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PART 1: REPORT BY GWP-SAS REGIONAL OFFICE

NAMES OF INDIVIDUALS CONDUCTING ASSESSMENT: **Upali S. Imbulana, Sardar Mohammad Tariq**

DATE OF ASSESSMENT: **25th July 2011**

The period under review saw further consolidation of GWP-SAS activities since the establishment of the Regional Office in Sri Lanka in January 2010 and with the Chairmanship of Mr. Sardar Mohammad Tariq in Pakistan, in line with the Regional Work Plan. Upali S. Imbulana assumed duties as the Regional Coordinator on 12th May 2011 and Mr. Ranjith Ratnayake continued with his valuable services to the Regional Office until June 2011.

The Regional Office activities focused on completing administrative and financial reports, coordinating the country activities and contributing to the GWP's global programmes in line with the Strategic Goals of GWP.

Goal 1: Promote water as a key part of sustainable national development.

United Nations Commission on Sustainable Development (UNCSD) conducted a survey to generate input to a status report on integrated approaches in the development, management and use of water resources. The part 1 (Level 1) of the survey was to be carried out by national governments. For the Level 2, UNCSD selected 3 countries from GWP SAS Region; Bangladesh, Pakistan and Sri Lanka. The Regional office successfully coordinated the surveys that were carried out by the respective CWPS.

Goal 2: Address critical development challenges.

- Regional Office supported the organization of Workshop on Climate Change, Water and Food Security held on 24-25 February in Sri Lanka, which concluded with the commitment to establish a platform to ensure the interaction of experts on the subject.
- A proposal/submission of interest was made for the Asia Pacific Adaptation Network (APAN) Sub Regional Node for South Asia. APAN is supported by several governments of the Asia Pacific Region and the relevant UN Organizations.
- With the contribution from CWPs, a draft proposal was prepared for the Water, Climate and Development Programme (WCDP) titled "Improving the resilience of South Asian countries to withstand the impacts of climate change"

Goal 3: Reinforce knowledge sharing and communications.

- A Concept Note was submitted for funding the South Asia Water Forum (SAWAF) IV planned to be held in November 2011 in Pakistan
- Some changes to GWP SAS website were carried out in line with the GWP Graphical Policy. This was interrupted due to the resignation of GWP SAS Communication Officer, but would be continued when a suitable replacement is made.
- Two Newslines were prepared with the contribution from CWPs. They included "Nara Canal Area Water Partnership: Poverty reduction through IWRM and participatory management of natural resources" contributed by GWP Pakistan and NCAWP, and "Promotion of IWRM by Capacity Building of Farmers and Water User Groups through Parimal Area Water Partnership (PAWP)" contributed by GWP India.

Goal 4: Build a more effective network

- Regional office, with the cooperation of CWP prepared monthly, quarterly and six-monthly reports including financial returns
- Coordinated the partnership applications with CWPs and GWP Secretariat
- Coordinated the inputs to Consulting Partners meeting to be held in August 2011
- Regional Chair initiated action on a “Youth Competition” within AWP, ZWP and CWP for selecting youth representatives to be nominated for participating in the Youth World Water Forum 2012.

PART 2: REPORT BY BANGLADESH WATER PARTNERSHIP (BWP)

Names of individuals conducting assessment:

Dr. Khondaker Azharul Haq, Focal Point and Executive Committee Member, BWP,
Engr. Zeba Rahman, Executive Secretary and Ms. Mukta Akhter, Admn. & Accts. Officer

Date of the assessment: **10-15 July, 2011**

GOAL 3: Reinforce Knowledge Sharing and Communications, Capacity Building**ACTIVITY 1: Training of Trainers (ToT) on IWRM and its Practices for Regional Level Water Managers****Dr. K. Azharul Haq addressing at the Concluding Session of ToT****Output:**

Center for Environmental and Geographic Information Services (CEGIS) in collaboration with Bangladesh Water Partnership (BWP) carried out a six days long Training of Trainers (TOT) course on “*IWRM and its Practices for Regional Level Water Managers*” from 21 to 26 May 2011. This initiative was taken as part of the on-going efforts to familiarize the professionals with the concept of Integrated Water Resources Management (IWRM). CEGIS has already organized a number of training courses on IWRM concept and process. This training course was very much focused on the IWRM practices in Bangladesh.

Training of Trainer course is very essential for a continued and sustainable training process. It is expected that the participants of this course would become successful trainers after this course and would be able to train up other officials/professionals working with them in their respective organizations.

The training of trainer course includes principles of Integrated Water Resources Management practice in Bangladesh. Skilled and experienced professionals working in different institutions involved in natural resources management were included as trainees of the TOT course. A group of highly experienced and trained resources personnel from various disciplines conducted the ToT course as resource personnel.

The objectives of the ToT courses were:

1. To explain the meaning of IWRM principles
2. To make the trainees capable in conducting training course on IWRM in their respective organizations on IWRM application
3. To apply the concept on participatory water management
4. To understand the Govt. procedure of planning and implementation of water resource development projects
5. To motivate and organize different groups of stakeholders to carry out their activities according to IWRM principles

The training mainly focused on IWRM concepts, methods, and practical experiences on IWRM practices in Bangladesh along with field work. The training program has been arranged for active participation of the regional level water managers and professionals from different Government, Autonomous, NGOs, institutions and committees. The exclusive six days training program was designed in such a way that the participants had discussion based lectures to understand the state of art of IWRM concept and its applicability as well as exposure to field condition.

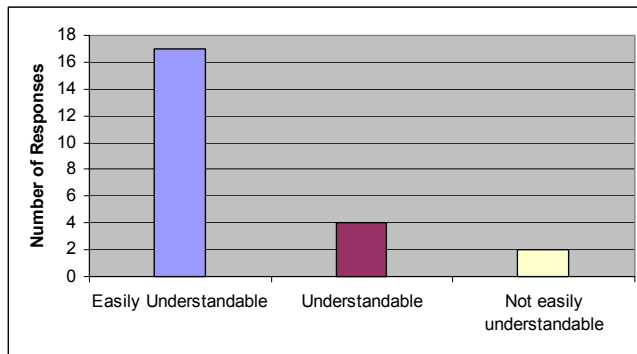
The training was delivered through two sessions, a five day lecture session on the IWRM and its Practices and a one day field visit session to gain practical experience on IWRM application. The first session included about 21 lectures while the second session allowed the trainees to take part in the practical application of IWRM in a project of Bangladesh Water Development Board in Rupgonj upazila of Narayanganj district. In the field trip the trainees were divided into three groups. Three separate exercises have been given to the three groups, so that all the participants get unique opportunity to practice theoretical and practical aspects of IWRM principles. After the field visits, participants made group presentation to share and exchange their views and findings. Each group presented their individual presentation in the training program. It is expected that the participants of this course would become successful trainers and would be able to train other officials/professionals in their respective organizations.

CEGIS played the key role in steering and coordinating the whole training program while BWP played the monitoring role and made some evaluation through physical presence and contributed a portion of the total cost.

To get the feedback from trainees, an evaluation form was designed and distributed among the trainees. The following graph was prepared from the results of the trainee's responses to questions regarding whether or not the lectures were understandable.

Outcome:

Through the ToT Training a large number professionals in the agriculture, water and climate sector from government and private sector and NGO's have been trained in the principles and practice of IWRM. The program has contributed significantly in popularizing IWRM in the improved management of water and environment sector. The program has been so successful that IWRM has almost become a 'House-hold word' with the water professionals. IWRM concept has also become integral to any new irrigation and water resources development projects.



ACTIVITY 2: World Water Day Celebration

World Water Day Celebration in Dhaka: The World Water Day was celebrated in Dhaka on 22 March 2011. A Seminar was organised on the theme of the day “Water for Cities: Responding to Urban Challenge”. It was sponsored by BWDB, WARPO, DWASA, CEGIS and IWM all partner organizations of BWP.

The Honourable Minister for Water Resources was the chief guest and Honourable State Minister of Water Resources and the Secretary, Ministry of Water Resources were the special guests. The seminar was presided over by Mr. Md. Habibur Rahman, Director General of BWDB. A large number of participants from all water related sectors were present. From BWP Dr. K. Azharul Haq, Mr. Giashuddin Choudhury and Mr. Sajjad Hossain all Executive Committee Members of BWP actively participated in the discussions. The Key note paper was presented by Dr. Liakath Ali, Deputy Managing Director, and Dhaka WASA. Dr. Ali presented a brief resume of the present status of water supply, sanitation and storm water drainage of the city. The water demand of the city is around 2,200 MLD and DWASA can supply around 2000 MLD through around 2,90,000 connections. Ground water sources constitute about 87% of the total supply where as surface water accounts for the balance 13%.

On the challenges faced by DWASA, Dr. Ali indicated that over dependence on ground water is becoming unsustainable and he presented a plan for increasing surface water based water supply projects to increase its contribution to 50% within the next five years. The other challenges were identified as reduction in NRW, increase in sanitation coverage from the existing 30% to 60% in next 10 years, improving water quality both at source (especially surface water) and in the distribution system and improving storm water drainage system. He further indicated that unplanned growth of the city and a nearly 8% annual growth of the population is also a major challenge. Lack of funds for capital expenditure for infrastructure development especially for sewerage and storm water disposal was also identified as a major challenge. Other major challenges included meeting the future needs where the estimated population by 2020 will be 15.5 million with a water supply demand of around 3500 MLD and supplying water to urban slums which houses 30% of the city population. The climate change impact is expected to have further negative impact on the challenges.

A second paper on climate change was presented by Mr. Abdul Wadud Bhuiyan, chief of Planning, BWDB. He emphasised the need for accommodating probable impact of climate change on the temporal and spatial distribution of rainfall which will ultimately have an impact on availability of raw water for Dhaka city.

The chief guest and the special guests emphasized the need for preparing the city water utilities for meeting the future challenges in service delivery through adequate financing, human resource development and integrated water resources development.

World Water Day Celebration in Khulna City:



Discussion at the World Water Day Celebration in Khulna City

In Khulna World Water Day was observed elaborately. As a part of on going activities World Water day was observed by Bhairab River Area Water Partnership and Initiative for Right view (IRV) with the support of Bangladesh Water Partnership (BWP). A workshop was organized on "Present Status of Water Supply in Khulna City and Way Forward" on 23 March, 2011 at Khulna Press club.

Mr. Talukder Abdul Khaleque, Mayor, Khulna City Corporation, was present as the chief guest. Dr. Tarun Kanti Sikdar, Director, Department of Environment, Engineer Mr. Tauhidul Anwar Khan, Secretary General, Bangladesh Water partnership(BWP), Amena Halim Beby, Councilor, Khulna City corporation, Sk. Ali Akbar Tipu, Councilor, Khulna City corporation were present as special guests. The seminar was chaired by Advocate. Firoz Ahmed, Convenor, Bhairab River Area Water Partnership and the inaugural speech was delivered by Kazi Zaved Khalid Pasha, Coordinator (CEO) of Initiative for Right View (IRV).

Contending that water crisis in Khulna city has turned acute as Khulna city, the Chief Guest Talukder Abdul Khaleque, Mayor, Khulna City Corporation indicated that they are trying their best to solve the problem. In this respect he shared that they took initiative in 1996 to bring water through pipeline form Phultali Upazilla for the Khulna city dwellers. When the initiative was at advanced stage and when 90% preparatory work was completed then inthe name of environment conservation, the local community went against this initiative. But the fact is that all the people took the compensation as their lands were acquired for the project. But now they are protesting and are against the project. The chief guest emphasized the necessity of solving the water crisis of the Khulna city including the crises of the southwest coastal region especially the Aila (a cyclonic storm that hit the area in 2008) affected Dakop, Koera(Khulna) and Mongla Upazillas(Bagerhat) upazillas. He informed that Rupsha River flowing by the city cannot be used due to severe pollution. All the surface water reservoir like ponds, canals and wetlands are being gradually filled up for various purposes. Not only has the Khulna city but the whole southwest coastal region been suffering form scarcity of drinking water. It is necessary to take coordinated and integrated initiative to solve the problem. There is any flow from upstream water especially during the dry season (Jan – May). But being a saline area priority has to be given on the use of surface water. He requested the experts to come up with workable solutions so that the people can be supplied with adequate water of required quality. He further informed that he is trying his best to solve the water crisis of the Khulna City. Khulna City Corporation used to look after the water supply system before the establishment of the Khulna Water Supply and Sewerage Authority (KWASA).. He emphasized that it is also necessary to ensure the navigability of Gorai River which is the main sweet water supply for the coastal region. The KWASA is trying to use the water of the near by rivers but the salinity of the water is so high that it will be costly to treat it.

Mr. Md. Abdullah, Managing Director, KWASA presented the keynote paper titled ***Present Status of Water Supply in Khulna City and Way Forward.***



Mr. Md. Abdullah, Managing Director of KWASA

In his presentation he described the water supply scenario in Bangladesh, access to water in urban and rural areas, source of drinking water and sanitation situation Khulna city, background of water supply in Khulna, present water supply system, management and operation of Khulna WASA, salinity levels in the rivers, water resources development plan, future development plan for Khulna WASA, and implementation status of JICA and ADB assisted projects. He indicated that Khulna is the 4th largest city in Bangladesh with a population of 1.5 million. Khulna WASA started functioning

independently from September 16, 2008. The Water Works Department of Khulna City Corporation, which was responsible for water supply, was handed over, with all their staff, to the newly established KWASA.

Khulna city is experiencing a serious water crisis as KWASA can supply only about 227 MLD of water against daily need of 945 MLD. At least 54 percent of the population collects water from unsafe sources while 75 percent of water used by city dwellers is supplied from underground sources. Water supply situation in the city has been further aggravated by frequent load shedding and drastic fall in underground water level. The KWASA is trying to use the water of the near by rivers but the salinity of the water is so high that it will be costly to treat it.

A video documentary on the status of water supply in Khulna city and prospect was presented by Mr. Kausik Ahmed, Secretary, Southwest Youth Water Forum. Another paper on Pollution of Bhairab River was presented by Ms. Nausin Ahmed, Deputy Secretary of the same organization.

As a special guest Engineer Tauhidul Anwar Khan, Secretary General of Bangladesh Water Partnership (BWP) indicated that among the of the total water that our planet contains, 97.5% water is ocean water which is salty. Among the remaining 1.725% is in the glaciers, snow and permafrost, 0.075% is ground water, and 0.025% is in the lakes, swamps and rivers. So it is clear that the total population of whole world is depended on only 1% sweet water. With the population increase the demand of water is also increasing. Upstream flow in all the river systems of Bangladesh reduces in dry months. It is necessary to increase the sweet water flow from upstream to solve the problem. Reduction of flow from the upstream during the dry season causes tremendous socio-economic and environmental losses for Bangladesh. Hence, any intervention on the upstream of the rivers affects Bangladesh significantly. For addressing all the key water related challenges of the country, water available in the Ganges, the Brahmaputra and the Meghna river systems is the single most crucial factor. It is necessary to increase basin based water supply.



Mr. Tauhidul Anwar Khan, Secretary General of BWP

Dr. Tarun Kanti Sikdar recollected that it is not a long time that we had used pond water. People started to use ground water with the introduction of Tube wells. It is necessary to take integrated approach to solve the water problems of Khulna city. In his opinion the major problem is the lack of management experience and inexperience of staff in operating a commercial water utility is also an important factor. He also advised to create awareness among all the stakeholders.

