



Summary Report

Scoping of Integration of Waterlogging Risk Reduction into National and Local Planning and Budgeting Processes

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Programming Division
Planning Commission
Government of Bangladesh

Study Team

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Guidance: Technical Advisory Committee, Programming Division

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Acknowledgement

This scoping study, is an attempt to develop a proposal for better institutional coordination at national and local levels along with a mechanism for enhanced budgeting and resource mobilization to solve the problem of waterlogging that is a menace to the vulnerable communities in the SW of Bangladesh. Public sector investment in Bangladesh plays a key role in addressing Disaster Risk Reduction (DRR) & Disaster Preparedness (DP). Till now, there is no such available information regarding the amount and extent of public funding on waterlogging risk reduction. Appropriately, Programming Division and UNDP have completed the joint study titled "*Scoping of Integration of Waterlogging Risk Reduction into National and Local Planning and Budgeting Processes*".

Widespread support from a range of stakeholders both at national and local levels is duly acknowledged. The first and foremost encouragement has come from the former Secretary, Planning Division and Member Programming Division, Mr. Tariq-ul- Islam. Mr. Ziaul Islam, Secretary Planning Division and Member, Programming Division, Planning Commission has given great support to effectively complete the study.

This study, has taken enormous effort to be completed within limited time and resources. It was conducted by international consultant Dr. Rafiqul Islam and national consultant Dr. Nabiul Islam who combined their expertise to produce an analytical report following the study objectives and guidance from the inter-ministerial Technical Advisory Committee (TAC) chaired by Md Syeedul Haque, Chief Programming Division. The TAC members provided advice and directives for the successful completion of the study. The TAC, met several times during the study period to contribute with their intellectual input, successfully visited waterlogged sites and attended regional workshops in Jessore/Satkhira in November 2016 and later in Khulna in April 2017, and finally reviewed several versions of the draft report. The contribution from the TAC is acknowledged gratefully.

UNDP has supported the study with generous technical and logistics support. Contributions and feedback particularly from Ms. Saudia Anwer, Capacity Building Specialist; Mr. Arif Abdullah Khan, Programme Specialist, Disaster Resilience; Mr. A.K. M. Mamunur Rashid, Climate Change Specialist, Mr. Khurshid Alam, Assistant Country Director UNDP, Dr. Sonia Ashrafee, Communication Expert and Mr. Mohammad Ezabat Ullah at UNDP Khulna office are highly appreciated.

Additional thanks go to the concerned line Ministries and Departments for ensuring access to the data on waterlogging relates projects and permission to interview key officials. Valuable data and documents were provided to the consultants.

At field level, contributions during the stakeholder consultations from Mr. Md. Abdus Samad, Commissioner, Khulna Division; Mr. Nazmul Ahsan, Deputy Commissioner, Khulna; Mr. Humayun Kabir, Deputy Commissioner, Jessore; Mr. Abul Kashem Md. Mohiuddin, Deputy Commissioner, Satkhira; Mr. Farid Hossain, UNO, Tala, Satkhira; Mr. Khairul Hossain, UNO, Monirampur; Mr. Shahidul Islam, Executive Director, Uttaran and Mr. Goutam Mondal, Executive Director, Human, Environment and Livelihood Promotion Society (HELPS), Khulna are also greatly acknowledged. Special thanks to participants at community meetings, meetings at UP offices, group discussions at field and Workshops at Satkhira and Khulna for their valuable contributions

At Dhaka level, thanks goes to Dr. Z. H. Khan, Director, Institute of Water Modelling and Mr. Giasuddin Chowdhury, Deputy Team Leader, Bangladesh Delta Plan 2100.

Executive Summary

Parts of south west region of Bangladesh, for the last 20-30 years, experienced persistent waterlogging for 2-6 months during monsoon season. Many programmes and projects have been undertaken to address many aspects of the waterlogging problem. Overall results have been mixed, despite increasing investments. While physical interventions are considered important, institutional bottleneck in addressing the problem has often been overlooked. This scoping study, led by the Planning Commission and facilitated by the UNDP, is an attempt to develop a proposal for better institutional coordination at national and local levels.

The adoption of the Disaster Management Act 2012, subsequent Disaster Management Policy and the Disaster Management (Committee Formation & Functions) Rules 2015 have in principle provided the needed governance and institutional structure to address disaster management in Bangladesh. However, the governance mechanism and institutional structure, though very effective in general, have been found inadequate to address waterlogging issue. This is despite involvement of a large number of organisations and also despite increasing budgetary provisions through many public agencies.

An analysis of resource allocations through the development budgets in three districts in the South West of Bangladesh (Khulna, Satkhira and Jessore) indicates that:

- The overall Annual Development Programme (ADP) budget for waterlogging projects during the last 15 years (from 2000/01 to 2015/16) is estimated as BDT 4,107 crores (= USD 494 millions) at current prices, and BDT 5,697 crores (= USD 605 millions) at constant (2005/06) prices. This is 15 percent of total allocations, in these three districts, at current price spent on waterlogging relevant projects. Year wise trend can be seen in **Annex I**.
- The rate of growth in the WL relevant ADP budget in 2015/16 over 2001/02 at current prices is estimated as 10.7 percent, which has exceeded inflation rate; and the rate at constant (2005/06) prices is estimated at as high as 35.6 percent. Thus, there is a real growth in the budget for waterlogging projects.
- Local Government Engineering Department (LGED) and Bangladesh Water Development Board (BWDB) are the two key agencies in implementing waterlogging relevant projects, accounting for 44 and 33 percent of the total ADP WL budgets, respectively.
- The ADP WL expenditure in the three districts has increased in real terms since 2001/02.

