

## Netherlands Vice-Minister Visits WARPO

Her Excellency Ms. J. M. de Vries, Vice minister, Ministry of Transport, Public Works and Water Management, The Netherlands, visited WARPO on 22<sup>nd</sup> November 2000. A ten member high-level official delegation along with other about twelve members from the same Ministry and different Institute and Companies accompanied the Vice-Minister.

The Director General and other senior officials of WARPO warmly welcomed Mrs. J. M. de Vries and her delegation. Extensive discussions were held between the delegation and WARPO officials on different aspects of national water resources planning and management including flood, drought, water quality and erosion management, and the O&M of the implemented projects. The discussion also emphasizes on the necessity of sharing the expertise in the field of Integrated Water Resources Planning and Management under the twinning arrangement between Bangladesh and the Netherlands for the fulfillment of the objectives of the National Water Policy, 1999.

Dr. M. A. Quassem, DG WARPO, briefed the Netherlands

delegation on the National Water Policy of Bangladesh, the water uses and problems in Bangladesh, the mandate of WARPO, the present endeavors and the future challenges of WARPO, the National Water Management Planning exercise and the National Water Resources Database. He also sought the Netherlands appreciation and support to WARPO in taking up the challenges and solving the problems. The Netherlands Vice-Minister said that she had been impressed by the achievements made by Bangladesh in these key areas as well as the role being played by WARPO in the water sector. Ms. de Vries also hoped that the Netherlands and Bangladesh both could be benefited by sharing the experience on national level water resources

planning and management. She agreed that an exchange of professionals between WARPO and the relevant departments of the Netherlands would be of great help. The Netherlands delegation expressed happiness on the progress made by WARPO in the water resources planning exercise.

The visit to WARPO by the Netherlands Vice-Minister was a part of her seven-day visit to Bangladesh.



### WARPO signs MoU with JRC for data sharing

As part of WARPO's ongoing activities to promote development of the National Water Resources Database, WARPO has signed a MoU with Joint River Commission (JRC) to facilitate sharing of information held in their databases. Earlier, a similar MoU was signed with LGED. The MoU was signed by Dr. M.A. Quassem, Director General, WARPO and Mr. Tauhidul Anwar Khan, Member of JRC. Dr. Quassem expressed his happiness and hoped that mutual sharing of data would greatly enhance the planning capacity of both organizations in their respective areas of interest. WARPO looks forward to close continued co-operation with JRC, and hopes to enter similar agreements with other organizations in the near future.

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# Update on preparation of the National Water Management Plan

WARPO, with the support of consultants, is preparing the National Water Management Plan (NWMP) for Bangladesh. The goal of the NWMP is to implement the National Water Policy

December to review the comments and jointly decide upon follow up actions. It was agreed that, building on the useful information and the identified technical options of the DDS, a final Development

Strategy Report (DSR) should develop and assess the main strategic choices for the Government to consider. The choices thus made by the Government will provide the framework within which the draft National Water Management Plan will be prepared by mid-2001. The DSR is now ready for review by the Executive Committee of the National Water Resources Council.

In parallel to the above, a third round of the People's Participation and Consultation Programme (PPCP) has been conducted in 24 districts and a 3rd National Workshop has been recently held in Dhaka. The latter addressed important strategic questions drawn from the comments on the DDS and it is encouraging to note that a broad consensus now seems to be emerging on the critical issues.



(NWPO) promulgated in January 1999, contribute to national economic development through rational management of water resources, in a way that protects the natural environment and improves the quality of life for the people of Bangladesh.

It is expected that the Plan will be reviewed and updated every five years and set in the context of development indicators up to 50 years ahead. It will be a firm plan for the next five years, an indicative plan for the subsequent five years, and a perspective plan to 2025. The NWMP will comprise an NWMP Main Report setting out the rationale and objectives of the plan, its main components and responsibilities for these, the required resources that central government needs to assure, and expected impacts. This will be supplemented by eight Regional Water Management Programmes and an Investment Portfolio of individual development programmes.