Amena Halim Bebi expressed that she was very much enriched by taking part in the seminar. She learned lot from the environment and water experts. She is very much interested to be the part of this initiative.

Sk. Ali Akbar Tipu opined that both KCC and KWSA have negative image among the people. But now all can understand that they are trying their best to solve the problem but due to some unavoidable reasons they cannot go forward. Most of the rivers have dried up or encroached. We have to save our rivers for the sake of drinking water supply. The state should play the vital role for solving the problem. We failed to accomplish our respective job. Due to some interest group we have been facing this problem. Once upon a time the water of Madhumati River was sweet. But now it has become saline. We shall have to be more conscious about the use of water.

After a detailed discussion the following recommendations were made:

- River Gorai should be re- excavated for ensuring flow of sweet water.
- Increased emphasis should be given on purifying surface water.
- Surface water reservoirs should be constructed to serve as raw water source
- Increasing water supply through pipeline for increased coverage
- Basin based water management should be given priority.
- Water conservation should be given priority
- Awareness creation is necessary for improving water management.
- More research and study is necessary to understand the total scenario.
- It is necessary to establish water treatment plant in southwest coastal region.
- It is necessary to preserve the rain water.
- Strengthen the save Mayur river movement.
- Save the Bhairab river form illegal grabbing and pollution.

World Water Day Celebration by Chittagong WASA:



Mr. Md. Fazlullah and Dr. K. Azharul Haq at the World Water Day Seminar

Chittagong WASA marked the world water day by organising a seminar on 28 March 2011 with financial assistance from BWP. Presided by the Managing Director, Mr. Md. Fazlullah, the key note paper titled "Status of Water Supply in Chittagong: Problems and Prospects" was presented by Mr. Izaz Rusul, Superintending Engineer CWASA. Dr.K.Azharul Haq, EC Member, BWP was present as a special guest.

The key note paper presented in detail the historical development of CWASA. Chittagong is the second largest city of Bangladesh with a population of around 4 million. Unlike DWASA, CWASA has only one responsibility of supplying potable water to the city dwellers. CWASA supplies 278 MLD of water which meets demand of only 40% of the population and the rest 60% arranges their own supply from ground water. In some key performance indicators like NRW, Bills receivables etc CWASA has significantly lower than those of Dhaka. But in water supply coverage performance is very poor. The major challenge is therefore to increase both supply and coverage. CWASA has also a favourable balance between surface and ground water.

At present Chittagong city has no piped sewerage system. Septic tanks effluents are discharged to open drain. Waste water is also being discharged in the open drains. Feasibility Study and Development Plan for Sewerage and Sanitation System for Chittagong Metropolitan Area was prepared in 1983. But to date no investment project has been implemented. Korea International Cooperation Agency (KOICA) prepared Master Plan in 2009 & has identified priority Sewerage project with STP at South Haliashahar. Chittagong Storm Water Drainage and Flood Control Master Plan prepared in 1994 with the financial assistance from UNDP. Chittagong City Corporation constructed RCC box culvert storm water drainage but it is totally inadequate to meet city's needs. TOR for appointment of consultant for preparation of Master Plan for Storm water drainage has been finalized in March 2007 with World Bank finance.

The following have been identified as key challenges:

- Water pollution at raw water source
- Protection of rivers from pollution & salinity
- Arsenic contamination and unsustainable ground water development
- Delay in implementation of projects
- Lack of institutional capacity
- High Non-Revenue water
- Tariff structure revision
- Organizational restructuring
- Rehabilitation of pipelines
- Water quality control management
- O & M facility management.



MD, CWASA & KA Haq in discussion

The MD, CWASA informed that the unaccepted level of low coverage resulted from inability to construct new water treatment facilities since 1987. CWASA has been able to maintain a 'status Quo' in water supply by installing tube wells as an interim measure. He also indicated that necessary funds have now been mobilized and construction has begun in one water treatment plant with a capacity of 90 MLD. At the same time CWASA has started to prepare master plan with assistance of Korean International Cooperation Agency (KOICA).

Dr. Azharul Haq observed that CWASA will not be able to achieve the MDG on water supply at the present rate of developments. It also faces formidable challenge in meeting the water supply needs of the city. He urged the CWASA authorities to expedite implementation of more water supply projects and also to initiate work on sewerage and industrial waste treatment & disposal to keep the raw water sources from being polluted.

Output/Outcome:

World Water Day celebration was highly focused on present status of the urban water supply in three major cities of Bangladesh. Water Supply & Sewerage authorities of these cities assured to take necessary steps for

preparing the city water utilities for meeting the future challenges in service delivery through adequate financing, human resource development and integrated water resources development.

ACTIVITY 3: Training Workshop on “Integrated Water Resource Management (IWRM) for the Youths of Bhairab River AWP”



Output:

With the support of Bangladesh Water Partnership, Bhairab River & Gorai River Basin Area Water Partnership and Initiative for Right View (IRV) organized a day long training workshop on Integrated Water Resource Management (IWRM) on 13 May 2011, at VIP lounge, Khulna press club, Khulna. The training session was divided into two parts.

At the beginning of the first session Safikul Islam Bhuban, organizing secretary of Bangladesh southwest water youth forum presented the objectives of the Forum.

In the inaugural session Professor Dr. Muhammad Alomgir, Vice Chancellor, KUET was present as chief guest. The chief guest thanked the organizers especially BWP to involve youth in water management initiative. Water is very much essential for environment conservation and also for the human being. Water scarcity has been increasing day by day. Unplanned urbanization and climate change is also increasing the problem. We need planned and integrated approach to conserve our water resources. In this regard youth should come forward and organize themselves for the conservation initiative. He hoped that through this training their skill will be developed and this will be able to help their community in proper management and conservation of water..

As special guests Principal Rehana Akter reiterated that water is synonymous to life. Women’s engagement in water management is very much important. She said that she was very happy to see that students from different colleges and universities working on water issues. The two presentations on water crisis are very much practical.. Government should take initiative for the proper water treatment and sewerage network management.

Mollah Safikur Rahman, Associate Professor, Environment Science Discipline, Khulna University expressed that IWRM is very much important for the water management of the southwest coastal region. An integrated initiative can bring fruitful result. Government has to take initiative for integrated development of agriculture, fisheries and controlling salinity.

As the chair of the workshop Firoz Ahmed, Convener, Bhairab River Area Water Partnership hoped that youth will come forward to face the challenges and develop themselves for the conservation of environment especially the water resource and river basin of the south west coastal region. They have opportunity and can develop their experience and skill through this kind of initiative and able to implement in their future life.

In the second session (technical session) as one of the facilitators of the training workshop Nazia Hasan, Lecturer, Environment Science Discipline, Khulna University focused her training on **IWRM for Youth Forum to Have a Better World**. Her topics of training were:

- Why IWRM? Key issues in water management
- Where are we headed?
- Why IWRM useful
- Water Resources Management issues in Bangladesh
- Definition of IWRM
- Water Management Principles
- Evaluation of IWRM
- Economic Dimension of IWRM
- IWRM and Agenda 21
- Objective of IWRM
- Water policy in Bangladesh
- Coverage of GWP
- Implanting IWRM
- Natural system of integration
- Human system integration
- Gender and water
- Youth forum and IWRM

Zihan Al Tuhin, Assistant Engineer, LGED, Khulna facilitated his training based on the following topics:

- Mandate of Integrated Water Resource Management (IWRM)
- Water Resource Management Projects in Southwest Region under Local Government Engineering Department
- Types of sub project under Integrated Water Resource Management (IWRM)

Md. Azizur Rahman, Senior Zonal Trainer, IPSWAM conducted the training on

- Water management and people's participation
- Goal and objective
- Concerned people for integrated water resource management
- Water Management Organizations (WMO)
- Local Government Institutions (LGIs)
- Participation process in water resource management
- Capacity Building Process in water management
- Orientation and need assessment
- Monitoring and evaluation

Representatives form Southwest water youth forum, Gorai River Basin Area Water Partnership, IPSWAM Water management group took part in the training.

Outcome:

Engaging youth in popularizing IWRM concept is very important and in its successful implementation at the grass root level. Participation of Students from different college & universities proved that, youth are interested to take important role on water security.

Participants enriched about IWRM concepts and they realized their obligation of playing an important role in meeting the future challenges in managing the water sector. Similar outcomes were also true for AWP in Bangladesh

ACTIVITY 4: Halda River AWP dissemination workshop on IWRM principles and importance of those for future water security.

Output:

A two part program to create awareness among the people of Halda River Basin was implemented by Halda River Area Water Partnership and NOWZUAN a local NGO. The Part-I of the program was held at a place called Madhuna Ghat on 20 Feb, 2011. 50 participants from different stakeholder groups such as fishermen, businessmen, students, journalists, government officers and NGO's participated in the discussion meeting to create awareness about the importance of saving the Halda River from pollution, encroachment etc and to impress upon the environmental and economic importance of Halda River. Mr. Kazi Md. Shafiul Alam Director, Family Planning was present as the Chief guest and NOWZUAN Chief Executive M.H Choudhury coordinated the program. The chief guest indicated that the Halda River is a valuable resource of the country and government and non-government organizations, civil societies, stakeholders all should join together and help protect the river and its surrounding environment. Other speakers included Mr. Keshob Kumar Barua, President of local press club and President of Raozan Fisheries Society. The speakers echoed the sentiment of the chief guest and emphasized the eco-friendly use of immense opportunities offered by Halda River.

The part II of the program was to create awareness through Folk Songs and Poetry presented by renowned local Kabial (Rural Poet) Md.Abu Yusuf and his team. This program was staged on 20 Feb 2011 which was presided over by Ms. Sazeda Choudhury, Vice-Chairman of Raozan upazilla. Mr. Zakir Hossain, Team Leader of Halda project and Mr.Md.Elias, President of Halda Raksha (save) Committee were also present.

Outcome:

The Kabial and his team presented the glorious past of the river and called for the revitalization of the river through their songs and poetry. The large gathering attending function went away with the message that for their economic and social well being it was extremely important to protect the river from degradation. It may be mentioned here that such "Kabials" are extensively used in rural Bangladesh as messengers of public awareness programs and they are being effectively used in family planning and HIV-AIDS prevention programs.

ACTIVITY 5: International River Protection Day Celebration

Output/Outcome:

The two programs to celebrate International River Protection Day was implemented by NOWZUAN a local NGO and Halda Area Youth Forum and supported by BWP.

First program was held at the Rauzan Upazilla Conference Room on 07 May, 2011. They organized Human Chain, Rally and Discussion Meetings, where 86 participants from different stakeholder groups such as fishermen, community, students, journalists, civil society etc. NGO's also participated in the program. Mr. Anjon Chandro Pal, Rawzan Upazila Nirbahi Officer was present as the chief Guest. Mr Shofiqul Islam Chowdhury former Pouroshoba (municipality) Mayor Presided over the discussion meeting. Mr Abdus Salam, a Social Leader and Business man and Mr Sofiul Alam, local Journalist was also present as a special Guest. Mr Anisuzzaman Khan team leader of Halda River project coordinated the Program. The honourable chief guest opined that people should unite to save the Halda River as this was the economic life line of the area.. He also identified water is "Blue Gold.' and opine that if we save the river, the river'll give us water and water'll give us life. Mr.Abdus Salam in his speech said that, not only the government but the non government organizations are also jointly working to save the rivers. He thanked NOWZUWAN and Bangladesh Water Partnerships for arranging this program.



Human Chain & Rally

Second program was held at Hathazari Upazilla Sadar on 08 May, 2011. They also organized a Human Chain and a Rally, where 60 participants from different stakeholder groups such as fishermen, community, students, civil society, NGO workers, Village Doctors, Imams (religious leaders) participated. Principal Md Ismail Hossain Upazailla Chairman was present as the chief Guest. Mr Mahabubul Alam Chowdhury Upazailla Vice-chairman, Mr. Keshob Kumar Barua President Hatazari Press Club, Mr Najim Uddin Khokhon Student Leader, Mr Ali Azam Chowdhury Social Leader and Businessman, Mr.Mahabubul Aalam UC Member and a member of the Halda River beneficiary group and Md Anisuzzaman Khan Team Leader Halda River Development Project were present as a special guest in this Program.

GOAL 4: BUILD A MORE EFFECTIVE NETWORK

ACTIVITY 1: *Workshop on Water Problem in South-west Coastal Region in Perspective of Climate Change*



Output:

Initiative for Right View (IRV) and Bhairab River Basin Area Water Partnership organized a training workshop on **“Water Problem in South-west Coastal Region in Perspective of Climate Change”** at Public Hall conference room in Khulna on 07 June, 2011 supported by Bangladesh Water Partnership (BWP),.

Dr. Professor Mohammad Faekuzzaman, Pro-VC of Khulna University was present as chief guest. Among the special guests Md. Ramjan Ali Paramanik, Executive Engineer, Water Development Board, Division-1, Mollah Safikur Rahman, Associate Professor, Environmental Science Discipline, Khulna University were present. The workshop was chaired by Advocate. Firoz Ahmed, Conveyer, Bhairab River Basin Area Water Partnership. Key note paper was presented by Kushol Roy, Lecturer, Environmental Science Discipline, Khulna University and the workshop was moderated by Marina Juthi, secretary, Bangladesh Women Water Network (BWWN) and Associate Coordinator, IRV.

At the beginning of the workshop Advocate Firoz Ahmed, Conveyer, Bhairab River Basin Area Water Partnership delivered the inaugural speech emphasizing conservation of water resources and awareness creation among the people. He shared that southwest coastal region is the most vulnerable district in the world regarding climate change. Salinity, water logging and sea level rise have been hampering the environment and livelihood of the people of the southwest coastal region. So, necessary initiatives should be taken for facing the problem. He gave thanks to the Bangladesh water partnership for their support and interest for the conservation and restoration of the environment and the river systems.

After that Kushol Roy, presented his paper on “**Water Security and Climate Change**” . The outline of his presentation was

- Climate Change tidbits
- Bangladesh Climate Change past and future projections
- Water Security issues; Immediate concerns
- Facts we should know

He concentrated his presentation on the importance of climate and its impact on water insecurity issues, crop calander and water use , impact on dry season and monsoon, impact on salinity etc,

Among the participant Shorab Ali opined that the region is facing a serious water crisis. Rivers are losing their flow and gradually silting up. As a result rivers are losing their capacity to carry adequate water. As a result excessive dependence on ground water has become a threat to the sustainability of water supply system.

Md. Ramjan Ali Paramanik, Executive Engineer, Water Development Board, Division-1 described his experience of water management. He opined that the embankments built in the 60's and 70's are now out of date. These are not working properly and as a result these are not able to protect the coastal areas from cyclonic storms. The flow of River Gangages has reduced alarmingly in the dry season resulting in saline water intrusion. He advised that integrated water resource management is very much necessary for the effective management of the water resources. He further indicated that initiatives should be taken for better use of surface water and rain water. He recommended for developing reservoir for conserving rain water.

Mollah Safikur Rahman, Associate Professor, Environmental Science Discipline, Khulna University also expressed that climate change has a great impact on the livelihood and water resources in southwest coastal region. Extensive research and studies are needed to identify and addressing the issues. There is limited information on climate change. Even developed countries do not have enough information on climate change.

