

NEED ASSESSMENT AND POSSIBLE SOLUTION REPORT

Background and Introduction:

Coastal Embankment Project (CEP), implemented from 1961-1967, has caused severe environmental consequences in southwest Bangladesh, water-logging is a symptom of the consequences of CEP which caused serious disruption to the life and livelihood of 1 million people in Jessore (Keshobpur, Monirampur, Avaynagar), Khulna (Dumuria, Fultala) and Satkhira (Tala, Kalaroa) districts living in the Bhadra (upper, lower and buri bhadra), Hari (including Srinadi, Teka and Mukteshwari) and Kapotakshmi catchment areas. Government of Bangladesh (Ministry of Water Resources) has implemented a development project in 1996 titled “Khulna Jessore Drainage Rehabilitation Project (KJDRP)” funded by Asian Development Bank (ADB). This project was an unsuccessful project as opined by the people and civil society of the catchments areas, with only one good result: accepting the people suggested Tidal River Management (TRM) methodology as the most suitable option for the solution of the water-logging. To make this methodology accepted by Bangladesh Water Development Board (BWDB), people had to organize series of processions, by cutting the embankment and welcoming the tidal water flow into low *beel* lands. However, having good result of peoples innovated method (TRM), BWDB has taken post KJDRP project in *Beel Kedaria* in 2002-2005, but the BWDB has not considered full option of people suggested method; rather they adopted more of regulated approach (regulator and sluice gate based water management) to solve the problem. As a result, the *beel kedaria* TRM brings very little benefit to the people of the areas. After *beel kedaria* TRM, very recently in 2006 another TRM option is taken in *Beel Khuksia*.

Having poor result of water management projects, there were growing tension among the people, and virtually stakeholders were divided into two larger groups regarding appropriate options and this division also contributed not to get good results from the projects as there were not uni-vocal civil society or people opinion was expressed to the duty bearers.

BWDB, *Pani Committee*, Water Management Group (WMG), Water Management Association (WMA), Water Management Federation (WMF), Local Government, NGOs, Left Political Parties, and Civil Society as institution played their role from a less-consensus modality, which increased tension but hardly bring any true solutions and made the duty bearers accountable to the people. This could be therefore termed as total institution failure, where no one can escape from being responsible.

Because of this institutional failure, no visible solution are observed, virtually which caused severe water logging in the areas (near about 507 villages). Since 2001, severity of water logging is increasing every year and sufferings of the people are increasing

simultaneously. Therefore, people are in a position of long-term social and political crisis along with severe economic and livelihood constraint.

Mass people, UPs, Civil Societies cried and appealed to solve the problem; BWDB and NGOs of the areas tried to solve the problem, which virtually did not help the people in a great deal. Now in 2006, problem become worsen and sufferings of the people has increased in a degree of non-tolerance and the situation might turn into severe humanitarian crisis if Govt., NGOs, and Civil Society fails to take very effective measure immediately. Otherwise, in the next year, we will find the crisis contributed huge migration, hunger, health crisis in this area along with many social and political unrest situation.

In the context of above-mentioned situation, Action Aid Bangladesh has taken an initiative to have a reconnaissance survey to understand the nature of problem and to grasp the possible way out options for people.

Objectives of the Survey:

The objectives of the reconnaissance survey were:

- (1) To identify hot spots for disaster and immediate interventions;
- (2) To map vulnerability aspects of different occupational and social groups as well as women, children, person with disability and elderly;
- (3) To understand the socio-political dynamics of the vulnerability;
- (4) To formulate a set of recommendations for immediate, short-term, mid term and long term interventions of AAB.

Key Observations:

Affected Areas

District	Affected Upazila	Affected Union	Affected Villages	Degree of Vulnerability	
				Affected Number of Households	No. of Poor Peoples' Households
Jessore	Monirampur	Kultia	Alipur	256	232
			Amzhuta	115	99
			Ashwingari	70	55
			Bazekultia	150	138
			Beelbakar		
			Beel Kedaria		
			Dahakula	130	121
			Danga Mohishdia	315	240
			Gabordanga	215	200
			Hatgacha	305	298
			Kultia	375	305
			Lakhaidanga	210	188