The budgetary analysis has further identified entry points to develop an integrated institutional framework promoting horizontal integration. Eight ministries (the Ministries of LGRD & Cooperatives; Water Resources; Disaster Management & Relief; Fisheries and Livestock; Agriculture; Planning; Finance and Land) and five government agencies (the Local Government and Engineering Department, the Bangladesh Water Development Board, the Department of Disaster Management, the Department of Agricultural Extension and the Department of Fisheries, are now considered as key entry points. Proposed institutional co-ordination framework has been developed involving these ministries and agencies.

Other Key Findings

- There is clear indication of increased waterlogged areas over the years. Several studies have indicated that waterlogging is expected to become worse with increased sea level rise due to climate change. Soil and water salinity of the region is expected to increase. Present vulnerable communities will become more vulnerable and new areas will be waterlogged.
- On-going works to address waterlogging includes a series of engineering interventions including re-excavation of rivers and canals to improve the flow of drainage. These efforts have given mixed results.
- Tidal River Management (TRM), a local innovation, has been found to be in harmony with nature and cost effective but has suffered from implementation problems.
- The target of the Government of Bangladesh is to reduce waterlogged areas from existing 2.5% to 0.5% of the coastal area during the 7th Five Year Plan period. Also, under the Bangladesh Delta Plan 2100 (draft), the target is to reduce waterlogging vulnerable people from 0.9 to 0.2 million by 2020. To support this targeted approach, a systematic and comprehensive study covering the total waterlogged areas with linkage to upstream and downstream is yet to be initiated.
- Though there is evidence of increased budget allocations exceeding the inflation rate, yet this is found to be inadequate to undertake projects/programmes in a systematic and comprehensive manner. Funding need to meet the required investment will be substantial.
- Project specific allocations under the ADP are the only source to fund waterlogging related projects. Increased allocations under the Annual Budget will be needed continually.
- Meantime, the Government of Bangladesh, under the Disaster Management Act 2012 has made provisions for two separate funds to address disaster management, in general for all disasters: National Disaster Management Fund; and District Disaster Management Fund. A total of only BDT 5 lakh was allocated for a district under the District Disaster Management Fund in 2015-16. Hence the need for a dedicated fund has been established considering inadequacy from all the available sources of funding.
- There are strong vertical linkages between agencies and their Ministries to address waterlogging following sectoral approach. Horizontal integration is found to be weak, especially at the local level in relevant districts and Upazilas.
- Instruments to promote horizontal integration to address waterlogging at a regional scale have never been developed. A multi-layered and multi-sectoral institutional coordination framework both at the national and local level is seen as a needed instrument.
- A comprehensive multi-sectoral and multi-agency action plan is also seen as another needed instrument. Implementation of this Action Plan has to be supported by continuous and sustained budgetary allocation, including consideration of a dedicated funding mechanism.

Recommendations

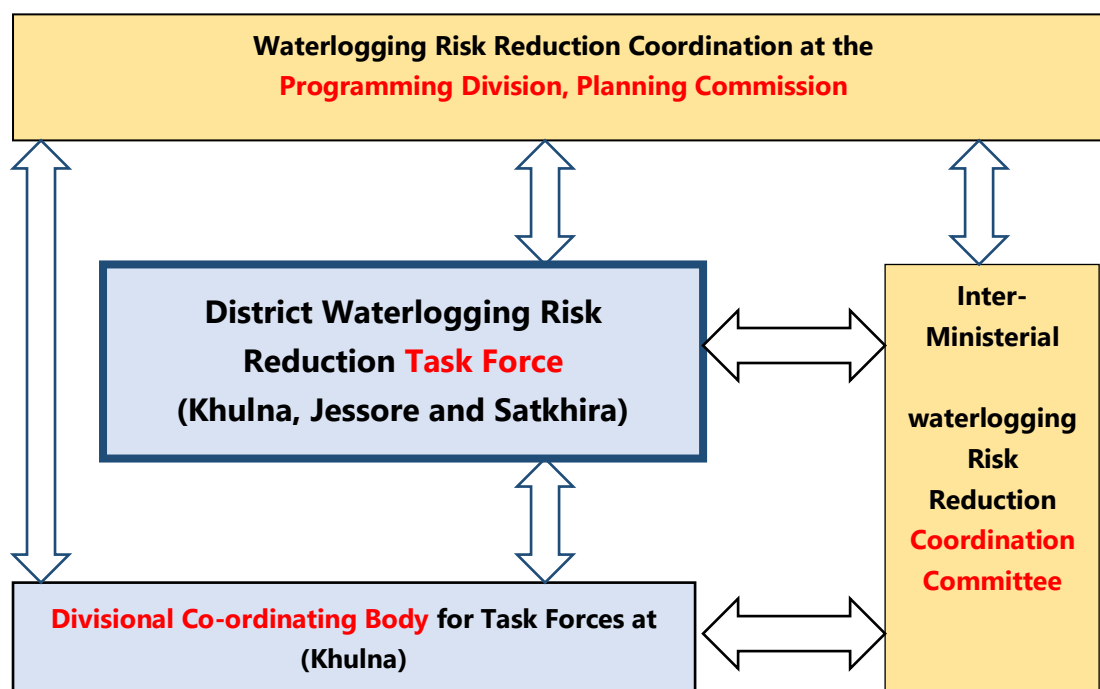
Based on the study findings, review of budgetary allocations, trends and provisions, institutional challenges, existing coordination setups in many sectors, in one-to one or group discussions with many stakeholders nationally and locally, through conducting regional workshops at Satkhira, Jessore and Khulna and with contributions from the Technical Advisory Committee (TAC) for the study, the following four distinct recommendations are proposed for consideration:

