

Draft Minutes of the Workshop on 'Participatory Water Management: Challenges and Way Forward'

17 November 2021

Support to Implementation of Bangladesh Delta Plan 2100 (SIBDP), General Economics Division (GED), and the Blue-Gold Program, BWDB jointly organized a workshop titled 'Participatory Water Management: Challenges and Way Forward' on Wednesday, the 17th of November 2021 at NEC Conference room, Bangladesh Planning Commission. Dr. Shamsul Alam, Hon'ble State Minister, Ministry of Planning (MoP), graced the occasion as Chief Guest. Mr. Kabir Bin Anwar, Senior Secretary, Ministry of Water Resources (MoWR), presided over the workshop. Dr. Md. Kawser Ahmed, Member of the General Economics Division (GED), was present as the special guest. Mr. Fazlur Rashid, Director General, Bangladesh Water Development Board (BWDB) were present as the guest of honor. Mr Folkert de Jager, First Secretary, Water and Food Security, Embassy of the Kingdom of the Netherlands and Mr. Martijn van de Group, Delegated Representative, Water Management, Embassy of the Kingdom of the Netherlands were also present in the workshop. The list of participants is attached in Annex II.

Welcome Address and Objective of the Workshop

At the beginning of the workshop, Dr. Robin Kumar Biswas, Project Director, the Blue-Gold Program, welcomed all the workshop participants. Dr. Biswas provided a brief overview of the Blue-Gold program, which is a collaboration program between the Government of the Netherlands (donor) and the Government of Bangladesh. The overall objective of the Blue-Gold Program is "to reduce poverty of 190,000 households living in 119,224 ha area of selected coastal polders by creating a healthy living environment and to pursue sustainable socio-economic development." The twenty-two polders selected for interventions through Blue Gold cover around 119,224 ha of land in the Patuakhali, Khulna, Satkhira, and Barguna districts.

The Ministry of Water Resources implemented the Blue Gold program through the Bangladesh Water Development Board (BWDB, lead agency) and the Department of Agricultural Extension (DAE). The Bangladesh Water Development Board (BWDB) protects the communities from flooding and surges by ensuring the integrity of the embankments and associated structures and forming and registering water management organizations (WMOs). The Department of Agricultural Extension (DAE) works alongside farmers to encourage the selection and cultivation of crops and varieties that are well-suited to the coastal environment. Ultimately this mechanism works as part of an interlinked annual cropping system to form the basis for a profitable business. In addition, the Department of Livestock Services (DLS) and Department of Fisheries (DoF) provide specialist advice for the development of training modules to farmer field schools and contribute to other project interventions. Local government institutions (LGIs), especially Union Parishads (UPs), are partners in polder development planning, coordination, and maintenance.

The Blue Gold Program is working to enhance the socio-economic development in the coastal areas of Bangladesh. The program establishes and empowers community organizations to sustainably manage their water resources. By providing water management support, the Blue Gold program ensured diversified land use, which helped increase employment opportunities in coastal areas. This program has separate components for community mobilization and institutional strengthening, water resources management, food security and agricultural production, business development, and private sector involvement. Mr. Kumar stated that the Blue Gold Program enhanced flood protection in polders by rehabilitating embankments and water intakes and outlets. The Blue Gold Program also improved the water distribution and drainage systems and created an effective operational partnership between government agencies and community groups (WMG/WMA). Currently, BWDB is responsible for managing large-scale water projects. However, BWDB has a limited human resource for managing 910 water sector projects. With its limited human resource, it is extremely challenging for BWDB to regularly inspect and maintain water infrastructure projects.

In the long run, Bangladesh needs to adopt a unified approach for PWM. According to Bangladesh Water Rule 2018 and Bangladesh Water Act 2013, District, Upazila, and Union water management committees are formed for the PWM. Also, according to Participatory Water Management Rules 2014, water management groups were created based on catchment areas. It is essential to find a unified approach for water resource Operation and Maintenance (O&M). For developing viable institutional and financial arrangements for O&M, the following three independent thematic studies have been commissioned by BGP:

- Experiences with Participatory Water Management (PWM) Approaches – An Institutional View
- An Institutional Framework for the PWM: An Exploration of Ideas; and
- Sustainability and Financing of Water Management: Operation and Maintenance in Coastal Polders

These three independent studies have been conducted by renowned experts including, Dr. Kh. Azharul Haq and Wais Kabir, Dr. Sajjad Zohir and Tofail Ahmed. Based on these studies, a synopsis has been prepared. The Support to Implementation of Bangladesh Delta Plan 2100 (SIBDP 2100) contributed to this study during the synopsis development process. SIBDP 2100 is a project of the General Economics Division (GED) of the Bangladesh Planning Commission. BDP 2100 emphasis the involvement of the local people in the operation and management of the water infrastructure for ensuring effective participatory water management. Goal 5 of the BDP 2100 focuses on capacity building, institutional development, and equitable water governance. Issues.