District	Affected Upazila	Affected Union	Affected Villages	Degree of Vulnerability	
				Affected Number of Households	No. of Poor Peoples' Households
			Mohishdia	230	206
			Padmanathpur	175	165
			Pariali	305	283
			Puradanga	600	450
			Satgati	145	105
			Sujatpur	550	440
			Bagdanga	250	200
			Mashiati	----	-----
		Haridaskathi	Chandua	175	155
			Sripur	150	128
			Bhomorda	215	188
			Hazrail	100	75
			Katakhali	150	121
			Nalguna	25	25
			Haridaskathi	197	157
			Kumorsima	75	61
			Diganga	50	35
			Kuchlia	105	80
			Khatardanga	307	257
			Pachbaria	205	155
			Bhulbaria	102	67
			Bahadurpur	250	210
			Madhupur	50	10
			Hetri	300	285
			Kazirgram	100	93
			Hugladanga	50	35
			Samskathi	121	102
			Kuramara	50	39
		Nehalpur	Nehalpur	1607	1044
			Balidha	1203	842
			Pachakori	1433	1005
		Monoharpur	Monohorpur	1702	1070
			Boyarkhola	446	276
			Bhabanipur	369	218
			Rozipur	497	302
			Kopalia	1085	677
			Naldanga	183	111
			Enayetpur	86	45
			Khakundi	725	443
		Durbadanga	Batbila	25	16
			Harina	125	85
			Asanagar	113	76
			Kushkhali	120	92

District	Affected Upazila	Affected Union	Affected Villages	Degree of Vulnerability		
				Affected Number of Households	No. of Poor Peoples' Households	
			Zhikardanga	115	79	
			Kamenidanga	175	125	
			Shayamnagar	125	99	
			Narkelbari	15	6	
			Parala	55	30	
			Bahirgharia	20	13	
			Ghatuadanga	27	15	
	Shamkur			Shayamkur	115	66
				Hasadanga	255	180
				Chinatola	35	20
	Chaluhati			Ratandia	110	62
				Gouripur	95	40
				Atghora	15	7
				Ratneshwerpur	12	5
	Dhakuria			Brahamanpur	220	60
				Bhabanipur	180	80
				Balianpur	170	110
				Barpara	320	195
				Brammapur	80	64
				Uttarpara	160	131
Laukunda				220	210	
Gabuakhali				250	228	
Chapakona				195	155	
Protapkathi				170	125	
Suvolkathi				265	230	
Nauli				190	155	
Joypur				550	440	
Taruapara				160	85	
Korerail				95	58	
Telikundu				55	40	
Dhakuria	500	300				
Keshobpur	Pourashava		Altapol	120	66	
			Moddhokul	200	127	
			Bhabanipur	210	169	
			Bazitpur	62	32	
			Mabdia	30	13	
			Marfabad	20	10	
			Baina	30	12	
			Brahhammakathi	30	19	
			Habashpul	250	213	
			Baliadanga	32	21	
Keshobpur Sadar			Moddhokul	200	122	
			Altapol	300	194	

District	Affected Upazila	Affected Union	Affected Villages	Degree of Vulnerability	
				Affected Number of Households	No. of Poor Peoples' Households
			Maguradanga	120	85
			Natun Mulgram	200	156
			Mulgram	300	214
			Basdanga	100	64
			Baliadanga	75	49
			Sujapur	75	46
			Ramchandrapur	60	30
			Dormutia	250	193
			Matiakhali	100	64
	Mongolkot		Kandarppur	65	48
			Mongolkot	37	24
			Chuadanga	30	17
			Ramkrishnapur	22	13
			Ghagha	25	14
	Pajia		Pathorghata	250	140
			Belnoti	20	9
			Dungakatha	30	17
			Sagardattakathi	20	9
			Monohornagar	300	190
			Madardanga	160	98
	Sufalakathi		Kakbadhal	35	16
			Kanaidanga	103	63
			Arua	185	125
			Gridhanagar	37	25
			Kalicharanpur	154	99
			Shantala	22	12
			Kismat Shantala	25	17
			Moynapur	53	34
			Dahuri	25	15
			Krishnanagar	26	18
			Narayanpur	62	39
			Betikhola	60	33
	Sagardari		Sagardari	100	43
			Komolpur	70	39
			Sheikhpura	100	48
			Bishtupur	111	60
			Mirzapur	90	34
			Ghopsana	135	61
			Meherpur	105	45
			Bashbaria	50	25
			Raghunathpur	55	20
			Kasta	34	14
			Baruihati	20	10