(a) Operationalization of the Disaster Management Fund, as indicated in the Disaster Management Act 2012.

Although the Disaster Management Act 2012 has made provisions for two separate funds: National Disaster Management Fund; and District Disaster Management Fund., the District Disaster Management Fund became available recently. Due to procedural delays, this fund at the district level remained unutilized in 2015-16. Smooth operationalization of the Disaster Management Fund at least at the district level is recommended. This can be achieved through a dialogue between relevant District/Divisional administrations at the local level and the Department of Disaster Management at the national level.

(b) A multi-layered & multi-sectoral coordination framework: two at the national level and two at the local level.

The following setup is recommended to be established:



A coordination mechanism on waterlogging related investments at the Programming Division of the Planning Commission is proposed as lead national integration/coordination point for all efforts for risk reduction to waterlogging. The Agriculture, Industries and Coordination Wing of the Programming Division could coordinate and provide secretariat service to the Inter-Ministerial Waterlogging Risk Reduction Coordination Committee.

The **Inter-Ministerial Waterlogging Risk Reduction Coordination Committee** will function as a formal linkage for achieving political commitments regarding waterlogging risk reduction, providing directions and making decisions. It shall provide strategic and operational advices. Existing Technical Advisory Committee can be restructured to develop the suggested Coordination Committee and chaired by the Chief, Programming Division of the Planning Commission.

It is proposed to establish three **District Waterlogging Risk Reduction Task Forces**, one each at Satkhira, Khulna and Jessore districts. These taskforces are considered as the main functioning setup to work at districts affected by waterlogging. Objective is to facilitate a coordinated response to reduce risk from waterlogging and to promote horizontal linkage among agencies.

Further, it is proposed to establish a single **Divisional Coordination Body for Task Forces** at the Divisional level at Khulna to guide and resolve inter-district interventions among three Task Forces.

All four institutional structures of the framework can be established through an office order from the Cabinet Division.

Membership and roles and responsibilities of these setups have been presented in **Annex II**.

(c) Formulation of a comprehensive Study & Action Plan to facilitate risk reduction to waterlogging.

At present, risk reduction efforts to waterlogging are usually done on an ad hoc basis. Analytical studies are performed in few cases covering small areas. No comprehensive study covering the entire waterlogged areas linking upstream and downstream has ever been done. Often, study recommendations are implemented years later, by the time which deltaic south west region changes hydro-morphologically and base data, collected years earlier, do not provide real on-ground picture.

Moreover, waterlogged areas are expected to be impacted by climate change and sea level rise. Hence the comprehensive study should cover hydrodynamic modelling, detailed area surveys, review of lessons learned from past interventions, socio-economic studies, environmental studies and study on impacts of climate change. Based on this study, it is recommended that there should be time bound comprehensive multi-sectoral and multi-dimensional Action Plan to reduce risks from waterlogging for now and for years to come. This Action Plan is a package of structural, non-structural and institutional interventions, including provisions for the Tidal River Management (TRM). The Action Plan needs to be implemented immediately.

The district-level taskforces, as mentioned under ‘b’, are needed to proactively participate in formulating the comprehensive study and developing the proposed Action Plan.

(d) A dedicated Investment Fund to implement the Action Plan

The proposed ‘Comprehensive Waterlogging Risk Reduction Study & Action Plan’ is expected to identify an investment need. Based on recent budgetary allocations, the investment need is expected to be substantial. Hence, It is recommended to create a dedicated ‘Waterlogging

Risk Reduction Investment Fund'. This dedicated fund will ensure immediate and timely implementation of the Action Plan.

Funding to carry out the Comprehensive Study and the Action Plan can be sought from Development partners. UNDP may take lead to assist the Government in this objective. Development partners who are actively working in the study area, ADB, WB, EKN, DFID and others should be approached to fund the comprehensive study and establish the dedicated fund.

The time frame to implement these recommendations is also proposed in this study.

Technical Advisory Committee

The Technical Advisory Committee (TAC), a multi-Ministerial setup, was specifically constituted for this study, as depicted below. The TAC has met several times during the study period to contribute with their intellectual input, visited waterlogged sites in Jessore, Khulna and Satkhira, attended regional workshops and finally reviewed several versions of the draft report.