A Draft Development Strategy Report (DDSR), prepared by the Consultants in August 2000, was circulated widely by WARPO. Over 600 written comments were received by WARPO. The Tripartite Review Panel, comprising WARPO, the World Bank and the Consultants, met three times in November and once in

## **General conclusions of the participants of the 3rd National Conference on NWMP held in February 2001 at WARPO**

- The general consensus and the PPCP revelation is that the FCD projects, with a few exceptions, have immensely contributed to protect agricultural crops, properties and lives from flood damages. People in general strongly favour the rehabilitation of useful FCD projects and continuation of it, but well planned and well-designed by participatory process.
- In view of the arsenic problems, lack of adequate studies of the recharge and usability, and the economic considerations, use of ground water should be handled with caution. However, ground water should not be wasted. Ground water storage, availability, recharge capacity and quality should be regularly monitored, studied and evaluated on regular basis.
- We should make best use of the water received under the GWT - '96. However, efforts for cooperation among the co-riparian countries for watershed management should continue.
- In all plans, at the planning stage, effects on the gender and the issue of addressing those should be considered.
- Existing organizations should preferably be retained over creating new ones, provided - it can be reasonably expected that the existing one responds to the changing demands and can meet those now and in future.
- Privatization of water supply and sanitation is in principle desirable. Privatization is a time consuming process and should be innovative to match the country and organization or project specific, for its success, instead of pursuing any patent procedure.
- To make WARPO centre of excellence for water sector planning, it should have a core of professionals for doing the routine works and source out the periodical activities. It should be able to recruit and retain highly qualified professionals.
- There is a general consensus on the outline and structure of the dNWMP - with a few remarks that will be taken care.

# NWRD has completed its 2nd phase

To make up the huge leeway between the demand and constraints of the water resources planners, providing data with reasonable accuracy from a single database of a single organization, National Water Resources Database, NWRD has been established within WARPO. Although the initial objective of NWRD was to support preparation of the National Water Management Plan, the overall aim is to establish a sustainable support system for long-term macro level water resource planning, organizing data collected from different agencies/organizations/ projects, improve data quality and make the data available to a wide range of users.

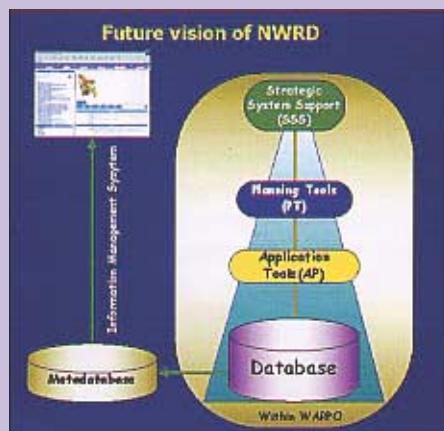
NWRD has already been made operational with the computer and database system to the extent that it

is readily capable of supporting WARPO planners in terms of their database and IT needs. A local area network (LAN) has been installed at WARPO to help easy in-house access. Protocols are to be established for new data entering, existing data correction, meeting new data needs and dealing with attribute data updating.



## A quick overview on NWRD activities:

- Ø NWRD collects data from different data collecting agencies.
- Ø NWRD processes and captures data with GIS technology and database management facilities.
- Ø NWRD archives the multi-faced data collected from different sources at a relational database format and stores in a centralized, secure and easily accessible location.
- Ø NWRD checks the primary quality of data with some field verification.
- Ø For easy access and extraction of data, NWRD develops useful and user-friendly application tools.
- Ø NWRD has developed a metadata system to give access to all level of users and to browse through the NWRD database.
- Ø All information regarding the NWRD data layers including their process descriptions is documented.
- Ø NWRD can disseminate data to all level of users with reasonable accuracy in a systematic and consolidated format.



To formally launch the database, a seminar on National Water Resources Database was organized on 23rd November 2000 at Dhaka Sheraton Hotel. The Honorable Minister of Water Resources inaugurated the seminar. The Honorable Secretary, Ministry of Water Resources chaired the opening session and Dr. Ainun Nishat, Country Representative, IUCN, acted as the Chairman of the Technical Session.