Key-note presentation

On behalf of the SIBDP 2100 team, Mr. Giasuddin Ahmed Choudhury provided the presentation on "Participatory Water Management: Challenges and Way Forward." Mr. Choudhury spoke about PWM experience in different projects, including MDIP, Manu Barrage, Teesta Barrage, BMDA, IPSWM, SWAIPMP, BGP, MIP, Haor Livelihood Improvement Project (HLIP), SSWRMP (LGED), CDSP. Mr. Choudhury highlighted that currently, Bangladesh is facing immense challenges in managing its water resources and achieving the long-term delta vision, mission, and delta goals. He also highlighted how BDP 2100 focuses on building resilience to climate change and other delta issues through robust, adaptive, and integrated strategies and equitable water governance. Through BDP 2100, Bangladesh is currently promoting a sustainable, holistic, and integrated water resources management approach where PWM has a vital role to play. He also mentioned how PWM is an indispensable component of 'equitable water governance' to involve the local community in managing water resources systems. Mr. Choudhury also provided specific recommendations for the community and agencies on strengthening PWM and enabling equitable water governance through PWM as envisaged in BDP 2100.

Mr. Choudhury further touched upon the fact that BWDB has to maintain and operate water infrastructures to maintain FCDI and bank protection. Subsequently, BWDB also conducts dredging, re-excavation to keep water systems in top operating condition. In total, BWDB is currently providing irrigation to 1.65 million hectares using surface water, which is more than 20% of agricultural land. He also underscored a set of challenges, including full operationalization of the Water Act 2013, PWMR 2014, and Water Rule 2018; enhancing roles of WMOs in Districts and Upazila Water Management Committees; lack of human resources and other logistical resources at BWDB. He also highlighted minimum involvement of LGIs in medium and large-scale water projects, as there is a lack of coordination among key stakeholders; absence of 'in-polder and within the project' water management; non-functionality of WMOs in the project cycle, and their absolute reliance on project support. Besides, he touched upon other key challenges, including WMOs lack of financial sustainability; little consultations and dialogs with WMOs regarding water body and *khal* leasing; lack of access to information regarding water resources development activities; and little or no role of WMOs in District, *Upazila* and Union Disaster Management Committees.

Finally, Mr. Choudhury discussed a number of short, medium, and long-term recommendations to strengthen the institutional capacity and communication among water-related agencies and to sustain the PWM practices. The study's short-term recommendations include strengthening WMOs, BWDB, LGIs, and enhancing coordination among stakeholders. The study also provided different long-term recommendations including, enhancing the regulatory framework and enriching the body of knowledge on PWM. For the long run, the study recommended establishing a regional stakeholder platform, ensuring coordination among regional stakeholders, and amending necessary acts, rules, and regulations concerning PWM management and practices.

Discussions:

Mr. Md. Mafidul Islam, Chief, General Economics Division, welcomed all the participants in the workshop. He mentioned that the presentation given by the Deputy Team Leader of SIBDP 2100 is very useful and informative, and the study report is very comprehensive. He added that Participatory Water Management (PWM) is an essential component of 'equitable water governance' to involve the local community in managing the water resources systems. All the national-level water related plans including BDP 2100, guidelines, policies, and acts focus on PWM, which has been promoted in the water resources sector for the last three decades. Yet the PWM is yet to take its full shape and become fully effective to realize its potential. In such a perspective, a study to review the current PWM approach, practice, implementation process and challenges for finding sustainable way out is a timely initiative with the sense that it would contribute to achieving BDP 2100 vision of achieving a safe, climate resilient prosperous delta. By synthesizing three Pathfinder reports, interviews with the experts, and field visits, a synopsis has been prepared in which a good number of recommendations has been provided. These recommendations aim to address the major challenges of PWM. These recommendations are useful and primarily made to strengthen institutional capacity, maintain strong coordination among the water-related agencies. Besides, the recommendations also aim to simplify the rules and regulations, ensure the sustainability of WMOs, involve LGIs in PWM, and ensure proper monitoring and evaluation. The report recognizes the importance of an integrated and holistic approach to water resource management, where WMO, BWDB, LGIs, and other government agencies will jointly collaborate. He expected that the suggestions and recommendations from today's workshop could assist in introducing and implementing innovative PWM practices. Though the study is carried out in coastal area but most of the recommendations provided in this study can be applicable in both coastal and non-coastal Bangladesh, he viewed.