Name & Designation	Work Place
Mr. Md. Syeedul Haque, Chief and Chair	Programming Division, Planning Commission
Mr, Prashanta K. Chakraborty, Joint Chief	Programming Division, Planning Commission
Mr. Shamim Ahmed Khan, Joint Chief	SEI Division, Planning Commission
Mr. Swapon Kumar Ghosh, Joint Chief	Industries & Energy Division, Planning Commission
Mr. Montu Kumar Biswas ,Joint Chief	Ministry of Water Resources,
Mr. Khandakar Ahsan Hossain, Joint Chief	General Economics Division, Planning Commission
Mr. Asraful Mosaddek, Joint Secretary	Rural Development and Co-operative Division, Bangladesh Secretariat
Mr. Md.Sayeduzzaman , Joint Chief	Programming Division, Planning Commission
Dr. Nurun Nahar, Deputy Chief	Programming Division, Planning Commission
Mr. Md. Abdul Salam Khan, Deputy Chief	Agri., WR & Rural Institutions Division, Planning Commission
Ms. Begum Naila Ahmed, Deputy Secretary	Ministry of Disaster Management and Relief, Bangladesh Secretariat
Mr. Shamsur Rahman Khan, Deputy Chief	Ministry of Environment and Forest, Bangladesh Secretariat
Mr. Md. Mahmudur Rahman, Senior Assistant Chief	Ministry of Agriculture, Bangladesh Secretariat
Mr. Md. Anisul Islam, SEn	Bangladesh Water Development Board
Dr. Md. Aminul Haque, Principal Scientific Officer	Water Resources Planning Organization (WARPO)
Mr. Dinesh Sarkar, Assistant Chief	Programming Division, Planning Commission

ANNEX I Analysis of Resource Allocations

Table A1.1: ADP and revised ADP total allocation: Bangladesh, 2001/02 – 2015/16

Fiscal Year	No. of projects*	ADP allocation (Crore Tk.)		Revised ADP allocation (Crore Tk.)	
		Current price	Constant price	Current price	Constant price
2001-02	1235	17271	13492	15324	11971
2002-03	1158	18170	15007	16391	13537
2003-04	1111	17542	15447	18390	16194
2004-05	1014	18984	17756	19402	18147
2005-06	1098	20502	20502	20286	20286
2006-07	1100	21760	23168	20264	21575
2007-08	1057	23956	27511	20829	23920
2008-09	1037	23526	28845	21689	26593
2009-10	1061	26865	35293	27177	35702
2010-11	1184	34357	48680	33748	47818
2011-12	1230	38825	59503	39341	60294
2012-13	1204	51156	84029	50348	82702
2013-14	1253	60692	105762	58048	101154
2014-15	1204	74424	136389	72350	132589
2015-16	1315	89838	171159	87082	165909
Total *	17,261	537,868	802543	520,669	778,391
Trend	0.9	11.8	18.5	12.1	18.8

* Overlapping projects across years

Table A1.2: Relevance assessment of ADP WL projects (nos.) in three districts over years

F Years	Total no. of project	% of projects by relevance				
		Highly	Significantly	Somewhat	Implicitly	All
2001-02	48	25.0	31.3	35.4	8.3	100.0
2002-03	49	22.4	26.5	40.8	10.2	100.0
2003-04	40	20.0	25.0	42.5	12.5	100.0
2004-05	37	18.9	32.4	35.1	13.5	100.0
2005-06	40	15.0	32.5	37.5	15.0	100.0
2006-07	32	25.0	28.1	37.5	9.4	100.0
2007-08	33	21.2	39.4	33.3	6.1	100.0
2008-09	40	12.5	50.0	32.5	5.0	100.0
2009-10	41	14.6	53.7	24.4	7.3	100.0
2010-11	36	19.4	52.8	25.0	2.8	100.0
2011-12	34	17.6	44.1	32.4	5.9	100.0
2012-13	36	19.4	41.7	33.3	5.6	100.0
2013-14	42	19.0	42.9	31.0	7.1	100.0
2014-15	37	24.3	40.5	29.7	5.4	100.0
2015-16	29	20.7	37.9	31.0	10.3	100.0
All	574*	19.7	38.3	33.6	8.4	100.0

* Overlapping projects across years

Table A1.3: Relevance assessment of ADP WL projects (nos.) three districts by ministries

Ministry	No of WL relevant Project by relevance*				
	Highly	Significantly	Somewhat	Implicitly	All
LGRD & Co-operative	4	17	22	3	47
Agriculture	3	4	3	0	10
Disaster Management and Relief	0	6	7	1	14
Environment and Forest	0	1	0	2	3
Fisheries and Livestock	3	2	6	2	13
Industries	2	0	0	0	2
Water Resources	13	16	4	3	36
Planning	0	2	0	0	2
Road Transport and Bridges	2	3	3	1	8
All	27	52	45	11	135
%	19.7	38.3	33.6	8.4	100.0

Notes: * Distinct projects (non-overlapping across years)

The Ministry of Disaster Management and Relief includes projects implemented by Ministry of Food.