Nine experts of water sector participated the discussion on 'Different Aspects of NWRD' in the Technical Session. The major objectives for organizing the seminar were to:

- Ø promote and advertise of NWRD database;
- Ø familiarize NWRD database to the users and data providers;
- Ø find better ways for maintenance and update of NWRD; and
- Ø establish cooperation for data exchange and sharing with other organizations.

The seminar ended successfully, having fulfilled its overall objective of familiarizing both data providers and users with the main components and future vision for the NWRD.

## BWDB Gets New Act

For sustainable and efficient management of the country's water resources, the Government has promulgated Act No. 26 of 2000 on 11th July 2000 superceding the Bangladesh Water and Power Development Boards order 1972 (P.O. No. 59 of 1972). The new act, provides a clear mandate for the BWDB in line with the National Water Policy and restructures top-management arrangements, known as Bangladesh Water Development Board Act 2000.

# Guidelines for Participatory Water Management

## Background

In Bangladesh, water resources have historically been dealt with by a number of public sector agencies, the principal agencies include the Bangladesh Water Development Board (BWDB), Local Government Engineering Department (LGED), Bangladesh Agricultural Development Corporation (BADC), Department of Fishery (DoF), Bangladesh Inland Water Transport Authority (BIWTA), Dhaka and Chittagong WASA etc.

From past experience, it became clear that water management cannot be carried out effectively without involving stakeholders in the process. Subsequently, the Flood Plan Coordination Organization (FPCO), BWDB and LGED developed guidelines for stakeholders' participation in the own water sector projects.

After declaration of the National Water Policy (NWPo) in January 1999, it became necessary to review those documents for formulating a common Guideline to avoid duplication and to accommodate flexibility and integrity.

Accordingly the Government, through a Notification issued by MoWR in May 1999, constituted an Inter-Agency Task Force comprising officials from relevant agencies for formulation of the Guidelines for Participatory Water Management (GPWM).

The Executive Committee of the National Water Council (ECNWC) discussed the draft GPWM on 20.09.2000 and 28.11.2000, and unanimously approved it in the meeting held on 28.11.2000. The present Guidelines synthesize all the experiences of the concerned implementing agencies. In addition, the Guidelines draws from the provisions of the NWPo, 1999.

## Participatory Water Management as Provided in NWPo

The NWPo through its various provisions emphasizes the issue of participatory water management. The following provisions have been made in the NWPo in this respect:

- Ø Planning and management of water resources
- Ø Public and private involvement
- Ø Economic and financial management
- Ø Stakeholder participation
- Ø Institutional policy

## Objectives

The objectives of the Guidelines, among others, are to:

- Ø Elaborate the provisions incorporated in NWPo, 1999 in respect of stakeholder participation.
- Ø Make available harmonized Guidelines for Participatory Water Management.
- Ø Give the local stakeholders a decisive voice at all stages of water management
- Ø Gradually establish ownership of local stakeholders in water resource management.

## Scope

In conformity with the provisions of NWPo, the scope of the Guidelines are, among others, to:

- Ø Apply to the public sector funded water development projects
- Ø Guide both the public and private initiatives for ensuring optimum development and management of water resources.
- Ø Apply to all stakeholders for participatory water management.
- Ø Apply to both new and existing project.
- Ø Apply to all stages of project cycle.

The guidelines will provide operational framework for stakeholder participation. Since all the complexities cannot be anticipated beforehand, the Guidelines will have to be applied in a flexible and adaptable manner.

## Water Management Organization (WMOs)

The institutional framework in which the local stakeholders will participate will be known as the Water Management Organization (WMO) comprising Water Management Group (WMG), Water Management Association (WMA) and Water Management Federation (WMF). Subject to testing, these will be the institutional mechanism at various levels of the local stakeholders for Participatory Water Management.

