2. ward no 4 & 9.
- Barouthan union: Total number of homestead crematories is 3. ward no 1, 3 & 8.
- Juldha union: Total number of homestead crematories is 3. ward no 2, 7 & 9.
- Kusumpura union: Total number of homestead crematories is 2. ward no 4, 6 & 8.
- Jiri union: Total number of homestead crematories is 2. ward no 2 & 6.
- South Bhursi union: Total number of homestead crematories is 3. ward no 2, 3, 5 & 8.
- Dhalghat union: Total number of homestead crematories is 2. ward no 1, 2, 5 & 8.
- Shobhandandi union: Total number of homestead crematories is 3. ward no 1 & 5.
- Asia union: Total number of homestead crematories is 2. ward no 1, 3 & 6.
- Kashoiyaish union: Total number of homestead crematories is 3. ward no 3, 5 & 8.

(Tha) Communication & means of transport:

There are smooth land and railway communication from Patiya Upazila to district and vice versa. The most notable mode of transport by road is bus, truck, lorry, cargo, rickshaw van, Train etc. Buses ply in 14 unions out of total 22 unions. In addition, CNG, Van, Auto rickshaw and Vatvati ply in these areas.

(Da) Forest & Afforestation:

There are 6300 acres forests at Patiya Upazila in Chittagong District. Expansion of forest areas are seen in this Upazila. But now few forest sites are on the verge of extinction due to human induced causes and natural adversities. Apart from hilly forest, social forestation has been done on both sides of roads and embankments. Trees that are found in those areas are Akash, Gadan, Moni, Sagun, Chambal, raintree, Korai, epil, epil, Guzan, gamari, neem, jam, mangoes, jackfruits, amda, Lime, guava, Pineapples, Bamboos, Rubber etc. Besides few trees are found in homesteads level.

1.4.3 Weather & Climate:

Ka) Raining trend- Analyzing the average rainfall at Patiya upazila, it is found that average rainfall in this upazila is almost same. During last 1990 to 2013 the average rainfall was 3,6,7 & 8 respectively. But it needed more research to ascertain that this trend is the outcome of climatic change. Due to the change of rainfall pattern, the period of rainfall is getting delayed and as a result cropping pattern is also changing. As a result, production cost is increasing and amount of production is decreasing day by day. Diseases and attack of insects are also increasing. Erratic and untimely rain is affecting crop and cultivation and livelihoods.

Kha) Temperature: Heat wave has been found due to indiscriminate cutting of trees and hilly locations. Now the Patiya upazila experiences temperature at highest 39.5 degree Celsius and lowest 12.5 degree Celsius. During raining monsoon the average temperature remains 22.5 degree Celsius. In most cases, the temperature remains normal but it is known from local people that the temperature is rising day by day. Especially the temperature has raised during last 10-15 years that normal life of people becoming harder. The main reason of heat wave is rise of humidity in air. Cultivation has been hampering due to increase of heat. The affect will be more significant if the present trend continues. According to Public Health Engineering (PHE) survey is conducted two times in each year and the finding is that water level comes down during the month of April and May that results decrease of safe drinking water. This will be a great barrier for future development.

Ga) Underground layer- According to information of Public Health Engineering (DPHE) a survey is conducted in each year to assess the underground layer of water. It is found that it was 275-280 feet in 2003 for deep tube wells & in 2012, it was 580-590 feet for deep tube wells. Underground water level gets down more in the month of May. According to community people – water has becoming scarce day by day due to continuous downing of water level and intrusion of saline water is destroying the water balance of upper level. Locals opinions is that safe water level are getting down and it is great barrier for sustainable development.

1.4.4 Others:

(ka) Land & use of land: Total areas of 22 unions of Patiya Upazila are 56134 acres. Area of single crop are 11073, double crop 28989 acres, triple crops are 13072 acres. Union wise details are appended below-

Kharna Union- Total areas of crops land are 1730 acres. Among them single crop areas are 519 acres, double crop areas are 667 acres & triple crops are 544 areas.

Kachuai Union- Total areas of crops land are 3200 acres. Among them single crop areas are 500 acres, double crop areas are 2000 acres & triple crops are 700 areas.

Bhatikhain Union- Total areas of crops land are 741 acres. Among them single crop areas are 38 acres, double crop areas are 580 acres & triple crops are 123 areas.

Chanhara Union- Total areas of crops land are 1976 acres. Among them single crop areas are 285 acres, double crop areas are 1593 acres & triple crops are 98 areas.

Haidgoan Union- Total areas of crops land are 5451 acres. Among them single crop areas are 679 acres, double crop areas are 1997 acres & triple crops are 2697 areas.

Kelishohor Union- Total areas of crops land are 1816 acres. Among them single crop areas are 334 acres, double crop areas are 1235 acres & triple crops are 247 areas.

Habilashdip Union- Total areas of crops land are 1239 acres. Among them single crop areas are 271 acres, double crop areas are 580 acres & triple crops are 388 areas.

Jangolkhain Union- Total areas of crops land are 1472 acres. Among them single crop areas are 148 acres, double crop areas are 1210 acres & triple crops are 114 areas.

Charlakha Union- Total areas of crops land are 3705 acres. Among them single crop areas are 1680 acres, double crop areas are 1531 acres & triple crops are 494 areas.

Charpathorghata Union- Total areas of crops land are 2000 acres. Among them single crop areas are 62 acres, double crop areas are 223 acres & triple crops are 395 areas.

Shikilbaha Union- Total areas of crops land are 7171 acres. Among them single crop areas are 1270 acres, double crop areas are 3031 acres & triple crops are 2870 areas.

Barolia Union- Total areas of crops land are 2938 acres. Among them single crop areas are 580 acres, double crop areas are 2050 acres & triple crops are 308 areas.

Barouthan Union- Total areas of crops land are 3071 acres. Among them single crop areas are 1100 acres, double crop areas are 2200 acres & triple crops are 1751 areas.

Juldha Union- Total areas of crops land are 1720 acres. Among them single crop areas are 210 acres, double crop areas are 800 acres & triple crops are 710 areas.

Kusumpura Union- Total areas of crops land are 2470 acres. Among them single crop areas are 380 acres, double crop areas are 1890 acres & triple crops are 200 areas.

Jiri Union- Total areas of crops land are 2310 acres. Among them single crop areas are 74 acres, double crop areas are 1346 acres & triple crops are 890 areas.

South Bhursi Union- Total areas of crops land are 840 acres. Among them single crop areas are 136 acres, double crop areas are 642 acres & triple crops are 62 areas.

Dhalghat Union- Total areas of crops land are 2520 acres. Among them single crop areas are 900 acres, double crop areas are 1080 acres & triple crops are 540 areas.

Shobhandandi Union- Total areas of crops land are 3200 acres. Among them single crop areas are 1100 acres, double crop areas are 1250 acres & triple crops are 850 areas.

Asia Union- Total areas of crops land are 2030 acres. Among them single crop areas are 630 acres, double crop areas are 970 acres & triple crops are 430 areas.

Kasiyaish Union- Total areas of crops land are 2842 acres. Among them single crop areas are 61 acres, double crop areas are 1457 acres & triple crops are 24 areas.

Kha) Agriculture & Food: The principal economic crops are rice and fish. In addition, potatoes, pulses, sugarcanes, maize's, water melons, guava, pineapples, Bangi, papaya, jam, jackfruits are considered as economic crops in this areas. It may be mentioned here that huge vegetables are produced in hilly terrain and plain land. Cauliflower, Cabbage, Kakrol, Barbati, Sweet gourd, bringle, Panni kumra, ladies finger, Mullah, Chili, carrot, tomatoes, Cucumber, Puishak, Lalshak and kachushak etc are abundantly produced in this Upazila. Principal foods of this Upazila are rice, fish, pulse; bread and main food habit are 1 time in the early, 1 time in the noon, and 1 time in the night. Union wise crop production are appended below-

Kharna Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 3500 M. Ton.

Kachuai Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2250 M. Ton.

Bhatikhain Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2400 M. Ton.

Chanhara Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2370 M. Ton.

Haidgoan Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2190 M. Ton.

Keloshohor Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 3270 M. Ton.

Habilashdip Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2850 M. Ton.

Kolagoan Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2490 M. Ton.

Jangolkahin Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2590 M. Ton.

Charlakha Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2350 M. Ton.

Shikolbaha Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2150 M. Ton.

Barolia Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 3600 M. Ton.

Barouthan Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2800 M. Ton.

Juldha Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2750 M. Ton.

Kusumpura Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2370 M. Ton.

Jiri Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2150 M. Ton.

South Bhursi Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 3100 M. Ton.

Dhalghat Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 1790 M. Ton.

Shobhandandi Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2150 M. Ton.

Asia Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2360 M. Ton.

Kasiyaish Union: Total annual production of hilly vegetables and fruits including rice, fish, potatoes, guava, pineapples, papaya, and mangoes are 2580 M. Ton.

Kha) Information of damages-

Union wise description of disaster induced damage are provided below-

Kharna Union: Total crop lands are 1730 acres and among them about 1020 acres land are damaged by different disasters including flood, execive rain, Tornedos, River Erosion, Land Slide etc.

Kahuai Union: Total crop lands are 3200 acres and among them about 2150 acres land are damaged by different disasters including flood, execive rain, Tornedos, River Erosion, Land Slide etc.

Bhatikhain Union: Total crop lands are 3329 acres and among them about 2150 acres land are damaged by different disasters including flood, execive rain, Tornedos, River Erosion, Land Slide etc.

Chanhara Union: Total crop lands are 1976 acres and among them about 1450 acres land are damaged by different disasters including flood, execive rain, Tornedos, River Erosion, Land Slide etc.

Haidgoan Union: Total crop lands are 5451 acres and among them about 3180 acres land are damaged by different disasters including flood, execive rain, Tornedos, River Erosion, Land Slide etc.

Kelishahor Union: Total crop lands are 1816 acres and among them about 1395 acres land are damaged by different disasters including flood, execive rain, Tornedos, River Erosion, Land Slide etc.

Habilashdip Union: Total crop lands are 1239 acres and among them about 940 acres land are damaged by different disasters including flood, execive rain, Tornedos, River Erosion, Land Slide etc.

Jangolhain Union: Total crop lands are 1472 acres and among them about 795 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

Kolagoan Union: Total crop lands are 1692 acres and among them about 1485 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

Charlakha Union: Total crop lands are 3705 acres and among them about 1850 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

Shikolbaha Union: Total crop lands are 7171 acres and among them about 4350 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

Barolia Union: Total crop lands are 2938 acres and among them about 1475 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

Barouthan Union: Total crop lands are 3071 acres and among them about 1570 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

Juldha Union: Total crop lands are 1720 acres and among them about 1100 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

Kusumpura Union: Total crop lands are 2470 acres and among them about 1250 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

Jiri Union: Total crop lands are 2310 acres and among them about 1400 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

South Bhursi Union: Total crop lands are 840 acres and among them about 525 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

Dhalghat Union: Total crop lands are 2520 acres and among them about 1240 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

Shobhandandi Union: Total crop lands are 3200 acres and among them about 1980 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

Asia Union: Total crop lands are 2030 acres and among them about 1100 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

Kashiyaish Union: Total crop lands are 2842 acres and among them about 1790 acres land are damaged by different disasters including flood, excessive rain, Tornados, River Erosion, Land Slide etc.

(Ga) Rivers:

Gha) Ponds:

Total number of big size ponds at 22 unions of Patiya upazial is 3833. Apart from this, there are small ponds owned by families. Generally fish are cultivated in these ponds, people take bath, and people wash cloths and bath animals. In some cases, vegetables cultivation is done using ponds water. Union wise data of ponds are appended below-

- Total ponds at Kharna union are 225. Those ponds are in from 1 to 9 no wards.
- Total ponds at Kachuai union are 200. Those ponds are in from 1 to 9 no wards.
- Total ponds at Bhatikhain union are 196. Those ponds are in from 1 to 9 no wards.
- Total ponds at Chanhara union are 267. Those ponds are in from 1 to 9 no wards.
- Total ponds at Haidgoan union are 170. Those ponds are in from 1 to 9 no wards.
- Total ponds at Kelidhohor union are 150. Those ponds are in from 1 to 9 no wards.
- Total ponds at Habilashdip union are 255. Those ponds are in from 1 to 9 no wards.
- Total ponds at Kolagoan union are 260. Those ponds are in from 1 to 9 no wards.
- Total ponds at Jangolkhain union are 205. Those ponds are in from 1 to 9 no wards.
- Total ponds at Charpatharghata union are 122. Those ponds are in from 1 to 9 no wards.
- Total ponds at Charlakha union are 320. Those ponds are in from 1 to 9 no wards.
- Total ponds at Shikolbaha union are 210. Those ponds are in from 1 to 9 no wards.
- Total ponds at Barolia union are 182. Those ponds are in from 1 to 9 no wards.
- Total ponds at Barouthan union are 120. Those ponds are in from 1 to 9 no wards.
- Total ponds at Juldha union are 165. Those ponds are in from 1 to 9 no wards.
- Total ponds at Kusumpura union are 210. Those ponds are in from 1 to 9 no wards.
- Total ponds at Jiri union are 120. Those ponds are in from 1 to 9 no wards.
- Total ponds at South Bursi union are 150. Those ponds are in from 1 to 9 no wards.
- Total ponds at Dhalghat union are 125. Those ponds are in from 1 to 9 no wards.
- Total ponds at Shobhandandi union are 100. Those ponds are in from 1 to 9 no wards.

- Total ponds at Asia union are 96. Those ponds are in from 1 to 9 no wards.
- Total ponds at Kashiyaish union are 120. Those ponds are in from 1 to 9 no wards.

Uma) Khal/Cannels: There are 60 Khal in the 22 unions of Patiya Upazila. Union wise information is provided below-

- Kharna Union: There are 1 Khal. 4 ,5, 6 & 7 no ward.
- Kachuai Union: There are 2 Khal. One Sreemai Khal, Two Kahrna Khal ward no. 1, 3, 6, 7 & 8
- Bhatikhain Union: There are 5 Khal. ward no 1, 2, 3, 4, 5, 8 &9.
- Chanhara Union: There are 10 Khal. Those Canel are in from 1 to 9 no wards.
- Haidgoan Union: There are 1 & ward no 3 & 4.
- Kelishohor Union: There are 2 Khal. ward no 2, 3, 4, 5 & 8.
- Habilashdip Union: There are 5 Khal. ward no 5, 6, 7, 8 & 9.
- Kolagoan Union: There are 2 Khal. ward no 2, 3, 4, 5 & 6.
- Jangolkhain Union: There are 3 Khal. ward no 2, 3, 6, 7 & 8.
- Charlakha Union: There are 32 Khal. ward no 2, 3, 4, 5 & 8.
- Charpathorghata Union: There are 4 Khal. ward no 1, 2, 3, 4, 6 & 9.
- Shikolbaha Union: There are 3 Khal. ward no 1, 2, 3, 4, 5 & 8.
- Barolia Union: There are 4 Khal. ward no 1, 3, 4 & 5.
- Barouthan Union: There are 4 Khal. ward no 2, 3 & 4.
- Juldha Union: There are 4 Khal. ward no 2, 3, 4, 5 & 8.
- Kusumpura Union: There are 1 Khal. ward no 5, 6, 8 & 9.
- South Bhursi Union: There are 2 Khal. ward no 1, 2 & 3.
- Asia Union: There are 3 Khal. ward no 1, 7, 8 & 9
- Kasiyaish Union: There are 6 Khal. ward no 1, 2, 3, 4, 5, 6, 8 & 9.

Uma) Chara: There is no Chara in this Upazila.

Ca) Beel: There is no Beel in this Upazila.

Cha) Haore: There is no Haore in this Upazila.

2nd Chapter: Disasters, Hazard and Vulnerability

2.1 History of Disaster:

Patiya upazila is one of the most vulnerable upazila among all upazilas of Chittagong district. Every year this upazila experiences one disaster or other. Each year huge resources are damaged and normal human lives are shattered due to different disasters like flood, tornado, hilly flood, etc. Strong cyclone and severe flood hit this upazila in 1991 and 2007. Almost all unions were affected severely by this disaster but among them 12 unions were badly damaged. The speed of that cyclone was 230-246 KM per hour. Many people died by this disaster and extensive damage was caused to Agriculture, Fisheries, Livestock, trees and Infrastructures.

Fishermen of about 2040 ponds were affected, damage of 21 primary schools including other educational institutions was occurred. Crop of about 22400 acres was totally damaged and 82 KM Kacha roads were badly damaged. In addition 68 culverts, about 23 bridges, Kacha houses of about 35700 families were inundated, about 2380 tubewells were affected, goods of 2390 small and large shops were swept away and 15 temples were also badly damaged.

Many government, non-government and foreign development organizations came forward to help the distress people. Apart from this, they provided support on recovery, rescue, primary treatment and distribution of medicines, distribution of dry foods, rehabilitation and other support.

Time of disasters and affected sectors

Name of Disasters	Year	Extent of Damage	Affected sectors
Flood	Each year	Huge	Agriculture, Trees, Fisheries, Human resources, Livestock, Infrastructures
Onrush of hilly water	Each year	Huge	Crop, trees, homes, Livestock, Fishery
Tornado	Each year	Huge	Crop, trees, Seasonal fruits, Houses, Livestock, Infrastructures.
River erosion	Rainy season	Huge	Crop, Houses, roads,
Drought	Everyday	Huge	Agriculture, Fishery, trees, safe drinking water
Water Logging			Agriculture, Fisheries, Environment Pollution, Diseases of Human bodies. Etc.

2.2 Identification of hazards and prioritization:

Sl No.	Name of disasters	Sl. No	Priorities
1	River Erosion	1	Flood
2	Flood	2	Drought
3	Drought	3	Tornado
4	Tornado	4	Onrush of Hilly flood
5	Onrush of hilly water	5	River erosion
6	Water logging	6	Water logging

2.3 Different hazards, it's present & future -

- 1. Flood:** Flood is occurring in each and every year in Patiya upazila. About 12140 acres crop land are inundated, and fishes of 1240 ponds swept away , about 175 KM Kacha roads are damaged and houses of 15800 families are inundated and about 21500 tubewells are affected. It may be mentioned here that intensity of flood is increasing due to losing of navigability of Srimai river and lack of upazila protection embankment. The extent of damage will increase substantially if this trend continues.
- 2. Drought:** Drought is seen during dry monsoon at Patiya upazila. More or less damage of crops are happened in almost all unions and scarcity of water occurs. Scarcity of water is seen in almost all tubewells during dry season as the underground water level recedes / go down so low. The risk can be minimized through installing more tubewells and increasing forest by GO and NGO initiatives.
- 3. Tornado:** Typically tornado affects this upazila in each and every year. Tornado hits each year due to impact of Climatic change. Crop of about 5750 acres partly or wholly damaged due to tornado. About 8400 Kacha houses are damaged , trees are uprooted and infrastructures are partly damaged. The extent of damage can be much more if tornado resilient homes are not made.
- 4. Onrush of hilly water :** Although the upazial is not known as 'Hilly Upazial' but there are abundance of hills in few unions. The Upazila is known as hills covered Upazila. There are hills in almost all unions. About 5890 kucha houses, 3884 kucha latrines, 35 graveyards and 28 mosques, 675 deep tube wells and damage of 4270 acres crop, 25600 trees, and 125 KM kacha roads are affected by onrush of hilly water. Moreover people die due to landslide during excessive rain. So the situation can be more worse in landslide if rehabilitation of people before start of excessive rain is not done by government and non government initiatives.

5. River erosion: River erosion is seen in few union like Habilasdip, Kolagaon, Baralia as mighty Srimay river has flown through this upazila. About 5340 acres crop land are affected by river erosion, houses of 760 coastal families are damaged, few fish farm taht are close to embankmenmt are also affected. It may be mentioned here that riskes can be reduced if actions to retain navigability of Srimai river is taken.