Mr. Mahfuz Ahmed, Chief, Water Management, BWDB, welcomed all the participants of the workshop. He thanked the SIBDP, the Blue-Gold Program, and others for conducting this comprehensive joint study on PWM. This study is timely research and provides a great opportunity to present PWM in the policy level forum. Community mobilization through PWM will require extensive support from BWDB as it is implementing large-scale water projects. It is essential to provide the necessary support to the WMOs to ensure that these organizations can effectively operate and maintain the water infrastructures. For ensuring the financial sustainability of the WMOs, unused government property can be leased to WMOs following the applicable government rules and regulations. WMO's can also be involved in the project's earthwork, which will provide income-earning opportunities for WMOs. WMOs should consider a center of all development activities for their sustainability and existence. Currently, PWM is being practiced in donor-funded projects, but PWM should be promoted in both GoB and donor-funded projects. He mentioned that the current study is a very comprehensive study, and the study's recommendations will help ensure PWM in the water sector projects.

Mr. Sheikh Moh. Nurul Islam, from LGED, welcomed all the participants in the workshop. We highlighted the PWM approach for WMCA's. In sharing LGED's experience on PWM, he highlighted that LGEDs WMCA's receive registration from the Department of Cooperatives. LGED has effectively shared the registration responsibility with another organization by assigning a third party to the registration process. Besides, these WMCAs need to ensure their financial transparency through the third-party audit process. If the WMCA's do not conduct regular audits, they do not get the periodic maintenance payment from LGED.

Along with water management, WMCA's are engaged in different income-generating activities throughout the year, including microcredit, mango plantation, and agricultural farming. For conducting microcredit activities, WMCA members contribute through their savings, and a part of their collective savings are used for water project O&M. LGED also assisted WMCAs in purchasing agricultural machinery. WMCA earns revenue from renting these agricultural machinery. LGED also facilitated the operation process of WMCA's by signing twenty Memorandum of Understanding (MOU) with different agencies. Subsequently, the Department of Livestock Services provided vaccination support for WMCA members. WMCA members regularly contribute to the water project O&M process by either providing cash or crop. LGED regularly grades the existing WMCA's by assessing their performance. If a WMCA has a lower grade, that particular organization does not receive periodic maintenance and other project support.

Mr. A K M Manirul Alam, Director, Field Service Wing, DAE, thanked SIBDP 2100 and BGP for arranging the PWM workshop. Mr. Alam highlighted that addressing the social conflict among the water users should be the key priority. Often influential local people dominate the water management issues and water use patterns in the locality. For ensuring efficient water use, field-level DAE officials need to collaborate with WMOs. Field level DAE officials know about the water requirement of different crops and have insights required for preparing local water use planning. In this regard, it is essential to establish an official link between WMOs and DAE. It is also important to include other agencies like the Department of Livestock Services and the Department of Fishery in a common platform to coordinate effectively with the WMO's. In this respect, Mr. Kabir Bin Anwar, Senior Secretary, Ministry of Water Resources and Chair of workshop, mentioned that according to Bangladesh Water Rule 2018, District level water coordination committees have been formed at the district level. By including representatives from WMO's in this coordination committee, it is possible to ensure greater community participation in WRM.

Open discussion:

Md. Delwar Hossain, Director General, Water Resources Planning Organization (WARPO), discussed the formation process of the district-level water coordination committee following the provisions of Bangladesh Water Rule 2018. In response to his discussion, Mr. Kabir Bin Anwar, Senior Secretary, Ministry of Water Resources, reported that in the District level water coordination committee, different govt. Officials and stakeholders are already included. If

required, there is scope for including additional committee members. At the Upazilla level, similar procedures have been maintained, including provision for including additional members. The only missing element here is to include WMOs in these water coordination committees. If we can establish a link between WMOs and the water coordination committee suggested by Bangladesh Water Rule 2018, Bangladesh will be able to solve the existing coordination problems. He expected that the different Project Directors would take necessary initiatives for ensuring union-level farmers' participation in water coordination committees in the future.

Mr. Mohsin, Deputy Director, Department of Agricultural Extension, reported that different methods and approaches are followed in GoB and Development partner supported projects. For instance, World Bank-funded projects create Common Interest Groups (CIGs) for conducting project activities. The Danish Government works through Integrated Pest Management (IPM) group. Even among the government agencies, LGED works through their WMCA and BWDB through WMO. In the same Union, different community organizations are formed by different agencies.