The chief guest Dr. Professor Mohammad Faekuzzaman, informed that southwest coastal region is rich in biodiversity, there are vast network of river, abundance of fish and other aquatic resources. People are living in peace. But due to climate change the situation has changed within a decade. Due to climate change rainfall has been reducing during rainy season. In the past people have been using boats for local transport. Flood was the regular phenomenon of that time. There was no water purifying tablet at that time. People used ponds as sources of water for drinking. We have lost our local species of fishes. We have constructed unplanned bridges and culverts which changed water flow patterns of the river systems. Rivers have silted and need extensive dredging. Malnutrition has been increasing. Pollution of water is harming the aquatic resources He recommended judicious utilization of water resources for protecting the ecology..

In the concluding remarks chairman of the workshop said that water is every where in this region but not a drop to drink. This shortage of water in this region makes the lives more critical along with other disaster. In the previous year scarcity of drinking water was not as much as it is at present. To meet the daily necessity of drinking water women and adolescent girls of the families have to carry water from long distances facing various social and physical problem. This may take upto three to four hours a day. As a result, they do not have enough time or energy to carry out other household duties like cooking, bathing, washing clothes, taking care of children and elders.

Outcome:

Southwest coastal region is the most vulnerable district in perspective of climate change, which was highlighted by this workshop.

ACTIVITY 2: Training and Consultation Workshop by Naboganga and Chitra River Basin Area Water Partnership

The Narail Training Workshop

Nabognaga and Chitra River and its branches support substantial parts of Narail. Narail, although, the second smallest district in Bangladesh, but the presence of five rivers is really an exceptional case in the nature. The Upazilas of Kalia, Lohagora and Narail Sadar are located within the basin. There are many beels and baors in and around, but the remarkable of which is Chachuri Beel in Kalia. Water tested for Arsenic in TWs in Narail district indicated that around 60% of the tube wells are arsenic free.



Output:

A day long participatory training and consultation workshop was organized in the Zila Parisad Auditorium of Narail district on 25th January, 2011 organized by Environment and Population Research Centre (EPRC) in collaboration with BAUL (a GARNET-SA member organization) and with the help of Nabaganga Chitra AWP Committee members. This program was supported by Bangladesh water partnership (BWP).

A total of 46 participants -26 females and 20 males, from Local government representatives, people's representative, NGOs, Department of Public Health Engineering (DPHE), Local Government Engineering Department (LGED), Department of Agricultural Extension (DAE), Department of Fisheries, School teachers and College teachers, local government representatives and social leaders participated in the training workshop.

The specific objectives of this workshop were to:

- i) Create awareness about the issues mentioned under the aim of the AWP in 2011
- ii) Discuss the existing water challenges
- iii) Update the AWP committee
- iv) Plan future activities and propose to BWP for assistance

The workshop included the following sessions:

- i) Opening session: awareness/refreshment of the issues
- ii) Discussion on existing situations
- iii) Recommendations and closing session

Dr. Bilqis Amin Hoque, Executive President of EPRC, Member of Executive Committee of BWP and Principal Investigator of the AWP presided over the workshop. Mr. Abdul Aziz, Deputy Director, DAE, Mr. Anwar Hossain, Executive Engineer (XEN), DPHE and Mr. S. M. Anamul Haque, District Fisheries Officer, Department of Fisheries, were present in the opening session as special guests.

Sufia Khanam, Research Co-ordinator, EPRC delivered the welcome address. She welcomed all the participants and highlighted the purpose of the workshop, AWP vision and activities from 2006 to date of the Nabaganga and the Chitra River Basin AWP.



Guest of the opening Session

Mr. Abdul Aziz, DD, DAE told that surface water is polluted/contaminated by applying excessive agro-chemicals for increasing agricultural production.. At the same time excessive withdrawal of ground water is causing arsenic contamination in the subsurface water. 3000 litres of water costing TK 45,000.00 is required to produce one kg rice.

He further said there is wastage of huge amount of irrigation water due to improper management. He stressed the need for development of water conveyance system like construction of underground pipe line in irrigation for preventing misuse of water. He also demanded introduction of sprinkler irrigation system for cultivation/ production of vegetables.

Mr. S. M. Anamul Haque, District Fisheries Officer told in the session that local varieties of fish will become extinct if we fail to ensure optimum utilization of water. He told that fishes are dying for the prevalent rotting system of green jute in the rivers in Narail areas. He asked the DAE officials to popularise the new “Revolvoing system” of raw jute rotting. Besides catching fish from different surface water bodies and withdrawal of surface water for irrigation are the reasons for extinction of different species of fish. He also stressed the need for fixation of water prices.

Mr. Anwar Hossain, XEN, DPHE in his speech told that 80% STWs did not yield water due to draught during last year. As a result a few “Tara Pumps” were installed to supply drinking water. He also mentioned that arsenic has been detected in Narail’s shallow and deep aquifers, and salinity in DTWs. In Narail areas, most of the latrines are constructed with pan, slab and one ring causing environmental pollution and contamination of water during rainy season. There are hanging latrines over the Chittra River in the Bazar areas and Chanturi Bil sub-project areas. He has demolished such latrines from the Chittra River at his own initiative. He asked the house to inform if there is any latrine connected to the river so that he will take necessary measures. Further, he informed that last year Rain Water Harvesting (RWH) installed by DPHE and different NGOs could not be utilized due to drought. Last year there was one of the worst droughts and that caused massive increase in water related diseases. He also informed that during monsoon there is no salinity in river water. He requested the participants to use rain water harvesting methods and dig new sources like khals and ponds for domestic use. Dr. Bilqis Amin Hoque talked about different aspects of the Nabaganga and Chittra river and high lighted the objective of integrated water resources management and it’s importance in MDG and CC perspective.

Participants of the Training Session

Dr. Bilqis A. Hoque discussed the eight components of the Millennium Development Goals (MDG). She presented the key features of Poverty Reduction Strategy Plan (PRSP) and Climatic Change and its adaptation issues. She discussed the linkages among MDG, PRSP and Climate change in Bangladesh perspective and pointed out how the AWP could address it. She highlighted the ongoing challenges such as scarcity of water, decrease in water level, draught, river erosion, flood, tidal bore, pollution of river, arsenic pollution, salinity intrusion, rising temperature etc. She also stressed upon different issues and problems like supply of drinking water, sanitation, irrigation management, navigation, sedimentation in the river bed, fish culture, artificial filling of river, synchronization of river systems, construction of different structures, arsenic contamination, livestock etc.

Outcome:

Detailed discussions were held on the existing situations in terms of both water issues and performance of the AWP. The participants highly appreciated the AWP and BWP for creating awareness and focusing the water issues of the area.

The participants thanked BWP-GWP stated that they were enlightened, enriched their knowledge and awareness about MDGs, PRSP and climate change adaptation. However, the participants opined that a training or discussion workshop alone is not enough to keep the continuity of AWP activity and they felt the need to have a programme including continued activities to sustain and meet the objectives explained.

The Kalia Upazila Training Workshop

Output:

A day long participatory approach training workshop was organized by BWP assisted by EPRC and Garnet-SA on 23rd March 2011 in Kalia Upazila Primary Teachers Association auditorium. Methodology followed was group discussion, exchange of views to solve problems and lecture method.

A total of 21 participants--12 females and 9 males, from Local Government representatives, NGO representatives, school teacher, and water management caretaker of EPRC'S installed water points of drinking water participated in the training workshop.

The specific objectives of the workshop were:

- I) To understand the existing drinking water condition
- II) Educate the grass root level people under AWP about the arsenic mitigation water options in climate change adaptation perspectives.

The training workshop included three sessions:

- i) Opening session and training
- ii) Discussion on existing water situations – arsenic and salinity
- iii) Recommendations and closing session

Md Abu Zahid , EPRC inaugurated the opening ceremony and presided over the training workshop.

Mollah Shahid Alam, President Upazila Primary Teachers Association, Md Milton Shaik, Secretary of Upazila Primary Teachers Association was present in the opening session as special guests.

Sohel Rana, Research Officer, EPRC on behalf of EPRC delivered the welcome speech. He welcomed the participants and narrated the training workshop objectives and highlighted the importance of World Water Day 2011.

Special Guest -Mollah Shahid Alam, President Upazila Primary Teachers Association emphasized the theme of the year 2011 "Water for the city ". He focussed on wastage, mismanagement and contamination of water in under ground water. He further said that in paddy fields water are wasted due to over irrigation which can be saved if managed properly.

Special Guest - Md Milton Shaik , Secretary of Upazila Primary Teachers Association said that water issues should be discussed elaborately at village and union level .Government has to take strong steps in refraining from river filling as this is creating an imbalance in the environment.

Md Abu Zahid, EPRC delivered the key note speech and imparted training. He narrated the objectives of training workshop, the importance of world water day and gave an idea of the objective of this workshop.

Details were discussed about source of drinking water, its availability and importance. Quality of water an essential element was also highlighted. Availability of adequate supply of water, satisfaction of using water, satisfaction in using latrines, physical labour of women and purdah of women were among other issues discussed. Training was imparted on

- Addressing climate change mechanism
- How to overcome/cope with climate change
- Risks of drinking water use in Bangladesh in future.
- 4 steps of integrating water namely --
 - Scarcity of safe drinking water
 - Development and management of water source
 - Key role of women in water management and maintenance
 - Giving importance to water as economic issue

The participants also discussed at length on:

- Description of AWP
- Existing situations about the drinking water

Outcome:

The participants were enlightened, enriched their knowledge and awareness about water and education about AWP. Since efforts were made to invite at least half of the participants from women stakeholders, they highly

appreciated this rare opportunity. All the participants appreciated EPRC, AWP, BWP and GWP for helping improve their knowledge.

ACTIVITY 3: 32nd Executive Committee Meeting

Output:

The 32nd Meeting of the BWP-EC was held on 22 Jan 2011. The following two important decisions were taken:

Outcome:

- For smooth implementation of the 2011 EC members will responsible for helping in implementation and monitoring of the specific components of the work plan.
- Ms. Reba Paul will be appointed as a part-time consultant of BWP with a modest consultation fee. At the moment she is working on a voluntary basis.

ACTIVITY 4: 33rd Executive Committee Meeting



Output:

The 33 EC Meeting and 2nd for the year 2011 was held on 14 May 2011. The principal agenda was to review the progress of the 2011 work plan and the approval of the new constitution of the BWP.

Outcome:

Five out 15 activities have been implemented to date. Summary reports of these activities have been presented in the monthly progress reports. The rest of the activities are progressing satisfactorily.

The revised constitution has been finalized and will be submitted to the appropriate authority (Social Welfare Department) for approval.

The following two new staff has been appointed for BWP:

Engr K. M. Zeba Rahman-Executive Secretary
Ms. Mukta Akter-Administrative & Accounts Officer

Findings on Productivity of Land in Diverse Irrigation System (This is a delayed report from 2010 work plan).

In Bangladesh most of the irrigation equipment's are installed and managed by various groups or organizations; these are categorized as i) public managed irrigation- BMDA ii) Private owned and operated systems-STW and iii) Public developed and community managed irrigation-for BADC and LGED. Some management systems already changed with the passage of time and the change of organizational views. The system efficiencies also vary with the management practice.

Output/Outcome:

Considering the situation above this study was undertaken to assess the technical, institutional and economical feasibility of these irrigation management systems with a developed questionnaire to ascertain the productivity of land with the financial support of Bangladesh Water Partnership (BWP).

Public developed and community managed irrigation

Two schemes of PANASI Project of BADC named Boro Harirspur and Parkholabaria DTW sub-projects under Natore sadar district were studied by the CIWM members. Both the systems have the same capacity with a discharge of 200m³/hr. In the first one water is distributed through buried pipes (BP) and the irrigation coverage is 21.5 ha and in the second one an open channel system is used for delivery of water and has a command area of about 13.5 ha.

The soil type of these schemes is sandy loam and crops under irrigation are Rice, Wheat, Jute, Groundnut, Garlic etc. The systems are managed by Shamitee (Farmer Groups) and BADC charged Tk. 22,500.00 per year and the Shamitee claim irrigation charge Tk. 8800.00 per hectare/season for Rice and Tk. 1500.00 per hectare/irrigation for other crops from their client. Electricity cost is borne by the Shamitee, which is about Tk. 45 to 50 thousand during the irrigation season. But the overall maintenance and trouble shooting is done by the BADC. Usually the farmers under these schemes apply irrigation 40 to 45 times over the base period for rice crops and ensure 3-4 inch of water per irrigation. Other than the Rice crops the field is irrigated up to the field capacity.

A surface water based irrigation project constructed by LGED named AGRONI, managed by a community (Water Management Somobai Shamitee Ltd.) was also assessed under this study. Only irrigation infrastructure was developed by LGED and overall management with operation, maintenance and troubleshooting was done by the Shamitee (Farmers' group). The system has 3120 m pucca (brick lined) channel network with 11000 m traditional earthen channels. The total command area under this scheme is 1620 hectare with the irrigation pumps having capacity of 3100 m³/hr. The soil of the scheme is clay and hence has a large moisture holding capacity. Farmers usually supply irrigation once a week, so number of irrigation over the base period is 16 to 18 times and the irrigation charge is Tk. 3300 per hectare for rice. In most of the land is planted with paddy and a small area is covered by non-rice crops that cost irrigation charge of 750 Tk./ hectare /irrigation.

Public Managed Irrigation Systems

An irrigation scheme implemented by Barind Multipurpose Development Authority (BMDA) has been evaluated by the study team. This Ground Water based irrigation scheme has been established by BMDA at Vashubihar, Shibgonj under Bogra district. The local people formed a Shamitee and pay Tk. 50 thousand as down payment but the system owner is BMDA. All repair maintenance including operation is done by BMDA but the pump operator and the coupon dealer are selected by the Shamitee and BMDA finally approves them officially. The system capacity is 180 m³/hr operated by a motor of 20 hp with buried pipe irrigation system. The total irrigation network is about 2900m of which 2440 m is buried pipe of 10 inch diameter and traditional earthen channel is 460 m. The total irrigation coverage is about 27 hectare. The soil type is clay-loam farmers usually apply irrigation 15 to 18 times over the base period for rice crops and ensure 2 inch of water per irrigation.

Other than the Rice crops the field is irrigated up to the field capacity and apply irrigations 2-4 based on the type of vegetables planted. Irrigation charge is Tk. 5200.00 and Tk. 1000 hectare for rice and vegetables respectively..

Privately Managed Irrigation Schemes

A shallow Tube well has studied by the study team adjacent to the Academy compound. The village name is Jamunna Hat Para in Shajahanpur Upazilla of Bogra District. The system owner is Mr. Md. Yusuf Ali, a medium farmer. The system capacity is 5 m³/hour operated by 5 hp motor. Area of coverage with this means was 6 ha during last season. Conveyance system under the scheme is traditional earthen channel and total network length is about 304 meter including main, secondary and tertiary canals. He collected irrigation charge of Tk. 8800.00 per ha for rice Tk. 350-700 per ha per irrigation depending on varieties of vegetables and other crops.

Irrigation efficiencies for different scheme were evaluated. In buried pipe irrigation system it was found to be 90%-95%, whereas in pucca channel 80% and in traditional one it is 60%-65%. In earthen channel water loss is much more than the other systems as seepage and overflow takes place frequently. The irrigation coverage (14.84 hectare /cusec) of BMDA managed schemes is higher than the other GW based schemes. Irrigation coverage in AGRANI scheme of LGED is the greater (52 hectare/cusec) due to heavy soil in the scheme. Irrigation depth depends on soil type, it's 380 cm in light soil and 106 cm in heavy soil. Irrigation charge is less in surface water based irrigation scheme i.e. Tk. 3350 per hectare but under the ground water schemes water charge of BMDA is less (Tk. 2100.00) compared to other schemes.