District	Affected Upazila	Affected Union	Affected Villages	Degree of Vulnerability		
				Affected Number of Households	No. of Poor Peoples' Households	
	Biddanandakathi	Sripur		20	9	
		Nehalpur		207	107	
		Boga		100	66	
		Rezakathi		125	82	
		Mohadebpur		100	68	
		Mominpur		52	37	
		Awangazi		80	51	
		Hizaldanga		142	72	
		Bhabanipur		82	58	
		Biddanandakathi		101	65	
		Baoshala		165	100	
		Parchakra		122	82	
		Hariaghop		37	23	
		Teghari		50	33	
		Kaklakhali		50	29	
	Abhaynagar	Payra	10		Not observed	Not Obs.
		Sundali	13		”	”
		Chalisia	09		”	”
		Prembag	08		”	”
		Pourashava	03		”	”
Khulna	Fultala	Jamira	At risk but not affected	”	”	
	Dumuria	Baruna	All villages are affected	”	”	
		Raghunathpur (part)	Part of the union (insignificant)	”	”	
		Rudaghara	All villages (insignificant)	”	”	
		Atlia (Part)	Part of the union (insignificant)	”	”	
		Maguraghona (Part)	Part of the union (insignificant)	”	”	

Hot Spots

Considering the affected households and concentration of poor people among the affected people a few places are hot spots¹ for humanitarian crisis. If agencies fail to address the

¹ For our purposes, hotspots are defined as locations (villages) where vulnerability of the people to water logging is extremely high and at present people are suffering most. The hot spot also includes those locations where the consequences of water logging strikes almost every time and the likelihood is almost certain along with high to extreme consequences. This definition is purposely quite broad in order to allow for entry points into AAB's Risk Reduction Programme and for other activities related to agriculture, livelihood, forest, fisheries, food security, and nutrition.

causes of water-logging and to meet the immediate needs of the affected people, there is potential risks to turn into critical humanitarian crisis. These hot spots are follows.

District	Affected Upazila	Affected Union	Affected Villages	Degree of Vulnerability	
				Affected Number of Households	Affected Poor income HH
Jessore	Monirampur	Kultia	Alipur	256	232
			Danga Mohishdia	315	240
			Gabordanga	215	200
			Hatgacha	305	298
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		205	155		
		250	210		
		300	285		
		Nehalpur	1607	1044	
		Balidha	1203	842	
		Pachakori	1433	1005	
		Monoharpur	1702	1070	
			446	276	
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			497	302	
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	Durbadanga	Kamenidanga	175	125	
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		Laukunda	220	210	
		Gabuakhali	250	228	
		Suvolkathi	265	230	
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			Mulgram	300	214
			Dormutia	250	193
		Pajia	Pathorghata	250	140
			Monohornagar	300	190
	Sufalakathi	Arua	185	125	
		Kalicharanpur	154	99	
	Biddanandakathi	Nehalpur	207	107	
		Baoshala	165	100	
	Abhaynagar	Payra	10		
		Sundali	13		
		Chalisia	09		

District	Affected Upazila	Affected Union	Affected Villages	Degree of Vulnerability	
				Affected Number of Households	Affected Poor income HH
		Prembag	08		
		Pourashava	03		

- Marks Top Priority Unions/Villages
- Marks Medium Priority Unions/Villages
- Marks Lower Mid Priority Unions/Villages
- Marks Lower Priority Unions/Villages

The hot spots refers only if the resources are limited and need to rescue the people from immediate sufferings, these are the villages and unions which needs most support; and this does not refer that there is no need of support to other areas. The all affected areas are vulnerable and some areas are at risk to be vulnerable. However, if there is adequate resource, AAB can cover all affected areas as well as can be prepared for areas at risk.

Vulnerability Aspects of Different People

A very simple checklist was used to identify the different vulnerable aspects of different people; especially person with disability, women, elderly, children and farmers. This was very quick grasp of 60 person's opinion. The result of the compilation of vulnerability is described in following table.