6. Water logging: Water logging occurs as Srimai river has crossed this upazila and hilly water onrush occurs in this upazila. Many diseases are spreaded due to water logging and about 4305 acres crop land are damaged. Necessary actions should be taken to get over this situation .

2.4 Vulnerability and Capacity:

(Ka) Vulnerability means socio, economic and environmental condition that refers to disasters and people do not have capacity to face them.

(Kha) Capacity means natural, social and environmental induced condition or process by which people or organizations face adverse situation and reduces the havoc of disasters.

Vulnerability and Capacity are shown by points below-

Hazards	Vulnerability	Capacity
1. Flood	<ul style="list-style-type: none"> • Siltration of Srimai river. • Less and weak embankments that break down easily. • Non existance of trees in both sides of embankments. • Non construction of disaster resilient houses. 	<ul style="list-style-type: none"> • Dredging is needed to increase navigability of Srimai river. • Plant trees on both sides of embankments. • Construct embankment newly make strong. • Construct diaster resilient houses in planned way.
2. Drought	<ul style="list-style-type: none"> • Lack of sufficient trees and forest. • Comperatively less tubewelllls for cultivation. • Crops damages. • Lack of rain water harvesting system for safe drinking water. 	<ul style="list-style-type: none"> • Plant more trees and create forest. • Increase number of deep tube wells. • Cultivate drought resilient crop varities. • Establish rain water harvesting system for safe drinking water.
	<ul style="list-style-type: none"> • Non construction of disaster resilient 	<ul style="list-style-type: none"> • Construct disaster resilient

Hazards	Vulnerability	Capacity
3. Tornado	<p>homes.</p> <ul style="list-style-type: none"> • Non cultivation of disaster resilient crop varieties. • Excessive cutting of trees. • Non availability of busy trees around homes. • Poor construction of Kacha latrines • Construction of Cattle homes weakly. • Less shelter centers in contrast to needs. 	<p>houses.</p> <ul style="list-style-type: none"> • Cultivation of disaster resilient crop varieties. • Plant more trees • Plant more bushy trees in and around homes • Construct disaster resilient kacha latrines • Construct disaster resilient cattle houses. • Construct required number of shelters by GO/ NGO initiatives.
4. Hilly water onrush	<ul style="list-style-type: none"> • Construction of homes at hilly slopes and hill sides • Poor awareness about onrush of hilly water. • Non-construction of disaster resilient houses. 	<ul style="list-style-type: none"> • Construction of homes away from hills. • Construct homes that can be disaster resilient. • Make community people aware about the danger of hilly water rush.
5. River erosion	<ul style="list-style-type: none"> • People lost everything due to river erosion. • Weak embankments. • Non availability of dense afforestation on river banks. • Broken embankments. 	<ul style="list-style-type: none"> • Construct homes in the coastal areas keeping safe distance. • There are scopes for planting more trees around embankments that can strengthen soil. • Plant trees in both sides of roads.
6. Water Logging	<ul style="list-style-type: none"> • Heavy rain creates water logging. • Due to siltration of canals and streams. • Many diseases spread by water logging. 	<ul style="list-style-type: none"> • Make speedy discharging of water. • Take initiatives to excavate canals and streams.

2.5 Most vulnerable areas:

Patiya upazila is one of the most vulnerable upazila. Few unions are more vulnerable due to few obvious reasons. Union based vulnerability and reasons of such vulnerability are outlined below-

Union wise detail of most vulnerability and its reasons are provided below-

Hazards	Most vulnerable areas	Reason of Vulnerability	Vulnerable population
1. Flood	<ul style="list-style-type: none"> • 1,2,3 & 7 no wards of Karana union. • 1,2,3,4,6 & 9 no wards of Bhatikhan union. • 4,5,6,7,8 & 9 no wards of Chanhara union. • 4,5,6,7,8 & 9 no wards of kalishahar union. • 5,6,7,8 and 9 no wards of Habilashdip union. • 3,4 & 5 no wards of Kolagaon union. • 1,3,5 & 7 no wards of Shikalbaha union. • 4,8 & 9 no wards of Baralia union. • 2,4,7 & 9 no wards of Julda union. • 1,3,6 & 8 no wards of Kusumpura union. • 1,4,8, & 9 no wards of Jiri union. • 3,5,7 & 8 no wards of Dhalghat union. • 1,3,5 & 6 no wards of Kashaish union. • 7,8 & 9 wards of Asia union. 	<ul style="list-style-type: none"> • Less navigability of rivers and canals. • Less embankment and also weak embankment. • No plantation on both sides of roads. • Not to build disaster resilient homes. 	Total number of affected families are 34870
	<ul style="list-style-type: none"> • All wards of Kharana union. • All wards of Kachuiai union. • All wards of Bhatikhain union. 	<ul style="list-style-type: none"> • Lack of sufficient trees and forest • Number of deep 	Total number of affected families are

<p>2. Drought</p>	<ul style="list-style-type: none"> • All wards of Chanhara union. • All wards of Haidgaon union. • All wards of Kelishahar union. • All wards of Habilashdip union. • All wards of Kolagaon union. • All wards of Junglkhain union. • All wards of Charlakkh union. • All wards of Shikalbaha union. • All wards of Baralia union. • All wards of Barauthan union. • All wards of Julda union. • All wards of Kusumpura union. • All wards of Jiri union. • All wards of Dhakkin Bhursi union. • All wards of Dhalghat union. • All wards of Shovandandi union. • All wards of Asia union. • All wards of Kashaish union. 	<p>tube wells are less in contrast to need for cultivation</p> <ul style="list-style-type: none"> • Lack of rain water harvesting system for safe drinking water. 	<p>15400</p>
<p>3. Tornado</p>	<ul style="list-style-type: none"> • All wards of Kharana union. • All wards of Kachuiai union. • All wards of Bhatikhain union. • All wards of Chanhara union. • All wards of Haidgaon union. • All wards of Kelishahar union. • All wards of Habilashdip union. • All wards of Kolagaon union. • All wards of Junglkhain union. • All wards of Charlakkh union. • All wards of Shikalbaha union. • All wards of Baralia union. • All wards of Barauthan union. • All wards of Julda union. • All wards of Kusumpura union. • All wards of Jiri union. 	<ul style="list-style-type: none"> • Non –construction of disaster resilient houses. • Non – cultivation of disaster resilient crop varieties. • Indiscriminate cutting of trees. • Non-availability of bushy trees around the homes. • Build kacha latrines weakly. • Build residence of livestock weakly. • Less number of 	<p>Total number of affected families are 5437</p>

	<ul style="list-style-type: none"> • All wards of Dhakkin Bhursi union. • All wards of Dhalghat union. • All wards of Shovandandi union. • All wards of Asia union. • All wards of Kashaish union. 	govt & non govt. shelters.	
4. Onrush of hilly water	<ul style="list-style-type: none"> • All wards of Haidgaon union. • All wards of Kelishahar union. • All wards of Habilashdhip union. • All wards of Charlakha union. • All wards of Shikalbaha union. • All wards of Kusumpura union. • All wards of Jiri union. • All wards of Dhakkin Bhursi union. • All wards of Dhalghat union. • All wards of Kashaish union. 	<ul style="list-style-type: none"> • Build houses on hills and hill slops. • Non aware about onrush of hill water. • Non- construction of houses strongly. 	About 18500 families
5. River Erosion	<ul style="list-style-type: none"> • 2,3,5,7,8 & 9 no wards of Charpatharghatta union. • 2,4,5,6,8 & 9 no wards of Shikalbaha union. • 1,3,5,7 & 8 no wards of Dhalghat union. • 1,3,5,7 & 9 no wards of Barauthan union. 	<ul style="list-style-type: none"> • People lost everything due to river erosion. • Weak embankment. • No afforestation on both sides of rivers. • Broken embankments at different parts. . 	Total number of affected families are 17400
6. Water Logging	<ul style="list-style-type: none"> • 2,3,5,6 & 8 no wars of Kachuiai union. • 1,2,4,5 & 7 no wards of Haidgaon union. • 3,5,6 & 8 no wards of Kelishahar union. • 2,4,6 & 9 no wards of Habilashdhip union. 	<ul style="list-style-type: none"> • Water Logging occurs due to heavy rain . • Due to siltration of rivers and canals. • Many diseases are seen due to water logging 	Total number of affected families are 23700

	<ul style="list-style-type: none"> • 4,5,6,7 & 9 no wards of Kolagaon union • 6,8 & 9 no wards of Charlakha union. • 2,3,4 & 7 no wards of Shikalbaha union. • 2,5,6 & 8 no wards of Baralia union. • 1,2,3 & 6 no wards of Barauthan union. • 2,4,6 & 8 no wards of Julda union. • 4, 5 & 7 no wards of Kusumpura union. • 7,8 & 9 no wards of Jiri union. • 3,4 & 5 no wards of Dhalghat union. 4,5,6,7 & 9 no wards of Shovandhandi union. • 4,6,7 & 8 no wards of Kashiash union. 		
--	---	--	--

2.6 Major sectors of development planning:

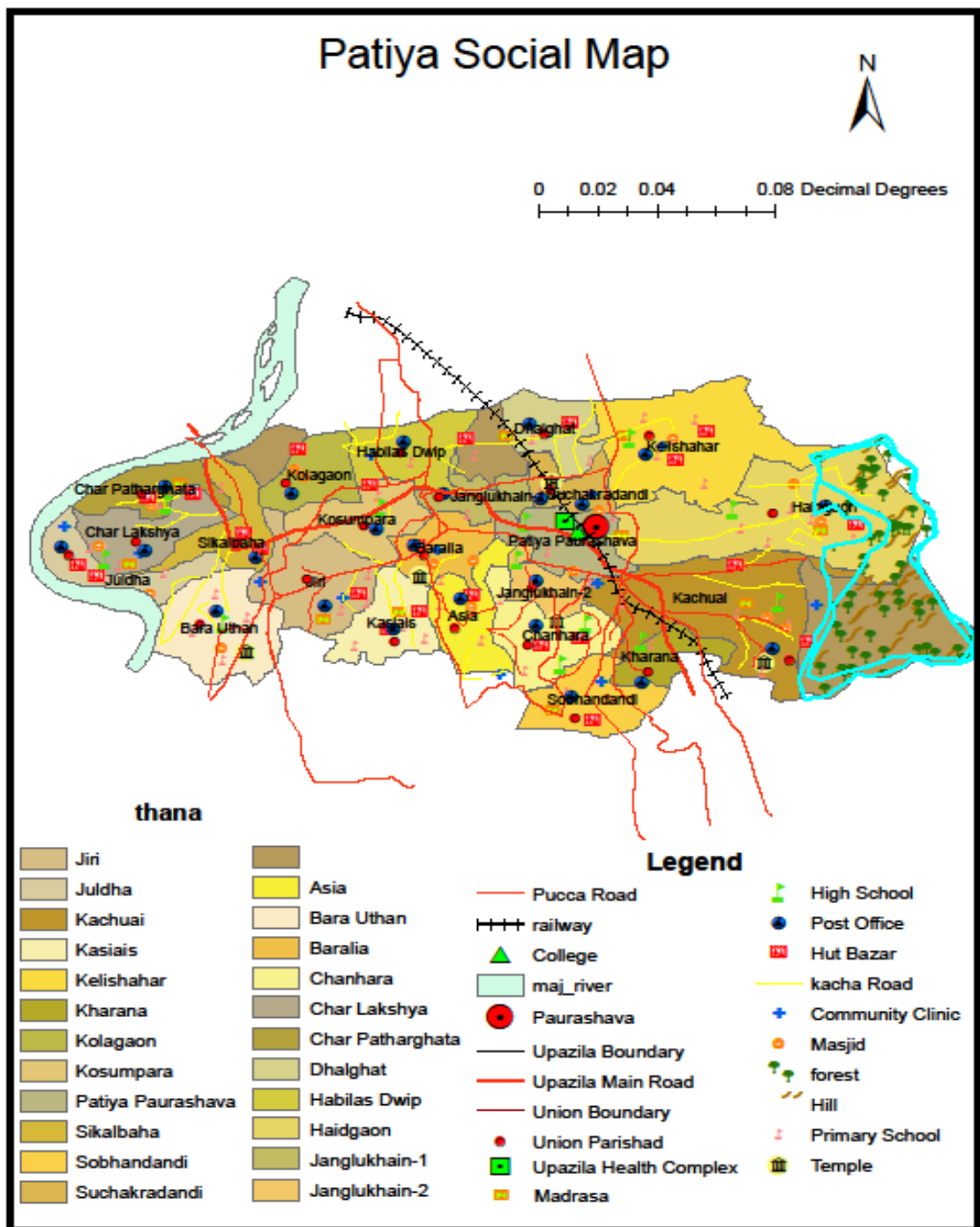
The major development sectors of Patiya Upazila:

Main sectors	Detail description	Coordination with Disaster risk reduction
1. Agriculture	<ul style="list-style-type: none"> Total crop land of this Upazila are 56134 acres. Aman, Aus and other Robi crop of about 12140 acres can be badly damaged if a large scale flood or tidal surge hit this upazila. Crop of about 5340 acres can be affected due to erosion of Karnafully river. Drought hits this upazila in every year. Crop of about 4590 acres can be damaged if a large scale drought hits this upazila. Onrush of hilly water occurs in every year in this upazila that damages crop of about 4305 acres. 	<ul style="list-style-type: none"> Building embankment strong. Improve water discharge system. Use rain water in Aman sampling production. Use organic manure in soil. Develop irrigation system and river excavation. Standing rice sampling put under beneath deep into the soil.
2. Fisheries	<ul style="list-style-type: none"> Fishes of about 1740 ponds are swept away if a tidal surge occurs in this upazila. Fishes of about 960 ponds are swept away in each year by flood and water logging in this upazila. 	<ul style="list-style-type: none"> Increase height of ponds banks. Repair and strengthen of embankment. Fisherman should be trained up. Cultivate three tier fishing. Use net during flood and water logging. Develop fish marketing system.
3. Livestock	<ul style="list-style-type: none"> It is most likely that about 25500 cows , 29700 goats, 1750 sheep, 90400 chicken, 45500 ducks including other animals can be swept away if a flood , tornado and tidal surge hit this upazila. As a result, about 38500 families can be 	<ul style="list-style-type: none"> Build earthen kills. breed varieties of animals. Ensure vaccination. Build cyclone resilient habitat for livestock. Make people aware about

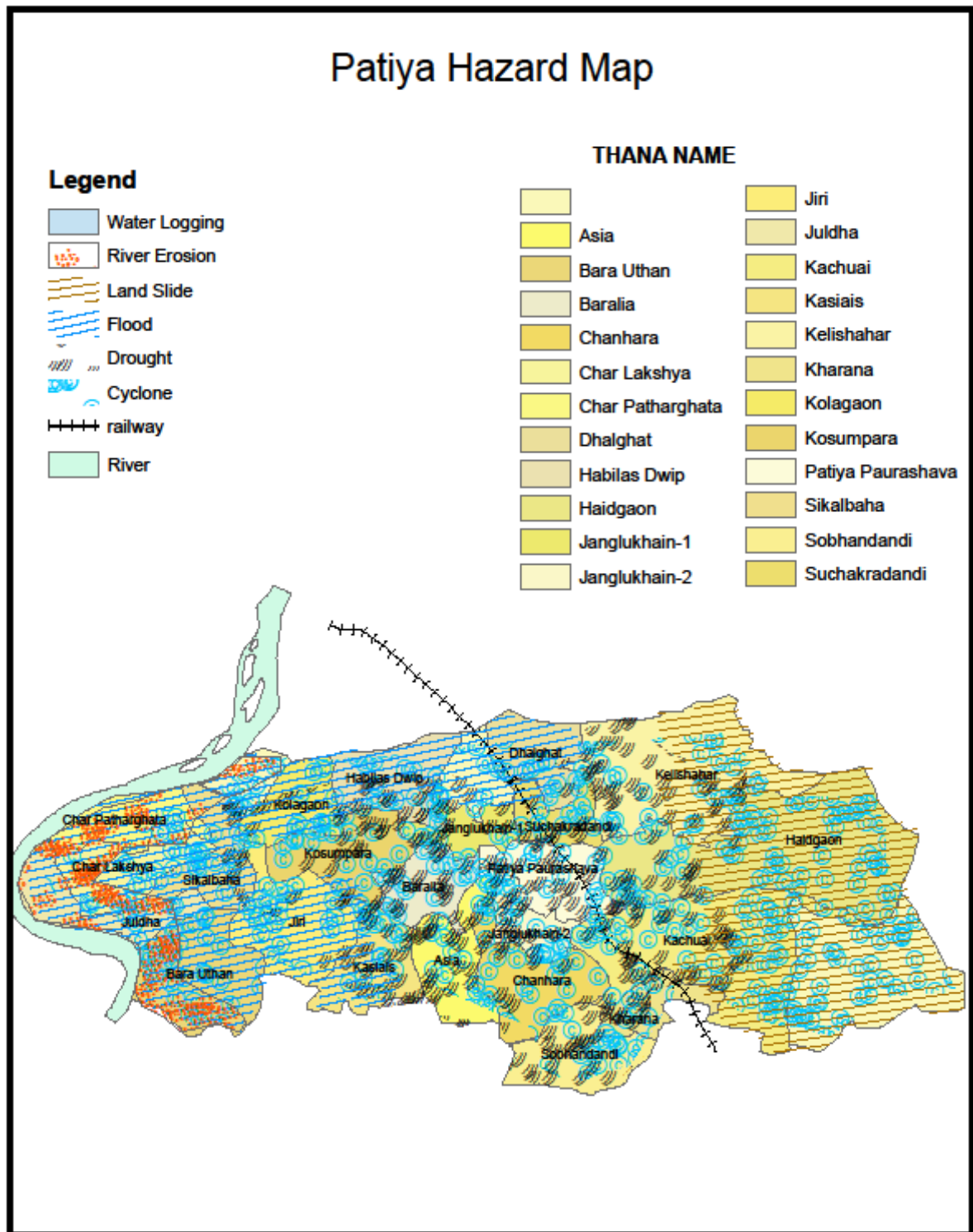
	affected with risk of losing natural beauties.	disease and treatment of livestock. <ul style="list-style-type: none"> • Esatblish food processing units for fooder of livestock.
4. Livelihoods	<ul style="list-style-type: none"> • About 3800 fisherman are directly or indirectly affected in Patiya Upazila due to flood. • About 1,50,00 farmers and 88000 day laboureres do not find employment due to drought in the month of Baishak and Jaistta , the dry monsoon. • About 29500 farmers find no emplyment of about 110000 man/days due to flood. • About 45000 farmers and 35000 day labourers find no jobs due to flood. 	<ul style="list-style-type: none"> • Organize different IGA training for sustainable livelihood option. • Motivate women for income generation in homestead. • Ensure use of local resources. • Government and non-government support should be ensured for livelihoods of vulnerable population. • Organize training for small traders through Samities/ Groups. • Increase scope of social security.
5. Trees	<ul style="list-style-type: none"> • Sampling of about 7430 nurseries can be affected by tornado. • Samplings of about 1070 nurseries can be affected by onrush of hilly water. • Huge number of trees are destroyed and swept away due to flood and samplings of 595 nurseries can be affected. 	<ul style="list-style-type: none"> • Motivate people to plant trees around houses. • Increase awareness about environment. • Enforce law to curb tree cutting illegally. • Increase area based social afforestation. • Motivate community people to plant more trees.
6. Homes & Infrastructure	<ul style="list-style-type: none"> • About 176 KM Kacha road , 145 KM HBB and 136 culverts, 28 eduactional instutions, 12 temples, 24 hatbazars and 9 health centers can be badly affected if a tornado like 1991 hits this upazila. 	<ul style="list-style-type: none"> • Make road elevated and Pucca/ paved. • Construct necessary culverts and bridges. • Construct sufficient

	<ul style="list-style-type: none"> • About 75 KM Kacha road , 92 KM HBB, kacha homes of about 13500 families are inundated, 16 educational institutions, 6 hatbazars can be directly or indirectly affected by inundation. • About 44 KM electric lines can be damaged by tornado. 	<ul style="list-style-type: none"> cyclone centers. • Construct new shelters. • Construct disaster resilient new infrastructures. • Build homes disaster resilient. • Motivate to plant more trees around homes/houses.
--	--	--

2.7 Social Map:



2.8 Hazard Map:



2.9 Hazard calendar:

Sl No	Hazards	Name of Months											
		Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec
1	Flood												
2	Land slide												
3	Tornado												
4	River Erosion												
5	Drought												
6	Water-logging												

Calendar Analysis:

Patiya upazila is known as a disaster prone area. It is known from interaction with community people that hazards like flood, hilly water on rush, tornado, river erosion, drought and water logging have been occurring in this upazila. Occurrence time of hazards has been shown in above chart. Details are outlined below-

- **Flood:** This upazila experiences flood every year as it is close to Srimai river which is a tributary of greater karnafulli and impact of climatic change. Flood is most prominent hazard for this upazila.
- **Onrush of hilly water:** It is known from interaction with local people that there are hills in some unions. Every year onrush of hilly water occurs in those areas and damage those areas. Usually this damage occurs during Asar to Bhadra month.
- **Tornado:** It is revealed from interaction with local community that tornado occurs almost every year in this upazila. This hazard makes extensive damages to lives and resources.
- **River erosion :** River erosion is a great hazard for Charpathargatha, Shikalbaha, Barauthan and Dhalghat unions of Patiya upazila. As a result, homes and crop land are being devoured by rivers in each year. This disaster occurs Asar to Bhadra month and also destroys infrastructures.
- **Drought:** It is known that drought occurs during dry monsoon in this upazila. Drought damages huge crops and creates scarcity of safe drinking water. Drought usually occurs in Jaishtha, Baishak and Chattrra month.