The coverage under public developed schemes is large compared to private owned schemes but the people are not interested to install such type of schemes due to high investment and clumsy management as well. So now a days individual schemes have become popular all over the country for its modest investment where the ground water table is within the suction limit of the pumps. But the areas where the GW table goes beyond the suction limit shallow tube wells are not effective. People of such regions have no other alternatives but to go for capital intensive deep tube wells. So government shall have to come forward to develop irrigation schemes where surface water is available during dry season. During expansion of GW based schemes Government Agencies should try to increase its coverage and efficiencies to ensure judicial use by introduction of buried pipe irrigation system.

PART 3: REPORT BY BHUTAN WATER PARTNERSHIP (BHWP)

NAMES OF INDIVIDUALS CONDUCTING ASSESSMENT: MR. **Ugyen Lhendup**

DATE OF ASSESSMENT: **16 June 2011**

Goal 2: Coping with Critical Water Challenges through Partnerships to Secure Mutual Goals

Activity 1

Water source management project at Umling

Output:

About 10 acres of degraded forest has been reforested which falls in the water catchment area. A new water storage tank has been constructed and protected. Community awareness on water and water source protection was conducted to over 180 people. Some critical watershed areas has been identified and fenced from animals and human interventions. An understanding was drawn among the local community that henceforth the community will own the watershed area and no activities like grazing, collection of firewood, timber or any other resources would be allowed in order to safe guard the water source.

The project had benefitted over 250 people at Umling village.

Outcome:

Due to the tank, there is no loss of water and as a result has increased amount of water for consumption. The impact of the plantation is yet to be discovered, however, the awareness and education program had made the local communities aware of water conservation and its scarcity

Activity 2

Training of school teachers and Non-formal Education Instructors on SODIS (Solar Disinfection of Water) for drinking water purpose

Output:

35 School Health teachers and 51 Non-formal Education Instructors from four districts trained on how to make their drinking water safe using SODIS technology. The participants expressed that such training will immensely benefit the schools and communities where people drink water directly from taps and streams. It is expected that water borne disease cases and infant mortality will be reduced. 86 participants were trained to use SODIS

Activity 3

Water source protection at Huntsho Community Primary School

Output/ Outcome:

The water source protection project had benefitted a school and a community with approximate population of 150 people. Over thousand trees were planted at the water source and some marsh lands were protected from animal grazing. Even the water storage tank has been renovated and protected. About 150 local people and 265 students benefitted

Goal 3: Reinforce Knowledge Sharing and Communications, Capacity Building

Activity 1

Awareness Poster on World Water Day 2011

Output:

With an objective to inform the urban dwellers on the importance of proper management of water resources, a poster that says how water is scarce and how people compete to avail the resource. The poster also contains the tips on how people should sensibly use water and avoid water shortage problem in the cities. Over 10,000 copies were printed and circulated nationwide.

Activity 2

World Water Day Celebration, 22 March 2011

Output:

The World Water Day celebration was in many parts of Bhutan and was attended by students and teachers, guests from the National Environment Commission, Ministry of Education, Municipality, Royal Society for Protection of Nature, Bhutan Water Partnership, local leaders and local communities.

Reports indicated that there were lots of awareness activities, stream cleaning, water source cleaning, talks on the importance of water, some literary activities like debate, quiz, slogan on water, speeches by students during morning assembly. Some schools have also involved local leaders and communities in the program in order to create awareness and share the responsibility.

65 Teachers, 1,400 students and about 150 local people participated in the WED.

PART 4: REPORT BY INDIA WATER PARTNERSHIP (IWP)

NAMES OF INDIVIDUALS CONDUCTING ASSESSMENT: **Dr. Veena Khanduri Executive Secretary and Mr. Mangla Rai**

DATE OF ASSESSMENT: **15th July, 2011**

Goal I: Promote Water as Key Part of Sustainable Development

Activity 1 : Preparation of Integrated Water Resources Development and Management Plan (IWRD&MP) for Wainganga river sub-basin by Western Zonal Water Partnership coordinating agency of IWP

Following the planning process for preparation of IWRD&MP for Wainganga river sub-basin in 2010 through negotiated approach after holding several meetings with the stakeholders to formulate the strategies for preparation of the plan with the financial support of India water partnership by the IWP Western Zonal Water Partnership Coordinating Agency, Gomukh Environmental Trust for Sustainable Development (Gomukh, Pune), the list of stakeholder consultation was shared with the State Government. While working on negotiated approach for Wainganga river sub-basin, Western Zonal Coordinating agency was also formally engaged by Water Resource Division, Government of Maharashtra for preparation of sub basin plans. In 2011, WZWP Coordinated agency started the work of data collection on hydrology, rainfall, water quality, environment, socio-economic conditions, meteorology, etc. for the Wainganga river basin which would form one of the major basis for preparing the plan.

Output:

After holding three consultation meetings with the stakeholders of Wainganga river basin and line departments of the Government of Maharashtra like Water Resources Department, Forest Survey of India, Agriculture Department, Fisheries Department, Department of Soil and Land use Survey, Geological Survey of India, Groundwater Survey and Development Agency (GSDA), the data from 24 Monitoring Stations (MSs) out of the 61 MSs in the river basin has been collected. The Data on the quality of the groundwater has also been collected and a list of villages suffering from fluoride, nitrite and iron poisoning has been prepared. Hydrological data like rainfall – autographic rain gauge and standard rain gauge stations, computed discharge, water level, evaporation, daily temperature, humidity, wind speed and wind direction, etc. for various locations in the Wainganga basin since 1994 (or since inception of the monitoring station) has also been obtained. The Watershed maps for the relevant sub-basins of the Wainganga project area have also been obtained.

Outcome:

The data on hydrology, rainfall, water quality, environment, socio-economic conditions, meteorology, etc. and watershed maps have been obtained from the various line departments of Government of Maharashtra, and the same are being analyzed and computed that would pave the path to prepare the IWRD&MP by Gomukh Trust, Pune to achieve the basic purpose of providing drinking water supply and sanitation facilities to the people who have been neglected or deprived of these facilities residing in and around the Wainganga river basin.



Meeting with Stakeholders regarding types of data to be collected

Activity 2 : New Rajasthan Water Policy (NSWP) - Capacity Building of Stakeholders, Farmers, PRI Officials, Water User Groups, State Govt. Officials, etc.

The New Rajasthan State Water Policy (NSWP) which came into force on 18th February, 2010 has incorporated Integrated Water Resource Management (IWRM) as part of the Policy.

Output:

Since the Rajasthan is very water scarce State and the main source of livelihood of the people is agriculture, it was decided by India Water Partnership in 2010 to review the new state water policy as to how the NSWP would be implemented and accordingly engaged IWP northern Zonal Partner, Centre for Environment and Development Studies (CEDSJ), Jaipur to undertake a small study. The CEDSJ with the support of India Water Partnership after thorough review of the NSWP organized two workshops at different locations to further identify the gaps in presence of NGOs, Water User Groups, PRI officials, State Govt. representatives, farmers, etc. The study recommended that capacity building of NGOs, PRI members, etc. who are working at ground level, is urgently needed, at the same time knowledge enhancement of Water User Groups, farmers, village community is necessary for better and effective implementation of the policy.

In continuation of India Water Partnership efforts during 2010 for building capacity of all stakeholders who would be engaged in implementation of IWRM in Rajasthan, IWP with the support of its another partner organization Jheel Sanskaran Samiti (JSS), Udaipur invited all Rajasthan based stakeholders who contributed in the review of new water policy and are also engaged in European Union supported IWRM State programme in Rajasthan for a Brainstorming session on IWRM organized at Udaipur, Rajasthan on World Water Day, 22nd March, 2011. Dr Veena Khanduri, Executive Secretary, IWP and Mr. Anil Mehta, IWRM expert strongly feels that IWP initiated and created a better understanding of IWRM in the context of Rajasthan by involving all stakeholders. The first step was to bring together local authorities and key stakeholders at one platform to take the lead in improving planning and management practices, drawing on each other synergy. IWP and JSS have also built a good relationship with State EU-SPP IWRM officials by inviting them in Capacity Development programme which would give a strong support to EU led IWRM process in Rajasthan.

In continuation of IWP's efforts for promotion of IWRM, a Capacity Development workshop for different stakeholders on IWRM, second in series, was organized on 22nd April, 2011 at Udaipur by JSS with the help of its strategic partners-Vidya Bhawan Polytechnic and Dr Mohan Sinha Mehta Memorial Trust. The workshop was attended by 200 participants, including NGOs, Water User Associations (WUAs), elected representatives of Panchayat Raj Institutions (PRIs); and farmers. Apart from that, the representatives of European Union-Rajasthan State Partnership Programme (EU-SPP) and officials of Water Resources Department, Government of Rajasthan also participated and interacted. Ms Julie Laudel (IWRM expert, EU-SPP) and Ms Magalie Vuillet (Junior IWRM expert, EU-SPP) participated in the workshop under the leadership of Mr. J M Roussel (Team Leader, EU-SPP).

The workshop had media coverage in 6 Hindi newspapers The prominent stakeholders (Sewa Mandir, Gandhi Manav Kalyan Samiti, CASA, SPWD, FES, ALERT, Wells for India, Arpan Sewa Sansthan, Praytna Samiti, Hanuman Vikas Samiti, Jagaran Jan Vikas Samiti, Chandpol Nagarik Samiti, Jheel Hiteshi Manch and Jwala Sansthan) who are already involved in preparation of IWRM plans at village level under the EU-assisted programme actively participated in the workshop.

The workshop was convened by Mr Anil Mehta and Mr Nand Kishor Sharma. A comprehensive but user friendly "IWRM Capacity Development Manual" prepared in Hindi was distributed to all the participants.

The workshop was inaugurated jointly by Ms Neelima Khetan (Ex CEO, Sewa Mandir), Mr. Riaz Tehsin (President, Vidya Bhawan), Prof Jagat S Mehta (Former Foreign Secretary, Government of India & President, JSS) and Mr. J M Roussel (Team Leader, EU-SPP). Ms Khetan explained various provisions of the state water policy in the context of IWRM and appealed for effective strategies and partnerships for successful implementation of IWRM. Mr. Anil Mehta gave his interactive presentation on “Understanding IWRM”; and elaborated GWP/IWP continued efforts for IWRM capacity building of different stakeholders. The workshop was conducted in seven sessions viz ; (i) Inaugural Session ; Technologies of Watershed Management and Water Resources Development; (iii) Panchyat Raj Syatem & IWRM; (iv) Inclusive & Paricipatory Development; Water Ethics of Rajasthan ; and Mechanisms for Conflict Management & Resolution; (v) Livelihood Issues ; (vi) IWRM & Ecological Concerns; and the last (vii) Valedictory Session.



Mr. Roussel, Ms Joulie, Mr. Anil Mehta and other Experts

During valedictory Ms Priyanka Singh (EO, Sewa Mandir), Mr V S Mehta (President, Dr M S Mehta Trust) and Mr J M Roussel (Team leader, EU-SPP) expressed the need of synergic efforts and collaborations for the successful implementation of IWRM. Mr Roussel expressed his willingness to partner in capacity development programmes of GWP/IWP; and for more collaborative efforts in the state of Rajasthan.

Outcome:

The capacity building workshop paved the way for adoption of a strong IWRM and effective implementation of new Rajasthan Water Policy in the State. Efforts of IWP by involving all stakeholders set the platform for achieving the IWRM objectives in the State of Rajasthan.

Activity 2 : Road Map on Integrated Water Resource Management (IWRM) in Odisha by Eastern Zonal Water partnership(EZWP)

Output:

On the occasion of World Water Day, with the support of India Water Partnership, the Eastern Zonal Water Partnership (EZWP) and Odisha Water Forum (OWF) organized a preparatory meeting on 22nd March, 2011 in Agragamee premises to discuss the Road Map prepared by Odisha State Govt with the technical assistance of ADB and to prepare a new Road Map for future with people’s participation. The meeting was also aimed to discuss about the present status of Integrated Water Resources Management (IWRM) in Odisha and future strategy. Convener of OWF Achyut Das presided over the meeting and said that the present developments in the water sector in the state of Odisha needs to be thought upon very carefully, whether they are good for the citizens of Odisha or in the long run they will marginalize the already marginalized ones. The guest of honor, Er. Sridhar Behera, Retired Engineer-In Chief said that Odisha is one of the states where the Water Policy provides first priority to drinking water and the second priority is accorded to environmental flows. Though Odisha is still a surplus state in case of most of the river basins, it is not far that we may become a deficit state if priority is not accorded to water conservation in the state. He opined that the water conservation should be taught to the school students. At least the future generation should be aware of the options before us. Er. Behera discussed on the different aspects of Integrated Water Resources Management (IWRM) and opined that flood management and prevention of pollution of water especially by the urban wastes should be a part of the IWRM strategy. Chief Speaker & Convener of Eastern Zonal Water Partnership (EZWP, India) Mr. Tapan Padhi (National Institute for Development) informed the house about the limitations of the IWRM Road Map already prepared by Odisha Government with the technical assistance of ADB. He said that without deciding the framework for the effective participation of

people in the implementation of IWRM it will prove to be a futile effort for the realization of the goal of IWRM. The proposed road map has stressed only of the economic sustainability and given only a leap service for the people's participation. The present road map needs substantial changes to be implementable in Odisha. Mr. Padhi stressed that there is a need for the Civil Societies to engage with the IWRM implementation process. Mr. Aurobindo Behera, IAS, Chief Secretary of Forest and Environment Department of Government of Odisha was the chief guest for the meeting. In his remarks he stressed on the coordinated efforts by the different departments, and common man for effective water resources management in the context of climate change. He opined that it is very important to critically analyze long term impact of different changes being proposed now.

Outcome:

As a future plan of action, Eastern Zonal Water Partnership (EZWP-India) in association with OWF will organize a workshop to discuss the opportunities and challenges thrown up by IWRM and to come out with a Road Map for the civil society organizations with respect to grounding of IWRM in the context of Eastern Zone. For this workshop, apart from line departments of Govt. of Odisha, PRI officials, civil societies' representative, the officials of ADB would also be invited.

Activity 3: Sensitizing community leaders and water regulators through PIM for improved and corruption free water management through Parimal Area Water Partnership (PAWP)

Around 50 villages on the bank of river Ramial and Indrajeet nallah under Parimal Area Water Partnership, Dhenkanal district, Orissa suffered from acute water scarcity again in the summer of 2011. No summer crops could be raised in these villages. Villages like Bhagirathpur and Kadua (close to Kalavila nallah) and Kanpal & Kamagara villages (close to Indrajeet nallah) also failed to raise even a small quantity of summer crops especially vegetables. Besides acute water shortage, 7 villages (Bhagirathpur, Kadua, Samatangi, Markata, Bijadihi, Mahulpal & Rekula under river Ramial and 2 villages; Kanpal and Kamagara under Indrajeet nallah) are recently facing new problems of land acquisition due to upcoming of RSB Metals Ltd. (Sponge iron plant) near Kalavila nallah and a Herbal garden of Central Medicinal Plants Board, Govt. of India which are going to affect more than 1000 acres of farm land, village and pasture land. These recent land acquisition activities have started putting pressure on the local people especially farming community and herdsman (who are members of the Local Area Water Partnership (LAWP) under PAWP).