Vulnerable Element/Aspect	Farmers (Male)	Women	Children	Person with Disability	Elderly
Food Availability	H	H	M	E	H
Income and Employment	E	M		E	M
Agriculture	E				
Fisheries	H				
Drinking Water	H	E	H	H	H
Sanitation (Defecation, Cleaning, Washing, Urination,)	H	E	H	E	E
Mobility	M	H	E	E	E
Life	L	L	H	H	L
Health/Disease	M	E	E	E	H
Security	L	L	H ²	L	L
House	E	E			
Household Assets	E	E			
Settlement (confidence to stay)	M	H ³	H ⁴	H	H
Food Market Prices	H				
Savings (Loan is vulnerability)	E	E			
Pest and Insects (including snake)	H	E	E	E	E

² Security of adolescent girls seemed at risk and in most cases, adolescent girls are send to the relatives' house that are living outside affected areas.

³ As above

⁴ As above

Trees and Plants	E				
Food Preparation	L	E	L	E	E
Livestock	E				
Family Peace	H	H			
Education			E		
Cultural and Social Ceremony/Recreation	H	H	E	E	E
Electricity	L	L	L	L	L

E= Extreme; H=High; M=Moderate; L=Low

It is observed during reconnaissance visit that sanitation, drinking water and health is very emergency issues to the affected people of all areas. People from Biddanandakathi, who took place in the roads of keshobpur demanded food and shelter but people of Monirampur has not demanded food rather they emphasized the permanent solution of the problem. We felt that the humanitarian situation in the areas are extremely bad where women, children, person with disability and elderly people need immediate sanitation and drinking water support as well as medical support to save from skin diseases and other water borne diseases. Food support could be provided by work, not as traditional relief. Some temporary shelter might be offered to those who took place in roads and other areas and become displaced.

Socio-Political Dynamics

The political process is formulated on the working discourse of Bangladesh Water Development Board. A group of people is categorized as “Pro BWDB” and another group is categorized as “Anti BWDB”. However, this difference becomes very distinct during KJDRP implementation. The main political questions around the issues are: stakeholder, participation, legitimacy, representation, and opportunism. Bangladesh Water Development Board has its existing working model in Southwest Bangladesh, where they form Water Management Group (WMG) by the direct beneficiaries of the water bodies (historically, in each *beel* areas there were a traditional *beel* committee who represents the owners of the *beel* land). Water Development Board only considers the landowners, dependent landless, fisherman and women as the stakeholder of the programme. The WMG, elected Water Management Association (Zone Wise, 9 zone in the KJDRP areas) and a central Water Management Federation (WMF) are the three tier peoples organizations who are registered under Cooperatives Department are the legitimate entity to BWDB. Uttaran and their *Pani Committee* opine that the water problem affect the whole community, therefore, BWDB should not only consult WMG/WMA/WMF but also Local Government (union parishad and pourashava), NGOs and Civil Society in a multi-stakeholder framework. They also opine that WMA/WMF virtually serve the purpose of BWDB and work as pocket committee of the board. On the contrary, WMA/WMF opines that *Pani Committee* of Uttaran represents elite society members of the areas, they are not the poor people of the areas and not the real affected people. They also raised question of their legitimacy and opined that this committee is a pocket committee of a NGO. Virtually, UP representatives are found in the both groups. Now a days, contractors are implementing the projects of BWDB, but previously UP had implemented the projects before 1996 in this area, therefore UP in general are not very supportive to the existing modality of BWDB and take stand against the agencies working modality. This conflict situation is creating more egoistic problem in the areas and more personalization and narrow regionalization is becoming dominant than coming to an objective solution for the areas. We have found that regarding solution, there is very little difference among the groups, but lot more propaganda mercenaries are very active to personalize the problems.

Beside this, many people opined that as the affected areas are politically Awami League dominated and Hindu population density is comparatively higher than other areas, the ruling alliance is not much willing to solve the problem. However, this popular discourse is very strong in the mindset of the suffering people.

Some UP representatives and influential people have economic interest in the problem areas: ownership of large-scale fish farm and loan money. Some people opined that these people in many cases, take stand against greater interest of the people only to serve their narrow interest.

Recommendations:

A. Immediate and Short Term Options

A1. Emergency Relief

A 1.1 There are at least 1 million vulnerable people in these areas, and these households need immediate support for sanitation, drinking water, medical care and some income subsidy by food/cash for work.

A 1.2 There is a need of sensitization about the problem among the service agencies as well as other national level stakeholders.