- **Water Logging:** It is known from local people that some areas of the upazila are in low-lying areas and it results water logging. Water logging occurs as rivers and canals get siltration and have lost depth.

2.10 Monsoon calendar of livelihoods:

Hazard Calendar of Upazila

Sl. No.	Livelihoods	Name of months											
		Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	Farmers	Blue	Blue	White	White	Blue	Blue	Blue	Blue	Blue	Blue	White	White
2	Fishermen	White	White	Purple	Purple	Purple	Purple	Purple	White	Purple	Purple	Purple	Purple
3	Business	Blue	Blue	White	White	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
4	Vatbati/ Van driver	Blue	Blue	White	White	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
5	Day laborer	Purple	Purple	White	White	Purple	Purple	Purple	Purple	Purple	White	White	Purple

2:11 Life & Livelihood related vulnerability:

Main livelihoods and what problems it creates is shown in below table

Sl No.	Livelihoods	Misfortune befalls ballots/disaster management					
		Flood	Land Slide	Baishakhi storm	River Erosion	Drought	Water-logging
1	Agriculture	Purple	Purple	Purple	Purple	Purple	Purple
2	animals resources	Blue	Blue	Blue	White	Blue	Blue
3	Business	Green	Green	Green	White	White	White
4	Fish	Purple	White	Purple	Purple	Purple	White
5	Workers day	Blue	White	Blue	White	White	White
6	Tattati also ply, van driver,	Purple	Purple	Purple	White	White	White

2.12 Sector wise description of hazards and of risks:

Hazards induced Risk identification and listing has been done after identifying union wise hazards, vulnerable sectors and areas. Risk prioritization has been done through votes of 24 representatives (3 groups consisting of 8 people of Farmer, fisherman and businessman professionals). Priorities risks and its causes identified by three groups have been combined, made analysis and risk reduction approaches have been identified. List of Priorities risks are exhibited below-

Identification of Vulnerable sectors.

Hazards	Vulnerable social Components/elements					
	Crops	Fisheries	Homes	Roads	Sanitation	Health
Flood						
Land Slide						
Baishakhi storm						
River Erosion						
Drought						
Water-logging						

Sector wise description of Hazards and risks:

Sector	Hazards	Description
Agriculture	Flood	Aman, Boro Aus and Robi crop including cultivation of Guava, and vegetables of about 1020 acres out of 1730 acres can be damaged at Kharana union if a flood like 1991 hits Patiya upazila. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava, and vegetables of about 2060 acres out of 3200 acres can be affected at Khasuai union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava, and vegetables of about 2150 acres out of 3329 acres can be affected at Bhatikhain union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava, and vegetables of about 1450 acres out of 1976 acres can be affected at Chanhara union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 3180 acres out of 5451 acres can be affected at Haidgaon union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 1395 acres out of 1816 acres can be affected at Kalishahar union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 940 acres out of 1239

Sector	Hazards	Description
		<p>acres can be affected at Habilashdip union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 1485 acres out of 1692 acres can be affected at Kolagaon union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 795 acres out of 1472 acres can be affected at Junglekhai union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 1850 acres out of 3705 acres can be affected at Charlakkah union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 4350 acres out of 7171 acres can be affected at Shikalbaha union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 4350 acres out of 7171 acres can be directly or indirectly affected at Baralia union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 1570 acres out of 3071 acres can be directly or indirectly affected at Barautthan union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 1100 acres out of 1720 acres can be directly or indirectly affected at Julda union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 1250 acres out of 2470 acres can be directly or indirectly affected at Kusumpura union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 1400 acres out of 2310 acres can be directly or indirectly affected at Jiri union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 525 acres out of 840 acres can be directly or indirectly affected at Dhakkin Bhursi union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 1240 acres out of 2520 acres can be directly or indirectly affected at Dhalghat union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 1980 acres out of 3220 acres can be directly or indirectly affected at Shovondhandi union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 1100 acres out of 3230 acres can be directly or indirectly affected at Asia union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 1790 acres out</p>

Sector	Hazards	Description
		of 2842 acres can be directly or indirectly affected at Khashiaish union if a flood hits. Similarly Aman, Boro Aus and Robi crop including cultivation of Guava and vegetables of about 1290 acres out of 2840 acres can be directly or indirectly affected at Charpatharghatta union if a flood hits.
Fisheries	Flood	About 142 ponds out of 225 ponds get inundated if a flood occurs like 1991 at Kharna union of Patiya upazila and about 220 fishermen are directly or indirectly affected. About 126 ponds out of 200 ponds get inundated and 168 fishermen are directly or indirectly affected at Kachai union if flood hits. About 126 ponds out of 196 ponds get inundated and 120 fishermen are directly or indirectly affected at Bhatikhain union if flood hits. About 190 ponds out of 267 ponds get inundated and 210 fishermen are directly or indirectly affected at Chanhara union if flood hits. About 134 ponds out of 170 ponds get inundated and 175 fishermen are directly or indirectly affected at Haidgaon union if flood hits. About 92 ponds out of 150 ponds get inundated and 79 fishermen are directly or indirectly affected at Kalishahar union if flood hits. About 168 ponds out of 225 ponds get inundated and 106 fishermen are directly or indirectly affected at Habilashdip union if flood hits. About 127 ponds out of 260 ponds get inundated and 100 fishermen are directly or indirectly affected at Kolagaon union if flood hits. About 120 ponds out of 205 ponds get inundated and 120 fishermen are directly or indirectly affected at Junglekchain union if flood hits. About 100 ponds out of 192 ponds get inundated and 120 fishermen are directly or indirectly affected at Charpathargatta union if flood hits. About 123 ponds out of 210 ponds get inundated and 98 fishermen are directly or indirectly affected at Shikalbaha union if flood hits. About 120 ponds out of 182 ponds get inundated and 88 fishermen are directly or indirectly affected at Baralia union if flood hits. About 90 ponds out of 120 ponds get inundated and 76 fishermen are directly or indirectly affected at Barautthan union if flood hits. About 79 ponds out of 165 ponds get inundated and 58 fishermen are directly or indirectly affected at Juldha union if flood hits. About 148 ponds out of 210 ponds get inundated and 110 fishermen are directly or indirectly affected at Kusumpura union if flood hits About 80 ponds out of 120 ponds get inundated and 73 fishermen are directly or indirectly affected at Jiri union if flood hits About 78 ponds out of 150 ponds get inundated and 60 fishermen are directly or indirectly affected at Dhakkin Burshi union if flood

Sector	Hazards	Description
		hits.About 96 ponds out of 125 ponds get inundated and 100 fishermen are directly or indirectly affected at Dhalghat union if flood hits.About 85 ponds out of 100 ponds get inundated and 76 fishermen are directly or indirectly affected at Shovandandi union if flood hits.About 68 ponds out of 96 ponds get inundated and 84 fishermen are directly or indirectly affected at Asiya union if flood hits.About 98 ponds out of 120 ponds get inundated and 90 fishermen are directly or indirectly affected at Kashiyais union if flood hits.
Health	Flood	Charpathargatha, Dhalghat, Kashiyas, Shikalbhaha, Charlakka, Kolagaon, Bhatikhain, Baralia, Chanhara are worst affected by flood. Many people are affected by various diseases by flood water. Health centers are also directly or indirectly affected by flood.
Road	Flood	About 110 KM Kacha road, 96 KM HBB (5 KM kacha and 4 KM HBB of Kharna union, 4 KM kacha and 5 KM HBB of Kachuai union, 5 KM kacha and 6 KM HBB of Bhatikhain union, 6 KM kacha and 3.5 KM HBB of Chanhara union, , 3 KM kacha and 4 KM HBB of Haidghaon union, 5 KM kacha and 2 KM HBB of Kalishahar union, 5 KM kacha and 3 KM HBB of Habilashdip union, 4 KM kacha and 3.5 KM HBB of Kolagaon union, 5 KM kacha and 4 KM HBB of Jungalkhain union, 5 KM kacha and 3 KM HBB of Charlakkah union, 4.50 KM kacha and 3.50 KM HBB of Charpatharghatta union, 5 KM kacha and 4 KM HBB of Sikalbhaha union, 6 KM kacha and 4 KM HBB of Baralia union, 4.50 KM kacha and 3 KM HBB of Barauthan union, 5 KM kacha and 4 KM HBB of Juldha union, 6 KM kacha and 5 KM HBB of Kusumpura union, 7 KM kacha and 6 KM HBB of Jiri union, 5 KM kacha and 4 KM HBB of Dakkin Burshi union, 7 KM kacha and 5 KM HBB of Dhalghat union, 5 KM kacha and 4 KM HBB of Shovandhandi union, 6 KM kacha and 3 KM HBB of Ashiya union, 4 KM kacha and 5 KM HBB of Kashiyas union.
Homes	Flood	Flood caused major damage to Charpatharghatta, Dhalghat, Kashiyais, Shikalbhaha, Charlakkaha, Kolagaon, Bhatikhain, Barolia, Jiri, Junglekhain, Chanhara of Patiya union. Particularlry flood damages Kacha houses to greater extent. Total number nof Kacha homes are 56524. Almost all kacha homes are affected if flood hits.
		Total number of latrines in this upazila are 97500. Among

Sector	Hazards	Description
Sanitation	Flood	them Pucca lateines are 56742, Kacha latrines are 56524. According to field survey, most affected unions are Charpathergatha, Dhalghat, Kashiyash, Sikalbhaha, Charlakkaha, Kolagaon, Bhatikhain, Barolia, Jiri, Junglekchain, Chanhara unions.
Agriculture	Onrush of hilly water	About 642 acres crop are affected in Bhatikhain union if a onrush of hilly water occurs. Similarly about 640 acres crop are affected in Haidgaon union if a onrush of hilly water occurs. Similarly about 590 acres crop are affected in Kalishahar union if a onrush of hilly water occurs. Similarly about 648 acres crop are affected in Charpatharghatta union if a onrush of hilly water occurs. Similarly about 650 acres crop are affected in Shikalbahha union if a onrush of hilly water occurs. Similarly about 645 acres crop are affected in Dhalghat union if a onrush of hilly water occurs. Similarly about 690 acres crop are affected in Barautthan union if a onrush of hilly water occurs. Similarly about 642 acres crop are affected in Shovandhandi union if a onrush of hilly water occurs. Similarly about 650 acres crop are affected in Habilashdhip union if a onrush of hilly water occurs.
Homes	Onrush of hilly water	There are hills in some unions although Patiya upazila is not entirely a hilly upazila. About 16500 homes are directly or indirectly affected if onrush of hilly water occurs.
Fisheries	Onrush of Hilly water	Onrush of hilly water occurs in this upazila every year. This hazard causes huge damage to fisheries. About 430 fishermen out of total 697 fishermen of 2630 families can be affected if a onrush of hilly water hits to Bhatikhain union. Similarly about 658 fishermen out of total 1209 fishermen of 4120 families can be affected if a onrush of hilly water hits in Haidgaon union. Similarly about 832 fishermen out of total 1548 fishermen of 8597 families can be affected if a onrush of hilly water hits to Charpathargatha union. Similarly about 548 fishermen out of total 1866 fishermen of 9445 families can be affected if a onrush of hilly water hits to Shikalbhaha union. Similarly about 332 fishermen out of total 980 fishermen of 3921 families can be affected if a onrush of hilly water hits to Dhalghat union. Similarly about 920 fishermen out of total 1246 fishermen of 6930 families can be affected if a onrush of hilly water hits to Barautthan union. Similarly about 455 fishermen out of total 1650 fishermen of 5057 families can be affected if a onrush of hilly water hits to Shovandhandi union. Similarly about 431 fishermen out of total 976 fishermen of 5740 families can be affected if a onrush of hilly water hits to Habilashdhip union.

Sector	Hazards	Description
		Similarly about 328 fishermen out of total 760 fishermen of 4060 families can be affected if a onrush of hilly water hits to Julda union.
Agriculture	Tornado	<p>Huge damage are caused in Patiya upazila each year due to tornedo. Crop of 298 acres Aus, Aman, Boro, and vegetable cultivation out of total 1730 acres at Kharana union can be affected by Tornado. Crop of 400 acres Aus, Aman, Boro, and vegetable cultivation out of total 3200 acres at Khasuayia union can be affected by Tornado. Crop of 280 acres Aus, Aman, Boro, and vegetable cultivation out of total 3329 acres at Bhatikhain union can be affected by Tornado. Crop of 294 acres Aus, Aman, Boro, and vegetable cultivation out of total 1976 acres at Chanhara union can be affected by Tornado. Crop of 300 acres Aus, Aman, Boro, and vegetable cultivation out of total 5451 acres at Haidgaon union can be affected by Tornado. Crop of 290 acres Aus, Aman, Boro, and vegetable cultivation out of total 1816 acres at Kalishahar union can be affected by Tornado.</p> <p>Crop of 190 acres Aus, Aman, Boro, and vegetable cultivation out of total 1239 acres at Habilashdip union can be affected by Tornado. Crop of 286 acres Aus, Aman, Boro, and vegetable cultivation out of total 1692 acres at Kolagaon union can be affected by Tornado. Crop of 180 acres Aus, Aman, Boro, and vegetable cultivation out of total 1692 acres at Junglkhain union can be affected by Tornado. Crop of 345 acres Aus, Aman, Boro, and vegetable cultivation out of total 3705 acres at Charlakkah union can be affected by Tornado. Crop of 320 acres Aus, Aman, Boro, and vegetable cultivation out of total 7171 acres at Shikalbaha union can be affected by Tornado. Crop of 270 acres Aus, Aman, Boro, and vegetable cultivation out of total 2938 acres at Baralia union can be affected by Tornado. Crop of 295 acres Aus, Aman, Boro, and vegetable cultivation out of total 3071 acres at Barauthan union can be affected by Tornado. Crop of 270 acres Aus, Aman, Boro, and vegetable cultivation out of total 1720 acres at Juldha union can be affected by Tornado. Crop of 300 acres Aus, Aman, Boro, and vegetable cultivation out of total 2470 acres at Kusumpura union can be affected by Tornado. Crop of 286 acres Aus, Aman, Boro, and vegetable cultivation out of total 2310 acres at Jiri union can be affected by Tornado. Crop of 160 acres Aus, Aman, Boro, and vegetable cultivation out of total 840 acres at Dhakkin bursi union can be affected by Tornado. Crop of 280 acres Aus, Aman, Boro, and vegetable cultivation out of total 2520 acres at Dhalghat union can be affected by</p>

Sector	Hazards	Description
		Tornado.Crop of 370 acres Aus, Aman, Boro, and vegetable cultivation out of total 3200 acres at Shovandhandi union can be affected by Tornado.Crop of 270 acres Aus, Aman, Boro, and vegetable cultivation out of total 190 acres at Ashiaya union can be affected by Tornado.Crop of 290 acres Aus, Aman, Boro, and vegetable cultivation out of total 2842 acres at Kashiyais union can be affected by Tornado.
Homes	Tornado	Tornado hits almost all 22 unions of Patiya upazila. Every year tornado hits this upazila as the upazila is close to Karnafulli river and impact of climatic Change. Number of Kacha homes in thisa upazila are about 56524. About 32490 kacha homes are directly or indirectly affected by tornado.
Agriculture	River erosion	Crop and land of 223 acres out of total 5340 acres are devoured by rivers . So It is imperative to take necessary actions to prevent the river erosion.
Fisheries	River erosion	River erosion are seen in some unions out of 22 unions during rainy monsoon. Huge damage to fisheries are occurred if river erosion happens. Fishermen of 1250 fishfirm are directly or indirectly affected if river erosion occurs. So it is most important to prevent river erosion to protect fish resources.
Homes	River erosion	About 8500 families out of total 16500 families are directly or indirectly affected in some unions of Patiya upazila by river erosion.
Agriculture	Drought	Drought hits almsot all unions of Patiya upazila as a result of Climatic Change. Aman, Boro, Aus , rice and vegetable cultivation of 298 acres out of 1730 acres at Kharana union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 270 acres out of 3200 acres at Kachuyai union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 300 acres out of 3329 acres at Bhatikhain union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 280 acres out of 1976 acres at Chanhara union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 340 acres out of 5451 acres at Haidgaon union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 276 acres out of 1816 acres at Kalishahar union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 250 acres out of 1239 acres at Habilashdhip union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of

Sector	Hazards	Description
		<p>280 acres out of 1692 acres at Kolagaon union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 236 acres out of 4800 acres at Fahapur union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 280 acres out of 1472 acres at Junglakhain union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 310 acres out of 3705 acres at Charlakkahiya union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 390 acres out of 7171 acres at Shikalbaha union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 225 acres out of 2938 acres at Baralia union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 295 acres out of 3071 acres at Barauthan union can be badly affected by severe drought.</p> <p>Similarly Aman, Boro, Aus , rice and vegetable cultivation of 220 acres out of 1720 acres at Julda union can be badly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 1250 acres out of 2470 acres at Kusumpura union can be directly or indirectly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 260 acres out of 2310 acres at Jiri union can be directly or indirectly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 170 acres out of 840 acres at Dhakkin bursi union can be directly or indirectly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 276 acres out of 2520 acres at Dhalghat union can be directly or indirectly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 300 acres out of 3200 acres at Shovandhandi union can be directly or indirectly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 280 acres out of 2030 acres at Ashiya union can be directly or indirectly affected by severe drought. Similarly Aman, Boro, Aus , rice and vegetable cultivation of 205 acres out of 2842 acres at Kashiyas union can be directly or indirectly affected by severe drought.</p>
Agriculture	Water logging	<p>About 4220 kacha homes of 11255 families can be directly or indirectly affected if a flood like 1988, 1991, and 1997 occurs in 22 unions of Patiya Upazila. About 1010 fruits, forest and herbal trees and 10 nurseries likely to be damaged in Charlakha union if a flood like 1988, 1991 and 1987 occurs.</p>