This mechanism ultimately leads to a lack of coordination among community groups and different government agencies. Therefore, at the grassroots level, Bangladesh has not been able to achieve required coordination. According to Bangladesh's National Agriculture Extension Policy, at the Upazilla level, Bangladesh has Upazilla Extension Policy Coordination Committee. In this committee, different stakeholders and government officials have been included as a member. However, often committee members do not regularly attend the committee meetings. Because of lack of enforcement and commitment from the top level, the coordination process proposed through the National Agriculture Extension Policy has not been achieved. It is essential to create one single platform for the GoB and Development Partner-funded projects. This platform should be coordinated through the Planning Commission and MoWR. Mr. Kabir Bin Anwar, Senior Secretary, Ministry of Water Resources, agreed with this suggestion. He mentioned that Bangladesh Water Act recognizes the importance of root level coordination. Mr. Kabir reported that the Honourable Prime Minister of Bangladesh, Sheikh Hasina, always emphasizes Bottom-Up policy. Considering this Bottom-Up policy approach, the water coordination committee has been given the mandate to initiate water resource management projects. Subsequently, this committee can implement and operate water resource management projects. Mr. Kabir reported that this committee includes representatives from BWDB, LGED, BADC, LGI, and other stakeholders. If required, this committee can conduct joint inspections for preparing project planning. For ensuring field-level coordination, Bangladesh has already created a platform through Bangladesh Water Rule 2018. If we can effectively utilize this platform, Bangladesh will be able address the existing water sector coordination challenges.

Mr. Kabir reported that salinity is a big problem in the coastal region, and often people do not get drinking water due to salinity issues. The chairperson mentioned that he has initiated a project for rainwater harvesting through digging ponds in the coastal regions of Bangladesh.

After digging these ponds, MoWR plans to hand over these ponds to DPHE. Subsequently, DPHE can develop a pipeline from these ponds to supply drinking water to different coastal communities. This proposed project has already been submitted to Planning Commission for approval. But the Planning Commission has provided an opinion that this project is outside the MoWR's mandate.

Mr. Supriya Kumar Kundu, Director General, Bangladesh Rural Development Board, mentioned that different development partners adopt different project approaches, that is also needed. Mr. Kundu shared the experience of BRDB in a participatory approach. Over the years, BRDB has formed approximately 80,000 societies. Some of these societies are functional, but most of the societies have not been able to sustain. He reported that by integrating Income Generating Activities (IGA) with the participatory approach, BRDB has been able to sustain the established societies. BRDB has cooperative societies, and these societies have developed small irrigation projects. In addition, BRDB is also promoting the concept of individual entrepreneurs for conducting project schemes. These entrepreneurs are operating in semi-commercial mechanisms. He shared one of his recent project visits to Gopalganj for the Participatory Rural Development Project. In this project, the project beneficiaries are sharing 15% cost, while the Union Parishad is responsible for providing 5% cost. The Government provides the remaining 80% cost. The subsequent maintenance is conducted by communities. BRDB is currently trying to adopt a similar approach for irrigation projects.

Mr. Md Ziaul Haque, Member Director (Minor Irrigation), BADC, reported that Bangladesh is currently facing different challenges in the irrigation sector. These challenges include ensuring the availability of water, providing proper irrigation management and coordination, and finally addressing salinity and managing natural disasters. In Bangladesh, approximately 73% of the total cultivable area is under irrigation facilities. But, Bangladesh currently relies on groundwater irrigation mechanisms. For ensuring sustainable water management, the GoB is currently discouraging groundwater-based irrigation and instead promoting water-based surface irrigation. For ensuring proper utilization of scarce water, BADC is currently adopting the prepaid metering concept. For minimizing water loss, BADC is promoting an underground irrigation pipeline and drip irrigation system.

Mr. Ataur Rahman Khan mentioned that although Bangladesh is a small country, the country has a diverse geographical profile. In the Southern coastal region, salinity is a big issue. For ensuring livelihood opportunities in the coastal region, it is essential to promote fish cultivation. Especially, it is necessary to promote the cultivation of Vetki/ Koral Sea Fish, saltwater shrimp, and other fishes, which are more suitable for the coastal areas. It is also essential to initiate tree plantation in the embankment areas to use Bangladesh's existing embankments as forest. Over the years, the number of Hijol or Indian oak has decreased for the haor region, and it is essential to focus on Hijol or Indian oak tree plantation for the haor region. Such tree plantation will ensure ecological balance in the haor region. In response, Mr. Kabir Bin Anwar, Senior Secretary, Ministry of Water Resources, reported that already the MoWR has extensive tree plantation initiatives in the 17,000 km embankment areas. For other

regions' tree plantation, the MoWR has submitted a project proposal to Planning Commission. Especially for the coastal region, MoWR is planning to establish nurseries and has already submitted a project proposal. Through these initiatives, MoWR is promoting nature-based solutions.