As the 7 villages close to Kalavila nallah are about to lose their land due to upcoming steel industry mentioned above, which is also going to pollute water, air and soil, hence the representatives of LAWP are not in favour of the upcoming industry and would like to share their concerns and grievances with the larger stakeholders (Pani Panchayat, farming community, senior community leaders, local media and the State Govt.).

Output:

Keeping in view the critical water challenges in these villages which are further going to affect all aspects of life and livelihood, the PAWP organized Pre-Kharif season convention on 26th June, 2011. The participants consisted of senior farmers and LAWP representatives of 32 villages. Besides this, local media persons, Pani Panchayat, senior farmers, social activists, volunteers and senior community leaders were also present. The key discussions centered around water management issues, poor maintenance of Dandadhar Irrigation project of which 60 villages in the command area and another 60 villages down stream of river Ramial are not getting their due share/benefits for irrigation purpose. The decision in the convention was taken to talk to Executive Engineer-in-Charge of the project and to put this issue at the district level agenda through Members of Legislative Assembly, Member of Parliament. This task was entrusted to Convener and Co-Convener of the PAWP. During the convention the case of 3 sub-branches of Ramial at Kangeilo, Jagannathpur and Pipra was also raised. These branching out channels have remained a bane for the respective villages, especially to the farming communities when they are in full flow during rainy season. As a safe guard, there have been petitions and public urges for construction of small bridges and stone bunding to which the authorities have

not yet responded positively. In this regard, the PAWP officials have decided to organize a private survey at these 3 places to present/press for needful action with the Executive Engineer-in-Charge and to put in the district level development agenda through Members of Legislative Assembly and Member of Parliament.

The case of Kalavila and Chadeichhada nallah was also presented by the Convener of Kadua-Bhagirathpur, LAWP. The huge potential of water flow in these 2 streams just goes waste when drained into the Ramial without any irrigation structure on these. A few local farmers only use a bit of it through raw manual mechanism of lifting water to their small crop patches on their own arrangement. The 2 nallahs with a total stream-length of about 18 kms should have 4-5 small water diversion/temporary storage structures to make best use of the available water.

In the convention it was also resolved to rename Parimal Area Water Partnership as People's Area Water Partnership.

Outcome:

It was unanimously decided in the convention that the above issues would be taken up with Executive Engineer-in-Charge of Dandadhar Irrigation project with the support of Members of Legislative Assembly and Member of Parliament for grievances redressal.

MEDIA COVERAGE: 'THE SAMAYA' / DATED 29TH JUNE 2011



'THE SAMAYA', Dtd.29/06/11

Kamakhyanagar, 28/6 (Bureau): There has been organized a convention of farming people & community leaders at Sabhaghar of New Rekula Club facilitated by India Water Partnership-IWP and Arun Institute of Rural Affairs-AIRA. This convention was attended by senior farmers, community leaders, serving & ex-PRI members, social & environmental activists and rural media representatives. Also present were Mr. S.K.Panda, Director, AIRA & Head of PAWP and Mr. G.B.Panigrahi, Chief Program Coordinator of the facilitating agency. Mr. A.Rath, Development researcher presented a detailed water-scenario of the Kamakhyanagar region and of the district highlighting the high wastage of the areas/districts' water potential. He also facilitated the participation of the LWP representatives and the specialists in the form of senior farmers and village-planners. The convention discussed the water issue of the sub-district with focus on domestic water & farm water. The participants also resolved to do the needful liaison & advocacy with the water officials and development planners.

Goal 2: Coping with Critical Water Challenges through Partnerships to Secure Mutual Goals

Activity 1: Sustainable Water Resources Management Approaches to effectively address Adaptation to Climate Change in villages of Jharkhand

To use IWRM approaches for effectively address adaptation to climate change and other emerging changes at national level, India Water Partnership supported one of its Northern Zonal Water Partner (NZWP) namely; Action for Food Production (AFPRO), New Delhi to undertake a study on **Sustainable Water Resources Management Approaches to effectively address Adaptation to Climate Change in villages of Jharkhand**". Under this study, networking with local agencies/organizations/institutions, research organizations have been done to understand the practices of using low cost water saving technologies promoted by the organizations/institutions to address adaptation to climate change. As the Jharkhand state is most vulnerable because of the heavy reliance on rain fed agriculture, poor level of water control and poor replenishment of reservoirs. Drought and floods are particular threats to food security and are expected to become more frequent, more intense and less predictable as a consequence of climate change. Hence, there is a need to create awareness on water conservation methods at large scale. As part of this study, after networking with more than 8 agencies/organizations/institutions, AFPRO staff visited the sites and organized focused group discussions with the community to collect information on community practicing water saving technologies adopted and promoted by different organizations. Till June, 2011 8 case studies on water savings and water harvesting technologies adopted by the people in Harazibagh, East Singhbhum, Latehar, Gumla and Ranchi districts of Jharkhand State under different projects of Government and State Government, has been documented by AFPRO.

Output:

These case studies provide insights on appropriate technological options, process followed for execution and lessons that can be drawn for replication. These cases reflect (i) Ground Water Recharge through Rooftop Rainwater Harvesting – Improving Source Sustainability (Case study of **St. Albert's College Ranchi city**), (ii) System of Rice Intensification (SRI) Cultivation: More Rice with Less Water (Case study of **Turkatar Village, Balumath Block, Latehar District**), (iii) Increase Storage Capacity of Check dam ensures protective Irrigation (case study of **Dasokhap village** located in the **district of Hazaribag**), (iv) Photovoltaic Water Pumps: Alternative Option for No Electric Zone (Case study of **Kanabandh Village, Churchu Block, Hazaribagh**), (v) Drip Irrigation system: Potential Water Saving Agricultural Technique (Case study of **Village Gohala, Block Musabani, East Singhbhum**), (vi) Harvest and conserve rainwater for sustainable ground water management (Case study of **Loreto Convent School, Ranchi**); (vii) Wells as a feasible mode of harvesting & conserve water (Case study of **Orbenga village, Gumla District**); and (viii) Water level indicator to save water and electricity (Case study of **Ranchi City**).



Recharging of a well in Loreto Convent School, Ranchi through roof rain water harvesting

Outcome:

Discussions with community and collected best practices revealed about crop planning (Sehbhagi variety of paddy) developed by Central Upland Rice Research Institute for Upland Regions, SRI practice, construction of channels for better irrigation which is in use by the farmers.

Expected Outcome:

The findings and experience of other partners of IWP would help to document the evidence based water saving technologies which would be shared by IWP and AFPRO during the Sensitization workshops in Jharkhand with officials of Water Resource Department, PRIs, Water User Groups and Public Health Engineering Department officials in the month of August and September 2011.

Activity 2: Water Conservation and Best Water Management Practices on World Water Day

The city of Meerut, Uttar Pradesh (UP) well represents the worsening water scarcity and water contamination. The increasing demand for water gave way to the tube wells which in turn fast depleted the ground water table. The water table has now fallen down below 20 meters. Not only is depleting ground water table, the ground water contamination also another area of concern. Keeping in view the focus of the 2011 theme “Water for Cities: Responding to the urban challenge, the NEER Foundation (IWP partner) with the support of IWP undertook series of events for a period of 5 days commencing from 22nd March, 2011, the World Water Day by involving greater and active participation of community, school children and the school teachers.



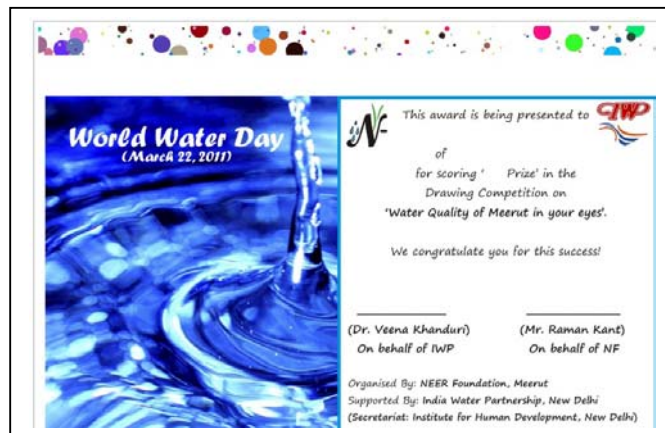
Safe Water Campaign by Students of Meerut on World Water Day

Output:

Water Audit in 10 Schools of Meerut

As part of the series of events, Water Audit in 10 schools of Meerut was conducted by the students themselves. The audit information was collected on selected parameters such as; uses of water, what kind of practices are being adopted by the school to store water, use of rainwater harvesting, and leakage in water taps.

Vidya Global Public School, Meerut was recognized as the best school, making best of every drop of the falling rain through rainwater harvesting structure and a waste water treatment plant installed in their school campus. The harvested rainwater is used for various purposes and is sent down to aquifers, contributing to the increase in water level of the area. The treated waste water is used in the gardens. Second was Godwin Public School and Army Public School came third. All these schools were provided with a certificate, poster and an appreciation letter for their noble cause by India Water Partnership.



Sample copy of the Certificate distributed among the successful students of the drawing competition

PGMT International School students to decide if Kali is a river once worshipped or just a drain – Water Quality Testing by School Students

Students of the school were taken to the Kali River in a group accompanied by their teachers. They were educated on the historical importance, present pollution existing in the river, reasons behind the pollution. ‘Seeing is more than believing’, such is the saying. So, the students were also made to test water through water testing kits provided by the organization. They tested the water on few parameters and found the harmful levels of the pollution.



Newspaper cutting : Students of PGMT International School taken to Kali River for water testing

Water testing by students of PGMT International School in Kali River where level of water pollution/contamination is clearly visible

Outcome:

Water audit has played an important role in sensitizing the students, school management staff and also for water management at household level. After these events, other schools have approached the NEER Foundation for installation of rainwater harvesting structures in their premises.

Goal 3: Reinforce Knowledge Sharing and Communications, Capacity Building

Activity 1: Sensitization of community and students on water conservation and water quality through group of people, drawing competition, hair saloons, Vehicle Service Centres, students

As reported vide Activity 2 under Goal-II that on the occasion of World Water Day, IWP and its partner organization NEER Foundation, Meerut undertook series of events for a period of 5 days from 22nd March to 26th March, 2011, the following activities with regard to water conservation and water quality were undertaken :

Output:

- **Awareness Meeting with the Good Morning Club of Meerut**

Good Morning Club of Meerut is a group of around eighteen people who meet every morning to discuss about the nature and environment. A meeting was organized by NEER Foundation with the club members on the issue of ‘Water Quality of Meerut and its implications on the residents of Meerut’. It is a fact that the water quality of Meerut is decreasing rapidly and that studies conducted by NEER Foundation have confirmed presence of heavy metals and pesticides in the drinking water sources. These findings were discussed in the

meeting and strategy was planned to deal with the increasing water contamination in Meerut, with the district administration.

•Drawing Competition and Sensitization of students at BDS Institute

A drawing competition was organized at BDS Institute, Jagriti Vihar, Meerut where about 50 schools of Meerut participated. The topic for the competition was 'Status of Water Quality of Meerut in your eyes'. Students came up with impressive drawings and showed realistic pictures of Meerut's water quality in their illustrations.

The best drawings were awarded with a certificate and appreciation letter from India Water Partnership. The drawing competition was followed by a presentation and documentary screening to educate and sensitize 200 students of the institute on 'Clean Water for a Healthy World'.

•Awareness Generation through Saloons and Vehicle Service Centre's

Three prominent hair saloons namely Hair Apeel at Samrat Shopping Mall, Meerut. The Head Master and Sunrise Hair Saloon at Shastri Nagar, Meerut were visited and educated on water education. The organisation then discussed their water usage in their daily activities. It was shocking to learn that these saloons waste a large quantity of water. They were motivated to change their habits to use water and become 'water savers'.

Similar exercise was done with three prominent vehicle service centres namely Vikrant Service Centre, Rajsneh Automobile Service Centre and Fairdeal Service Centre located at Meerut. During discussion, it was learn that the water usage per day of Vikrant is about 605 litres of water per day and that of Rajsneh and Fairdeal is about 1130 litres.

The heads of these centres and the workers were educated about the depleting water levels and the need to conserve fresh water as and where possible. They were urged to :

- Avoid cleaning their centres with running water through pipes.
- Install water treatment plant and recycle water as much possible, using it for some purpose.
- Use pressure pump while washing the cars which saves about 30 percent of water to what is being used presently.
- Adopt rainwater harvesting.

•'Water Walk' by students of CCS University, Meerut

A 'Water Walk' was organised with the participation of the students of CCS University, Meerut. Informative quotes and messages were delivered through placards. During the walk, local residents were motivated to conserve water through filling of Water saving pledge forms and they were informed about the simple ways of keeping water quality healthy which they can practice at home like boiling of water, proper storage source etc.

•Meeting with the residents of Jalalpur village

Jalalpur village is located on the banks of highly polluted Kali River in Meerut district. This village is in the clutches of pollution and is witnessing continuously increase diseases and deaths.

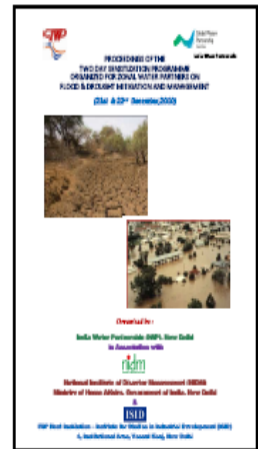
On the occasion of World Water Day, a meeting was organised at the village to plan out some plan of action to be followed by NEER Foundation towards restoring Jalalpur.

Outcome:

- (i) 200 students of 50 schools in Meerut were sensitized about water conservation, using of safe drinking water
- (ii) Hair saloons & Vehicle Service Centres were sensitized and educated for saving water through various means
- (iii) Community sensitized and educated for water conservation and use of safe drinking water.

Activity 2 : Dissemination of Report on Two Day Sensitization Programme for Zonal Water Partnership of IWP on Flood & Drought Mitigation and Management

A two day Sensitization Programme for Zonal Water Partners of IWP on Flood & Drought Management and Mitigation which was organized on 21st & 22nd December, 2010 in association with Institute for Studies in Industrial Development, New Delhi and National Institute of Disaster Management, Ministry of Home Affairs, Government of India was sent to all the 41 participants, all the IWP partner organizations, all the GWP partner organizations from India and senior water specialists/experts in India in June, 2011. The report was also sent to Regional Office, GWP-South Asia and the same is uploaded on GWP-South Asia website and it is also available on IWP website.



Output/Outcome:

Coordinators/representatives of Zonal Water Partners who benefitted from the two day sensitization programme will carry the messages forward and disseminate their knowledge down to the field level functionaries, farmers and the community in their area of operation. IWP partner organizations and GWP partner organizations from India would also carry forward the same message among their staff, field functionaries, farmers and community in their respective area of operation.

Activity 3: Workshop on Status of Integrated Water Resource Management (IWRM) and its effective implementation in Rajasthan (India) on World Water Day (22nd March, 2011)

Output:

A one day Seminar-cum-Workshop on Status of Integrated Water Resource Management (IWRM) in the State of Rajasthan and for effective implementation of New State Water Policy was organized on World Water Day i.e. 22nd March, 2011. This one day workshop was the continuation of India Water Partnership (IWP) efforts during year 2010 for promoting IWRM in the State of Rajasthan. In the second phase during 2011, IWP supported Jheel Sanrakshan Samiti, Udaipur to further work on strengthening the Water User Groups (WUGs), NGOs, PRI members, Engineers and Administrative officers in Rajasthan by building their capacities for proper and effective implementation of new State Water Policy and promoting IWRM. Towards this endeavour, the JSS organized the above Workshop-cum-Seminar on World Water Day (22nd March, 2011) along with its other strategic partner organizations; Dr M S Mehta Memorial Trust and Vidya Bhawan Polytechnic College. Former Foreign Secretary, Govt of India, Mr. Jagat S Mehta, Padam Bhushan Award Winner inaugurated the workshop.