Table A1.4: ADP WL project allocations by agencies three districts, 2001/02–2015/16

Agencies	No. of projects*	ADP WL relevant (Crore Tk.)		
		Allocation	Capital	Revenue
BWDB	37	1345	1104	241
LGED	42	1785	1678	107
DPHE	6	63	56	7
DDM	14	170	134	36
DoF	9	56	20	36
DAE	8	75	47	28
Others	19	612	574	39
All	135	4107	3613	494

Notes: * Distinct projects (non-overlapping across years)

Table A1.5: ADP WL projects by ministries by budget components, 2001/02 – 2015/16

Agency	Projects*		ADP allocation WL relevant (In Crore TK.)		% of total ADP allocation (TK) WL relevant		
	N	%	Total	%	Capita	Revenue	Project Aid
BWDB	37	27.4	1345	32.7	82.1	17.9	53.1
LGED	42	31.2	1785	43.5	94.0	6.0	58.0
DPHE	6	4.5	63	1.5	89.6	10.4	63.9
DDM	14	10.5	170	4.2	78.9	21.1	34.2
DoF	9	6.8	56	1.4	36.3	63.7	66.8
DAE	8	5.7	75	1.8	62.2	37.8	72.7
Others	19	13.9	612	14.9	93.7	6.3	69.9
All	135	100.0	4107	100.0	88.0	12.0	57.7

Notes: *Distinct projects (non-overlapping across years)

The Ministry of Disaster Management and Relief (MoDMR) acted as an agency to have directly implemented a few projects. For simplicity, projects implemented by the Ministry of Disaster Management and Relief (MoDMR), the Department of Disaster Management (DDM) and the Directorate of Relief and Rehabilitation (DRR) are merged under DDM. The small number of projects implemented by the Water Resources Planning Organization are included under BWDB.

Table A1.6: ADP WL project allocation by ministries by GoB contribution, 2001/02 – 2015/16

Ministry	Allocation (Crore TK)		
	Total	GoB contribution	Donor contribution
LGRD & Co-operatives	1848	772	1076
Agriculture	82	22	60
Disaster Management and Relief	171	113	58
Environment and Forest	20	1	19
Fisheries and Livestock	78	36	42
Industries	3	3	0
Water Resources	1345	631	714
Planning	16	1	15
Road Transport and Bridges	544	159	385
All	4,107	1,739	2,368

Table A1.7: ADP WL relevant projects and allocation in three districts, 2001/02 – 2015/16

Districts	No. of WL relevant project		ADP WL relevant project allocation (Crore TK)		% of ADP WL relevant project allocation		
	Total	%	Total	%	Capital	Revenue	Project Aid
Jessore	46	34.3	1404	34.2	89.0	11.0	55.6
Khulna	48	35.9	1524	37.1	88.8	11.2	55.4
Satkhira	41	29.8	1179	28.7	87.0	13.0	57.6
Total	135	100.0	4107	100.0	88.3	11.7	56.1

* Distinct projects (non-overlapping across years)

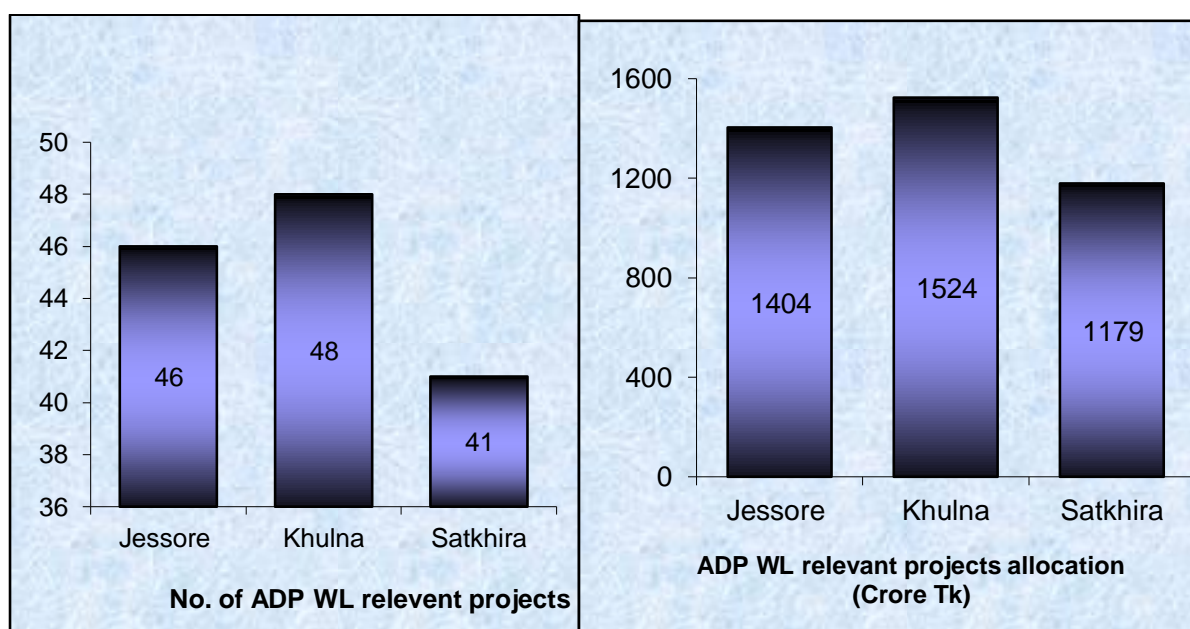


Figure 1: ADP WL projects and allocation in three districts, 2001/02 – 2015/16

Annex II Proposal for Institutional Coordination Framework

Based on study findings, a proposal for institutional coordination framework has been developed and elaborated in this Annex.