Md. Humayan Kabir, Project Director, TTAP, Department of Agricultural Extension, shared his experience from the Blue-Gold project. Mr. Humayan Kabir reported that through WMG, DAE could work in the project area. If DAE can provide agriculture-related interventions to WMG, then these WMG will remain a viable organization. Mr. Kabir highlighted that along with peripheral infrastructure, it is crucial to provide small-scale infrastructure. Usually, BWDB does not conduct small-scale infrastructure work. DAE can be involved in small-scale infrastructure work, and already DAE has included agriculture engineers in its organization. In the future, these agriculture engineers will be placed in each of the Upazila's. DAE's involvement can be beneficial for the small-scale canal, culvert, inlet, and outlets construction and rehabilitation in the coastal region.

Speech by Guest of Honor:

Fazlur Rashid, Director General, Bangladesh Water Development Board (BWDB), highlighted the water resource management initiatives of the Founding Father of Bangladesh, Bangabandhu Sheikh Mujibur Rahman. Bangladesh's Founding Father Bangabandhu Sheikh Mujibur Rahman, established BWDB for ensuring the wellbeing of Bangladesh's vulnerable communities. Despite having numerous natural disasters, Bangladesh has achieved self-sufficiency in food grain production, and BWDB has played the leading role in achieving this food security goal. For ensuring food security, BWDB has completed 910 projects. BWDB actively engages local communities in project development, implementation, operation, and management through PWM. So far, BWDB has developed 3174 WMG, 268 WMA, and 3 federations. BWDB has developed a "Water Management Organization Registration App and Irrigation Management System to ensure smooth WMO registration and irrigation management." Besides, for monitoring WMOs under the Blue Gold Programme, BWDB has developed another separate app. By combining these two apps, it is possible to further improve the PWM aspects. The GoB has already developed the BDP 2100 and currently focusing on the implementation process of BDP2100. For ensuring future economic development in the coastal region, coastal polders will play a crucial role. For ensuring proper economic development of the coastal area, it is essential to coordinate the activities of different government agencies. Mr. Rashid expected that today's workshop recommendations would play a crucial role in ensuring PWM.

Speech by Special Guest:

Dr. Kawser Ahmed, Member, GED, thanked everyone for joining the 'Participatory Water Management: Challenges and Way Forward' workshop. Dr. Ahmed discussed the bottom-up approach of the Honourable Prime Minister of Bangladesh, Sheikh Hasina. Dr. Ahmed mentioned that the report rightly discusses the climate change impacts, diverse land use

patterns, and increasing market-based commercial agriculture in Bangladesh. Because of these changes, the water use pattern for farmers has changed. BWDB has very limited human resources, and most of the existing staff are from engineering backgrounds. It is essential to include social and anthropologists in BWDB's human resources. It is also crucial to actively include the involvement of LGI in the overall coordination and management process of PWM. The report also points out the difference between LGED and BWDB's water resource projects. Current BWDB and WMOs have a patron-client relationship, and for addressing this issue, it is essential to include people from the social science background in BWDB. For WMOs, it is essential to focus on financial sustainability by supporting WMOs in different income-generating activities. It is also essential to improve coordination among different stakeholders through a common platform.

Speech by Chief Guest:

Dr. Shamsul Alam, Hon'ble Minister of State, Ministry of Planning, thanked all the participants for attending this important workshop. Water infrastructure management issue is very important as Bangladesh spends valuable public resources for the construction process of water infrastructure, and after the construction process, these crucial infrastructures need to be properly operated and maintained. For water infrastructure, O&M through PWM is very important. Hon'ble Minister of State said that the Blue Gold Programme has adopted a coordinated approach for project implementation. The Blue Gold Programme coordinated with different agencies and ensured diversification of income for community members. Currently, many WMOs are not performing properly. One of the contributing factors is the involvement of external people, including different businessmen in the WMO's. On one occasion, the Hon'ble Minister of State found that a brickfield owner is leading the WMOs.

It is essential to review the rules for WMO formation and ensure that the community's farmers lead WMO. Mainly these farmers use water for agriculture purposes, and instead of businessmen, these farmers should have a more active role in WMOs. Horizontally these WMOs can take help from other government agencies, like the Sub Assistant Agriculture Officers of DAE. Sometimes, UP Chairman takes the role in PWM, but these elected representatives are busy with different activities. Along with their regular UP activities, the Up Chairman and UP members are involved in the construction and rural development sector and other businesses.