Sector	Hazards	Description
		<p>About 4420 fruits, forest and herbal trees and 5 nurseries likely to be damaged in Dhalghat union if a flood hits. About 11100 fruits, forest and herbal trees and 6 nurseries likely to be damaged in Barouthan union if a flood hits. About 4200 fruits, forest and herbal trees and 4 nurseries likely to be damaged in Barolia union if a flood hits. About 10030 fruits, forest and herbal trees and 8 nurseries likely to be damaged in Juldha union if a flood hits. About 5300 fruits, forest and herbal trees and 7 nurseries likely to be damaged in Jiri union if a flood hits. About 7320 fruits, forest and herbal trees and 12 nurseries likely to be damaged in Shobhandandi if a flood hits. About 15400 fruits, forest and herbal trees and 16 nurseries likely to be damaged in Kharna union if a flood hits. It is most likely that fruit, forest and herbal tress can be badly damaged if no effective preventive action is taken.</p>

2.13 Climatic Change & Its potential impact:

Sectors	Hazards	Descriptions
Agriculture	Flood	Flood occurs every year in this upazila. Every union is affected by flood. The intensity of flood increase during rainy monsoon. About 12140 acres crop can be directly or indirectly affected by inundation by flood in this upazila.
Agriculture	Drought	Drought affects Patiya upazila almost every year. Crop of about 6570 acres are directly or indirectly damaged by drought.
Agriculture	Tornado	Tornado damages most in this upazila every year. About 6420 acres crop are damaged by tornado.
Agriculture	Onrush of hilly water	Onrush of hilly water happens in this upazila every year. Extensive damage is caused if this hazards occurs. About 6420 acres crop are damaged in each year during rainy season.
Agriculture	River erosion	River erosion is occurred in some unions during rainy season. About 5340 crops are damaged due to river erosion and few infrastructures are vanished.
Agriculture	Water logging	Water logging is occurred as the upazila is close to rivers and due to onrush of hilly water.
Fisheries	Flood	Fishes of about 1250 ponds are swept away if a flood like 1991 occurs and about 2450 fishermen are directly or indirectly affected.
Fisheries	Onrush of hilly water	Onrush of hilly water are occurred in every year. About 2070 fishermen are directly or indirectly affected with their family members if onrush of hilly water occurs.
Fisheries	River erosion	River erosion is occurred every year in this upazila. Extensive damage is caused to fisheries if river erosion is occurred. About 1270 fishermen of 16500 families are directly or indirectly affected by river erosion.
Fisheries	Water logging	Water logging is occurred as the upazila is close to rivers and due to onrush of hilly water. As a result fishes of 965 ponds are swept away and lives of fishermen becomes hard.
Homes	Flood	Flood damages homes to greater extent. Particularly Kacha homes are more affected. Number of total kacha houses are 56524. Kacha houses are damaged to larger number by flood.
Homes	Onrush of hilly water	There are hills in some unions though the upazila is not known as hilly upazila. Houses are damaged due to onrush of hilly water. Total number of households are 1,01,968. Among them about 56524 homes are directly or indirectly damaged by onrush of hilly water.
Homes	Tornado	Tornado hits almost every year in this upazila. Every year

Sectors	Hazards	Descriptions
		tornado hits as the upazila is close to Karnafulli river and impact of climatic Change. Total number of kacha homes are 56524. About 25400 kacha homes are directly or indirectly damaged by tornado.
Homes	River Erosion	River erosion is occurred in every year duuring rainy season. Many houses are devoured if a river erosion occurred. About 1270 families out of 16500 families are directly or indirectly affected by river erosion.
Roads	Flood	About 110 KM Kacha roads and 96 KM HBB roads are directly or indirectly affected if a flood like 1991 occurred.
Roads	Water logging	Water logging is occurred as the upozial is close to rivers and due to onrush of hilly water. About 92 Km kacha roads and 96 KM HBB are directly or indirectly affected by water logging.
Sanitation	Flood	Patiya upazila is known as diaster prone upazila. So sanitation turn worst if a flood occurred in this upazila and it creates various diseases. Total number of latrines in this upazila are 97500. Among them 56842 are made of concrete and 65624 are kacha. But kacha latrines are directly or indirectly affected by flood.
Health	Flood	Peope becomes affected by various diseases if a flood occurred in this upazila. About 6 health centers are directly or indirectly affected if a flood occurred in this upazila.

3rd Chapter: Disaster Risk Reduction

What risk factors	This is because		
	Immediate	Secondary	Final
<p>Sector: Agriculture Hazard: Flood The Upazila is affected by flood each year. Flood damage almost almost all unions of this Upazila. Extent of damage is increasing day by day in this Upazila. About 12140 acres crop land can be directly or indirectly affected by flood.</p>	<ul style="list-style-type: none"> ➤ Not to make quick disposal of water. ➤ Not to make available the massage of flood in time. ➤ Due to intrusion of saline water to crop land directly. 	<ul style="list-style-type: none"> ➤ Intrusion of saline water due to Joar and Bhatta. ➤ No regulatory system for control of saline water intrusion. ➤ Non availability of required number of Sluice gates in conjunction of rivers and canals. 	<ul style="list-style-type: none"> ➤ Lack of appropriate actions of WDB. ➤ Donors support is less in contrast to need. ➤ Unawareness of people.
<p>Sector: Fisheries Hazard: Flood Total number of ponds in Patiya Upazila is 3833. It is most likely that fishes of 1250 ponds out 3833 ponds can be swept away if a flood like 1250, 1991 and 1989 occurs. As a result, 2150 fishermen of 5300 families can be affected.</p>	<ul style="list-style-type: none"> ➤ Pond location is in low-lying areas. ➤ Bank of ponds are low. 	<ul style="list-style-type: none"> ➤ Ponds are not built on high land. ➤ Lack of awareness of Fisherman. ➤ No provision of netting around ponds. 	<ul style="list-style-type: none"> ➤ Banks of ponds are not high. ➤ Not to provide training to Fisherman by Govt. and non Government.
<p>Sector: Infrastructure. Hazard: Flood About 36700 kacha homes of 46800 families of 22 unions can be directly or indirectly affected by floods like 1988, 1991, 1997 occurs in this Upazila.</p>	<ul style="list-style-type: none"> ➤ Unplanned building of educational institution. ➤ Rural homes are made of Bamboos so beaks easily. ➤ Not to build roads strongly. ➤ Not to build culverts strongly. 	<ul style="list-style-type: none"> ➤ Due to low-lying locations of educational and religious Institutions. 	<ul style="list-style-type: none"> ➤ Due to lack of formulating risk reducing infrastructure Policies. ➤ Building materials are not cyclone resilient.

<p>Sector: Sanitation Hazard: Flood About 690 tube wells and 37800 Kacha latrines are swept away if a flood like 1988, 1991 and 1997 occurs and as a result 4050 families can be affected.</p>	<ul style="list-style-type: none"> ➤ Tube wells and latrines are in low lying areas. ➤ Non execution of repair works. 	<ul style="list-style-type: none"> ➤ Not to make base of tube wells Pucca. ➤ Non-presence of water disposal system. 	<ul style="list-style-type: none"> ➤ Not making latrines Pucca. ➤ Not installing of tube ➤ Well by Government.
<p>Sector: Health Hazard: Flood Flood occurs every year due to siltation and narrowing of rivers and canals. As a result about 10500 family members get affected by many diseases. Apart from this, 15 health centers out of total 33 centers are directly or indirectly affected by flood.</p>	<ul style="list-style-type: none"> ➤ People are not aware about health. ➤ Locations of tube wells are in low-lying spots. 	<ul style="list-style-type: none"> ➤ Placing garbage to everywhere. ➤ Lack of awareness about diseases. ➤ Lack of awareness about post disaster responsibilities. 	<ul style="list-style-type: none"> ➤ Increase standard of health services. ➤ Non availability of health centers and doctors.
<p>Sector: Agriculture Hazard: Onrush of hilly water The Upazila is known as 'Hilly Upazila'. There are hills in almost all unions. Homes are destroyed in every year due to hill water onrush. 6420 acres crop are damaged each year due to water onrush.</p>	<ul style="list-style-type: none"> ➤ Not to make quick disposal of water ➤ Not to make available the massage of flood in time. ➤ Due to intrusion of saline water to crop land directly. 	<ul style="list-style-type: none"> ➤ Intrusion of saline water due to Joar and Bhatta. ➤ No regulatory system for control of saline water intrusion. ➤ Non availability of required number of Sluice gates in conjunction of rivers and canals. 	<ul style="list-style-type: none"> ➤ Lack of appropriate actions of WDB. ➤ Donors support is less in contrast to need. ➤ Unawareness of people.
<p>Sector: Fisheries Hazard: Onrush of hilly water Total number of ponds in Patiya Upazila is 3833. It is most likely that fishes of 1020 ponds out of 3833 ponds can be swept away if a flood occurs in this Upazila. As a result, 1020 fishermen of 10800 families can be affected.</p>	<ul style="list-style-type: none"> ➤ Low height of ponds embankment. ➤ Less awareness of people. 	<ul style="list-style-type: none"> ➤ Less awareness of people. ➤ Non provision of netting above ponds. 	<ul style="list-style-type: none"> ➤ Non locating of ponds away from hills. ➤ Low depth of ponds.

<p>Sector: Agriculture Hazard: Tornado Tornado hits this Upazila every year. This Upazila is affected by tornadoes every year as it is close to sea and due to affect of climatic change.</p>	<ul style="list-style-type: none"> ➤ Affect of depression to coastal areas. ➤ Increase of temperature in atmosphere. ➤ Affect of green houses. ➤ Climatic Change. 	<ul style="list-style-type: none"> ➤ Absence of sufficient trees. ➤ Having no plan for social afforestation. ➤ Due to black fumes of mills and transports. ➤ Not getting advance forecasting of tornadoes. 	<ul style="list-style-type: none"> ➤ Poor attention of Agricultural department. ➤ Absence of Agricultural research centers. ➤ Lack of adequate training of farmers. ➤ Lack of effective government policies about Hazard and risks.
<p>Sector: Homes Hazard: Tornado There are a total 8650 homes in Patiya Upazila. Among them 56524 Pucca, Almost majority homes are Kacha can be affected if a tornado like 1991 occurs in Patiya Upazila.</p>	<ul style="list-style-type: none"> ➤ Not to construct tornado resilient homes. ➤ Make base of homes strong. 	<ul style="list-style-type: none"> ➤ Not to circulate weather forecasting properly. ➤ Lack of awareness of people. 	<ul style="list-style-type: none"> ➤ Destroying of natural balance. ➤ Climatic Change.
<p>Sector: Agriculture Hazard: River Erosion There are Karnafully river in this Upazila. River erosion is seen in some union. About 500600 acres crop are damaged due to river erosion.</p>	<ul style="list-style-type: none"> ➤ Weak embankment. ➤ Increase of water pressure in rivers. ➤ Non existence of trees on sides of embankments. 	<ul style="list-style-type: none"> ➤ Losing / decreasing navigability. ➤ Decrease of depth by siltation. 	<ul style="list-style-type: none"> ➤ Lack of cooperation of WDB. ➤ Not to take any initiatives to prevent river erosion.
<p>Sector: Fisheries Hazard: River Erosion River erosion occurs in every year during rainy monsoon. Fisheries sector suffers extensively due to river erosion. About 1540 ponds are devoured by river erosion.</p>	<ul style="list-style-type: none"> ➤ Due to presence of ponds close to rivers. 	<ul style="list-style-type: none"> ➤ Not to make Embankment strong. ➤ Not aware of fisherman in this respect. 	<ul style="list-style-type: none"> ➤ Lack of proper attention of Fishery Departments. ➤ Not taking any government initiatives to prevent river erosion.
<p>Sector: Homes Hazard: River Erosion</p>	<ul style="list-style-type: none"> ➤ Non existence of Embankments. 	<ul style="list-style-type: none"> ➤ Losing / decreasing navigability. 	<ul style="list-style-type: none"> ➤ Not taking any government

<p>River erosion occurs in every year in this Upazila. About 1560 homes can be devoured if a river erosion is occurs.</p>	<ul style="list-style-type: none"> ➤ Due to increase of water pressure in rivers during rainy monsoon. 	<ul style="list-style-type: none"> ➤ Decrease of depth of rivers by siltation. 	<p>initiatives to prevent river erosion.</p> <ul style="list-style-type: none"> ➤ Lack of good attention of WDB.
<p>Sector: Agriculture Hazard: Drought Drought is found during dry monsoon in this Upazila. Almost all unions are affected by drought. About 3540 acres crop are damaged directly or indirectly due to drought.</p>	<ul style="list-style-type: none"> ➤ Due to climatic Change ➤ Not timely raining. ➤ Absence of sufficient large trees. 	<ul style="list-style-type: none"> ➤ Absence of provision of retaining water in rivers and canals. 	<ul style="list-style-type: none"> ➤ Lack of appropriate attention of DAE. ➤ Not inventing drought resistance crops.
<p>Sector: Agriculture Hazard: Water Logging Water logging occurs as the upazila is close to Karnafully river and huge onrush of hilly water during raining monsoon. As a result about 5200 acres crop are directly or indirectly affected.</p>	<ul style="list-style-type: none"> ➤ As the crop land are in low lying areas. ➤ Non avialiability of speedy water discharging system. 	<ul style="list-style-type: none"> ➤ Non – cultivation of of disaster resilient crop varieties. 	<ul style="list-style-type: none"> ➤ Not taking appropriate actions by WDB. ➤ Poor support from donors.
<p>Sector: Fisheries Hazard: Water Logging As the upazila is close to Karnafully river and huge onrush of hilly water occurs during rainy monsoon. Fishes of about 533 acres are swept away due to this disaster and as a result, peoples lives become very hard.</p>	<ul style="list-style-type: none"> ➤ As the fishermen are not aware about it. 	<ul style="list-style-type: none"> ➤ Absence of required number of fish services centers. 	<ul style="list-style-type: none"> ➤ Not to take proper actions by district Fishery department.

3.2 Identification of means to reduce risks:

Hazards & Risks	Possible means to reduce risks		
	Short-term	Midterm	Long-term
<p>Sector: Agriculture Hazard: Flood The Upazila is affected by flood each year. Flood damage almost almost all unions of this Upazila. Extent of damage is increasing day by day in this Upazila. About 12140 acres crop land can be directly or indirectly affected by flood.</p>	<ul style="list-style-type: none"> → Make easy and speedy disposal of water. → Reach warning message in time. → Not to allow entering saline water directly to crop land. 	<ul style="list-style-type: none"> → Not to allow entering saline water directly to crop land. → Control intrusion of saline water. → Install sluice gate at the junction of rivers and canals. 	<ul style="list-style-type: none"> → Take appropriate steps by WDB. → Increase donors cooperation & support as per need. → Make people aware.
<p>Sector: Fisheries Hazard: Flood Total number of ponds in Patiya Upazila is 3833. It is most likely that fishes of 1250 ponds out 3833 ponds can be swept away if a flood like 1250, 1991 and 1989 occurs. As a result, 2150 fishermen of 5300 families can be affected.</p>	<ul style="list-style-type: none"> → Ponds are located at low-lying areas. → Elevate banks of ponds. 	<ul style="list-style-type: none"> → Establish ponds to high land. → Make farmers aware. → Netting above banks. 	<ul style="list-style-type: none"> → Elevate banks. → Train fisherman by GO/NGOs.
<p>Sector: Infrastructure. Hazard: Flood About 36700 kacha homes of 46800 families of 22 unions can be directly or indirectly affected by floods like 1988, 1991, 1997 occurs in this Upazila.</p>	<ul style="list-style-type: none"> → Build institutions by planned way. → Rural homes must be made in such a way that it is not destroyed easily. → Roads must be made strongly. → Culverts must be made strongly. 	<ul style="list-style-type: none"> → Educational and religious institutions should not keep Kacha and made in low lying spots. 	<ul style="list-style-type: none"> → Make policies for risk and hazard free Infrastructure. Building materials should be disaster resilient.
<p>Sector: Sanitation Hazard: Flood About 690 tube wells and 37800 Kacha latrines are</p>	<ul style="list-style-type: none"> → Not to establish Tube wells and latrines in low lying areas. 	<ul style="list-style-type: none"> → Pave the base of tube wells. → Provision of 	<ul style="list-style-type: none"> → Make latrines paved. → Establish tube wells

Hazards & Risks	Possible means to reduce risks		
	Short-term	Midterm	Long-term
swept away if a flood like 1988, 1991 and 1997 occurs and as a result 4050 families can be affected.	→ Repair latrines	discharging of water.	by government initiatives.
Sector: Health Hazard: Flood Flood occurs every year due to siltation and narrowing of rivers and canals. As a result about 10500 family members get affected by many diseases. Apart from this, 15 health centers out of total 33 centers are directly or indirectly affected by flood.	→ Make people aware about health. → Not to install tube wells at low-lying spots.	→ Not to dispose garbage here and there. → Keep people aware about diseases. → Know about post flood responsibilities.	→ Increase quality of health services. → Establish required number of health centers and keep sufficient doctors.
Sector: Agriculture Hazard: Onrush of hilly water The Upazila is known as 'Hilly Upazila'. There are hills in almost all unions. Homes are destroyed in every year due to hill water onrush. 6420 acres crop are damaged each year due to water onrush.	→ People are not aware about 'Onrush of hilly water'. → People are not aware about Landslide. → Not to cut trees in large number from hills.	→ Cultivate water resistance crop varieties. → Framers should have training. → Plant more and more trees to hills by GO & NGOs.	→ Cultivate water resistance crop varieties. → Impart training to farmers. → Strict execution and enforcement of Hill cutting policies.
Sector: Fisheries Hazard: Onrush of hilly water Total number of ponds in Patiya Upazila is 3833. It is most likely that fishes of 1020 ponds out of 3833 ponds can be swept away if a flood occurs in this Upazila. As a result, 1020 fishermen of 10800 families can be affected.	→ Raise height of ponds embankment. → Keep people aware.	→ Keep people aware. → Provide nets above banks.	→ Build ponds away from hills. → Increase depth of ponds.

Hazards & Risks	Possible means to reduce risks		
	Short-term	Midterm	Long-term
<p>Sector: Agriculture Hazard: Tornado Tornado hits this Upazila every year. This Upazila is affected by tornadoes every year as it is close to sea and due to affect of climatic change.</p>	<ul style="list-style-type: none"> ➤ Affect of depression to coastal areas. ➤ Increase of temperature in atmosphere. ➤ Affect of green houses. ➤ Climatic Change. 	<ul style="list-style-type: none"> ➤ Absence of sufficient trees. ➤ Having no plan for social afforestation. ➤ Due to black fumes of mills and transports. ➤ Not getting advance forecasting of tornadoes. 	<ul style="list-style-type: none"> ➤ Poor attention of Agricultural department. ➤ Absence of Agricultural research centers. ➤ Lack of adequate training of farmers. ➤ Lack of effective government policies about Hazard and risks.
<p>Sector: Homes Hazard: Tornado There are a total 8650 homes in Patiya Upazila. Among them 56524 Pucca, Almost majority homes are Kacha can be affected if a tornado like 1991 occurs in Patiya Upazila.</p>	<ul style="list-style-type: none"> → Build tornado resilient homes. → Strengthen base. 	<ul style="list-style-type: none"> → Give advance warning. → Keep people aware. 	<ul style="list-style-type: none"> → Not maintain natural balance.
<p>Sector: Agriculture Hazard: River Erosion There are Karnafully river in this Upazila. River erosion is seen in some union. About 500600 acres crop are damaged due to river erosion.</p>	<ul style="list-style-type: none"> → Strengthen embankments. → Repair embankments. → Plant more and more trees on banks of river. 	<ul style="list-style-type: none"> → Increase navigability. → Increase depth and keep clean the routes of rivers 	<ul style="list-style-type: none"> → Increase cooperation of WDB. → Not to take initiatives to protect river erosion.
<p>Fisheries Hazard: River Erosion River erosion occurs in every year during rainy monsoon. Fisheries sector suffers extensively due to river erosion. About 1540 ponds are devoured by river erosion.</p>	<ul style="list-style-type: none"> → Not to build ponds close to rivers. 	<ul style="list-style-type: none"> → Build embankments strong. → Fisherman should be aware 	<ul style="list-style-type: none"> → Put more attention of fishery department. → Government initiatives must to prevent river erosion.