The purpose of the institutional framework is to address the lessons learnt and governance challenges and to improve the governance in order to bring the existing institutional framework and government agencies in a better position of consistent and coordinated governance and to play an active and required role in addressing waterlogging issue. Institutional Framework encompasses necessary and agreed reforms of the current institutional framework and the governmental organizations involved. These organizations need to be involved in such a way as to be prepared to participate in the long-term Action Plan formulation; they also need to adopt and execute the implementation programme in an integrated, targeted, focussed, broadly supported and transparent way.

Institutional development and good governance are probably the most important factors for achieving the ambitions for zero waterlogging, security of life, livelihood improvement and economy growth in the south west Bangladesh. There is an urgent governance challenge which can be characterized as ‘collaborative planning and implementation’. This requires national level “horizontal coordination” but also in terms of multi-level governance requires “vertical coordination” between national and local government. The recent and future anthropogenic changes in the hydrological cycle due to e.g. climate change, emergence of *gher* farming in combination with increasing waterlogged areas are expected to make future water governance and management of collaborative implementation more challenging. The development culture could be transformed more profoundly from a short to mid-term sector and project approach to a long term consistent program approach with a strong emphasis on coordination of planning and resource allocation as well as on adequate collaborative implementation.

Sound implementation of policies and programmes depends upon the prevailing governance environment and underlying institutional arrangements. These requirements gain added significance when policies and programs are cross-sectoral in nature and involve multiple line agencies. The agenda to address waterlogging is essentially cross-sectoral and implementation arrangements involve multiple line ministries, local government institutions, communities and private sector. Clarity of role, interdependence of actions and a coordinated approach are essential requirements of the institutional set up. The stakes are large and so are the resource requirements. Yet, resources are limited and there are competing demands. How resources are allocated among competing demands, how trade-offs are made and how effectively programmes are implemented to get the best results from limited resources are major political economy issues that depend critically upon the prevailing governance environment.

Institutions are not static. They are dynamic in the sense that they evolve over time. Starting with a thoughtful design that involves pragmatic solutions based on the present socio-political realities of Bangladesh and working within the umbrella of the overall capacity constraints in public administration, institutional changes can further evolve as implementation progress is made.

Waterlogging in south-west Bangladesh is a multi-dimensional and multi-faceted problem, therefore the solutions require a multi-dimensional approach with different ministries and stakeholders to be engaged in a coordinated and sequential manner in the arena (UNDP 2014). Recommendation, among others, from a national consultation meeting on waterlogging in southwest Bangladesh includes ‘Develop innovative institutional mechanisms for stronger coordination among government departments and involving local communities’ (FAO 2016). It was recommended by FAO:

- Strengthen district government setup - improve collaboration among agencies
- Coordinate at basin level across multiple disciplines - may require a new institutional set up (task force, agency etc.)- critical for complex development process, one entity to oversee development plan and implementation
- Work to establish a maintenance culture, with local government ownership (and new funding for running costs)- non-functional project based community participation, linking with LG with innovative funding arrangement (FAO 2015).

Delta issues show in many cases challenges or problems which require dedicated involvement and real input and commitment of the stakeholders. In some issues, like waterlogging in South-West Bangladesh or drainage congestion in South-Central area, none of the stakeholders can solve the problem individually nor has the exclusive mandate to decision making. In these cases, an Issue Based Coordination and Problem Solving approach offers effective possibilities to address the long lasting issue, identify an agreed problem definition and agree on relevant organizations to play a role. A lead government organization needs to be identified which could form a Council or Task Force as temporary joint institutional setup at field level consisting of relevant government agencies including district administrations but also other LGIs, NGOs, civil society. The issue should be addressed in a comprehensively. If necessary, the Delta Plan (2100) could provide the strategies and measures to be developed phase wise as per community feedback and mainstream the agreed measures at national level.

Against the backdrop, this annex describes a framework of the basic core institutional arrangement that must underlay the formulation and implementation of an Action Plan to address waterlogging. The suggested institutional framework draws on the lessons of Bangladesh’s own experiences in the affected area. It recognizes the socio-political environment of Bangladesh and suggests institutional set up that is realistic and is likely to work and sustain in Bangladesh.

There are many government Ministries and departments involved in addressing waterlogging problem nationally and in particular in south-west Bangladesh. Besides, Local Government institutions, NGOs and even development partners participate and contribute in solving waterlogging problem. After reviewing existing coordination setups in many sectors, multiple stakeholder engagement at the districts of Satkhira, Jessore and Khulna, a consensus has been reached to propose the following four institutional structures; two at the national and two at the local levels.