A 1.3 Emergency relief effort need to target first to the hot spots identified in the reconnaissance survey. As people are not relief oriented, the efforts should keep the spirit up and by no means will turn them to relief oriented. Relief in “cash for work” form might be the best for to keep the spirit up and to contribute in the reduction of water level down to 1-2 ft by manual excavation of the river and gates.

A.2 Cash for Work to de-silt the following points

A 2.1 Immediate Re-excavation

There is a general consensus among the people that one of the prime need is re-excavation of 17 Km river bed of Sri-Hari-Teka-Mukteshwari Rivers before re-opening the TRM of *Beel Khuksia* . Immediately, the left 3 km river bed is very urgent need for re-excavation either by BWDB or by manual labour using cash for work.

A 2.2 Re-Excavation with Coordinated Efforts of Development and Relief Agencies

After the very immediate work of re-excavation of 3 Km of Hari River, there should a massive effort to re-excavate the following gates with the cooperation of GoB and DER groups.

Upper Vodra: Nurnia Gate (4 vent), Burulia (3 vent) and Patra (4 vent) Gate, Borenga Gate (3 vent), Khozakhai (4 vent), Kashimpur (1 vent), Olipurbag Point and Verchimore Point

Lower Vodra: Bharatia Gate, Kharnia Gate

Kapotakshi: Gopalpur Gate, Boga Gate, Magura Gate, Islamkathi Gate

Hari-Sri-Teka-Mukteshwaeri nadi: Choera Gate (4 vent), Bharat Bhayna (1 vent), Vaena Gate in Rudughara Village (2 vent), Agorhati Gate (4 vent), Kanirshihi (3 vent) Khuksia

Gate (daier gate) (8 vent), Kapalia Gate outside (3 vent), Singher gate (4 vent), Keuratala Gate (4 vent), Dahkula Gate (2 vent), Salate Gate (2 vent), Katenga (1 vent).

Salta: Charibhanga gate, Hulor Gate, Gelapdah Gate, Salta Gate, 3 No. Gate

Ghangrail: Kulbaria Gate

A.3 Livelihood Rehabilitation Support

A.3.1 Rehabilitation need assessment, advocacy and support

There is potential risk of huge damages of houses, schools, roads, other infrastructures, crops, livestock and poultry birds. Some crop rehabilitation incentive might be provided to the sufferer people if advocacy effort might not get result immediately after the water removal from lands. GoB also should extend their rehabilitative support to the highly vulnerable people.

A.4 Social Audit

A.4.1 Facilitate a social audit to Water Development Boards works specially to ensure good governance of BWDB implementation transparency

This is very important task to forward to any advocacy work and develop civil society dimension in the advocacy process. AAB has relative advantage to facilitate social audit and that might be an short term response to the problem in a meaningful way.

B. Mid Term (2-5 Years) Options and Strategies

The following are the recommendations, which can start now and can be implemented by 2-5 years from now.

B.1 A comprehensive study on the problem and possible solutions

B.2 Livelihood Security by Adopting Alternative Options

It could be a wise approach if we also take preparation for the worst case scenario. There will be continuous effort to solve the problem through emergency, advocacy and service initiatives. However, the efforts might take long time and in the mean time the whole area could be inundated by stink water. In that case livelihood security will be at risk for long time, which might cause severe humanitarian crisis in long run. Climate change impact might aggravate the situation to a worst end. There should be a parallel effort to develop alternative livelihood options resilient to water logging.

B.3 Rehabilitation work in the light of worst-case scenario risk reduction targets

B.4 Methods of Peoples' Participation; meaning, indicators, and acceptability

B.5 Democratization of Civil Society Platform (Pani Committee and WMA & WMF)