Many influential business people have agricultural land, and these businessmen are involved in WMO through their land ownership. But most of their income comes from other sources. With the presence of these businessmen, the local farmers fear to express their opinion. The presence of these influential businessmen can be detrimental to self-propelling WMOs. Ideally, membership should be confined to only participatory farmers who derive at least 80% of their income from agriculture. It is essential to exclude different business people and elites from the WMO membership, including brick field owners, real estate entrepreneurs, and Local Government elected members. The WMO's should be homogeneous and participated by the

actual farmers. Farmers are already engaged in different income-generating activities at the local level, including poultry, goat rearing, and other activities. Therefore, it is not essential to further explore IGAs.

The Hon'ble State Minister provided his opinion that though difficult it will be necessary to introduce a user fee in Bangladesh. In Bangladesh, water is mainly considered as a public good, except for the cases for groundwater irrigation. Considering the importance of water, all the canal construction activities should be done by Government. The PWM approach should be adopted for the O&M issues. Most of the expenditure should be covered through government subsidies. Otherwise, the nation could suffer in the future. WMO's could spend some portion of the collected irrigation charge. This fund can be used for canal maintenance and other small-scale infrastructure. This will encourage farmers to contribute further to irrigation charges. It is also essential to meet with Water Management Federation (WMF) at the regional level. In the future, Bangladesh can hold a national water participation convention with the inauguration by Honourable Prime Minister of Bangladesh, Sheikh Hasina. He advised the organizers to explore the possibility of holding a national water participation convention. During this convention, the role of PWM and its cost modality can be highlighted.

The Hon'ble Minister of State emphasized that at least the O&M cost should be borne by the community members. The WMO's can be registered under cooperatives, and under cooperatives, they will have to conduct regular annual audits. Besides, they also need to conduct regular elections and follow other sustained organizational structures. Through this process, the cooperatives will have the opportunity to help WMOs and also train WMOs. In fact, all the government agencies should help WMOs, including DAE and others. These WMOs should be self-propelling. In the BDP 2100, Bangladesh has emphasized the development of regional WMOs. On a pilot basis, Bangladesh can initiate a regional federation forum. In Netherland, there is regional water groups, and they maintain all the water infrastructures. These groups have their own income and own budget. These regional groups collect their own revenue and deposit some portion of the collected income to the Government.

Speech by the Chair:

Mr. Kabir Bin Anwar, Senior Secretary, Ministry of Water Resources, informed that soon Bangladesh is going to celebrate its 50 years relationship with Netherlands and there will be a separate program to celebrate this occasion. Water Board constructed the polders with the help of development partners and government funding support since the 1960s. Currently, people focus on the inside water management issues. Of course, the ultimate target is to protect the life and livelihood of the people. Considering the importance in the Blue-Gold Program and other projects, PWM has been practiced. According to Bangladesh Water Act, the guidelines, regulations have already been developed.

Mr. Kabir highlighted that catchment area should be the most critical priority for MoWR. Hon'ble Prime Minister, Sheikh Hasina has initiated new dimension in project planning through adopting BDP 2100. Especially in the MoWR, good number projects have been undertaken in

line with the Delta Plan. MoWR is currently focusing on six hotspots, including the wetlands. In the coastal regions, the development of the polders is another key priority for Bangladesh. MoWR has conducted a study of the polder areas to identify infrastructures that are not properly functionally. MoWR is also focusing on sustainable use of the natural resources in line with the Delta Plan. With SDG goals and the good planning document prepared by the GED, Bangladesh is gradually becoming a prosperous country. In Bangladesh, we actually conduct many studies. However, Bangladesh needs to focus on implementing these studies at the field level. He emphasized on gradual implementation of the important recommendations of this study.

The workshop concluded with the following recommendations:

Capacity Building of WMO

- The compliance of PWM Rule 2014 may be ensured for the community participation in identification, feasibility study, planning & design, implementation, O&M, M&E. This will require the formation of WMOs in all water sector projects, including GoB and Development Partner supported projects. BWDB, LGED, BADC, DAE, DoF, DLS etc. and also LGIs should collaborate with WMOs during new project planning and implementing process. It may be ensured that real farmers are included in WMOs and are homogeneous.
- The process of formulation, election, registration, and establishment of WMO may be simplified by using the BWDB's WMO Registration and Irrigation Management app. This app may be replicated in all water sector projects. ICT may be used to communicate with WMOs.
- The elected members of WMOs may be provided training to streamlining its activities. This training may include the stakeholders including LGIs regarding their involvement in PWM. The office spaces may be provided to facilitate the activities of WMOs.
- The conventions may be arranged nationally and regionally to advance the cause of PWM and sharing the experiences and knowledge as well as awarding best performing WMOs.