## Local Government Institutions (LGIs)

The LGIs will provide necessary support to the WMO. LGIs will provide such assistance through their representation as advisors to the concerned WMO to ensure sustainable management of local water resources.

## Participatory Process

All public sector funded water sector interventions must ensure participation of stakeholders at stages of projects. It would be a demand driven process. It can be framed in six

stages:

- Ø Identification/Pre-feasibility study
- Ø Feasibility study
- Ø Detailed planning, design and Stakeholders' Institution Building
- Ø Implementation and Trial Operation
- Ø Operation and Maintenance
- Ø Monitoring and Evaluation

#### **Organizational Framework of Water Management Organization (WMO)**

The proposed WMO will be a three-tier organization, viz

- (i) Water Management Group (WMG): It will be formed for each smallest hydrological unit or social unit of the project.
- (ii) Water Management Association (WMA): Will be formed for either the apex level of project or the mid level for each sub system of the project.
- (iii) Water Management Federation (WMF): Will be formed for apex level of the project.
- Ø For projects less than 1000 ha there should be WMG and WMA
- Ø For projects upto 5000 ha, there should be WMG, WMA and if necessary WMF.
- Ø For projects above 5000 ha, there should be WMG, WMA & WMF.

#### **Legal Status of the Water Management Organization (WMO)**

Registration of the WMOs will be done within the framework of the Cooperative Societies Ordinance, 1984 and the Cooperative Societies Rules, 1987; will prevail till such time the government will frame separate rules for registration of the WMOs

#### **Monitoring and Further Revision**

The application of the Guidelines will be monitored. The Task Force will evolve the necessary methodology for monitoring, collect relevant information and send the compiled information to WARPO, and after necessary auditing WARPO will send the compiled information to the MoWR indicating progress and comments.

## **New Director General Takes Over**

Dr. M A Quassem took over as the new Director General of the Water Resources Planning Organization (WARPO) on deputation on 17 September 2000. Dr. Quassem replaces Mr. Tauhidul Anwar Khan. Mr. Khan has been appointed as Member of the Joint River Commission of the Government of Bangladesh.



Dr. Quassem graduated from Bangladesh University of Engineering and Technology (BUET), Dhaka in 1966 in Civil Engineering. He did his Post-Graduate Diploma in Hydraulic and Environmental Engineering, Delft in 1980. Dr. Quassem also obtained a Post Graduate Diploma in Rural Policy Planning from the Institute of Social Studies of the Hague in 1988 with Distinction. Dr. Quassem did his Ph.D. on Participatory Water Management from Barrington University of the USA in 2000.

Dr. Quassem was serving as Superintending Engineer of Dhaka Operation and Maintenance Circle (O & M Circle) of Bangladesh Water Development Board (BWDB) immediately before taking over as Director General of WARPO.

## **New Director**



Mr. H S Mozaddad Faruque takes over as the Director of the Water Resources Planning Organization (WARPO) on deputation on 1st October 2000. Mr. Faruque graduated from Bangladesh University of Engineering and Technology (BUET), Dhaka in 1974 in Civil Engineering and obtained M.Sc. Degree in Water Resources Engineering from the same University in 1990. He has a good number of Publications in his credit including a textbook on Irrigation Management (Sech Padhyati O Babosthapano), published by Bangladesh Open University.

Mr. Faruque was serving as Superintending Engineer of Bangladesh Water Development Board (BWDB) immediately before his taking over as Director of WARPO.

# Peoples' Participation in NWMP - Round 3

As a part of the Government's policy of increasing democratization and in conformance with the principles regarding stakeholders involvement laid down in the National Water Policy (NWPo), emphasis is being given to a bottom-up participatory approach in the planning process of National Water Management Plan (NWMP). Peoples' (stakeholders') Participation, with an extensive consultation programme at different levels and three points in time, was initiated in 1998 and was rounded off in early December, 2000 with the completion of Round 3 consultations. Twenty-eight Districts spread over seven hydrological regions of Bangladesh were selected for the consultations, which were conducted from village to district level.