C. Long-Term (5-10 Years) Options and Strategies

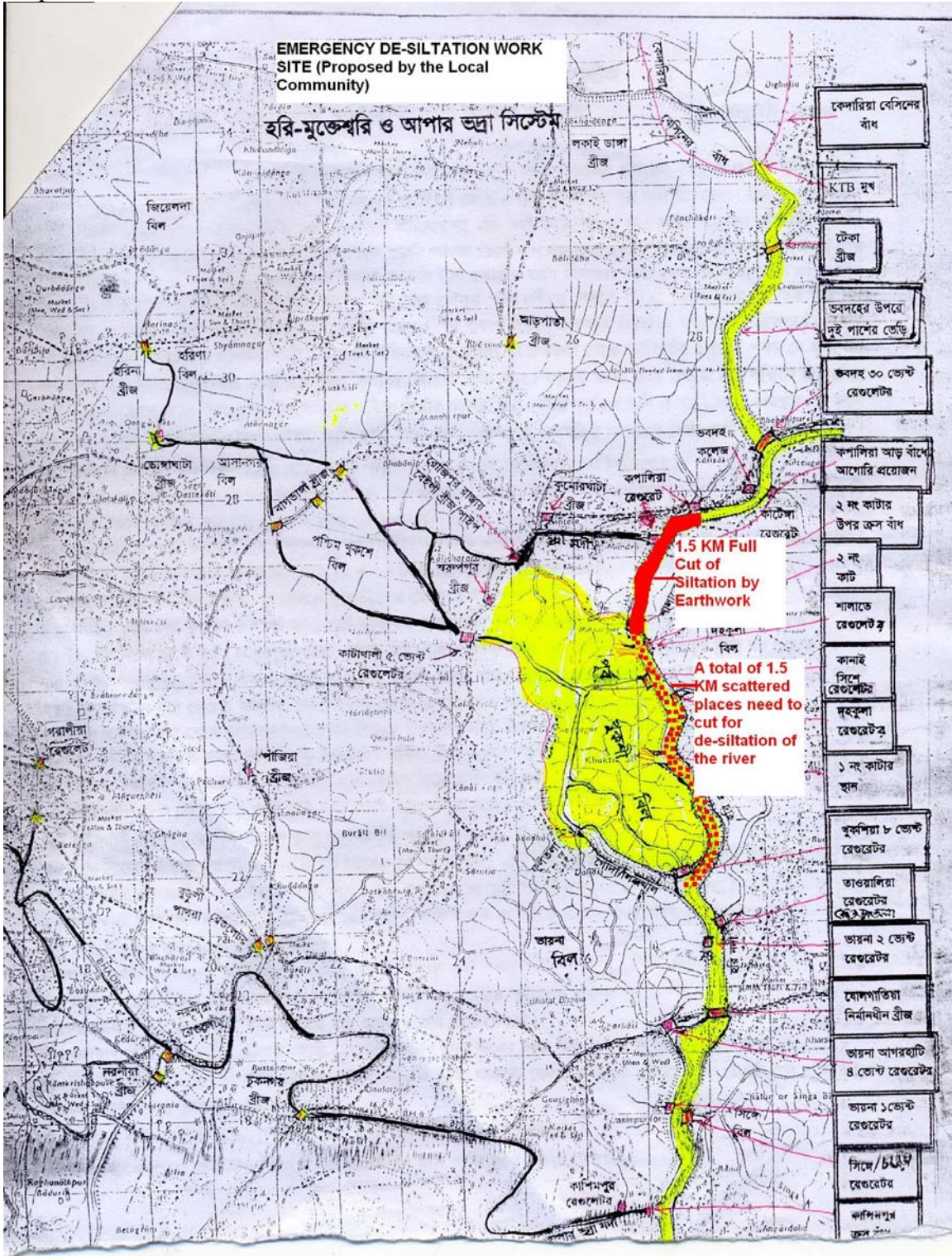
C.1 Advocacy for Alternative Silt Management