National level

- 1) Waterlogging Risk Reduction Coordination at the Programming Division, Planning Commission
- 2) Inter-Ministerial Waterlogging Risk Reduction Coordination Committee

Local level

- 3) District Waterlogging Risk Reduction Task Forces at Khulna, Jessore and Satkhira
- 4) Divisional Coordination Body for Task Forces at Khulna

Institutional Framework at the National Level

Planning and budgetary processes in Bangladesh is still national centric. This is discussed in Chapter 5 of the study report to show how a number of Ministries and agencies are mandated to address waterlogging in Bangladesh. To address waterlogging, it is necessary to identify a single organization or set up to assume leadership. Naturally the Bangladesh Water Development Board, because of their extensive involvement in waterlogging risk reduction activities like river re-excavation, embankment, regulators, polders, hydro-morphological monitoring activities and also investments, could have been the lead agency to coordinate. Somehow, BWDB is also perceived to be the agency that has caused this 'man made' waterlogging

Based on the existing institutional mechanism for national planning and budgeting, a multi-layered & multi-sectoral coordination mechanism, under the leadership of Planning Commission, appears quite feasible (UNDP 2016), as it is an existing mechanism mandated for programme coordination for a whole range of planning activities and the **transfer of funds**. It can also anchor donor funds through ERD and thereby channel to various ministries. The Planning Commission in general and the Programming Division in particular can provide leadership in future efforts to solve waterlogging situation, based on following reasoning described in **Box A**.

Box A

Why Planning Commission to lead? Why Programming Division?

- The Bangladesh Planning Commission (PC) is the central planning entity of the Government. As part of its executive function, the Planning Commission is responsible for preparing, processing and approving development plans, programmes as well as projects. The coordination function of PC encompasses the whole range of planning activities in order to ensure consistency of investments with overall and sectoral objectives of plans of the relevant ministries and divisions
- The allocation of funds to individual projects in the ADP is done by the Programming division of the Planning Commission in close interaction with the Sector Divisions of Planning Commission and the Ministry of Finance
- Hence, the Planning Commission in general and the Programming Division in particular is the best suited agency to lead risk reduction efforts.
- The Programming Division has close interaction with Ministries, Agencies at the national level and the local level administration
- Furthermore, the Programming Division is already leading this Scoping Study. It has the institutional memory and conceptual setting
- The Programming Division has already expressed its willingness to lead this multi sectoral, multi-agency initiative.

1) ESTABLISHMENT OF A COORDINATION MECHANISM AT THE PROGRAMMING DIVISION

It is proposed to establish a coordination mechanism on waterlogging at the Programming Division of the Planning Commission. This is proposed as lead national integration/coordination point for all efforts for risk reduction to waterlogging. The Agriculture, Industries and Coordination Wing of the Programming Division will coordinate and provides secretarial service to the Inter-Ministerial Waterlogging Risk Reduction Coordination Committee.

Proposed Structure

Joint Chief, Agriculture, Industries and Coordination Wing, Programming Division, Planning Commission

Deputy Chief, Programming Division, Planning Commission

Assistant Chief, Programming Division, Planning Commission

Support staff

Functions

- Provides leadership to integrate/coordinate all efforts for risk reduction to waterlogging
- Sensitizes waterlogging issue at national level and continue to keep the issue in national agenda
- Formulation of programme portfolio of interventions in waterlogged areas.
- Facilitates resource allocation to the programme in co-ordination with Finance Division, ERD and Agriculture, Water Resources and Rural Institutions Division.
- Determination of external assistance requirements for waterlogging risk reduction investments.
- Facilitates coordination of capacity building, knowledge generation and management and M&E efforts.
- Provides secretarial service to the Inter-Ministerial Waterlogging Risk Reduction Coordination Committee.

Functions of Officers involved in coordination mechanism are regarded as additional responsibilities to their normal functions at the Wing.

2) INTER-MINISTERIAL WATERLOGGING RISK REDUCTION COORDINATION COMMITTEE

It is proposed to establish a coordination committee to facilitate inter-Ministry and inter-agency coordination, chaired by the Chief, Programming Division, Planning Commission. Existing Technical Advisory Committee of this study can be restructured to develop this Coordination Committee as an operational level forum. The Inter-Ministerial Coordination Committee provides strategic and operational advices.

Tentative memberships of the Committee are:

Chief, Programming Division, Planning Commission	Chair person
Joint Chief, Programming Division, Planning Commission	Member
Joint Chief, Agriculture, WR & Rural Institutions Division, Planning Commission	Member
Joint Chief, Agriculture, Industries and Coordination Wing, Programming Division, Planning Commission	Member-Secretary
Joint Secretary/ Joint Chief, Ministry of Water Resources	Member

Chief Planning, Bangladesh Water Development Board	Member
Additional Chief Engineer, LGED	Member
Representative, Ministry of Public Administration	Member
Representative, Ministry of Disaster Management and Relief,	Member
Representative, Ministry of Environment & Forests	Member
Representative, Ministry of Fisheries	Member
Representative, Ministry of Agriculture	Member
Representative, Ministry of Land	Member
Representative, Department of Disaster Management	Member
Director, Institute of Water Modelling	Member
Director, CEGIS	Member
Representative of the Academia	Member
Representative of Development Partners	Member
Representative of NGOs	Member

The Coordination Committee sits at least once every four months.