Participants at the Workshop-cum-Seminar

The workshop was attended by State government representatives and other stakeholders. Dr R C Purohit, Dean, College of Technology and Engineering, MPUAT, Mr B R Khaturia, Water Resources Deptt, Govt of Rajasthan, Mr G P Soni, Former Supdt Engineer, Water Resources, Deptt, Govt. of Rajasthan, Mr O P Mathur, Former Director, Central Ground Water Board, Govt of India, Mr A S Jodha, KVK Udaipur were the eminent officials present in the workshop. Mr. Jagat S Mehta emphasized the need of synergic and continued efforts of government, civil society and PRIs for effective implementation of Rajasthan New Water Policy. The proposed water regulatory authority shall have representation of the civil

society, he appealed to the Government. Mr. Anil Mehta explained the concept of IWRM tree. He said that in order to grow and establish the IWRM, four essential nutrients/inputs are required viz.(1) Stakeholder Participation, (2)Enabling Environment, (3)Eco-technology and 4) Good Governance. Mr Mehta also conveyed the message of Prof. S R Hashim, President, IWP and Dr Veena Khanduri, Executive Secretary, IWP who has taken initiative to take up first review of State Water Policy of Rajasthan, status of IWRM in Rajasthan and effective implementation of the new water policy as a part of India Water Partnership Strategic Plan to focus on how IWRM can be translated effectively by empowering and capacity building of all stakeholders.

During seminar, the participants in different groups reviewed various provisions of the new State Water Policy and expressed gratitude towards the Rajasthan State government for including the IWRM as guiding approach for the water resource development in the state. The seminar concluded with the recommendation that to get the policy implemented at grass root level, and get reflected in all development plans, the capacity building of all stakeholders is a pre- requisite. The participants unanimously recommended that JSS with the support of IWP should organize capacity development workshops for stakeholder groups in the coming three months.

Outcome:

Capacity building of stakeholders (Implementing NGOs, farmer groups and water user groups) for effective implementation of IWRM in the New water policy of Rajasthan planned and organized in the month of May, 2011. European Union state partnership programme (EU-SSP) officials working on IWRM plans also participated in the capacity building programme which generated synergy to help State government in its effective implementation of IWRM.

Activity 4: President, IWP and its other Board members as member of Drafting Committee of India's New Water Policy

The Ministry of Water Resources, Government of India held several meetings, workshops in 2010 with academicians, parliamentarians, policy makers, experts, prominent NGOs working in water sector for reviewing the current water policy with regard to declining water trend and demand for future. These meetings/workshops were also attended by IWP office bearers, Prof. S R Hashim (President), Dr. Veena Khanduri (Executive Secretary), Prof. Kamata Prasad (former Vice President), Mr. S C Jain (Joint Secretary), Mr. M P Vasimalai (Board member), Mr. A D Mohile (former Joint Secretary & Former Chairman, Central Water Commission, Govt. of India), IWP & GWP partner organizations who fed their substantial inputs to the draft New Water Policy circulated by Ministry so that a good water policy can be framed. In 2011, the Ministry has constituted a Committee to prepare India's New Water Policy. Prof. S R Hashim (President IWP), Mr. A D Mohile (former Joint Secretary, IWP & former Chairman, Central Water Commission, Govt. of India) and Mr.

S C Jain (present Joint Secretary, IWP) has been included in the drafting Committee to prepare India's new water policy.

The first meeting of Drafting Committee comprising of Prof. S R Hashim (President, IWP), Mr. A D Mohile (former Joint Secretary, IWP & former Chairman, Central Water Commission), Mr. Ashok Jaitly (GWP member & Distinguished Fellow, TERI), Mr. S C Jain (present Joint Secretary, IWP), Dr. Tushhar Shah (GWP Technical Committee member), Prof. Subhash Chander (former Prof. Water Resources, Indian Institute of Technology, New Delhi) and Prof. Samar Datta (Indian Institute of Management, Ahmedabad, Gujarat) was held at Ministry of Water Resources, Govt. of India on 27th June, 2011.

Output/ Outcome:

The Committee for preparing the National Water Policy for India has been constituted and started working.

Activity 5: IWP Newline disseminated among IWP and GWP partners

As a part of the activities under reinforce knowledge sharing and communication strategy, IWP prepared three types of news-lines based on the year 2010 reports submitted by its partner NGOs, and the same have been circulated among IWP partners, GWP partners (in India) and senior water experts of India. One of the news-line i.e, Promotion of IWRM by Capacity Building of Farmers and Water Users Groups by Parimal Area Water Partnership which was sent to Regional Office, GWP-South Asia is also available on its website.

Goal 4: Build a More Effective Network

Activity 1: Strengthening of Parimal Area Water Partnership (PAWP), Dhenkanal District, Odisha by Arun Institute of Rural Affairs (AIRA) supported by India Water Partnership (IWP)

With the active support of the IWP and the continuous and dedicated efforts of AIRA promoting PAWP since 2008, the PAWP came into existence on the 15th of June 2010, covering river Ramial and Indrajeet sub-basins in the Dhenkanal district of Orissa, involving 45 villages. The PAWP now covers an area of 140 km². Under the PAWP, two Local Area Water Partnerships (LAWP), one each in the Northern Ramial and Southern Indrajeet clusters, comprising of eight Micro Area Water Partnerships (MAWP) in each LAWP have been constituted.

AIRA, with the technical and financial support of the IWP, is constantly strengthening the PAWP by holding periodical meetings with the members of the PAWP, farmers, Water User Groups, women, etc. to educate them on the management of irrigation systems, empowering them to maintain water bodies, evolving mechanisms for water sharing and defining allocation priorities, encouraging them to follow best practices on water management, linking them with other stakeholders, integrating gender dimensions, better crop management, inculcating the habit of voicing demands from line departments of the State Government, optimizing community participation in the planning process, water conflict resolution, checking water corruption, circulation of reading materials on water use efficiency, media coverage, conducting workshops / seminars on water conservation measures at block and district level, etc.

In 2011 (till June) AIRA has focused to strengthen and broaden the scope of PAWP with the envisaged activities such as ; Strengthening / consolidating the MAWPs & LAWPs and also the PAWP constituents as a whole ; Mapping of industries and water sources for reference (with water sources already visibly polluted and also likely to be polluted); bringing all stakeholders at one platform who are affected or likely to be affected by the growing water pollution/shortage/misuse; Capacity Building trainings on Irrigation Management System & Campaigns (additional rounds); Attempting at holding negotiations with local public bodies, govt. administration for needful action; Involvement of local media and anti-pollution action groups on water as right to life; documentation, monitoring & follow-up.

On 30th March, 2011, PAWP volunteers and AIRA staff were involved in a district level convention of peasants on water and farm sector issues under the title of Krishak Kranti Samabesh. This mega event required elaborate contact and mobilization of peasants, farm-sector workers and community leaders where more than 2000 people were present at the Dhenkanal stadium where the convention took place.



*(Farmers Convention at Dhenkanal stadium on water & farm sector issues)
(Published in local media SAMBADA on 31/03/2011 in Oriya language)*

Activities by PAWP in May, 2011

(a) Discussions with the Minor Irrigation Department of Govt. of Odisha by the PAWP officials

- i) LAWP representatives Binayananda Sahoo, Barun Sahoo and Dibakar Sahoo met and discussed with the Junior Engineer & Assistant Engineer of Minor Irrigation Department, Kamakhyanagar to take up additional minor structures (new as well as repair of water harvesting/holding) on the Indrajeet Nallah before onset of Monsoon.
- ii) PAWP representatives Pramod Sethy, Parshuram Behera, Rabi Mallik and Convener Pradeep Sahoo met and discussed the water scarcity (short supply problem) with the Executive Engineer, Minor Irrigation Department, Dhenkanal Division with a request-cum-memorandum on behalf of the farming people of PAWP.
- iii) Also PAWP Co-Conveners G. S. Das and N. Mohapatra and members P. R. Behera and B. Sahoo have put in applications for technical information inclusive of development plan on the above water sources with the Executive Engineer, M.I. Division under RTI provisions.

After receipt of information on the development plan from district irrigation officials, the PAWP would discuss the issue and share the information with all stakeholders (farmers, water user groups, local panchyati raj representatives, etc.) by the end of June or early July to press for needful action by the sub-district/district/state level water authorities. (PAWP already held pre monsoon farmers’ convention on 26th June, 2011 to discuss the water issue related to the sub-district with focus on domestic water & farm water. The participants also resolved to do the needful liaison & advocacy with the water officials and development planners.

(b) PAWP Participation & Collaboration in meetings, consultations, conventions:

i) PAWP members participated in local consultations/meetings of “Dhenkanal Zilla Krushi Paribesh Suraksha Parishad” (covering the district) and “Parimal Swarajya Vichar Manch”, a Gandhian-Sarvodaya forum (covering the sub-district) on the water-environment issue and action.

ii) PAWP members also participated in the sub-district level consultation on water, environment and livelihood issues held at Aluajharan on the 22nd of May 2011. PAWP Convener Shri P. Sahoo has been nominated as an adviser to the above forums.

ii) LAWP members P. Behera, P. K. Sethy, R. N. Barik, R. C. Behera and D. Khilar participated in the “Shree Farmers & Water Management” convention jointly organized by the District Agriculture Office (Dhenkanal) and a local NGO ISWO at the Old Zilla Parishad Hall, Dhenkanal on 11th of May 2011.

Output/ Outcome:

Farming community in the PAWP aware about their water rights, water sharing, better crop management practices, water conservation methods, increase in voicing demands of the farmers/communities with the stakeholders/line departments of the State Government.

Activity 2: Participation in Workshops, Meetings, Seminars, etc.

(i) Participation of Dr. Veena Khanduri, Executive Secretary, IWP in a Conference on “Transforming Municipal & Industrial Water Landscape (12th February, 2011) at New Delhi

Confederation of Indian Industry (CII) organized a two day conference on “**Transforming Municipal & Industrial Water Landscape**” at New Delhi on 11th & 12th February, 2011. This two day conference has showcased all the latest advancements in municipal and industrial sectors. In the CEO’s Meet on Water organized on 11th February, 2011, Mr. Suresh Prabhu, GWP Ambassador participated as a “Panelist” and expressed his views on issues & challenges in transforming municipal and industrial water landscape. Dr. Veena Khanduri, Executive Secretary, IWP participated in the technical sessions on Water Purification Technologies and Innovative Saving Products in Domestic, Municipal & Agriculture sectors on 12th February, 2011. GWP-India partner organizations like Jain Irrigations and Sulabh International & Social Reforms also participated and shared their views and experiences with national and international participants. Mr. Vincent H Pala, Hon’ble Minister of State for Water Resources, Government of India was the Chief Guest during the conference. Mr. Dhruv Vijai Singh, Secretary, Ministry of Water Resources, Government of India and Mr. Arjun Thapan, Special Senior Advisor (Infrastructure & Water), ADB were the eminent persons present in the Conference.

(ii) Participation of Dr. Veena Khanduri, Executive Secretary, IWP in Conclave on Business and Climate Change

Dr. Veena Khanduri, Executive Secretary, IWP participated in a Conclave on Business and Climate Change organized by CII-ITC Centre of Excellence for Sustainable Development on 15 March 2011 at Le Meridien, New Delhi. Mr. Suresh Prabhu, GWP Ambassador gave the keynote address at the session on “**Investing in Climate Change Solutions**” at the Conclave.

(iii) Participation of Dr. Veena Khanduri, Executive Secretary, IWP in a Workshop on “Nanotechnology for Safe Water : Strategies and Partnerships to benefit the Bottoms of the Pyramid

On the initiative of Dr. K Vijaya Lakshmi, Alternate R C Member, India & Vice President, Development Alternatives (DA), an IWP partner a workshop on “Nanotechnology for Safe Water : Strategies and Partnerships to benefit the Bottoms of the Pyramid” was organized by DA with the support of Department for International Development (DFID) and Department of Science & Technology (DST), Govt. of India was

organized at India Habitat Centre, New Delhi on 21st April, 2011. Dr. Veena Khanduri, Executive Secretary, IWP participated in the workshop. Officials of DST, Centre for Nano Materials, Indian Institute of Toxicology Research, World Bank, The Energy & Research Institute (TERI), US Embassy and many research institutions and industry representatives from TATA Chemicals, Eureka Forbes, Thermax participated in the workshop. Some of the IWP partner organizations also participated. The DA has been researching the potential of nanotechnology to provide safe drinking water to the Bottom of the Pyramid (BoP) population. In this context, DA organized two workshops one at Bangalore on 4th March, 2011) and the second on 8th March, 2011 in association with DST. This workshop was third and the concluding workshop in order to move forward and strategize workable models to get feasible nanotechnology solutions for water purification to the BoP. The workshop concluded with the note that learning from these workshops would be taken forward to a potential Phase-II DFID action research programme. This would involve the experts in multi-stakeholder processes to evaluate and pilot feasible approaches to enable nanotechnology to reach the BoP. The results of this action research would be widely shared and disseminated.

(iv) Participation of Dr. Veena Khanduri, Executive Secretary, IWP in India Water Forum-2011

India Water Forum, 2011 was organized by The Energy and Resources Institute (TERI), New Delhi in association with the Department of Drinking Water and Sanitation, Ministry of Water Resources; Ministry of Rural Development; Ministry of Urban Development and Department of Science and Technology, Ministry of Science and Technology, Government of India to address the dynamics of water and climate change in the context of India and South Asia Region from 13-15th April 2011 at India Habitat Center, New Delhi. The India Water Forum 2011 was aimed at exploring new strategies and technologies for water security while being eco-friendly and ensuring sustainable development. This forum was attended by policy makers, researchers, industrial experts and water practitioners. The forum was inaugurated by **Md. Hamid Ansari**, Hon'ble Vice President of India, **Dr Farooq Abdullah** Hon'ble Minister Ministry of New and Renewable Energy Government of India, **Mr Salman Khurshid** Hon'ble Minister Ministry of Water Resources Government of India, were the distinguished guests.

Dr. R K Pachauri, Director-General, The Energy and Resources Institute, **Mr Ashok Jaitly** distinguished Fellow and Director, Water Resources Division of The Energy and Resources Institute, were also present during inaugural and thematic discussions. **Mr. Suresh Prabhu**, GWP Ambassador & Former, Chairman, GWP-South Asia, Mr. Santosh Deshmukh from IWP partner organization Jain irrigations, Dr. Veena Khanduri, Executive Secretary, IWP and Dr. Jasveen Jairath, RC member India participated and actively contributed in this 3 day International Forum. The India Water forum 2011 addressed the dynamics of water and climate change, and deliberated on significant issues specific to water security, means to resolve the same by investment in natural infrastructure, monitoring efficient usage, application of new technology etc. This forum was attended by more than 200 International and National participants.

(v) Participation of Dr. Veena Khanduri, Executive Secretary, IWP in AWIS Partners Workshop organized by Water Integrity Network (WIN) at Berlin, Germany

Dr. Veena Khanduri represented Global Water Partnership-South Asia (GWP-SAS) & India Water Partnership (IWP) in AWIS Partners workshop organized by WIN Secretariat at Berlin, Germany on 19th & 20th May, 2011. Representatives from nine organizations participated in the workshop.