Each round of consultation was conducted with specific objectives. The main objectives of Round 1 were to obtain water-related needs, problems. The local people themselves identified constraints and they were invited to suggest their solutions to those problems. Round 2 validated the major findings of Round 1, and the consultations in this round were focused on a limited number of priority water-related problems. A multi-disciplinary approach was used involving a panel of local experts drawn from engineers, social scientists and representatives of civil society in order to obtain a clear understanding of the problems and possible solutions. The third and final round of consultation sought to obtain peoples' feedback/reactions on technical options prepared by a team of experts to address the main issues arising from Rounds 1 and 2.

In Round 3, fifty-two technical options were selected for presentation before the participants in order to get their feedback. Peoples' suggestions were also sought to improve selected options to suit their local needs and priorities. In Round 3 only district level consultations were held with half of the participants selected from those involved in Rounds 1 and 2. Round 3 participants were relatively heterogeneous in the composition compared to those earlier rounds in respect of the extent of exposure to PPCP process, class, occupation, spatial background of the participants and gender.

The major issues in Round 3 consultation programme fall into the following categories:

- Ø Domestic Water Supply
- Ø Expansion of Irrigation
- Ø River Management
- Ø Environmental Management
- Ø Flood Management
- Ø Cyclone/Tidal Flood Management.

Under the issue of Domestic Water Supply, the option Ponds and Pond Sand Filters emerged as favoured choice along with



Rural and Peri-Urban piped Water Supply Based on Mini DTW. Under the issue of Expansion of Irrigation, Re-excavation of Khals, Rivers and other Water Bodies for

irrigation was similarly popular, together with On Farm Water Management and Improvement for Minor Irrigation. Under the issue of river management, options of Dredging for Navigation and Drainage, Re-excavation of khals, Rivers and other Water Bodies, Dredging and Training works at major off takes and Major River Training all gained varying degrees of support. The Options for Water Management for fish/Fisheries put forward were well received in the context of Environmental Management together with other more general options for water bodies. For Flood Management, Flood protection using local Embankments (for towns/ cities), Protection of Flood Control Embankments, Community-Based Flood Proofing, improvement of Existing BWDB Inland Rural FCD Schemes have all emerged as desirable options. In dealing with the issue of Cyclone and Tidal Flood Management, Raising Sea Facing Embankments was the most important option.

In order to keep balance of ecosystem, participants stressed the need for conjunctive use of SW and GW. They also talked about the pros and cons of implementation and operation and maintenance of the options.

Round 3 was conducted by a joint and multi-disciplinary team, comprising staff from WARPO-NWMP, NGO and BIDS. WARPO staff were supervised the proceedings and presented the options at each meeting. NWMP consultants assisted WARPO in designing and managing the programme. NGOs were responsible for organizing the consultations and for facilitation. BIDS was entrusted with analyzing the data obtained from the consultations and preparing an independent report.

The peoples' perspectives are now being integrated into the NWMP plan formulation process.

## How the Netherlands prepare future decision-makers on development cooperation

In the Netherlands a project was launched to create more support for development cooperation amongst the youth: the future decision-makers. This project is called "OS met andere ogen" (literally: development cooperation with other eyes that means development cooperation from different perspectives). The project has a 'software' component and a 'hardware'



*Picture shows (from left) Hans Van den Heuvel, Dr. Nilufa Islam, Her Excellency Ms. E.L. Herfkens and meeting coordinator.*

component. The software part is a web-site: [www.met-andere-ogen.nl](http://www.met-andere-ogen.nl). By means of a popular quiz children are introduced to themes like water, food scarcity, education and rural development. Every month the most successful participant receives a computer. The hardware part is a bus, which visits on request Dutch secondary schools. The bus features a complete video-wall with eight television screens. A short

documentary film shows a dynamic picture of both Mali and Bangladesh. The film is hopeful and positive that is, quite the opposite of which the youth in Western countries is used to. Usually they are exposed to films about developing countries, which show starving people, drought, devastating floods and on a certain moment they will simply turn their heads away from the screen as a kind of self-protection.