Financial Sustainability of WMOs

- It is essential to ensure financial sustainability of WMOs through engaging in different income generating activities. In this regard, government can lease water bodies to WMOs. Besides, it is essential to ensure financial transparency of WMOs through regular monitoring and audit. Before leasing any water bodies, khals etc within the water sector projects, WMOs may be consulted to facilitate the proper operation of water management system.
- The members of the WMOs may be paid honorarium for attending meetings from WMOs own earned fund through different Income Generating Activities (IGAs)
- WMG Innovation Fund may be introduced.
- The WMOs may be considered as a hub for community participatory activities by all Implementation Agencies (IAs) related to water resources management.

Improving role of WMOs in O&M

- The existing O&M agreement with WMOs may be followed. WMOs need to prepare annual O&M plan in consultation with LGIs and other stakeholders.
- Irrigation service charges realised may be spent in the project for its maintenance of canal and small-scale infrastructure in a transparent manner. This will encourage farmers to participate in O&M activities with greater enthusiasm

Representation of WMOs in District, Upazila and Union Level Committees

- At present WMOs is not represented in District, Upazila and Union Water Management Committees formed under Water Rule 2018. WARPO may initiate the process of including WMOs representation in these committees.

Capacity Building of BWDB Officials

- PWM is a key priority area of BWDB. However, adequate number of officials are not available in field offices as well as in the office of Chief Water Management for performing the activities of PWM. BWDB does not have offices at many Upazilas. BWDB may ensure adequate number of its officials in these offices and the presence of its officials in Upazila Coordination meeting.
- PWM learning events may be arranged in engineering, agricultural, and other universities as well as BWDB's training institute.

Regional and National Stakeholders' Platform

- Bangladesh does not have any regional and national platform for WMOs and Water Users for promoting PWM as well as raising their voices on the national and regional level water management issues. It is, therefore, suggested to establish Regional Stakeholders' Platforms conforming to administrative and hydrological boundaries and National Stakeholders' Platform for coordinating the activities of Regional Stakeholders' Platform.

(Kabir Bin Anwar)
Senior Secretary
Ministry of Water Resources
and
Chairman of the Workshop on
'Participatory Water Management: Challenges and Way Forward'

Annexure 1: Picture







Annexure II: Participant List

Ministry of Planning (MoP)	
1	Dr. Shamsul Alam, Hon'ble State Minister
2	Shakhaowat Hossain, APS to State Minister
3	Md. Abdul Aziz, PS
General Economics Division (GED)	
4	Dr. Md. Kawser Ahmed, Member
5	Md. Mafidul Islam, Chief (Additional Secretary)
6	Md. Nazrul Islam, Additional Secretary, International Economics Wing
7	Khan Md. Nurul Amin ndc, Additional Secretary, Fiscal and Monetary policy wing
8	Md. Forhad Siddique, Joint Chief, Macro and Perspective Planning Wing
9	Md. Mahbubul Haque Patwary, Joint Chief, Poverty Analysis and Monitoring Wing
10	Md. Bazlur Rashid, Joint Chief, Macro and Perspective Planning Wing
11	Abu Syed Md. Kamruzzaman, Joint Secretary
12	Munira Begum, Joint Chief
Economic Relations Division (ERD)	
13	Moslema Naznin, Deputy Secretary, Europe-2
Planning Division	
14	Mohammed Kawsar Alam, Deputy Chief, Planning, PTC Wing
Implementation, Monitoring and Evaluation Division (IMED)	
15	Dr. Taibur Rahman, Director
Ministry of Water Resources (MoWR)	
16	Kabir Bin Anwar, Senior Secretary
17	S.M. Rezaul Mostofa Kamal, Joint Secretary, Planning Wing
18	Md. Toufiqul Islam, Deputy Secretary
19	Md. Ehtesham Reza, Deputy Secretary
Bangladesh Water Development Board (BWDB)	
20	Fazlur Rashid, Director General
21	Md. Mahbubur Rahman, Chief Engineer (Civil), Planning
22	Dr. Md. Khairul Islam, CSO
23	Mahfuz Ahamad, CWM
24	Md. Amirul Hossain, Chief Engineer, Training (former PCD BGP)
25	Zahir Uddin, ADG (West)
26	Dr. Robin Kumar Biswas, DP-3 PCD Blue Gold
27	Dr. Shamal Chandra Das, Director, Planning-1
28	KBD Amalesh Chandra Ray, Deputy Chief (Extension Officer)
29	Engineer Bidyut Kumar Saha, SE, Planning-2
30	Akhil Kumar Biswas, ADG (East)
31	Jyoti Prasad Ghosh, Chief Engineer, North Region
Department of Bangladesh Haor and Wetlands Development (DBHWD)	
32	Dr. Ali Mohammed Omer Faruque, Director
Water Resources Planning Organization (WARPO)	
33	Md. Delwar Hossain, Director General
34	Rezaul Karim, PSO