Hazards & Risks	Possible means to reduce risks		
	Short-term	Midterm	Long-term
<p>Sector: Homes Hazard: River Erosion River erosion occurs in every year in this Upazila. About 1560 homes can be devoured if a river erosion is occurs.</p>	<ul style="list-style-type: none"> ➤ Non existence of Embankments. ➤ Due to increase of water pressure in rivers during rainy monsoon. 	<ul style="list-style-type: none"> ➤ Losing / decreasing navigability. ➤ Decrease of depth of rivers by siltation. 	<ul style="list-style-type: none"> ➤ Not taking any government initiatives to prevent river erosion. ➤ Lack of good attention of WDB.
<p>Sector: Agriculture Hazard: Drought Drought is found during dry monsoon in this Upazila. Almost all unions are affected by drought. About 3540 acres crop are damaged directly or indirectly due to drought.</p>	<ul style="list-style-type: none"> → Plant sapling newly. → Increase sufficient large trees. 	<ul style="list-style-type: none"> → Retain water in rivers and canals. 	<ul style="list-style-type: none"> → DAE should put more attention. → Invent drought resilient varieties of crops.
<p>Sector: Agriculture Hazard: Water Logging Water logging occurs as the upazila is close to Karnafully river and huge onrush of hilly water during raining monsoon. As a result about 5200 acres crop are directly or indirectly affected.</p>	<ul style="list-style-type: none"> ➤ As the crop land are in low lying areas. ➤ Non avialiability of speedy water discharging system. 	<ul style="list-style-type: none"> ➤ Non – cultivation of of disaster resilient crop varieties. 	<ul style="list-style-type: none"> ➤ Not taking appropriate actions by WDB. ➤ Poor support from donors.
<p>Sector: Fisheries Hazard: Water Logging As the upazila is close to Karnafully river and huge onrush of hilly water occurs during rainy monsoon. Fishes of about 533 acres are swept away due to this disaster and as a result, peoples lives become very hard.</p>	<ul style="list-style-type: none"> ➤ As the fishermen are not aware about it. 	<ul style="list-style-type: none"> ➤ Absence of required number of fish services centers. 	<ul style="list-style-type: none"> ➤ Not to take proper actions by district Fishery department.

3.3 Development Plan of NGOs:

Sl. No.	Name of NGO	Activities	No of beneficiaries	Duration of project
1	Proshika	Education, Health, Risk Reduction & Micro-Credit	930 people	long-term
2	Hope	Sanitation , Awareness, Health and Micro-Credit	1030 people	long-term
3	BRACK	Development of the women, Education, Health, Risk Reduction & Micro-Credit	2750 people	long term
4	Blast	Health, Awareness & Micro-Credit	1120 people	long term
5	Karitas	A small loan, to raise awareness	890 people	long term
6	T M S S S S	Development of the women, Education, Awareness, Health and Micro-Credit	1530 people	long term
7	Bangladesh Bureau	Raise awareness & Micro-Credit	640 people	long term
8	GHARONI	Education and Disaster Management Ptoqram	2112 people	3 year
9	NASS	Raise awareness, Risk Reduction and disaster management.	650 people	For long-term
10	Plan Bangladesh	Education, Risk Reduction and Awareness	some 7,500 persons are under sentence	5 year plan
11	Grameen Bank	Micro-Credit and various awareness programs	1160 people	long term
12	AlMa	Health, Awareness and Micro-Credit	790 people	long term
13	Bishab	Micro-Credit & Raise Awareness	675 people	long term
14	Ghasful	Education, Awareness, and Micro-Credit	780 people	long term
15	Barnali	Health, Awareness and Micro-Credit	695 people	long term
16	Uddipon	Health, Awareness and Micro-Credit	985 people	long-term
17	Pratashi	Disaster Management, Disable and Micro-Credit	1020 people	long-term
18	Mamata	Health, Awareness and Micro-Credit	760 people	long term
19	Nojoyan	Micro-Credi & Rise Awareness	376 people	long term
20	Niskriti	Sanitation , Awareness, Health and Micro-Credit	640 people	long-term
21	Nari Jagaran Sangstha	Development of the women, Education, and Awareness	840 people	long-term
22	Surjer Hasi	Micro-Credit & Health related activities	500 people	long-term

3.4 Disaster Management Action Plan:

3.4.1 Pre-preparation for Disaster

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implement.	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Com m. %	UP %	NGO %	
1	Identification of points for massage	176	1,76,000	Village, ward, up & purashava	February-march	Through Co-ordination				All activities will make community people aware and motivate to work to reduce Disaster risks. As a result, the loss of lives and resources will be reduced. The activities will contribute to socio-economic and national development.
2	Group formation at Ward level	198	7, 92, 000 -	Pourashava & Up	February-march					
3	Plan to circulate advance massage for flood/hazards at local level	198	4,95,000	Pourashava & Up	February-march					
4	Circulate advance massage for Flood & disasters	198	97, 500 -	Village, ward, up & purashava	February-march					
5	Deliver Health Services	22	22, 00, 000 -	Village, ward, up & purashava	February-march					
6	Conduct drill activities	44	6, 20, 000 -	Pourashava & Up	February-march					
7	Repair of Shelters	44	4, 00, 000 -	Pourashava & Up	February-march					
8	Impart training on Disasters & Primary Health	44	2, 20, 000 -	Pourashava & Up	February-march					
9	Keep ready of Dry foods and Medicines	dry food - 18 tons Rice/Rice- 15 tons	25, 50, 000 -	Village, ward, up & purashava	February-April					
10	Impart traing to school students on Disasters	About 20 at school	6, 50, 000 -	School	February - April					

3.4.2 During Disasters:

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implement.	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
1	Distribution of Dry foods	10 tons dry food, rice, pulses 12 tons	15, 50, 000	Ward & Union	During disaster management	Through Co-ordination				All activities will make community people aware and motivate to work to reduce Disaster risks. As a result, the loss of lives and resources will be reduced. The activities will contribute to socio-economic and national development.
2	Arrange provision for Pure drinking water & Sanitation	Almost 55000 Family	8, 50, 000	Ward & Union	During disaster management					
3	Transfer affected people to shelters or Health centers	45,000 family	9, 00, 000	Ward & Union	During disaster management					
4	Take women, children, aged, ill and disabled to shelters and high land on emergency basis.	88	5, 75, 000 -	Ward & Union	During disaster management					
5	Transfer affected people to proper medical service	-	-	Ward & Union	During disaster management					
6	Ensure Social security	-	-	Ward & Union	During disaster management					

3.4.3 After Disasters:

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implementation	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
1	Rescue wounded People & provide primary treatment	176	10,50,000	All wards & unions of upazila	After disaster	Through Co-ordination				All activities will make community people aware and motivate to work to reduce Disaster risks. As a result, the loss of lives and resources will be reduced. The activities will contribute to socio-economic and national development.
2	Cleaning garbage immediately	176	12, 50, 000 -	In the disaster affected areas	After disaster					
3	Start early rescue operation	176	-	In the disaster affected areas	After disaster					
4	Emergency rehabilitation & support for livelihood	47000	8,40,000	In the disaster affected areas	After disaster					
5	Restablishment of social security	-	-	All wards & unions of upazila	After disaster					

3. 4. 4 In normal period/Risk Reduction Perod:

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implementation	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
1	Repair of embankment & construction	21 km.	Every km. 34 lakh	1. Kachuai union 6 km. ward no. 1, 3, 7 & 8. 2. Bhatikhain union 4.5 km. ward no. 3, 4, 5, 6 & 7 3. Chanhara union 3 km. ward no. 1 & 3 4. Haidgoan union 1.5 km. ward no. 2, 3, & 5. 5. Charpathorghata union 4 km. ward no. 3, 7, 8 & 9. 6. Juldha union 3 km. ward no. 3 & 7	After disaster	Through Co-ordination				All activities will make community people aware and motivate to work to reduce Disaster risks. As a result, the loss of lives and resources will be reduced. The activities will contribute to socio-economic and national development.
2	Sluice gate	3	Per sluice gate 64 lac	1) Kharna union: sluice gate located is Kharna khal ward no 4, 5, 6 & 7 2) Jiri union: sluice gate located is Shikilbaha khal ward no 3 & 7	After disaster					
3	Digging canals	50 at least 22 of the canal	Every 1 crore	1) Bhatikhain union: sluice gate located is Chankhali khal ward no 1, 2, 3, 4 & 5 2) Chanhara union: sluice gate located is Raida khal ward no 1, 3, 4 & 8 3) Haidgoan union: sluice gate located is Mora khal ward no 2, 3, 4 & 5 5) Kelishohor union: sluice	After disaster					

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implementation	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
				<p>gate located is Sonaichari khal ward no 7 & 8</p> <p>6) Habilashdip union: sluice gate located is 5, 6, 7, 8 & 9 khal ward no 4, 5, 6 & 7</p> <p>8) Charlakha union: sluice gate located is Kharna khal ward no 4, 5, 6 & 7</p> <p>9) Charpathorghata union: sluice gate located is Roya khal ward no 1, 2, 3, 5, 8 & 9</p> <p>10) Kusumpura union: sluice gate located is Garudola khal ward 5, 6, 7 & 9</p> <p>11) Jiri union: sluice gate located is ward no 2, 4, & 6</p> <p>12) Asia union: sluice gate located is Asia khal ward no 4, 5, 6 & 7</p> <p>13) Kasiyaish union: sluice gate located is Kasiayasish khal ward no 4, 5, 6 & 7</p>						
4	Road repairs & brick soling	50 km. kacha & HBB 184	Every kilometer 15 lakhs	<ol style="list-style-type: none"> 1. Kharna union Kacca road 4 km. ward no. 3, 5 & 8 & HBB road 3 km. ward no. 1, 3, 5, 6 & 9. 2. Kachuai union Kacca road 6 km. ward no. 3, 4, 5, 6 & 4 & HBB road 7 km. ward no. 3, 5, 7 & 8. 	After disaster					

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implementation	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
				3. Bhatikhain union Kacca road 14.5 km. ward no. 3, 4, 5 & 7 & HBB road 5 km. ward no. 1, 2, 3, 4, & 9.						
				4. Chanhara union Kacca road 3.5 km. ward no. 1, 2, 3, 5 & 19 & HBB road 7 km. ward no. 1, 3, 5, 6 & 9.						
				5. Haidgoan union Kacca road 4.5 km. ward no.1, 2, 3, 4, 5, 6, 8 & 17 & HBB road 8 km. ward no. 1, 3, 5, 6 & 9.						
				6. Kelishohor union Kacca road 10 km. ward no. 1, 3, 5, 8 & 11.5 & HBB road 5 km. ward no. 5, 6 & 9.						
				7. Habilashdip union Kacca road 13 km. ward no. 3, 5, 6, 7 & 8 & HBB road 16 km. ward no. 1, 3, 5, 6, 7, 8 & 9.						
				8. Kolagoan union Kacca road 12 km. ward no. 1, 2, 3, 5, 8 & 15 & HBB road 13 km. ward no. 1, 3, 5, 6 & 9.						
				9. Jangolkhain union Kacca road 12 km. ward no. 2, 3, 5, 8 & 10 & HBB road 7 km. ward no. 3, 5, 6 & 9.						
				10. Charlakha union Kacca						

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implementation	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
				<p>road 16 km. ward no. 1, 2, 3, 5, 8 & 7 & HBB road 6 km. ward no. 1, 3, 6 & 9.</p> <p>11. Charpathorghata union Kacca road 8 km. ward no. 3, 5 & 8 & HBB road 5 km. ward no. 6 & 9.</p> <p>12. Shikolbaha union Kacca road 4.5 km. ward no. 3, 5 & 8 & HBB road 6.5 km. ward no. 1, 3, 5, 6 & 9.</p> <p>13. Barolia union Kacca road 8 km. ward no. 3, 5 & 8 & HBB road 8 km. ward no. 1, 3, 5, 6 & 9.</p> <p>14. Barouthan union Kacca road 9 km. ward no. 3, 5 & 8 & HBB road 9 km. ward no. 6 & 9.</p> <p>15. Juldha union Kacca road 8 km. ward no. 3, 5 & 8 & HBB road 7 km. ward no. 1, 3, 5, 6 & 9.</p> <p>16. Jiri union Kacca road 5 km. ward no. 1, 2, 3, 5, 8 & 15 & HBB road 8 km. ward no. 1, 3, 5, 6 & 9.</p> <p>17. South Bhursi union Kacca road 5 km. ward no. 2, 3, 5, 8 & 10 & HBB road 5.5</p>						

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implementation	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
				km. ward no. 3, 5, 6 & 9. 18. Fhalghat union Kacca road 8 km. ward no. 3, 4, 5 & 7 & HBB road 6 km. ward no. 1, 2, 3, 4, & 9. 19. Asia union Kacca road 2 km. ward no. 1, 2, 3, 5 & 19 & HBB road 7 km. ward no. 1, 3, 5, 6 & 9.						
5	Emergency control room operation	-	-	Upazila & Union	After disaster					
6	Repair of shelter & reconstruction	22	Per 1.5 crore	Per Union 1	After disaster					
7	Construction of Culvert	90	Every 2 lakh 40 thousand	1. Kharna union no. of culvert 7. ward no. 1, 6, 8 & 9. 2. Kachuai union no. of culvert 9. ward no. 1 to 9. 3. Bhatikahin union no. of culvert 12. ward no. 1 to 9. 4. Chanhara union no. of culvert 9. ward no. 1 to 9. 5. Hoadgaon union no. of culvert 9. ward no. 1 to 9. 6. Kelishohor union no. of culvert 8. ward no. 1 to 9. 7. Habilashdip union no. of	After disaster					

Sl. No	Activities	Targets	Probable budget	Where to do	Probable date for implementation	Who to do & How much				Coordination with development Plan
						Upazila admin. %	Community %	UP %	NGO %	
				culvert 8. ward no. 1 to 9. 8. Jangolkhain union no. of culvert 8. ward no. 1 to 9. 9. Charlakha union no. of culvert 9. ward no. 1 to 9. 10. Charpathorghata union no. of culvert 9. ward no. 1 to 9. 11. Shikolbaha union no. of culvert 8. ward no. 1 to 9. 12. Barouthan union no. of culvert 7. ward no. 1 to 9. 13. Dhalghat union no. of culvert 6. ward no. 1 to 9.						
8	Construction of Soil killa	4	80 lakhs In each	Each union 2	After disaster					
9	sanitation	22, 800	Every 20 thousand	Ward, Village & Up	After disaster					
10	Ward, Village & Up	Ward, Village & Up	Ward, Village & Up	Ward, Village & Up	After disaster					
11	Ward, Village & Up	Ward, Village & Up	Ward, Village & Up	Ward, Village & Up	After disaster					
12	Upazila	Upazila	Upazila	Upazila	After disaster					
13	Upazila	Upazila	Upazila	Upazila	After disaster					

4th Chapter: Emergency Response

4.1 Emergency Operation Center (EOC)

An emergency operation center is organized during disasters at Potiya Upazila. The center plays effective role in responding during disasters and coordinates with others. The center opens 24 hours. During this period the center collect data, examines data, inspect and manage resources.

The emergency operation center is organized in the office of PIO. In this center, an operation center, 1 control room and 1 communication cell operates. The name, designation and mobile no of responsible persons are exhibited in below table-

ka) Upazila:

List of Potiya Upazila's Emergency Operation center

Sl. No	Name	Designation	Member	Mobile No
01	Mojaffar Ahmed Tipu	Upazila Chairman	Chairman	01819-316840
02	Rokeya Parvin	Upazila Nirbahi Officer	Vice-Chairman	01718-186871
03	Md. Abul Hossain	Project Implementing Officer	Member Secretary	01820-186770
04	Harun-ar-Rashid	Member	Member	01733-939585
05	Air Mohammad Peyaru	Member	Member	01817-721141
06	Afroza Begum Jali	Member	Member	01831-316840

Kha) Center list of union emergency operation center committee in table below:

List of Kharna union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Mafjal Ahmed Chowdhury	Chairman	01819-170667
02	Md. Jamal Uddin	Member Secretary	01835-058285
03	Shamsul Alam	Member	01812-865834
04	Md. Abdul Malek	Member	01819-289033
05	Akhi Das	Member	01812-716519

List of Kachuyai union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Khalilur Rahman Babu	Chairman	01812-824782
02	Md: Milton Chowdhury	Member Secretary	01815-370662
03	Sajeda Begum Saju	Member	01813-145103
04	Md: Morshed Faroukhi	Member	-
05	Md. Saiful Islam	Member	01819-172707

List of Bhatikhain union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Mahbubul Alam	Chairman	01819-828799
02	Paritosh SEN	Member Secretary	01823-732371
03	Sahnaz Farid	Member	01816-518577
04	Azam Khan Talukdar	Member	01823-318655
05	Ledu Mia	Member	01818-816917

List of Chanhara union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Alhaj Md. Kamal Uddin	Chairman	01817-212348
02	Sujan Barua	Member Secretary	01818-125850
03	Md. Harun Rashid Sikdar	Member	01829-492660
04	Mohammad Rafiqul Islam	Member	01818-737887
05	Swapna Chowdhury	Member	01820-853814

List of Haidgaon union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Moinuddin	Chairman	01818-917801
02	Uzzal Das	Member Secretary	01814-317320
03	Selina Akhtar	Member	01814-894303
04	Ranjit Chowdhury	Member	01817-762560
05	Shamsul Alam	Member	01826-556705

List of Kelishor union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Mohammad Jasim Uddin	Chairman	01819-802379
02	Syed Ahmed Chowdhury	Member Secretary	-
03	Shikha De	Member	01811-686750
04	Md. Ismail	Member	01821-450168
05	Pulok De	Member	01713-615393

List of Habilashdip union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Shafiqul Islam	Chairman	01827-920625
02	Md. Abdul Kayum Choudhury	Member Secretary	01819-179319
03	Rehena Akhtar	Member	01818-774368
04	Mohammad Motaleb	Member	01812-074746
05	Md. Idris Ali	Member	01823-521555

List of Kolagoan union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Haji Md. Shamsul Islam	Chairman	01711-710045
02	Md. Idris	Member Secretary	01911-018458
03	Nasim Akhtar	Member	01824-699146
04	Habibur Rahman	Member	01817-735419
05	Mohammad Sharif	Member	01710-842173

List of Jangalkhain union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Alhaj Shahadat Hossain	Chairman	01817-723056
02	Nayan Bhattacharya	Member Secretary	01818-552848
03	Mrs. Nargis Aktar	Member	01811-626494
04	Md. Shahadat Hossain Sabuj	Member	01817-266013
05	Haji Md. Alauddin	Member	-

List of Charlakha union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Alhaj Mohammad Ali	Chairman	01717-894975
02	Dilip Kumar Biswas	Member Secretary	-
03	Sanora Begum	Member	01821-534567
04	Mohammad Jasim Uddin	Member	01828-772190
05	Md. Alamgir	Member	01824-915982