During the launch of this project, which took place in the Spui Theater in The Hague, Minister Herfkens of the Netherlands Directorate of International Cooperation, discussed with editors of school-newsletters and journalists of the Netherlands newspapers. Dr. Nilufa Islam, PSO of the Environmental Section of WARPO and Hans van den Heuvel, technical advisor to this section, who happened to be in The Netherlands to participate in a course on sustainable project planning in the water sector, were invited to attend the discussions. Dr. Nilufa Islam gave a presentation stressing both the positive and negative aspects of floods in Bangladesh. She also talked about environmental awareness issues and the specific role children can play. During the discussion many questions arose on how children could actually contribute.

The idea was launched to directly establish relations between schools of Bangladesh and those of The Netherlands, and to allow children to exchange experience on how to translate increasing awareness into action. This might evolve into a modest but complementary layer of initiatives for improved development cooperation. The exchange of thoughts may be on economizing on the use of water (e.g. tooth brushing with a running tap), sanitation, waste management and other related subjects.



## From the DG's Desk

*Since joining WARPO last September, I have been impressed by the diversity of work that the organization can take up. Whilst preparation of the National Water Management Plan is currently our foremost task, this issue of the Newsletter once again well illustrates the range of WARPO's current activities.*

*As we move forward with formulation of the NWMP, we are gaining a much clearer appreciation of the role WARPO in the future management of the sector. WARPO is uniquely placed as Secretariat to the National Water Resources Council to provide cross-ministerial support to all future activities in the sector. Thus, we continue to give much emphasis to strengthening our links with different agencies and organizations within and outside of Government. We are making progress in this direction.*

*Examples of this are the new MoU with Joint Rivers Commission for data sharing, our collaboration with NGOs in developing consultation programs and our participation in developing new Guidelines for Participatory Water Management, all of which are highlighted in this Newsletter. We have also been working closely with DoE on updating Guidelines for Environmental Impact Assessment of water resource development projects, building upon the experience gained over the last decade. We have been pleased as well to welcome a number of important visitors to WARPO, both on formal occasions, such as the Hon'ble Netherlands Vice-Minister for Transport, Public Works and Water Management, and in informal discussion groups, such as with Sri Lankan environmental specialists and a US company engaged in arsenic mitigation research. Dialogue is an essential element to build understanding amongst all practitioners, and is something I am particularly keen to encourage both internally and externally.*

*We are now actively looking ahead to build up a sustainable and effective WARPO for the future. We recognize the substantial responsibilities that befall us, and are considering a number of options by which WARPO can best fulfill these. This requires a long-term vision, which the NWMP is providing for us, tempered by the realities of developing new skills and a motivated team of professionals. We have already made much headway in developing the National Water Resources Database, but this is just a beginning. Our future role in framework planning, activity coordination and monitoring development of the sector will require much effort on our part and the active support and co-operation of others.*

*These are exciting and challenging times for WARPO. I hope this Newsletter provides you with some insight into both our current and future activities. I welcome any suggestions you may have.*

*Dr M A Quassem  
Director General, WARPO*

## WARPO's Website Updated

The WARPO web site now has a fresher look with improved graphics design. You can still find it on the same domain name [www.warpo.org](http://www.warpo.org).

The NWMP Draft Development Strategy (DDS) of NWMP has been added to the site, replacing the previous NWMP Topic Papers. The documents, prepared by the Consultants engaged under the NWMP, are posted in Postscript Document Format (PDF), to facilitate access of wide range of audience.

The site also currently includes a Home Page, a copy of the National Water Policy, copies of previous WARPO Newsletters, and information on the NWRD.

The Home Page contains 'More About WARPO' and its 'Contact Details'. Information on the NWRD covers the main contents of the National Water Resources Database that has been set up at WARPO.

### Coming Soon

WARPO' web site is going to be enriched soon with -

- Ø Final Development Strategy
- Report of NWMP WARPO
- welcomes any suggestion to improve the web-site.

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