C.2 Strengthen Civil Society Dimensions

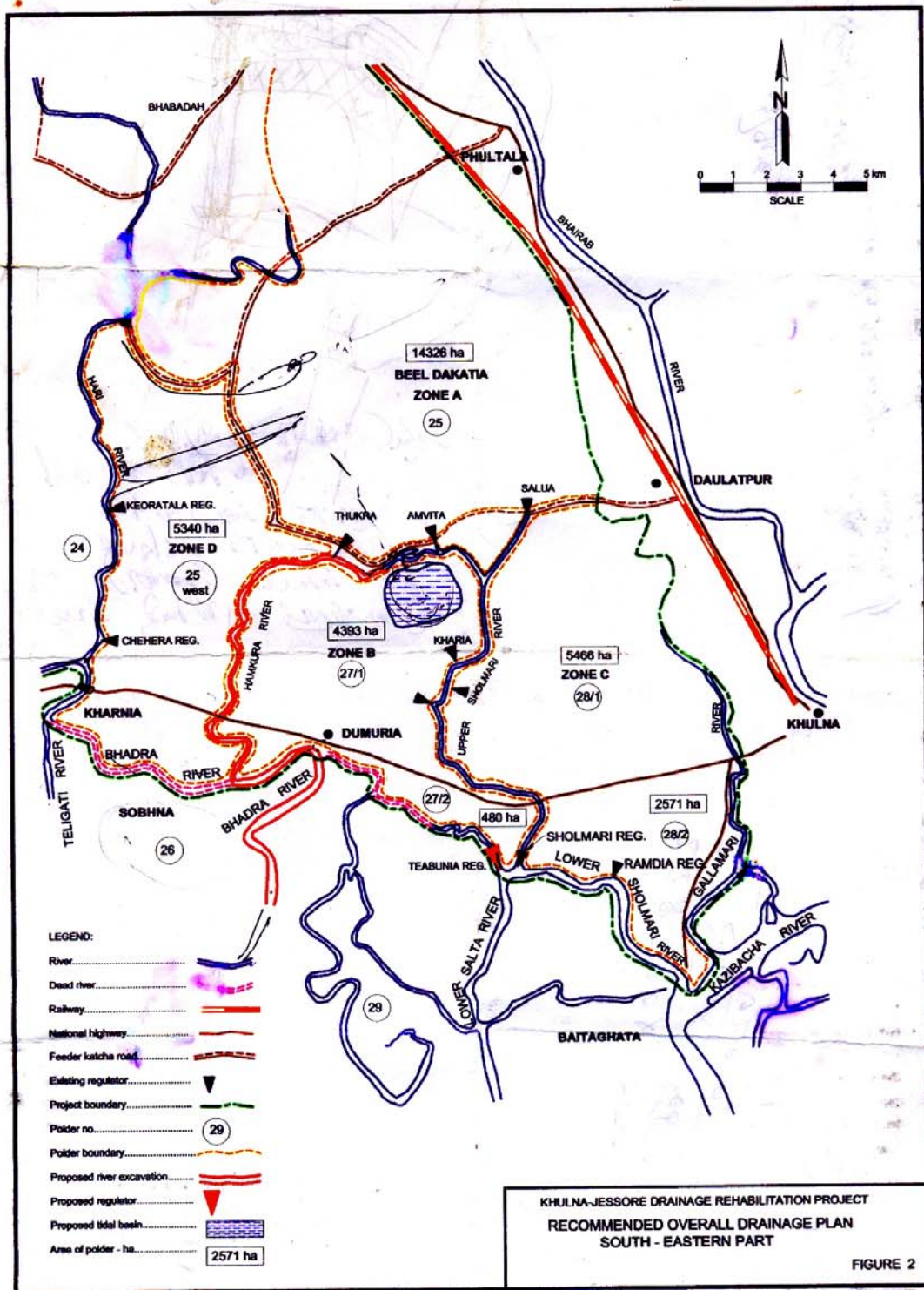
C.3 Mainstreaming the issues into political process

Bangladesh Water Development Board opined about political willingness and influence to their operation. There should be an strategy to mainstream the issues into political process (which exist to some extent in this area) to make sure that by no means this sufferings could be longer rather immediate agreed solutions are supported by all parties.

Annexure
Map-1



Picture-3: Zones of KJDRP Areas



**ACTIONAID INTERVENTION
in
South-West area**

Immediate response (Relief & Rehabilitation)

Relief: Sanitation, Medical Support, Drinking water.

Duration: Support would be continued for 2 months.

Area coverage: Two upazila of Satkhira- Keshobpur & Monirampur

Target Beneficiaries: 20000 Families

Budget : Taka 50,00,000 (approx) Fifty lacs

Immediate Intervention

Sl no.	SUPPORT	ITEM	Allocation / Number	Amount in BDT
1	Water Supply	Tube-well restoration	100	50,000
		Gazi tank installation [2500 litre]	10 pieces	80,000
		Jerry-can supply [20 litres]	200 pieces	50,000
		Boat support for carrying water		50,000
2	Sanitation support	Latrine installation		20, 00,000
3	Medical support	12 health care centre		
		12 Health Worker		
		Medicine support		5,00,000
4	Cash for work	Creating employment opportunity: 3 km Excavation of silted river channel	1000 individuals	10, 00,000