List of Charpathorghata union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Haji Saber Ahmed	Chairman	01713-120899
02	Khurshid Alam Chowdhury	Member Secretary	01921-520911
03	Md. Jahangir Patwari	Member	01812-909160
04	Aleya Begum	Member	01823-948010
05	Md: Khayer Ahmed	Member	01680-808842

List of Shikolbaha union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Abul Kalam Bakul	Chairman	01819-366823
02	Pranab Pal	Member Secretary	01817-770700
03	Mrs. Rehena Akhtar	Member	01834-212378
04	Md: Arshad Ali	Member	01822-534684
05	Tayeb Alam Ankur	Member	01819-622964

List of Barolia union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Shaheen Islam	Chairman	01827-393477
02	Tilok Kanti Das	Member Secretary	01814-804159
03	Anima Barua	Member	018128 047630
04	Nurul Kabir Chowdhury	Member	01823-923340
05	Pradut Chowdhury	Member	01711-375686

List of Barouthan union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Didarul Alam	Chairman	01717-133030
02	Mohammad Azgar Ali	Member Secretary	01812-505221
03	Nazmun Nahar	Member	01789-764721
04	Emdadul Haque Chowdhury	Member	01819-626044
05	Md. Nasir Uddin	Member	01814-309537

List of Juldha union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Nurul Haque	Chairman	01817-716144
02	Samir Dhar	Member Secretary	01818-466929
03	Ratna Dutta	Member	01812-579275
04	Shalah Ahmed	Member	01812-498452
05	Sahabuddin	Member	01820-061125

List of Kusumpura union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Rezaul Karim Nechar	Chairman	01815-944881
02	Md. Shah Alam	Member Secretary	01816-130037
03	Shakhina Begum	Member	01815-854199
04	Shahana Akhtar	Member	01825-132073
05	Md. Selim	Member	01812-493212

List of Jiri union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Abul Kalam	Chairman	01817-201309
02	Mohammad Abdul Mannan	Member Secretary	01813-405720
03	Kallan Majumder	Member	01818-825789
04	Mohammad Badsha	Member	01819-509823
05	Mohammad Hasan	Member	01829-508235

List of South Bhursi union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Muhammad Syed	Chairman	01819-178737
02	-	Member Secretary	-
03	Ashutosh Mukherjee Das	Member	01815-143717
04	Ersana Nasrin	Member	01820-276937
05	Nazim Uddin	Member	01819-381859

List of Dhalghat union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md: Aalamat Ullah	Chairman	01819-326793
02	Didarul Alam	Member Secretary	01818-684424
03	Parveen Akhtar	Member	01818-138721
04	Shafiul Alam	Member	01819-352450
05	Md. Saiful	Member	01813-247863

List of Shobhandandi union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md: Ehsanul	Chairman	01818-765434
02	Manjur Alam	Member Secretary	01815-625960
03	Mary Begum	Member	01818-355266
04	Jamal Ahmed	Member	01813-139960
05	Babul Kanti Choudhury	Member	01824-422584

List of Asia union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Mohammad Hashem	Chairman	01819-637200
02	Mohammad Farooq	Member Secretary	01822-937438
03	Deji Akhtar	Member	01811-822695
04	Md. Belal	Member	01813-965570
05	Md. Yakub	Member	01820-170830

List of Kasiyash union's Emergency Operation center

Sl. No	Name	Designation	Mobile No
01	Md. Abul Kasem	Chairman	01819-320507
02	Md. Nazrul Islam	Member Secretary	01819-616415
03	Sabina Yasmin	Member	01951-051704
04	Nazim Uddin	Member	01815-520134
05	Mohammad Rahim Uddin	Member	01840-080358

4.1.1 Operate Emergency control room:

A control room is organized at the office of Upazila Nirbahi Officer during disasters. There is a register. Who, when will deliver their responsibilities is written in this register and what kind of message is received and what kind of message is sent to whom is written in this register. A union based LGED MAP is kept in the room and various locations, roads for communication, rivers, canals and embankments etc is written in this MAP.

2 members of Upazila Disaster Management Committee (UzDMC) work in this control room by turns just after occurrence of disasters and a police also remains present in this center. Responsible 3 people deliver their duties by turns and a 3 member voluntary team work 24 hours by turns. Full time contact is maintained through phone or mobile with Unions and district.

Just after the disasters, affected areas are identified in this MAP. It may be mentioned here that control room lacks some instrument like large torch light, gumboot, life jacket and raincoat etc.

4.2 Plan during disaster:

Sl no	Activities	Unit	Target	When to do	Who do	Who to do	How to do	Communication
1	Keep ready to volunteers	People	22 Union in 6600	Feb. to March	UP Chairman	UzDM C & NGO & Public	Impart Training & material supply	Representative of Union & Upazila disaster management community
2	Micking of warning	People Number	22 Union of 100%	Rescue of warning messages	Responsible volunteers	Rural police & Rural people	Through siren & dream	UDMC responsible representative
3	Ready to Boat/, Car/ Van	Number	22 unions 220	Before disaster	Responsible person of Union Parishod	UP member	Preserve phone no of boat, car & van drivers	UDMC responsible representative
4	Conduct rescue operation	People Number	3600 people	Before disaster	Responsible person of Union	People of Non-govt. organization & community	Through selecting few volunteers who are capable of rescue activities & using life saving devices	UzDMC & UDMC responsible representative
5	Primary Treatment	Number	22 in 22 the Union	Before disaster	Responsible person of Union	People of Non-govt. organization & community	Keep communication with health center	Responsible person of Upazila health center
6	Collection of life saving medicine & keep prepared	Medicine	1000 people	Pre-disaster	Responsible person of UDMC	People of Non-govt. organization & community	Keep communication with health center	Communication with UzDMC & UDMC to the responsible person
7	Dry food,/pulse/rice & house building materials	Taking only dry food total of 15 tons			Responsible person of UDMC	local business community and non-governmental organizations people	Through collecting phone no & discation with community people & agencies that capable of provides foods	Communication with UzDMC & UDMC to the responsible person
8	Vaccine of domestic animal	Medicine (people)	8800	Pre-disaster & after disaster	Responsible person of Union	People of Community	Through discation with union responsible worker	Responsible agencies of UDMC & Upazila livestock officer
9	Shelter repairs	Number	22	Pre-disaster	Responsible person of Union	People of Non-govt. organization & community	Solve problems through informing responsible officers by visiting shelters directly	Communication with UzDMC & UDMC to the responsible person
10	Organize reharshall	Number	44	Pre-disaster	Responsible person of Union	People of Non-govt. organization & community	Volunteers reharshell in more vulnerable areas	Communication with UzDMC & UDMC to the responsible person

Sl no	Activities	Unit	Target	When to do	Who do	Who to do	How to do	Communication
11	operate emergency room	room	22	Pre-disaster	-	-	Preserve information for emergency room	Communication of district disaster management community

4.2.1 Keep volunteers ready:

- Organize groups with leadership of UP members at ward level.
- Circulate information and warning message through volunteers
- Organize training for members of volunteers on different responsibilities like signaling, messaging, rescue, disposal and shelter management and risk reduction.

4.2.2 Circulate warning message:

- Ward UP members will circulate the warning message to every home of all wards as his own responsibilities.
- Circulation of 5 no danger warning shall be done through Miking at least once in one hour.

4.2.3 Approach of removing community people

- Ward UP member will start removing people to shelters just after getting message of taking shelter to shelter centers through radio and TV.
- Miking should be started to take shelter of high risk people immediately after announcement of 8 no warning and volunteers will put pressure of taking shelter by moving house to house. They should be moved if necessary. People having risk must keep informed about their respective shelter.

4.2.4 Rescue & Primary Medical service:

- This responsibility should be entrusted to the members of District and Upazila Disaster Management Committee of high risk areas.
- A permanent fund should be created under the supervision of District and Upazila Disaster Management Committee for rescue operation.
- Conduct and establish temporary rescue camp.
- Send ill person, aged, children and delivering pregnant women urgently to hospitals.
- UP members with the help of volunteers will put dead animals into grave and dead men to burials.

4.2.5 Maintenance of Shelter centers:

- Keep cyclone centers ready after doing necessary repair before start of Disaster monsoon.
- Finalize the cyclone centers or safe centers during emergency.
- Ensure security of women, children, and disabled during disasters.
- Ensure safe drinking water and other services.

4.2.6 Keep ready boats:

- DDMC and UzDMC will update the list of engines driven boats and make a selection for use during disasters.
- Boats owners will provide assistance to them.

4.2.7 Need assessment of damages and send report:

- Send SOS for within 24 hours of disaster happening and 'D' form within 7 days to UP Chairman.
- UP Chairman will send compiled ward report to Chairmen of Upazila DMC within next 12 hours through UP secretary.

4.2.8 Coordinate of relief activities:

- UP Chairman will coordinate all relief activities of different relief agencies.
- Maintain a register about the relief materials arrived and inform control room about the operating areas and groups working in those areas.

4.2.9 Collect & keep ready dry foods and life saving medicines:

- Collect and procure dry foods like Chira, Muri from local hat/bazaars for prompt distribution.
- Collect rice, pulses, Ata, oil and house building materials like Tin,, Perek, and nylon ropes from local Bazars.
- Prepare a list of necessary medicines with the help of Health assistant and Family Planning Assistant.

4.2.10 Treatment/ Vaccination of Domestic animals:

- Keep ready medicines at Union Parishad Bhaban or Health centers from upazila livestock office.
- Members of Union disaster Management Committee (UDMCs) should be imparted training on Animal treatment.
- Experienced men must be involved in Animal treatment activity during disasters.

4.2.11 Organize drill:

- Drills should be organized on warning, forecasting, removal, recovery, and management of primary relief operation.
- Disasters drills should be organized periodically in cyclone/ flood prone areas.
- Examine the strength of preparation through drills on April and May of each year with vulnerable communities.
- During drills focus should be given to move ill, disables, lactating mothers/ pregnant women and children towards shelters.
- Drills should be conducted in areas risky for disasters on how move people to shelters.

4.2.12 Conduction of emergency control room:

- Emergency control rooms must be organized at unions/upazila/district offices just after disaster occurrence. Presence of Gram police members and 3/4 volunteers must be ensured by turns in these centers.
- Secretary of union Parishad and responsible person will be in duties of EOCs. Each team should consist of at least 3 members and 3 volunteers will deliver duties at EOC by turns. UP secretary will supervise activities all the time.

4.2.13 Shelters / safe places -

- Places which are safe from inundation during floods and away from river erosion can be used as Shelters.

Selected shelters, local schools and colleges, government and non-government institutions, high road, and embankments can be used as shelters.

4.3 List and description of Upazila safe places-

List of safe places during disasters

Name of shelter center	Name	Name Union	power
Soil Killa	There is no	-	-
Cyclone shelter	Charlakha Cyclone center in Ward No. 6 and 9	Charlakha	Almost 900 people
School Cum Shelter	Manasa School and College	Kusumpura	Almost 1200 people
	Ayub Bibi City Corporation School and College	Charpathorghata	around 1100 people
	Khammir Degree College	Jiri	Almost 1000 people
	Dhalgaht School and College	Dhalghat	around 1100 people
	A.J Chowdhury multiple College	Shikolbaha	Almost 1200 people
	Shobhondandi Public School and College	Shobondandi	Almost 850 people
	Charpathorghata High School	Charpathorghata	Almost 700 people
	Bathuya High School	Asina	Almost 900 people
	Chakrosala Agricultural High School	Kachuiya	Almost 850 people
	Dhalghat High School	Dhalghat	Almost 700 people
	Pingola Bbudhpura High School	Kasiyaish	almost 750 people
	Kusumpura High School	Kusumpura	About 800 people
	Kelishor High School	Keleshor	almost 750 people
	Ratanpur High School	Keleshor	Almost 850 people
	Lakhara High School	Kolagoan	Almost 950 people
	Mojaforabad Girls' High School	Kharna	Almost 1000 people
Mojaforabad N, J. High School	Kharna	Almost 950 people	
Charhara High School	Chanhara	Almost 1400 people	
Dhourdanga Sharada pedicure High School	Chanhara	Almost 1000 people	
Union Aagriculture High	Jangolkhain	Almost 700 people	

	School		
	Jangolkhain High School	Jangolkhain	Almost 650 people
	Jiri Paroubek High school	Jiri	Almost 500 people
	Union Agriculture High School	Jangolkhain	Almost 850 people
	Jangolkhain High School	Jangolkhain	Almost 700 people
	Jiri Paroubek high school	Jiri	Almost 650 people
	southbhurshi High School	South bhurshi	almost 550 people
	Karthala High School	Barolia	Almost 650 people
	Nalikamona Memorial Institute	Bhatikhain	Almost 500 people
	Haji Omra Kalarpola Mia High School	Shikilbaha	Almost 650 people
	Joara Khankana Government High School	Shobandandi	Almost 500 people
	Habilashdip Girls High School	Habilashdip	almost 750 people
	Haidgoan High School	Haidgoan	nearly 600 people
Up Building	Charpathoeghata High School	Up building	nearly 600 people
	Kolagoan Union	Up building	almost 550 people
	Juldha union	Up building	almost 550 people
	Barolia Union	Up building	Almost 650 people
	Barouthan union	Up building	Almost 500 people
	Charlakha union	Up building	Almost 650 people
	Shikilbaha union	Up building	Almost 500 people
	Patharghata union	Up building	Almost 650 people
	Asia Union	Up building	nearly 600 people
	Kolagoan	Up building	Almost 500 people

4.4 shelter center list of disaster management committee

Disaster management of shelters is an important part.

- During disaster save lives and property
- During disaster save livestock
- Shelter center and maintenance to make sure

Shelter Center	Name of shelter center	Responsible person	Mobile no.
Cyclone center	Charlakha Cyclone center in Ward No. 6 and 9	At that moment time disaster committee was formed	-
School cum shelter	Dhalghat High School	Mr. Abdul Jalil	01817-983460
	Pingola Bbudhpura High School	Md. Didarul Islam	01818-048770
	Kusumpura High School	Mohammad Ilias	-
	Kelishor High School	Salam Uddin	01818-033300
	Ratanpur High School	Rana Rahman	01819-741839
	Lakhara High School	S. M. Mejbahul Rahman	-
	Mojaforabad Girls' High School	Badal Chandra De	01727-862532
	Mojaforabad N, J. High School	Manik Kishor Malakar	01815-132325
	Charhara High School	Rina Dutta	-
	Dhourdanga Sharada pedicure High School	Manik Chandra Kar	01824603160
	Union Aagriculture High School	-	-
	Jangolkhain High School	Md. Abdul Gani	01815-028820
Up building	Chairman, খরনা, up	Mafjal Ahmed Chowdhury	01819-170667
	Chairman, Kachuiya	Md. Khalilur Rahman Babu	01812-824782
	Chairman, Bhatikhain	Md. Mahbubul Alam	01819-828799
	Chairman, Chanhara	Alhaj Md. Kamal Uddin	01817-212348
	Chairman, Haidgoan	Mohammad Mohiuddin	01818-917801
	Chairman, Kelishor	Mohammad Jasim Uddin	01819-802379
	Chairman, Habilusdip	Md: Mafijul Islam	01827-920625
	Chairman, Kolagoan	Haji Md. Samsul Islam	01711-710045
	Chairman, Jangolkhain	Alhaj Shahadat Hossain	01817-723056
	Chairman, Charlakha	Alhaj Mohammad Ali	01717-894975
	Chairman, Charpathorghat	Haji Saber Ahmed	01713-120899

4.5 List of Upazila resources:

Infrastructure / resources	Number	Choose	As a brief
shelters	3	Responsibilities are given instantly.	Almost all items are in damaged condition. Cyclone shelters have been useless and unprotected.
Godawn	2		
Small Megaphone	1 set		
Wireless	1		
Life Jacket	There is no		
Gamboot	There is no		
Ssirens	1		
Helmet	There is no		
By Cycling	There is no		
Torch light	There is no		
Apron	There is no		
Flagstand (with flag)	There is no		
Engine driven boats	There is no		
Rescue tool box	There is no		
Wireless sets	1		
Strechers	There is no		
Mike	1		
Radio (files).	1		
First aid box	1		
Table	3		
Chair	8		
Almirah	1		

4.6 Financing:

The income of union parishad comes from local tax, lease of hat/ bazaars and issuing of trade license of some specific business. But Union Pradshad has no authority to lease large hat/Bazars and Khall / Bills. But now government transfers 1% tax to union parishad from land registration.

(a) Own Resources: (Union Kar, rate and Fees).

Type of source	Annual income										
	Charlakha	Kachuai	Bhatikhain	Chanhara	Haidgoan	Kelishor	Habilashdip	Kolagoan	Jangolkhain	Karna	Charpathorghat
Annual residential house tax	40,000 -	82,250 -	170544	220000	80,888 -	40,000 -	2,20,000	40,000 -	-	42,000 -	50,000 -
By the license and license issue fees for permits	20,000 -	20,500 -	12,000 -	20,000 -	-	-	40,000 -	70,000 -	22,000 -	-	2,00,000 -
For the lease (, Market, Ghat, ponds, etc)	-	3,15,000 -	33,000 -	-	100000	15,000 -	-	20,000 -	-	31,000 -	72,000 -
Income property	-	-	-	-	-	-	-	-	-	-	-
General Fund of Union	-	-	-	-	-	-	-	-	-	-	-
Others	100000	20,000 -	-	100000	10,000 -	-	1,00,000	-	100000	-	25,000 -

Type of source	Annual income										
	Shikolbaha	Barolia	Barouthan	Juldha	Kusumpura	Jiri	Southbhursi	Dhalghat	Shobhandandi	Asia	Kashiyash
Annual residential house tax	2,20,000 -	-	220000	260000	40,000 -	-	47,000 -	-	40,000 -	40,000 -	43,000 -
By the license and license issue fees for permits	32,000 -	-	60,000 -	20,000 -	20,000 -	-	20,000 -	-	12,000 -	-	-
For the lease (, Market, Ghat, ponds, etc)	-	-	20,000 -	-	30,000 -	-	23,000 -	-	20,000 -	20,000 -	50,000 -
Income property	-	-	-	-	-	-	-	-	-	-	-
General Fund of Union	-	-	-	-	-	-	-	-	-	-	-
Others	2,00,000 -	-	-	-	100000	-	-	100000	-	100000	100000

(b) Government donation:

Type of source	Annual income										
	Charlakha	Kachuai	Bhatikhain	Chanhara	Haidgoan	Kelishor	Habilashdip	Kolagoan	Jangolkhain	Karna	Charpathorghat
Allowance of Chairman & Mambers	150000	155800	2, 03, 100 -	155300	156800	1, 53, 800 -	1, 56, 800 -	150200	3, 30, 000	15000	3, 80, 000 -
Salary of secretary & other workers	600000	272250	3, 94, 094 -	600000	166400	4, 66, 100 -	6, 00, 000	600000	5, 44, 000	600000	3, 30, 000 -
Developing fund of reparing road/L.G. S.P	1200000	1500000	-	200000	-	1000000	1000000	300000	-	1000000	-
1% of Land	600000	1100000	6, 50, 000 -	-	1850000	1500000	1200000	-	1100000	-	12, 00, 000 -
Construction and home repair, the development Fund	-	-	-	-	-	-	-	-	-	-	-