The Annotated Water Integrity Scan (AWIS) partners' workshop was the first step in establishing collaboration with the partners that recognize the added value of AWIS and are prepared to include the same in their work plans. Mr. Teun Bastemeijer, Director of WIN gave a brief of the AWIS which was developed in 2010 in collaboration with WIN Secretariat, Germany and International Water and Sanitation Centre, The Netherland. Explaining to the participants, Dr. Teun said that AWIS responds to the call made in 2008 Global Water Corruption Report for participatory and qualitative tools to analyze corruption and enhance integrity of water

services development and delivery. The aim of the workshop was to share the AWIS tool with partner organizations, receive the feed-back from them and discuss potential improvement of the methodology, plan the dissemination of AWIS and define the next steps.

Participants were divided in two working groups. Necessary improvements of the AWIS manual were identified by the first group and it was agreed that promotional material and a number of short documents should be produced to make the AWIS tool more accessible to interested groups of people. Second group discussed potential contexts, in which the tool could be applied, the stepwise approach for the preparation of an AWIS workshop and the necessary follow up. The different partner organizations committed to explore their programme portfolios and activities at the country level. Dr. Ulrike Pokorski, GIZ suggested that a WIN representative could present AWIS at GIZ to find ways as how to integrate AWIS in to GIZ programmes. Dr. Veena Khanduri, GWP- South Asia/ IWP suggested that Maharashtra and Rajasthan would be potential states in India to implement AWIS in GWP/IWP country programmes.

It was decided that the experiences made with AWIS will be shared and the partner organizations will contribute to further developing the methodology and producing a final AWIS manual.

Output/ Outcome with respect to Participation in Workshops, Meetings, Seminars, etc.:

The current activities/plans and objectives of IWP, GWP-South Asia and GWP was shared with the potential participants in order to build a more effective network.

Output/ Outcome with regard to WIN workshop :

A concept note on Drinking Water Supply in Maharashtra (*A Case Study in Corruption in the Water Sector*) prepared with the help of IWP Western Zonal Water Partnership (WZWP) Coordinating Agency was submitted to WIN for testing AWIS tool on water corruption. WIN has appreciated the concept note and has agreed to fund a small study to IWP (WZWP) Coordinating Agency.

PART 5: REPORT BY NEPAL WATER PARTNERSHIP (NWP)

NAMES OF INDIVIDUALS CONDUCTING ASSESSMENT: MR. **Surya Nath Upadhyay**

DATE OF ASSESSMENT: August 2011

Goal I: Promote Water as Key Part of Sustainable Development

Activity 1: Documentation and Review of the Laws relating to Ownership and Right to Water

Under the programme entitled "The Law on Ownership and Right to Water" GWP Nepal/JVS has appointed a Research Consultant to review the existing laws particularly in relation to the ownership and the right to use water.

Output/Outcome:

The draft report on 'Law on Ownership and Right to Water' submitted by the researcher is under peer review. The finalization of the report and the dissemination of the information will be done through workshop. The workshop is expected to be participated by experts who shall dwell upon the findings of the study and suggest measures not only to improve the reports but also to take future course of action in this regard.

Activity 2: Documentation and Review of the Laws and Legislation relating to Groundwater

A Research Consultant was assigned to document and review the existing laws particularly in relation to extraction and utilization of groundwater under the program entitled "The Law and Legislation on Groundwater".

Output/Outcome:

A draft study report is expected to be completed by end of July. After the draft is received it shall take the same course of action as activity No. 1.

Goal 2: Coping with Critical Water Challenges through Partnerships to Secure Mutual Goals

Activity 1

GWP Nepal/JVS appointed a Consultant to prepare/write a book on 'Climate Change and Livelihood Challenges in Nepal' in local (Nepali) Language. The book will be published by the end of this year.

Output/Outcome:

Since the book is in the local (Nepali) language, the book is expected to make the local people/public clear about the concept and issues of climate change. The draft book is expected within a month's time.

Goal 3: Reinforce Knowledge Sharing and Communications, Capacity Building

Activity 1: Preparatory Work for River Conservation Workshop and IWRM Training

The preparatory work has been undertaken to conduct a Training on IWRM and two-days Seminar on River Conservation with special focus to Tinau River in Rupendehi district of Nepal. GWP Nepal/JVS and Nepal Engineers' Association, Lumbini Regional Centre, Butwal are jointly organizing the programmes.

Output/Outcome:

Tinau is one of the rivers in the western part of Nepal which is in dilapidated condition. Its sand and gravel is extracted randomly. Its banks are being encroached by landless people. It is under a serious threat.

Workshop will be inaugurated by the Minister elected from that area and a wide range of stakeholders to be participated. This training workshop is expected to raise the application of IWRM methodologies. The outcome of this seminar will be documented for further research and activities.

Goal 4: Build a More Effective Network

Activity1: Preparatory Work for Launching New Local Water Parliaments

GWP Nepal/JVS is in a process to expand and strengthen Local Water Parliaments (LWP).

Output/Outcome:

Some preparatory works are underway to launch two new LWPs i.e. Jog Mai and Devi Mai in Ilam district of Eastern Nepal.

PART 6: REPORT BY PAKISTAN WATER PARTNERSHIP (PWP)

NAMES OF INDIVIDUALS CONDUCTING ASSESSMENT: MR. **Karamat Ali**, Country Coordinator, PWP
Mr. Naseer Ahmad Gillani, Chair, PWP

DATE OF ASSESSMENT: **9th July 2011**

Goal I: Promote Water as Key Part of Sustainable Development

Activity 1:

The Ministry of Environment, Government of Pakistan is a very supportive partner for GWP-Pakistan, under the sponsorship of UNDP, One UN Joint Program on Environment (JPE), prepared the Pakistan National Climate Change Policy in April 2011 which provides a framework for addressing issues that Pakistan faces or will face in future due to the changing climate.

Output

The report of the Planning Commission's Task Force on Climate Change to which Chairman PWP is a Member, was used as the building block for preparation of this policy document. In collaboration with PWP, extensive consultations with provinces, federal institutions and civil society were carried out which provided valuable inputs to the policy. As a second step, PWP has planned to pick some of the areas for implementation jointly with the Ministry of Environment. This policy provides a comprehensive framework for the development of Action Plan for national efforts, adaptation and mitigation of climate change impacts.

Outcome

National Climate Change Policy document containing workable recommendations on Climate Change adaptation; mitigation; capacity building & institutional strengthening; awareness raising; international & regional cooperation, raising financial resources; transfer of technology and implementation mechanism is now on ground and has been submitted to the Federal Cabinet for approval. This collaborative effort carries firm commitment and assurance of UNDP, JPE, Government of Pakistan, Provincial Governments and major Civil Society Organizations (NGOs) for its implementation.

Activity 2:

The Ministry of Water and Power (Water Sector Capacity Building & Advisory Services Project-WCAP) in collaboration Asianics Agro-Dev International (GWP partner) and Pakistan Water Partnership (PWP) prepared a policy revision document "Benefit-Sharing on Hydropower Project among Stakeholders" for incorporation in the present compensation mechanism for mega projects in Pakistan.

Output

In this context number of consultations were held, last one as the Mid Term Workshop on "Studies and Policies for Benefit-Sharing on Hydropower Project among Stakeholders" at Islamabad Club, Islamabad, Pakistan on 14th April 2011 which was attended by the PWP contributing a presentation on the Mid Term Report prepared by PWP after consulting partners and affected communities in the vicinity of hydropower projects during past decades. PWP used this event to hold dialogue with the participants from the Federal and Provincial Governments and assisted the Government of Pakistan to move forward for launch of the national water policy, preparation of national and provincial water management plans, review of existing water laws and regulations involving all stakeholders. Prior to this, PWP organized three Roundtable Consultations on "Benefit-Sharing for Community Development" at Malakand, Lahore and Islamabad on 7, 27 and 31 January 2011. Executive Director/CEO, PWP presented a concept paper on the benefit-sharing for community development on the mega hydropower projects in Pakistan. IWRM concepts of water management were also highlighted in the roundtable consultations. The next conclusive round of dialogues will be held in August 2011.

Outcome

Primarily a set of recommendations to amend the Constitutional Provisions and Project documents of future mega hydropower projects were made and also a comprehensive package of benefit-sharing with the affected communities over a long-term basis ensuring economic development and social justice for all sectors of life disturbed or affected by construction of mega hydropower projects was included.

Activity 3:**Output:**

Pakistan Water and Power Development Authority (WAPDA), a PWP partner and permanent donor, held a partners meeting on the engagement of general consultants for Diamer-Basha Dam and other projects of WAPDA in WAPDA Rawal Rest House, Islamabad on 30.04.2011. Apart from local water resources management experts, Deputy Mission Director USAID also attended the meeting. PWP emphasized incorporation of the principles of integrated water resources management in every work plan of hydropower project making it mandatory to have provisions for long term benefit sharing with the affected communities and stakeholders. It was also emphasized by PWP that at project concept preparation stage, all stakeholders and affected communities should be consulted giving participatory flavour to the project from its very inception. It was also pointed out that in order to create the sense of ownership in each mega project, it is necessary to involve the affected communities in decision-making process of that particular project.

Outcome:

WAPDA being the largest water sector developer of the country involved the stakeholders and affected communities' representatives in the very initial processes of Diamer-Basha Dam construction.

Goal 2: Coping with Critical Water Challenges through Partnerships to Secure Mutual Goals**Activity 1:**

In order to integrate IWRM into the strategies and action plans of the Government of Pakistan, PWP in collaboration with the Planning Commission, Government of Pakistan and under the partial financial support of World Meteorological Organization (WMO) held three events on 11, 12-14 and 15 January 2011:

Output:

- a. International Seminar on Integrated Flood and Drought Management in Auditorium of Planning Commission, Pak Secretariat, Islamabad on 11 January 2011 attended by over 130 delegates.
- b. Capacity Building Workshop for Pakistan on Integrated Flood and Drought Management at Bhurban, Murree on 12-14 January 2011 attended by 15 representatives of the Flood and Drought Management of Pakistan. WMO's Flood and Drought Management Experts namely Dr. Wolfgang Grabs, Dr. Giacomo Teruggi and Dr. Roberto Rudari delivered capacity building lectures and provided on the hand training to the local experts.
- c. National Consultation on Integrated Flood and Drought Management at Marriott Hotel, Islamabad on 15 January 2011 at 1100 hours after conclusion of the 4-day Workshop on Integrated Flood and Drought Management – Capacity Building for Pakistan for about 30+ delegates.

Outcome:

Two independent project documents on Integrated Flood Management and Integrated Drought Management along with their concept notes were prepared for presentation to the Government of Pakistan for funding by the Italian Government. Involving the National Disaster Management Authority (NDMA) both project concept were shared with them for picking up some of the project components by them under their own disaster management and national development programs. The Integrated Flood Management program of Pakistan has already become a flagship of WMO through the financial support of the Italian Government.

Activity 2:

Output:

PWP in collaboration with National Defence University, a partner of PWP, researched in the field of Pakistan's Water Security and evolved a comprehensive paper titled "**Pakistan Water Security Dilemma – Approaches to Rejuvenating the Indus Waters Treaty**" after consultations with a number of PWP partners in Government of Pakistan and civil society organizations. PWP presented this paper in the National Seminar on "Pakistan's Water Security" held by the National Defence University, Islamabad on 19 January 2011. Over 150 delegates including Mr. Naseer Ahmad Gillani, Chairman PWP; Mr. Shams ul Mulk, former Patron/Chairman PWP and many other GWP partners attended this Seminar.

Outcome:

Comprehensive recommendations emerged out from this seminar which was shared with the Government of Pakistan and the civil society organizations for their consideration and adoption in their respective policies and plans.

Activity 3:

Output:

PWP arranged two water filtration plants costing Rs. 3.7 million through Brig. Muhammad Aslam, Director PWP which were installed by Pakistan WAPDA in Manchar Lake area of Sindh Province to provide clean and hygienic drinking water to the fishermen communities of this area. This activity completed in May 2011 and was highly appreciated by the Honourable Chief Justice of Pakistan lauding name of Pakistan Water Partnership in almost every major news paper of Pakistan. The two plants are producing high quality of potable water containing 150-200 parts per million (PPM) of total dissolved solids (TDS) by treating saline effluent of Manchar Lake containing 4,000 PPM. Member (Water) WAPDA in a press release on 10 May 2011 informed that WAPDA arranged these two water treatment plants free of cost through Pakistan Water Partnership (PWP) Islamabad. The design capacity of each plant is 500 litres per hour and it can fulfil the drinking water requirements of 2,000-3,000 persons per day at the rate of 3 litres per day per person.

Outcome:

This activity has helped availability of clean and safe drinking water to the fishermen communities of Manchar Lake area of Sindh Province which is positively impacting the health and livelihood of these communities. This has been observed and commended personally by the Chief Justice of Pakistan appreciating the roles of WAPDA and PWP.

Activity 4:

Realizing that the task of improve management through adopting the RBO concept for allocation and management of water in a basin through resource mapping, zoning is extremely large one needing high level of investment, PWP decided to concentrate in a small localized basin within the Indus Basin. Thus Potohar Area of Indus Basin has been selected and a resource mapping and zoning exercise has been initiated in collaboration with the Potohar AWP. This would also inject some activities into the Regional Proposal on Climate Change Adaptation and Management.

Output/Outcome:

The activities are in very early stages and output/outcomes are not yet possible to be determined.

Goal 3: Reinforce Knowledge Sharing and Communications, Capacity Building

Activity 1:

Output:

PWP collaborated with the National University of Science and Technology (NUST) Islamabad and held an International Workshop on “Education for Managing Hydrological Extreme and Related Geo Hazards” at the University Conference Hall, Islamabad from 24th -26th January 2011 with the financial support and collaboration from the UNESCO, France. PWP presented a paper titled “Training High Level Policy Stakeholders on Drought Management in Pakistan” on 24th January 2011 in the First Technical Session. Over 500 delegates from all over the country and abroad participated in the Workshop, creating very valuable and workable recommendations for the Government of Pakistan to manage drought in the country.

Outcome:

Capacity of the local water and drought experts enhanced to take up issues related to drought management. Recommendations of the Workshop were presented to the Government of Pakistan to replicate such educational workshops at all provincial and district levels, especially in the seriously drought-prone areas.

Activity 1-A:

World Water Day was celebrated all over the country under arrangements by PWP, AWP and partner organizations.

PWP collaborated with IUCN, Balochistan and other local partners and celebrated World Water Day 2011 in Quetta under the chairmanship of Sardar Muhammad Tariq, Regional Chair, GWP-SAS. Importance of water for cities was highlighted among the participants in a walk arranged at Quetta. The participants took oath to prevent wastage of water and reduce/eliminate unwanted use of water in the hilly city of Quetta.

Sarawan AWP, Mastung celebrated World Water Day on 22nd March and held an awareness seminar wherein the stakeholders and partners were educated in water conservation also on proper and better water management in the AWP areas.

World Water Day Coordination Meeting was held in the Planning Commission with the arrangements by Pakistan Water Partnership. Representatives from Planning Commission, Institution of Engineers Pakistan (IEP), Capital Development Authority (CDA) Islamabad, Partners in Sustainable Development (PSD), Sustainable Development Policy Institute (SDPI), Allama Iqbal Open University (AIOU) and Integrated Rural Development Organization (IRDO) participated in the Meeting and three mega events were finalized and to be carried out in Islamabad on 22nd March, 11th, 25th and 30th April, 2011.