35	Md. Alamgir Hossain, Director
36	Md. Hasan Shahariar, Senior Scientific Officer (Environment)
Joint Rivers Commission (JRC)	
37	Md. Anwar Kadir, Executive Engineer
Ministry of Agriculture (MoA)	
38	Nasima Khanom, Deputy Secretary, PPC Wing
Department of Agricultural Extension (DAE)	
39	Md. Mizanur Rahman, Additional Director
40	Md. Mohashin, Deputy Director
41	Syed Abu Siam, Senior Monitoring Officer
42	Md. Humayoun Kabir, Project Director, TTAP, Department of Agricultural Extension
43	Dr. Md. Akram Hossain Chowdhury, Deputy Project Director
44	Dr. Md. Sarwarul Haque, Additional Director
45	Dr H. M. Monirujjaman, Deputy Director
Bangladesh Agricultural Development Corporation (BADC)	
46	Md. Ziaul Haque, Member Director
47	Mohammad Khasru Noman, Principle
Ministry of Fisheries and Livestock (MoFL)	
48	Md. Abdul Matin, Joint Secretary (Planning-1)
Department of Fisheries (DoF)	
49	Md. Mukhlesur Rahman, Director
50	Md. Aatur Rahman Khan, Deputy Director
51	Nasrin Jahan, Assistant Director
Department of Livestock Services (DLS)	
52	Dr. Debashis Das, Director (Admin)
Local Government Division (LGD)	
53	Kazi Ashraf Uddin, Additional Secretary (Upazila Branch)
54	A. H. M. Kamruzzaman, Joint Secretary
55	Abu Md. Mohiuddin Quaderi, Joint Secretary (Planning Branch)
Local Government Engineering Department (LGED)	
56	Md. Mozibur Rahman Shikder, Additional Chief Engineer
57	S.M. Abdus Salam, Superintending Engineer, IWRM (O&M)
58	Md. Khaled Chowdhury, Superintending Engineer, IWRM (P&D)
59	Abu Saleh Md. Hanif, DP Small Scale
60	Sheikh Mohd. Nurul Islam, PD Small Scale- SSWRDP
61	A. K. M. Mostafa Morshed, Senior Assistant Engineer
Ministry of Disaster Management & Relief (MoDMR)	
62	ABM Shafiqul Haider, Joint Secretary
Ministry of Environment, Forest and Climate Change (MoEF&CC)	
63	Zakia Afroz, Joint Secretary, Development Wing
Department of Environment (DoE)	
64	Syeda Masuma Khanam, DS
Ministry of Power, Energy and Mineral Resources (MoPEMR)	
65	Sajida Khatun, Additional Secretary, Blue Economy Cell
Ministry of Shipping (MoS)	

66	Md Alamgir Kabir, Deputy Secretary
67	Rakibul Islam Talukder, Additional Chief Engineer, BIWTA
Bangladesh Rural Development Board (BRDB)	
68	Supriya Kumar Kundu, Director General
Embassy of the Kingdom of the Netherlands (EKN)	
69	Folkert de Jager, First Secretary, Water and Food Security
70	Martijn van de Group, Delegated Representative
Blue Gold Program	
71	Guy Jones, Team Leader
72	Alamgir Chowdhury, Deputy Team Leader
73	Heering Hero, Project Director
74	Abul Kashem, Conference Management
Center for Environmental and Geographic Information Services (CEGIS)	
75	Dr. Maminul Haque Sarker, Senior Advisor, River, Delta and Coastal Morphology
76	Md Motaleb Hossain Sarker, Director
77	Mostafizur Rahman, Director
78	Dr. Farhana Ahmed, Senior Specialist
79	Ms. Jakia Akter, Senior Specialist
80	Dr. Shibly Sadik, Associate Specialist
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81	Abu Saleh Khan, Executive Director
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82	Mirza Md. Mohiuddin, Deputy Project Director
83	Touhidduzzaman Khan, Assistant Project Director
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