The Committee would have the following functions:

- (a) to provide a formal linkage for achieving political commitments regarding waterlogging risk reduction, provides directions and makes decisions;
- (b) to give instructions for integrated efforts for risk reduction to waterlogging to meet long-term challenges of climate change and sea level rise;
- (c) to steer comprehensive studies related to waterlogging risk reduction.;
- (d) to guide Waterlogging Risk Reduction Task Forces at district level; and
- (e) to perform such other functions, as may be determined by the Committee.

The Agriculture, Industry & Coordination Wing of the Programming Division, Planning Commission provides secretarial service to the Inter-Ministerial Waterlogging Risk Reduction Coordination Committee.

Institutional Coordination Framework at Local Level

Waterlogging as a disaster has a local or regional presence. Southwest Bangladesh is one such region. Hence, it is logical to seek institutional solution mainly at the local level. Institutional canvass of the local waterlogged area has already been described in Chapter 3.

South West Bangladesh is naturally the proponent of creative problem solving in advancing the concept of 'Tidal River Management' and also institutions like 'Pani Committee' or 'Association of Waterlogged Unions'.

Also, formulation of master plans for Upazilas are progressing according to Article 23 of Upazila Parishad Act 1998 which clearly stipulates that Upazilas are obliged to establish a Five Year Plan and plans for different planning period.

Key Challenges faced

- In Bangladesh, planning and budget for district and upazilla level have always been centrally managed.

- District and upazilla level managers have experienced problems dealing with area-specific issues. More could be done at the local level to conduct evidence based analysis and planning and take action as per local priorities.
- Planning, resource mobilization and implementation at local level are not distant dreams but coming to reality through a gradual process. Though local people have the right knowledge mix to solve local problems, yet they lack capacity to develop structured projects. 'The Union Digital Centres being established at every Union Parishad will be beneficial.

It is proposed to establish two setups "District Waterlogging Risk Reduction Task Force's at three districts, Satkhira, Khulna and Jessore and the 'Divisional Coordination Body for Task Forces' at Divisional Level at Khulna.

3) DISTRICT WATERLOGGING RISK REDUCTION TASK FORCE

A task force (TF) is a unit or formation established to work on a single defined task or activity. These Task Forces are proposed to be constituted under the existing Disaster Management Act 2012.

It is proposed to establish three Task Forces, one each at Satkhira, Khulna and Jessore districts. These taskforces are considered as the main functioning setup to work at districts affected by waterlogging.

Objective: To facilitate a coordinated response to reduce risk from waterlogging

Membership

- Deputy Commissioner, Convenor
- Executive Engineer, BWDB, Member-Secretary
- Executive Engineer, LGED
- Executive Engineer, DPHE
- District Agricultural Officer, DAE
- District Fisheries Officer, DoF
- District Officer, Primary & Mass Education Department
- District Relief & Rehabilitation Officer, DDM
- NGO representative

The Task Force can co-opt any other agencies deemed relevant for the objective.

Tasks & Responsibilities

- Provides leadership at district level to integrate/coordinate all efforts for risk reduction to waterlogging
- Propose and discuss among taskforce members of projects {related to waterlogging risk reduction) being communicated from the district level to head offices for budget allocation. Make efforts to avoid duplications and reach out for a consensus proposal
- After budget allocations each year, analyse resources available for projects related to waterlogging risk reduction at the district level and make judicious use of resources available. Consider, if possible, resource pooling.

- Support operationalization of emergency fund (when available) for waterlogging risk reduction.
- Support and facilitate the team preparing a comprehensive waterlogging risk reduction action plan.
- Keep linkage with Upazila and Union Disaster Management Coordination Committees.
- Receive and act upon guidance from the waterlogging Risk Reduction Co-ordination Cell/Desk and the Inter-Ministerial Waterlogging Risk Reduction Coordination Committee.
- Any other task and responsibilities identified by the Task Force.

4) DIVISIONAL COORDINATING BODY FOR TASK FORCES

It is proposed to establish a single Coordination Body to guide and resolve inter-district interventions among three Task Forces.

Objective: To facilitate a coordinated response among three Task Forces

Membership

- Commissioner, Khulna Division, Convenor
- Chief Engineer, South-West Zone, BWDB, Khulna, Member-Secretary
- Deputy Commissioners, Khulna, Jessore & Satkhira
- Executive Engineers, BWDB, Khulna, Jessore & Satkhira
- Executive Engineer, LGED, Khulna, Jessore & Satkhira
- District Relief & Rehabilitation Officer, DDM, Khulna, Jessore & Satkhira
- NGO representative

The Body can co-opt any other agencies deemed relevant for the objective.

Tasks & Responsibilities

- Provides leadership at Divisional level to integrate/coordinate all efforts for risk reduction to waterlogging.
- Resolves any inter-district issues for waterlogging risk reduction.
- Support and facilitate the team preparing a comprehensive waterlogging risk reduction action plan.
- Keep linkage with Divisional Disaster Management Coordination Committees.
- Receive and act upon guidance from the waterlogging Risk Reduction Co-ordination Cell/Desk and the Inter-Ministerial Waterlogging Risk Reduction Coordination Committee.
- Any other task and responsibilities identified by the Coordination Committee.