PWP in collaboration with the Planning Commission, Government of Pakistan; Allama Iqbal Open University, Islamabad and Institution of Engineers Pakistan, Islamabad organized water awareness walk as a series of events for the World Water Day on 14th April 2011 in the campus of Allama Iqbal Open University, Islamabad. Over three hundred people including engineers, professors, experts, students, common persons and university staff participated in the walk. The slogan was “Water for Cities – Responding to Urban Challenges”. The walk commenced from Main Gate of the University and concluded at the National Library where Chairman PWP, Project Director AIOU and the Vice Chancellor delivered their short speeches carrying messages on conserving and preserving waters for judicious use in the cities by the present and the coming generations. The Vice Chancellor also gave away Walk Mementos to the organizers of the walk in commemoration of their hard work on organizing a walk on a very hot day.

Activity 2:

PWP has adopted GWP-SAS Communication Strategy in principal and is in the process of developing its localized version for PWP and its AWP. In the later part of this year, a draft of the Communication Strategy will be shared with all partners and AWPs seeking their inputs.

Goal 4: Build a More Effective Network**Activities**

- Meeting of the PWP Board of Directors and Annual General Meeting of PWP Partners were held on 29 March 2011 wherein the Annual Progress Report of 2010, Audited Accounts and Work Plan, Budget and Planned Activities for 2011 were discussed and presented to the Partners.
- On a request from the Regional Chair GWP-SAS, Chairman PWP accompanied by Country Coordinator, PWP visited Male, Maldives from 26th to 28th February 2011. They had highly successful meetings with three senior officials from the Department of National Planning in Ministry of Finance & Treasury, and Ministry of Housing & Environment; and with two Ministers from State for “Fisheries & Agriculture” and “Finance & Treasury”. A Memorandum of Understanding between the Government of Maldives and the Global Water Partnership – South Asia (through Chair PWP) was finalized and submitted for approval by the Maldives Government which would pave way for establishment of Maldives Water Partnership in the coming months.
- Country Coordinator PWP assisted Dr. Pervaiz Amir, Director, Asianics Agro-Dev International (GWP partner) in carrying out interviews on 11th, 14th and 15th April, 2011 from the five experts for filling out the survey questionnaire of UNCSO for on the application of integrated approach to the development, management and use of water resources. Country Coordinator also followed up with the Government of Pakistan for Level-1 survey forms completion and timely submission to SIWI with copy to Mr. Alan Hall of GWP. The Level-2 interviews and survey report were also completed by the consultant and submitted to Mr. Alan Hall within time frame.
- Country Coordinator PWP attended and contributed in the First Asia-Pacific Synthesis Meeting which was rescheduled at Bangkok, Thailand on 21st -22nd April 2011 highlighting potentials and opportunities available in South Asia. The meeting participants finalized the three policy priorities for water security: Development; Resilience and Well-being for the Second Asia-Pacific Water Summit to be held in Bangkok, Thailand from 5th -6th February, 2012. Seven Focus Area Sessions were defined to be held by lead organizations along with sub-regional coordinators and partner organizations during the Summit during the morning session on 5th February 2012.
- During May 2011, Country Coordinator PWP, under guidance of Regional Chair, GWP-SAS and Chairman PWP, developed some comprehensive funding proposals for the Fourth South Asia Water Forum to be held in Islamabad Pakistan from 15th -17th November 2011. Proposals were submitted to USAID-Pakistan, ADB, World Bank, Embassies of Kingdom of Netherlands, Germany, Norway, Japan, Australia and England. PWP received regrets from ADB, World Bank and German Embassy. Whereas encouraging responses are expected from Embassy of Kingdom of Netherlands and USAID. Local partner institutions including Ministry of Water and Power, UNICEF and UNDP are expected to come up with partial financial or in-kind support for this vitally important regional event. GWP itself has flatly refused to provide any support for its own vitally important regional event.
- PWP has held a meeting with the Principal, Federal Government College for Women, G10/4, Islamabad to discuss involvement of the youth in water awareness imparting activities and providing opportunities to the youth for presenting their virgin ideas on this aspect. Two young students

(female) of this College have already won Third Prize in the Intel Science Fair in the field of Environmental Sciences. It was decided to hold a competition among the students of schools and colleges of the country on different fields of water management, domestic use and conservation.

- An innovative idea of digging a water storage pond in every college and school where enough land is available with the help of communities and donors was agreed. This pond would cater for groundwater recharge and gardening requirements of the college/school. In this connection, another meeting has been planned to be held in mid of July 2011 as a follow up of this activity. Country Coordinator PWP was instructed to prepare a short write up of this program for PWP on the above lines.

PART 7: REPORT BY SRI LANKA WATER PARTNERSHIP (SLWP)

NAMES OF INDIVIDUALS CONDUCTING ASSESSMENT: MR. **Ranjith Ratnayake, Ms. Kusum Athukorala**

DATE OF ASSESSMENT: **18th July 2011**

Goal I: Promote Water as Key Part of Sustainable Development

Activity 1.

Water Related Disasters- Landslides, Impact on Human Settlements. SLWP and NBRO organized a workshop on the above on 1st March to review policies, processes and operational rules in place to respond to increase frequency of landslides. The new clearance processes for settlement planning in landslide prone regions that have been identified with new regulations in place and role of the National Building Research Organization (NBRO) as the regulator and clearance authority was discussed. While regulatory processes were now clear there was still need for coordination among many state organizations such as the Road Development Authority (RDA) as vertical cuts on hillsides in landslide prone areas when roads were developed or improved were subject to road slips and danger to road users and adjacent infrastructure. Overall national physical planning and allocation and use of land for agriculture, settlement and urban needs had to be integrated to consider the fragile nature of some areas of the central highlands.

Output/Outcome:

There is now improved communication among state agencies and local authorities in land use practices in landslide prone areas. Increasing population and urbanization was resulting in marginally safe lands being put to use. There was need to raise both social and political consciousness on need for mitigation and prevention rather than disaster coping which had high social and economic cost. Media needed to be brought on board as a partner for extended outreach and this is planned for as the next activity.

Activity 2

Sri Lanka was one of 3 countries in South Asia identified for Survey for Rio+20. Level 1 Survey on Policy issues with respect to Water Resources was undertaken by the Ministry of Irrigation and Water Resources while the Level 2 Survey was undertaken by SLWP through a Consultant. Level 1 and Level 2 Survey Reports are complete and have been shared with GWPO and UN Water.

Output/ Outcome:

Lack of an umbrella overarching comprehensive policy on water resources stalemated by lack of political commitment and objections by some has resulted in some sub sectors determining policies that impinge on water resources management in an integrated manner. For example there are separate Drinking and Rainwater policies and increasingly environmental policies and laws are attempting to regulate areas of water resources concern through environmental control regulation in the absence of a clear Water policy. And this

has some negative effects and resulted in more controls and protection and control regulation rather than management and conservation for sustainability with development.

Nevertheless the World Bank assisted Dam Safety and Water Resources Planning project has attempted to set sector priorities (drinking water) and set up institutional arrangements for sub sector coordination, mitigating to some extent the lack of an overarching policy for water.

Activity 3.

SACOSAN Activity: South Asia Regional Conference on Sanitation had both policy/institutional and capacity Building elements. The National Water Supply and Drainage Board (NWSDB) and SLWP worked closely on this activity which culminated with the regional workshop in early April. SLWP served on the Steering Committee for this event. SLWP undertook 2 School Sanitation Surveys in Southern and Central Provinces to secure data for its evidenced based Advocacy programme to influence school sanitation and institutional arrangements for health sanitation. This activity was preceded by a provincial SACOSAN awareness programme in February in the Central Province organized jointly by SLWP and NWSDB.

Output/Outcome:

SLWP survey findings have helped in identifying policy changes with regard to school sanitation now being taken up with the education authorities. This is also being considered by the NWSDB in its health sanitation development programme. SLWP work on this aspect was specifically included in the Hon Ministers address to the conference participants. (Also Goal 3)

Goal 2: Coping with Critical Water Challenges through Partnerships to Secure Mutual Goals

Activity 1.

SLWP and Network of Women Water Professionals (NetWwater) took the lead role in organizing the Regional Conference on Water Security and Climate Change- Challenge for South Asia Women in Colombo in February. It was a collaborative effort of SLWP, NetWwater, SaciWATERS and IWMI. The First lady was the chief guest at this event at which over 60 participants attended.

Output/ Outcome:

The workshop highlighted the importance of the role of women in CCA. It enabled Sri Lankan and regional water professionals to interact and share experiences and understandings on the role of women in relation to water security and climate change.

Activity 2.

SLWP actively supported the GWP TEC/IWMI and GWP SAS Workshop on Climate Change, Food and Water Security that was held in Colombo in February at which over Regional and global participant including many CC Experts and Donors participated. Chair SLWP the Country Coordinator and Dr Ranjith Premalal De Silva from the Post Graduate Institute of Agriculture and a co author of a Drought Management Policy for Sri Lanka participated.

Output/ Outcome:

SLWP has been in the forefront of organizing many disaster related and CCA focused workshops both at provincial and national level and have also targeted specific groups such as women and school children.

A series of preceding collaborative efforts with the Department of Meteorology, Disaster Management Centre and the Ministry of Disaster Management in 2010 and the holding of the Regional Integrated Drought Management (RIDM) Workshop in Colombo on in July 2010 has helped in many ways to clarify approaches to climate change and adaptation issues. The Drought Management Policy now in its final stages is likely to consider and incorporate many of the deliberations and suggestions that were made at these forums. This

workshop has specifically identified the setting up of a Virtual Platform on CCA for SAS that will enable knowledge to be shared and issues discussed. SLWP and other CWP in the region would be able to link on these issues and best practices once established.

Activity 3.

Maha Oya and Menik Ganga AWP organized a series of activities to promote IWRM in their respective Basins. In Maha oya a programme for identifying/establishing a medicinal plant nursery and bank restoration programme through replanting was undertaken in March and April/May. One activity was linked to world water day and the others were follow up programmes. Replanting both of reservations and vulnerable banks in the source area and down stream, including setting up of areas for planting of medicinal plants, will be undertaken as continuing activity. River pollution by commercial and industrial establishments in the town ship as an issue will be undertaken in the next phase as a part of the river improvement programme in collaboration with the local chambers, In Menik ganga the AWP is actively involved in ensuing through the divisional and district committees established that the water supply to Kataragama (town) and for agricultural needs are safeguarded from over exploitation by those upstream.

Output/ Outcome:

Regular interventions by the AWP ensure Community awareness and commitment to safeguarding river resources and in pollution mitigation activities. There is now a closer interaction between the agencies ,local authority and CBO in which the AWP play a major role. In Deduru Oya a visit was organized by the AWP to have school children visit an area of the river that was subject to severe illicit sand mining ,now being gradually restored due to public interest and commitment catalysed by the AWP as an example to be followed in other sections needing rehabilitation and restoration.

Activity 4

Water quality and health issues were the subject of a workshop organized by MASL/ DSWRP and SLWP at Kalawewa in the NCP, a province where issue of water both surface (waterways) and ground was contaminated with agro chemicals and heavy metals were taking a heavy toll of the local population. The Workshop held on 9th June had 49 participants from agencies, NGO/CBO , volunteer groups and interested public. Issues of point source and non point source pollution, safeguards and management practices were discussed. This is a follow up activity to ones held for schools earlier in the NCP.

Output/ Outcome:

The community is gradually being made aware that poor environmental behaviour is resulting in major health hazards. This programme needs to be mounted on a wider scale to highlight the issues involved and changes to behaviour needed to avoid and mitigate this severe health hazard.

Goal 3: Reinforce Knowledge Sharing and Communications, Capacity Building

Activity 1

World Water Day celebrations centred on sanitation in view of SACOSAN due to be held in Sri Lanka in Aril. Two surveys were undertaken to study status of school sanitation in two districts in the Southern and Central Provinces by SLWP. The SLWP Schools Programme *Sisu Jala Hamuwa* was held in Matara and Kandy to coincide with WWD.

The programme in Kandy at the Nugawela Balika Vidyalaya which included support by way of a rain water harvesting tank for toilet maintenance and for vegetable gardening activities as a pilot was very successful and was the site selected for the field visit by SACOSAN participants to Sri Lanka

Output/ Outcome:

The School and its Parent Teacher Association contributed to this activity. A toilet and sanitation culture was instilled and a maintenance regime to be operated and monitored by the school has resulted in a well maintained toilet system and a flourishing vegetable/flower garden.

Activity 2.

Media Training for SACOSAN: SLWP and the South Asian Women in Media 9 (SAWM) carried out a pre SACOSAN media training on Reporting Water and Sanitation Matters for 25 Media Persons in March. NWSDB and UNICEF supported this activity through resource persons. A field visit was arranged to a underserved urban community where upgraded sewerage systems are being installed through cost sharing by the community. An O&M fee will be levied under the programme for supporting maintenance cost.

Output/ Outcome:

Media play an important role in carrying messages to the community. This orientation was to enable them to report effectively not only on SACOSAN but on water/ sanitation/health issues. It also offered exposure to a community supported sewerage programme where costs were partly being met by the local community as seen in many community water supply projects that benefited a change from the usual dependence on the state for such services.

Activity 3.

A school sanitation booklet sponsored by a partner Brandix Limited and a poster was printed in Sinhala for distribution to the schools where the survey was undertaken and for use in the SLWP Schools Programme. Printing of the booklet in Tamil with support from CAPNET Lanka and NWSDB is expected to increase outreach. SLWP had a stall at the SACOSAN Exhibition in Colombo which highlighted its work both on IWRM and health/sanitation.

Output/ Outcome:

Printed material including booklets and posters and the exhibition has helped SLWP to reach and influence a larger audience than it would have through small group capacity building and awareness programmes. Significant changes with respect to health sanitation issues both in the school children, teachers and education authorities is noted. School sanitation which had low priority and little investment by the authorities are now being given adequate priority and is on the high concern agenda both of the education authorities and local politicians.

Activity 4.

Street Drama Training. SLWP and the Maha Oya AWP arranged a Street Drama Training Programme for youth and school children from Mawanella and 2 schools in Kandy. 30 participants were trained in street drama structure, design and techniques by a well known dramatist and choreographer Prof Prasanna Mahagama. Focus of training was to convey messages on health/sanitation to local communities. A short video of the training has been developed for use for TOT later.

Output/ Outcome:

Street Drama is an effective message carrier through which sensitive and even culturally frowned on topics can be discussed/portrayed without embarrassment. SLWP had effective experience earlier with RSM and school sanitation in Western Province SLWP will shortly have one or two trained groups for carrying out its programme with expansion to other areas later.

Goal 4: Build a More Effective Network**Activity1**

One Steering Committee Meeting and 5 Programme Committee Meetings have been held up to June this year. AWP established are being strengthened, but no new ones will be established due to funding and follow

up capacity issues. A further 3 New Partners- the Girl Guides Association, Environmental Foundation and Ministry of Disaster Management joined as Partners.

Output/ Outcome:

SLWP Programmes on track. But it was unable to move on Comprehensive Water Policy yet, due to apathy by state on this. Operations are directed to impact by working on “hot topics” such as floods, droughts, landslides, climate change, river sand mining, pollution etc. Major activity with Schools, AWP and collaborating partners.