Type of source	Annual income										
	Shikolbaha	Barolia	Barouthan	Juldha	Kusumpura	Jiri	Southbhursi	Dhalghat	Shobhandandi	Asia	Kashiyash
Allowance of Chairman & Mambers	150000	150000	1, 55, 200 -	330000	330000	-	1, 56, 300	330000	1, 53, 200 -	330000	3, 44, 300 -
Salary of secretary & other workers	600000	544000	3, 30, 000 -	600000	600000	3, 30, 000	6, 00, 000	600000	5, 44, 200 -	600000	4, 17, 000 -
Developing fund of reparing road/L.G. S.P	300000	-	1200000	300000	1200000	-	1000000	700000	10, 00, 000	1200000	26, 30, 000
1% of Land	300000	-	3, 00, 000 -	1200000	800000	-	1200000	500000	12, 00, 000	800000	12, 00, 000
Construction and home	-	-	-	-	-	-	-	-	-	-	-

repair, the development Fund												
------------------------------	--	--	--	--	--	--	--	--	--	--	--	--

c) Local Government:

Local government	Annual income										
	Charlakha	Kachuai	Bhatikhain	Chanhara	Haidgoan	Kelishor	Habilashdip	Kolagoan	Jangolkhain	Karna	Charpathorghat
Upazila Parishad	100000	250000	-	100000	-	-	1, 00, 000	100000	-	100000	44, 600 -
District Council	-	-	-	-	-	-	-	-	-	-	-

Local government	Annual income										
	Shikolbaha	Barolia	Barouthan	Juldha	Kusumpura	Jiri	Southbhursi	Dhalghat	Shobhandandi	Asia	Kashiyash
Upazila Parishad	100000	-	1, 00, 000 -	100000	100000	-	1, 00, 000	-	1, 00, 000 -	100000	1, 00, 000 -
District Council	-	-	-	-	-	-	-	-	-	-	-

(d) Developing non-govt. organization:

Non-govt development organization	Annual income										
	Charlakha	Kachuai	Bhatikhain	Chanhara	Haidgoan	Kelishor	Habilashdip	Kolagoan	Jangolkhain	Karna	Charpathorghat
CDMP	-	-	-	-	-	-	-	-	-	-	-
ADB	-	-	-	300000	-	2000000	-	-	-	1000000	-

Non-govt developing organization	Annual income										
	Shikolbaha	Barolia	Barouthan	Juldha	Kusumpura	Jiri	Southbhursi	Dhalghat	Shobhandandi	Asia	Kashiyash
CDMP	-	-	-	-	-	-	-	-	-	-	-
SDB	-	-	-	200000	-	-	-	-	-	-	-

4.7 Assessment of Planning and Work Plan:

S.I No	Name	Designation	Member	Mobile No
1	Mojaffar Ahmed Tipu	Upazila Chairman	Chairman	01819-316840
2	Mr. Rokeya Begum	Upazila Nirbahi Officer	Co-Chairman	01718-186871
3	Md. Abul Hassain	Project Implementing Officer	Member Secretary	01820-186770
4	Md. Anisuzaman	Upazila Engineer, LGED	Member	0114334469
5	Parvin Akter	Upazila Health officer	Member	01199-270177

5th Chapter: Rescue & Rehabilitation Plan

5.1 Assessment of damage

Ballots	Description
Agriculture	The amount of total firm land is 56134 acres. About 12140 acres Aman, Aus, Boro, and Robi crops and cultivation of Guava and vegetables can badly be affected by land slide similar to 1991 occurs of hits this upazila. About 5750 acres crop can be damaged each year by flood/tornado. Partly damage of 1750 acres crop is occurred by tornados. About 6570 aces crop can be damaged by draught. Soil fertility is decreasing day by day. About 5340 acres river erosion acres crop can be affected if a draught. About 4305 acres crop can be affected if a major water logging in this upazila.
Fisheries	Fishes of about 1250 ponds out of total 3833 are flown away if a flood hits the Upazila. Fishes of about 325 ponds out of 3833 ponds are washed away if a tornado/water logging/flood in the upazila. About 80-85 ponds ponds are affected by river erosion.
Health	People of about 19500 families can be affected with various diseases. 10300 families are being affected by draught/water logging/flood/land slide & river erosion etc. In addition, Water scarcity is found due to lowering of underground water of tube wells during dry monsoon.
Livelihoods	About 380600 farmers, 126700 day laborers lost employment due to flood. In addition, goods of 1240 small and large shops are damaged. About 59800 day laborers lost their employment due to flood, River Erosion. water logging & tornado. In addition drought takes away employment of 59800 day laborers and 12600 farmers. Besides 10500 fishermen directly or indirectly affected by drought/flood.
Sanitation	There are a total 97500 latrines at Potiya upazila. 56742 are Pucca and 56524 are Kacha. About 26500 latrines can be affected if a flood occurs. About 12400 latrines can be affected by tornedo, flood, and river erosion.
Infrastructure	About 110 KM Kacha road & HBB road 96 km. out of total 419.5 KM, inundation of 43600 families out 101968 famolies, 12 educational institutions out 274 , 8 Hatbazars out of 38 Hatbazars, 5900 Kacha homes out of 12300 homes and 28 culverts can be affected by floods, land Slide, tornedo & water logging.

5.2 Early Recovery:

5.2.1 Re-establishment of Administration

S.I No	Name	Designation	Member	Mobile No
1	Mojaffar Ahmed Tipu	Upazila Chairman	Chairman	01819-316840
2	Mr. Rokeya Begum	Upazila Nirbahi Officer	Co-Chairman	01718-186871
3	Md. Abul Hassain	Project Implementing Officer	Member Secretary	01820-186770
4	Md. Anisuzaman	Upazila Engineer, LGED	Member	0114334469
5	Parvin Akter	Upazila Health officer	Member	01199-270177

5.2.2 Cleaning of Garbage:

S.I No	Name	Designation	Member	Mobile No
1	Mojaffar Ahmed Tipu	Upazila Chairman	Chairman	01819-316840
2	Mr. Rokeya Begum	Upazila Nirbahi Officer	Co-Chairman	01718-186871
3	Md. Abul Hassain	Project Implementing Officer	Member Secretary	01820-186770
4	Md. Anisuzaman	Upazila Engineer, LGED	Member	0114334469
5	Parvin Akter	Upazila Health officer	Member	01199-270177

5.2.3 Resumes of Public Services:

S.I No	Name	Designation	Member	Mobile No
1	Mojaffar Ahmed Tipu	Upazila Chairman	Chairman	01819-316840
2	Mr. Rokeya Begum	Upazila Nirbahi Officer	Co-Chairman	01718-186871
3	Md. Abul Hassain	Project Implementing Officer	Member Secretary	01820-186770
4	Md. Anisuzaman	Upazila Engineer, LGED	Member	0114334469
5	Parvin Akter	Upazila Health officer	Member	01199-270177

5.2.4 Emergency Livelihood Assistance:

S.I No	Name	Designation	Member	Mobile No
1	Mojaffar Ahmed Tipu	Upazila Chairman	Chairman	01819-316840
2	Mr. Rokeya Begum	Upazila Nirbahi Officer	Co-Chairman	01718-186871
3	Md. Abul Hassain	Project Implementing Officer	Member Secretary	01820-186770
4	Md. Anisuzaman	Upazila Engineer, LGED	Member	0114334469
5	Parvin Akter	Upazila Health officer	Member	01199-270177

Annexure 1

Checked List of Implementing Planning:

Sl no.	subject	YES/NO
1.	Call to start publicity of danger calling member of volunteers selected for miking of warning.	Yes
2.	Whether formation or organized or responsible person has been done to rescue people of vulnearable areas.	Yes
3.	Whether publicity has been made to keep dry foods and safe drinking water for 2/1 days beneath soil.	Yes
4.	Life jakets for the security of volunteers members have been supplied	Yes
5.	Necessary manpower have been deployed to keep control room runing till the time.	Yes
6.	Necessary security for union food godwon/relief godawn are in place.	Yes
7	Others	

- The checklist for the various faults can be seen in the field will be reconstructed to take steps.
- By Union Council or any source of fund volunteers from members of the team for special needs life jacket collection.

Checklist

- Every year on April 15 the date/month of May between disaster Union Management Committee meeting the discussion below: fill in the following table: list the Executive Officer of the sub-district and will be sent to the district magistrate.

SL no.	subject	Signs of its proper place
1	Union food store there is an adequate amount of storage?	No
2	It is risky for the children vaccines/vaccine has been given?	Yes
3	1 and 6 when the mother and children have been fed on vitamin K?	Yes
4	Up clinic hospitals are presive in Salain?	Yes
5	The annual volunteer training has been given to members?	No
6	For the shelter to primary treatment is medicine equipment	No
7	As for the shelter to Rural Doctors are present in the area	No
8	There are tube-wells to center shelter in	No
9	To center shelter in doors and windows there are right	No
10	As for shelter to the center for alternative care taker?	Yes
11	Shelter for women to the center there is a separate system for	No
12	To prenancy center shelter in women elected to local midwife to care for There are area	No
13	cows and goats for the position of high places or has been determined for the emphasized reforesting	No
14	The responsibility of members of the party have been aware about	Yes
15	At shelter installations/lattrin there is.	No
16	The weather broadcast and danger signal necessary for developed speaker microphone incredible pixel there is.	Yes
17	At least 2 or 1 days of taking only dry food, drinking water, to be alert to the people has been to?	Yes
18	Others	

Annuxer 2 List of Upazila Disaster Management Committee

Sl.no	Name/Designation	Member	Mobile No
1	Upazila Chairman, Patiya	President	01819-316840
2	Upazila Nirbahi Officer, Patiya	Vice-President	01718-186871
3	Mayor, Patiya	Member	01733-939585
4	Upazila Vice-Chairman, Male Patiya	Member	01817-721141
5	Upazila Vice-Chairman, Female Patiya	Member	01831-193167
6	Project Implementing Officer	Member Secretary	01820-186770
7	Chairman, Kharna	Member	01819-170667
8	Chairman, Kachuyai	Member	01812-824782
9	Chairman, Bhatikhain	Member	01819-828799
10	Chairman, Chanhara	Member	01817-212348
11	Chairman, Haidgaon	Member	01818-917801
12	Chairman, Kelishor	Member	01819-802379
13	Chairman, Habilashdip	Member	01827-920625
14	Chairman, Kolagoan	Member	01711-710045
15	Chairman, Jangolkhain	Member	01817-723056
16	Chairman, Charlakha	Member	01717-894975
17	Chairman, Charpathorghata	Member	01713-120899
18	Chairman, Shikolbaha	Member	01819-366823
19	Chairman, Barolia	Member	01827-393477
20	Chairman, Barouthan	Member	01717-133030
21	Chairman, Juldha	Member	01817-716144
22	Chairman, Kusumpura	Member	01815-944881
23	Chairman, Jiri	Member	01817-201309
24	Chairman, southbhurshi	Member	01819-178737
25	Chairman, Dhalghat	Member	01819-326793
26	Chairman, Shobhandandi	Member	01818-765434
27	Chairman, Asia	Member	01819-637200
28	Chairman, Kashiyaish	Member	01819-320507
21	Upazila Health Family Planing Officer	Member	-
22	Upazila Agri. Officer	Member	01914-739136
23	Upazila Livestock Officer	Member	01712-553350
24	LGED Officer	Member	0114334469
25	Upazila Youth Development Officer	Member	01820-186770
26	Upazila Primary Education Officer, Patiya	Member	01913-565419
27	Upazila Secondary Education officer,	Member	01718-186871
28	Upazila fisheries officer, Patiya	Member	01711-677808
30	Assistant Commissioner (land)	Member	01754-589867
32	Freedom fighter commander, Patiya	Member	01819-076556
33	Upazila Women Affairs Officer	Member	01199-270177
35	Upazila Police Station Officer-in-charge	Member	01713-373643
36	Upazila Fire Station Officer,	Member	01718-459656
37	Upazila Fire Station commander	Member	01813-969030

Annuxer 3

List of Volunteers of Kachuyai Union

Sl No	Name	Ward No.	Training	Mobile no.
01	Md. Sakib Hossain	1	Micking of signal	01835-930212
02	Farid Ahmed	2	Rescue	01829-810959
03	Md. Abu Nasim Faroukhi	2	Rescue assistance	01832-071842
04	Swapan Biswas	3	Warning assistance	01824-005696
05	Ashish kept	3	Primary treatment	01824-478702
06	Mijan Hossain	5	Primary treatment	01848-156753
07	Nusrat Sultana	5	Relieve assistance	01819-196333
08	Md Touhidul Islam Chowdhury	6	Shelter	01818-575444
09	Jahida Begum Choudhury	6	Shelter assistance	01713-118800
10	Md. Nasir Uddin	7	Relief	01770-384995
11	Md. Ismail	7	Primary treatment	01831-167763
12	Ms. Delwara Begum	7	Relief	01829-448640
13	Md: Jahangir Alam	8	Micking of signal	01814-317438
14	Mr. Vishwanath	9	Shelter	01855-631360
15	Ms. Selina Akhtar	9	Rescue	01825-033543

List of Volunteers of Bhatikhain Union

SI No	Name	Ward No.	Training	Mobile no.
01	Sharoj Kanti Barua	1	Micking of signal	01819-089214
02	Santosh Kumar Barua	2	Rescue	-
03	Tunu Basijol Das	2	Rescue assistance	01918-982350
04	Abdul Malek	3	Warning assistance	-
05	Abu Siddique	3	Primary treatment	-
06	Mohammad Jasim	5	Primary treatment	01821-712579
07	Swapna De	5	Relieve assistance	01829-334704
08	samir Nath	6	Shelter	01813-587734
09	Amal Das	6	Shelter assistance	01813-531874
10	Abdul Jalil	7	Relieve	01814-376922
11	Abdur Rahim	7	Primary treatment	01831-102483
12	Meera Das	7	Relieve	01826-348921
13	Abu Taher	8	Micking of signal	01818-851973
14	Abul Kasem	9	Shelter	-
15	Milan Sarker	9	Rescue	01826-675880

List of Volunteers of Chanhara Union

SI No	Name	Ward No.	Training	Mobile no.
01	Abdur Rahman	1	Micking of signal	01830-469942
02	Yakub Ali	2	Rescue	01924-848902
03	Mohammad Mohiuddin	2	Rescue assistance	-
04	Samir Mallik	3	Warning assistance	-
05	Md. Nasir Uddin	3	Primary treatment	-
06	Mohammad Hossain	5	Primary treatment	01830-041141
07	Rubel De	5	Relieve assistance	
08	Dipen Chakraborty	6	Shelter	01812-542798
09	Sanjit De	6	Shelter assistance	01829-286052
10	Abul Kasem	7	Relieve	-
11	Enamul Haque	7	Primary treatment	01825-384761
12	Hasanul Haq	7	Relieve	01851-378429
13	Abdul Jalil	8	Micking of signal	01843-291078
14	Sanjay Dutta	9	Shelter	-
15	Dijen Barua	9	Rescue	01812-380755

List of Volunteers of Haidgoan Union

SI No	Name	Ward No.	Training	Mobile no.
01	Md. Abdul Gafur	1	Micking of signal	01843-619900
02	Amulla Mallik	2	Rescue	01816-866584
03	Md. Abdul Motaleb	2	Rescue assistance	01823-380567
04	Md. Nizam Uddin	3	Warning assistance	01811-989912
05	Md. Nurul Bashar	3	Primary treatment	01848-149174
06	Rabiul Hossain	5	Primary treatment	01814-894303
07	Jinnatur Rahman	5	Relieve assistance	01819-171870
08	Ruma Chowdhury	6	Shelter	01827-280240
09	Jharna Dutta	6	Shelter assistance	01811-616008
10	Jahangir Alam	7	Relieve	-
11	Abul Kasem	7	Primary treatment	01815-235617
12	Mohammed Mojaffar	7	Relieve	01815-120789
13	Md. Samsul Alam	8	Micking of signal	01837-219304
14	Enam Chowdhury	9	Shelter	01827-403852
15	Mohammad Omar Ali	9	Rescue	01818-570738
16	Md: Siraj Miah	9	Relieve assistance	01824-829803

List of Volunteers of Habilashdip Union

SI No	Name	Ward No.	Training	Mobile no.
01	Suma Akhtar	1	Micking of signal	01853-010741
02	Sheikh Mohammad Hossain	2	Rescue	01823-257080
03	Shahidul Islam revolution	2	Rescue assistance	01853-119670
04	Tumpa Akhtar	3	Warning assistance	01853-896273
05	Md. Rafiqul Islam	3	Primary treatment	01833-084923
06	Mohammad Anwar Hossain	5	Primary treatment	01863-593829
07	Mahfuzur Rahman	5	Relieve assistance	01840-156589
08	Green Mia	6	Shelter	-
09	Know Alam	6	Shelter assistance	01828-462832
10	Md: Ekramul Afsar Esan	7	Relieve	01843-571249
11	Aminur Rahman Manik	7	Primary treatment	01819-879898
12	Rokon De	7	Relieve	01854-753100
13	Rocky	8	Micking of signal	01822-228524
14	Md. Safi	9	Shelter	01813-286654
15	Mohammad Ali	9	Rescue	01834-248773
16	Abu Sayet	9	Relieve assistance	01819-127298

List of Volunteers of Kolagoan Union

SI No	Name	Ward No.	Training	Mobile no.
01	Mohammad Rafiq	1	Micking of signal	01923-684865
02	Zafar Ahmed	2	Rescue	01849-597684
03	Ahmed Noor	2	Rescue assistance	01854-996699
04	Md: Alamangir Rahaman	3	Warning assistance	01840-740688
05	Abdul Azad	3	Primary treatment	01826-348280
06	Abu Mohammad	5	Primary treatment	01829-448426
07	Papiya Khatun	5	Relieve assistance	-
08	Mafizur Rahman	6	Shelter	01757-374105
09	Akhtar,	6	Shelter assistance	01827-334689
10	Saleha Khatun	7	Relieve	01831-034046
11	Md. Selim	7	Primary treatment	01845-316607
12	Mohammad Ilias	7	Relieve	01820-563154
13	Abul Hossain	8	Micking of signal	01849-726157
14	Abu Mohammad	9	Shelter	01829-448426
15	Nurul Islam	9	Rescue	01814-164133
16	Mohammad Shafi	9	Relieve assistance	01812-810879

List of Volunteers of Jangolkhain Union

SI No	Name	Ward No.	Training	Mobile no.
01	Md. Alamgir	1	Micking of signal	01820-194903
02	Shaheda Begum	2	Rescue	01851-405368
03	Abdul Barek	2	Rescue assistance	01824-478738
04	Sirajul Islam	3	Warning assistance	01835-962523
05	Md Liakat	3	Primary treatment	01817-720002
06	Shikha Pal	5	Primary treatment	01834-211842
07	Syed Nabi	5	Relieve assistance	-
08	Hafejur Rahman	6	Shelter	01838-258256
09	Badiul Alam	6	Shelter assistance	01828-578160
10	Khorsheda Begum	7	Relieve	01813-277311
11	Azizul Haque	7	Primary treatment	01830-366435
12	Shadhan Babu	7	Relieve	01822-312612
13	Khorsheda Begum	8	Micking of signal	01813-277311
14	Rashid ul-Ma'Mr;	9	Shelter	01820270269
15	Md: Nasim Uddin	9	Rescue	01830-032139
16	Hasina Akhtar	9	Relieve assistance	01819-503905

List of Volunteers of Charlakha Union

SI No	Name	Ward No.	Training	Mobile no.
01	Amina Khatun	1	Micking of signal	01827-840797
02	Md. Noor Kalam	2	Rescue	01827048935
03	Mahfuja Begum	2	Rescue assistance	-
04	Sabir Ahmed	3	Warning assistance	01819-093468
05	Noor Mohammad	3	Primary treatment	-
06	Md: Sirajul Islam	5	Primary treatment	01933-092353
07	Marjana Begum	5	Relieve assistance	01836-162655
08	Md. Selim	6	Shelter	01829-224953
09	Delowara Begum	6	Shelter assistance	-
10	Md: Iman	7	Relieve	01839-513533
11	Sultana Begum	7	Primary treatment	-
12	Md. Jamal Uddin	7	Relieve	01814-337016
13	Rahima Begum	8	Micking of signal	01832-587574
14	Halima Begum	9	Shelter	01826-115666
15	Nachima Akhtar	9	Rescue	01818-915844
16	Mohammad Yunus	9	Relieve assistance	01828-437737
17	Noor Jahan	9	Rescue	01825-216600

List of Volunteers of Charpathorghata Union

SI No	Name	Ward No.	Training	Mobile no.
01	Md. Abdur Rahman	1	Micking of signal	01812-012567
02	Nur Mohammad	2	Rescue	01190-897891
03	Mohammad Shamsuddin	2	Rescue assistance	01739-830713
04	Md: Osman	3	Warning assistance	01681-059700
05	Akbar Ali	3	Primary treatment	01845-237308
06	Jaheda Khanam	5	Primary treatment	01832-413482
07	Mohammad Salam! Uddin	5	Relieve assistance	01829-065905
08	Mumtaj Begum	6	Shelter	01838-457415
09	Jahangir Alam	6	Shelter assistance	01933-079538
10	Shahanaz Parvin	7	Relieve	01823-821331
11	Rahena Akhtar	7	Primary treatment	01757-155772
12	Rahim Ali	7	Relieve	01836-518729
13	Mohammad Yunus	8	Micking of signal	01925-140424
14	M Moin Uddin	9	Shelter	01713-115683
15	Parveen Akhtar	9	Rescue	-

List of Volunteers of Shikilbaha Union

SI No	Name	Ward No.	Training	Mobile no.
01	Md. Sekendar Nia	1	Micking of signal	01831-134923
02	Md. Faruk Ahmed	2	Rescue	-
03	Md. Shakil Alam	2	Rescue assistance	01819-290719
04	Suman	3	Warning assistance	01821-712056
05	Abul Kalam	3	Primary treatment	01825-642572
06	Mubarak Ahmed	5	Primary treatment	01826-531269
07	Abbas Uddin	5	Relieve assistance	01811-588981
08	Ershad Shoudagar	6	Shelter	01925-777791
09	Abu Chattar Ronnie	6	Shelter assistance	-
10	Liyakat Ali	7	Relieve	-
11	Ershad Ali	7	Primary treatment	01811-301640
12	Mohammad Murad	7	Relieve	01825-585994
13	Rashid carpenters	8	Micking of signal	01926-168294
14	Mohammed Jasim Uddin	9	Shelter	01817-702184
15	Abchhar Uddin	9	Rescue	01813-253356
16	Sheikh Ahmed	9	Primary treatment	01820-247566

List of Volunteers of Barolia Union

SI No	Name	Ward No.	Training	Mobile no.
01	Abu Siddique	1	Micking of signal	01816-370181
02	Rahim Uddin	2	Rescue	01716-181478
03	Mafizur Rahman	2	Rescue assistance	01819-721184
04	Mohammad Abu Mansoor Chowdhury	3	Warning assistance	01821-018267
05	Syed Saiful Islam	3	Primary treatment	01835-700274
06	Muru Mia	5	Primary treatment	01718-824570
07	Shankar Dutta	5	Relieve assistance	01814-262515
08	Ratan Chowdhury	6	Shelter	01818-117705
09	Nasir Uddin	6	Shelter assistance	01830-063679
10	jarina Akter	7	Relieve	01818-009265
11	Pijus Barua	7	Primary treatment	01831-193186
12	Mohammad Mannan	7	Relieve	01814-816912
13	Md. Jamal Hossain	8	Micking of signal	01836-764553
14	Md. Malek	9	Shelter	01823-689611
15	Yakub Hossain	9	Rescue	01819-532429
16	Milan Kanti Das	8	Primary treatment	01820-061170
17	Md: Tayeb	8	Relieve assistance	01830-113663
18	Mohammad Yusuf	9	Shelter	01830-208511

List of Volunteers of Barouthan Union

SI No	Name	Ward No.	Training	Mobile no.
01	Md. Abul Kashem	1	Micking of signal	01819-073369
02	Md. Harun	2	Rescue	01682-641342
03	Md. Imran Khan	2	Rescue assistance	01835-358700
04	Jannatur Khanam	3	Warning assistance	01811-020370
05	Chanowara Begum	3	Primary treatment	01818-397752
06	Nasir Uddin	5	Primary treatment	01814-309537
07	Joynabo Begum	5	Relieve assistance	01814-266753
08	Abdul Haque	6	Shelter	01819-624479
09	Nabir Hossain	6	Shelter assistance	01822-012318
10	Md. Anwar	7	Relieve	01815-377146
11	Mohammad Jamil	7	Primary treatment	01856-717938
12	Md: Enam Hossain	7	Relieve	01817-740346
13	Md: Tayeb	8	Micking of signal	01849-918662
14	Haridus Shil	9	Shelter	01829-047075
15	Mohammad Rafiq	9	Rescue	01834-911102
16	Md. Ismail	8	Primary treatment	01820-241756
17	Sunil Biswas	8	Relieve assistance	01818-021246

List of Volunteers of Juldha Union

SI No	Name	Ward No.	Training	Mobile no.
01	Mohammad Ibrahim	1	Micking of signal	01818-111479
02	Ratna Dutta	2	Rescue	01812-579375
03	Safi Saodagar	2	Rescue assistance	01835-101231
04	Mohammad Sarwar	3	Warning assistance	01818-908191
05	Badi Alam	3	Primary treatment	01815-853937
06	Ilias	5	Primary treatment	01819-863576
07	Mohammad Farooq	5	Relieve assistance	01814-321022
08	Md. Noor Alam	6	Shelter	01811-257575
09	Nazrul Islam	6	Shelter assistance	01820-167375
10	Mohammad Pervez	7	Relieve	01813-593711
11	Mohammad Amjad Hossain	7	Primary treatment	01725-045862
12	Md. Kamal	7	Relieve	01811-817269
13	Md: Charfalcon Rashed	8	Micking of signal	01819-624479
14	Abu Bakkar	9	Shelter	01811-536029
15	Mohammad Rahim	9	Rescue	01815-135967
16	Ratan dhar	8	Primary treatment	01819-172207
17	Parimal Sarkar	8	Relieve assistance	01815-603682
18	Debnath Shil	9	Primary treatment	01814-326531

List of Volunteers of Kusumpura Union

Sl No	Name	Ward No.	Training	Mobile no.
01	Mohammad Mansoor Alam	1	Micking of signal	01811-378293
02	Mohammad Yusuf	2	Rescue	-
03	Md: Abchhar	2	Rescue assistance	01675-626699
04	Md. Nasir Uddin	3	Warning assistance	01819-172812
05	Mohammad Abdul Mannan	3	Primary treatment	01848-169125
06	Sheikh Ahmed	5	Primary treatment	01821-018291
07	Mohammad Rafiq	5	Relieve assistance	01815-711148
08	Shah Alam	6	Shelter	01816-130037
09	Didarul Alam	6	Shelter assistance	01818-141387
10	Mafizur Rahman	7	Relieve	01832-581485
11	Abdur Rahman	7	Primary treatment	01815-628527
12	Md. Abdul Hai	7	Relieve	01822-521296
13	Md. Alamgir	8	Micking of signal	01812-098510
14	Abul Kalam	9	Shelter	01824-482177
15	Nurul Alam	9	Rescue	01812-712544
16	Ranu Akhtar	8	Primary treatment	01815-510531
17	Fatema Begum	8	Relieve assistance	01814-208795
18	Md. Delwar	9	Primary treatment	01845-229588

List of Volunteers of Jiri Union

Sl No	Name	Ward No.	Training	Mobile no.
01	Md. Motiar Rahman	1	Micking of signal	01817-010882
02	Sabina Begum	2	Rescue	01819-303612
03	Md. Babul Hossain	2	Rescue assistance	01832513628
04	Jewel Rana	3	Warning assistance	01829-306208
05	shahnaz Begum	3	Primary treatment	01832-868892
06	Joynal Abedin	5	Primary treatment	01823-396413
07	Fatema Begum	5	Relieve assistance	01811-842343
08	Zulfikar Naim	6	Shelter	01828-843818
09	Nadia Begum	6	Shelter assistance	01823-962532
10	Md. Shahidul	7	Relieve	01829-638091
11	Jannatul Ferdous	7	Primary treatment	01832536926
12	Md: Russell Khan	7	Relieve	01812-962201
13	Aleya Begum	8	Micking of signal	01840188641
14	Mohammad Yunus Bhuiaya	9	Shelter	01815-507487
15	Asma Begum	9	Rescue	01856-207980
16	Noor Hossain	8	Primary treatment	01839-812971
17	Parveen Begum	8	Relieve assistance	01829-620910
18	Mohammad Afzal Hossain	9	Primary treatment	01812-653961

List of Volunteers of Dhalghat Union

SI No	Name	Ward No.	Training	Mobile no.
01	Md: Sukur Fakir	1	Micking of signal	01822-730901
02	Rina Begum	2	Rescue	0845-011082
03	Imran Khan	2	Rescue assistance	01859-672210
04	Rahima Begum	3	Warning assistance	01811-596872
05	Ibrahim Khan	3	Primary treatment	01815-171907
06	Reshma Begum	5	Primary treatment	01827-236720
07	Abdus Salam Fakir	5	Relieve assistance	01852-089170
08	Jasmine Akhtar	6	Shelter	01826-974325
09	Moyna	6	Shelter assistance	01857-420167
10	Md. Shahadat Hossain	7	Relieve	01829-752802
11	Hena	7	Primary treatment	01827-719400
12	Nurul Amin	7	Relieve	01828-337029
13	Mina Chowdhury	8	Micking of signal	01840-188672
14	Borhan Sardar	9	Shelter	01829-911814

List of Volunteers of Shobhandandi Union

SI No	Name	Ward No.	Training	Mobile no.
01	Abu Syed	1	Micking of signal	01831-958862
02	deedar Alam	2	Rescue	01811-938176
03	Rahim Uddin	2	Rescue assistance	01812-575787
04	Md. Selim	3	Warning assistance	01814-023178
05	Enam	3	Primary treatment	-
06	Akbar Hossain	5	Primary treatment	01823-722039
07	Siraj Miah	5	Relieve assistance	01827-720434
08	Rokeya Begum	6	Shelter	01816-102263
09	Ferdous Ara	6	Shelter assistance	01814-418300
10	Abu Sattar	7	Relieve	01816-838741
11	Samsul Alam	7	Primary treatment	01835-882858
12	Md. Ismail	7	Relieve	01830-069794
13	Md. Kamal	8	Micking of signal	01815-500353
14	Babul	9	Shelter	01835-879999
15	Md: Momen	9	Rescue	01814-447850
16	Rabiul Hossain	8	Primary treatment	01816-320029

List of Volunteers of Asia Union

SI No	Name	Ward No.	Training	Mobile no.
01	Monira Begum	1	Micking of signal	01847-270932
02	Rokonuzaman	2	Rescue	01816-331994
03	Arshi Akhtar	2	Rescue assistance	01818-602199
04	Md. Rezaul Islam	3	Warning assistance	01852-642961
05	Khadija Begum	3	Primary treatment	01823-939212
06	Masud Sikdar	5	Primary treatment	01841-627091
07	Beauty Das	5	Relieve assistance	01836-279211
08	Md. Monir Khan	6	Shelter	01827-898572
09	Nazma Begum	6	Shelter assistance	01832-517692
10	Mohammad Farooq Sheikh	7	Relieve	01833-986710
11	Rina Sultana	7	Primary treatment	01827-531870
12	Arif Kabir	7	Relieve	01827-717400
13	Milan Gazi	8	Micking of signal	01829-803789
14	Jamila Begum	9	Shelter	01849-959788
15	Joynata	9	Rescue	01832-536226
16	Zakia Akhtar Lima	8	Primary treatment	018290917531

List of Volunteers of Kasiyaish Union

SI No	Name	Ward No.	Training	Mobile no.
01	Erani Begum	1	Micking of signal	01824-392732
02	Farooq Halder	2	Rescue	01843-837411
03	Roushan Ara Begum	2	Rescue assistance	01829-204607
04	Akul Biswas	3	Warning assistance	01822-189301
05	Fatima Akhtar	3	Primary treatment	01849-462702
06	Masum Billah	5	Primary treatment	01813-402369
07	Parveen Begum	5	Relieve assistance	01837-227938
08	Jalal Musalli	6	Shelter	01843-382266
09	Hosne Ara Begum	6	Shelter assistance	01815-712804
10	Ranjit Prosonna	7	Relieve	01834-237901
11	Nur Jahan Begum	7	Primary treatment	01849-372112
12	Arun Das	7	Relieve	01827-810450
13	Selina Begum	8	Micking of signal	01819-966153
14	Hafizur Rahman	9	Shelter	01845-725026
15	Sajia Akhtar	9	Rescue	01829-833826
16	Gazi Kabir	8	Primary treatment	01823-252622
17	Mousumi Begum	9	Shelter	01834-019864

Annexure 4

List of Shelter centre Management Committee

Shelter Centre	Name of Shelter Center	Responsible Person	Mobile No
School cum center	Asia High School	Rahela Akhtar	-
	ChakraSala High School	Milton Das	01715-024405
	Kusumpura High School	Bishnu Jaya Chakrabarti	01813-147007
	Dhalghat Dergee College	Shah Alam	-
	Chanhara High School	Chabera Khatun	01619-821647
	Southbhursi High School	Abdullah Al Mamun	01718-001455
	Juldha High School		-
	Habilashsip High School	Sujan Ghon	-
	Juri High School	Kalam Uddin	01616-018545
	Bathua High School	Kutubddin	01914-774010

High road or Embanlment:

Patiya Upazila to take shelter in a high road or embenkment.

Health Management Committee

List of health management committee in the table below:

Name H of ealth center	Responsibility person	Mobile no.
Upazila Health Center	Dr. Dulal Prasad Bhattacharjo	01727-234384
	Dr. Md. Mizanur Rahman	01819-128542
	Dr. Md. Mazharul Haque	01819-327135
	Dr. Afroja Zakia	01814-310903
	Dr. Sujan Kumar Dhar	01812-028509
	Dr. Md. Abul Mansoor	01712-176277
	Dr. Manob Kumar Chowdhury	01817-205002
	Dr. Md. Mostafizur Rahman	-
	Dr. Fatima Sadia Khatun	01817-706010
	Dr. Muhammad Islam	01819-628265
	Dr. Supriya Karmokar	01558-887862
	Dr. Shah Moin Uddin Chowdhury	01815-344161
	Dr. joy Dutta Barua	01712-248372
	Dr. A. B. M. Farid Uddin	01819-323816
	Rayhanur Begum	-
Tahmina Akhtar (Officer-in-charge officer).	01819-308755	

Fire Safety Committee:

Fire Safety Committee list of Patiya Upazila in the table below:

Name of fire station	Responsible person	Title	Mobile no.
Patiya Fire Sevice station & Civil defence	Mojaffar Ahmed Tipu	Upazila Chairman, Patiya	01819-316840
	Mr. Rokeya Begum	UNO, Patiya	01718-186871
	Md. Abul Hossain	PIO, Patiya	01820-186770
	Dolan Acharjo	Station Officer	01718-459656

Local Business:

Sitakunda Upazila locally engaged in various professions in person below

Name Union/Ward	Name of local businessman	Mobile no.
Kalishor	Md. Abdul Aziz	01815-849331
Kalishor	Md: Riyadh	01818-125285
Kalishor	Md. Aminul Islam	01819-622072
Kalishor	Md: Arman	01819-834350
Kalishor	Mohammad Javed	018190392590
Kalishor	Md: Tayeb	01819-834384
Dhalghat	Sadek Ali	01822-730901
Dhalghat	Imran	01859-672310
Shobhandandi	Bazlur Rahman	01831-958866
Shobhandandi	Deedar Alam	01811-938176
Juldha	Idris Miah	01818-111475
Juldha	Mohammad Sarwar	01818-908191
Jiri	Motiar Rahman Mohd.	01817-010882
Jiri	Md. Babul Hossain	01832-513628
South bhursi	Insan Ali	01820-276937
South bhursi	Nazim Uddin	01819-381859

Annuxure 5

At a glance of Patiya Upazila

Sl no	Area	255 sq. Km.	Sl no	Idgah ground	18
1	Union/Upazila	22 unions and 1 Pourashava	23	Bank	14
2	Maujas	127	24	Post office	31
3	Village	176	25	Club	81
4	Family	101968	26	Hat/Bazar	33
5	Total population	6, 32, and 150 people	27	Place grave	767
6	Men	3, 20, and 218 people	28	crematory	67
7	Women	3, 12, 148	29	Chicken farm	28
8	Educational Institution	228	30	Deep tube-wells	243
9	Govt. Primary School	179 companies saw a fall	31	Tube-wells	78760
	Secondary School	47	32	Shalow tube-wells	42
11	College	07	33	River	-
12	Madrassa, filing, Fazil, started under	21	34	Canel	60
13	% of Education	58 55 percent.	35	Bill	-
14	Community clinics	31	36	Haore	-
	Dam	7 dam almost 26.	37	ponds	3833
16	Sluice Gate	3	38	concrete road	200 km.
17	Bridge	176	39	Kacha road	219 km.
18	Mosque	593	40	HBB road	281. 5 Km.
19	Culverts	674	41	Godawn	3
20	Industrial factory	-	42	play ground	49

Annuxure 6

List of Bangladesh Radio broadcast on some important program

Radio center	Name of Program	Broadcast time	Name of day
Dhaka-Ka	Krishi Samachar	At 6:55 and 7:00	Every day
	Sukher Thikana	At 7:25 and 7:30	Every day
	Health is Wealth	At 11:30 12:00	Every day except on Friday
	Sonali Fashol	At 06:05 - 6:35	Every day
	The weather news	At 06:50 - 7:00	Every day
Chittagong	Krishi Katha	6:55 am-07:00	Every day
	Krishi Samachar	At 06:10 - 06:50	Every day
	Sukhi Sangshar	At 06:55 and 08:30	Every day
Rajshahi	Khet Khamar Samachar	06:55 am-07:10	Every day
	Green Bangla	At 06:05 and 06:50	Every day
Khulna	Health Information	06:55 am-07:00	Every day
	cultivation	At 06:10 - 06:50	Every day
Rangpur	Sukher Thikana	07:25 AM-07:30	Every day
	Khet Khamar	At 06:05 and 06:30	Every day
Sylhet	In today's cultivation	06:55 am-07:00	Every day
	Sukher Thikana	07:25 AM-07:30	Every day
	Shymol Sylhet	At 06:05 and 06:25	Every day except on Friday
Thakurgaon	Kishen Mati Desh	At 06:05 and 05:25	Saturday, Monday and Wednesday
Cox's Bazar	In today's Agriculture	At 03:07 and 03:25	Every day
	Sonali Prantor	At 03:40 and 03:45	Tuesday and Thursday
Barisal	To agriculture	At 03:15 03:30	Every day except Saturday and Wednesday
	Small family	At 03:35 03:50	Monday, Wednesday and Friday every day except
Rangamati	Giboner Katha	At 01:40 and 01:55	Every day
	Khamar Bari	At 03:05 and 03:15	Every day



Development of Disaster Management Plan at Upazila Level

Upazila: Patiya, District: Chittagong

Plan Developed by-
Upazila Disaster Management Committee,
Patiya, Chittagong

Co-ordinate by:



GHARONI

July 2014

Supported by
Comprehensive Disaster Management
Program (CDMP-2)
Ministry of Disaster Management & Relief



Empowered lives.
Resilient nations.