

## **JSS/IWP Initiative**

### **Capacity Building on IWRM based on New State Water Policy of Rajasthan**

#### **Report**

##### **1. Background :**

The new Rajasthan State Water Policy, which came into force on 18th February, 2010 has adopted Integrated Water Resource Management (IWRM) as guiding principle and umbrella approach for water resources development and management in the state. India Water Partnership, with the support of one of its zonal water partners, first organized two consultation meetings in Jaipur, Rajasthan in 2010 in order to review the new State Water Policy, keeping in view the role of Non Governmental Organization in its implementation. During these consultations, it emerged that though New Water Policy principally adopted IWRM approach, there is very little understanding of IWRM among the key stakeholders in the State. The recommendations of these two meetings suggested that capacity building of NGOs, PRI members and key stakeholders, working at ground level, is urgently needed. At the same time, dissemination of knowledge on IWRM to Water User Groups, Farmers, Village Community, Women Self Help Groups is necessary for better and effective implementation of the policy. In continuation of India Water Partnership efforts during 2010; and for building capacity of all key stakeholders, IWP with the support of its partner organization Jheel Sanskaran Samiti (JSS), Udaipur organized various activities for the capacity building of diverse stakeholder groups, including those who contributed in the review of new water policy and are being involved in implementation of IWRM and State Water Policy, 2010.

## **2. Objectives of the Project**

The IWRM capacity development project was launched with the objectives to review and disseminate various key IWRM provisions of Rajasthan State Water Policy,2010; creating awareness about IWRM and its implications in terms of new roles and responsibility of NGOs, Engineers, PRIs; build capacity and enhance understanding of various stakeholders, including Panchayat Raj Institutions, Non-Government Organizations , Engineering and Administrative Organisations and Women Self Help Groups, on IWRM and State Water Policy.

## **3. Approach & Methodology**

In order to build capacity of different and diverse stakeholder groups on various components and aspects of IWRM, encapsulated in the State Water Policy,2010, number of seminars, workshops and consultation meetings were held in the state of Rajasthan by the Jheel Sanrakshan Samiti(JSS). In all the programmes organised, the NGOs/speakers / trainers / facilitators who are practitioners in respective water sector ; and involved in dissemination, development and implementation of IWRM strategies & plans were invited. The interactive sessions provided the opportunity to mutually learn and understand IWRM. The medium of instruction and interactions was mainly in Hindi as well as in local dialect. There was simultaneous focus on management tools and behavioral psychology aspects of IWRM in all activities and programmes. The mass media was involved in order to spread the message to millions.

The outcomes of the earlier IWP supported project, implemented in the year 2010, were used to draw the approach and methodology of this capacity building project. The expertise and earlier experiences of JSS and its strategic partner

organizations on IWRM formed the sound basis for determining guiding principles and tools to achieve the project objectives .

#### **4.1. Workshop I : Review of Status of IWRM & State Water Policy of Rajasthan**

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, Administrative officers, Women Self Help groups by building their capacity for proper and effective implementation of new State Water Policy and promoting IWRM. Towards this endeavor, the JSS organized the above Workshop-cum-Seminar along with its other strategic partner

organizations, Dr. M. S. Mehta Memorial Trust and Vidya Bhawan Polytechnic College. Former Foreign Secretary, Government of India, Mr. Jagat S Mehta, Padam Bhushan Award Winner inaugurated the workshop.

The workshop was attended by fifty participants including representatives of the State Government, Experts and other Key Stakeholders. Dr R. C. Purohit, Dean, College of Technology and Engineering(CTAE), Mr. B.R. Khaturia, IWRM Nodal Officer of Water Resources Department, Government of Rajasthan, Mr. Maqbul Khan Pathan, Executive

Engineer, Water Supply Department, Government of Rajasthan, Mr. G. P. Soni, Former Supdtt. Engineer, Water Resources, Department, Govt. of Rajasthan, Mr. O. P. Mathur, Former Director, Central Ground Water Board, Government of India, Dr. Satish Sharma, ACF, Department of Forests, Dr P K Singh, Associate Professor, CTAE, Mr. Jitendra Mehta, Director, ALERT, Mr. Madan Nagda, Director, Gandhi Manav Kalyan Samiti, Mr. A. S. Jodha , KVK Udaipur were the eminent experts who actively participated 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. He appealed to the Government that the proposed water regulatory authority shall have representation of the civil society. Mr. Anil Mehta explained the concept of IWRM tree. He said that in order to grow and strengthen the IWRM approach, four essential nutrients/inputs are required viz.(1)

Stakeholder Participation, (2)Enabling Environment, (3)Eco-technology and (4) Good Governance. Mr. Mehta conveyed the message of Prof. S.R. Hashim, President, IWP and Dr. Veena Khanduri, Executive Secretary, IWP who took the 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 formed separate groups and 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. It was unanimously agreed that to develop better understanding of IWRM in the context of Rajasthan, the foremost need is to bring together governmental and administrative authorities and all other key stakeholders at interactive platforms for effective planning of IWRM plans and strategies and subsequently, better implementation. It was recommended (a) To develop a simple, user friendly manual in Hindi language for effective and better understanding of IWRM (b) To bring together Government Authorities and key stakeholders at one platform in order to improve planning and management practices through synergic efforts. The seminar concluded with the recommendation that to get the State Water Policy implemented at grass root level, and eventually get reflected in all development plans, the capacity building of all stakeholders is a pre-requisite. The participants unanimously recommended that JSS and IWP should organize capacity development workshops for different stakeholder groups in three months.

#### **Outcome of Workshop I :**

The expert participants developed material in the form of draft chapters for the proposed IWRM Manual. The chapters were developed with the focus on the IWRM tree model; and suggestions & recommendations of the workshop I.

#### **4.2. Workshop II: Capacity Building on IWRM**



In continuation of GWP/IWP project of Capacity Development of different stakeholders, a workshop was organized on 22<sup>nd</sup> April, 2011 at Udaipur by the Jheel Sanrakshan Samiti (JSS) and its strategic

partners- Vidya Bhawan Polytechnic and Dr. Mohan Sinha Mehta Memorial Trust. The workshop was attended by nearly 200 participants representing NGOs, Water User Associations, PRIs and Farmers. The officials of European Union- Rajasthan State Partnership Programme(EU-SPP) and Water Resources Department, Government of Rajasthan actively participated in the Workshop.

The schedule of the workshop was divided into seven sessions viz. (i) Inaugural Session (ii) Technologies of Watershed Management and Water Resources Development (iii) Panchayat Raj System & IWRM (iv) Inclusive & Participatory Development, Water Ethics of Rajasthan, Mechanisms for Conflict Management & Resolution (v) Livelihood



Issues (vi) IWRM & Ecological Concerns (vii) Valedictory Session. All sessions were highly interactive , conducted by the panel of expert who authored different chapters of the IWRM Capacity Building Manual . The workshop was Inaugurated jointly by Ms. Neelima Khetan( Former 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 activities in the field of IWRM capacity building. Mr. Tehsin shared the achievements of Vidya Bhawan in the field of capacity building of PRI elected representatives on governance and natural resources management.

Mr. J M Roussel and Ms. Julie Ladel(IWRM expert EU-SSP) discussed the strategies for effective implementation of IWRM in the state of Rajasthan and thanked JSS/GWP/IWP for their initiatives and sustained efforts. Ms. Magalie Vuillet(Junior



IWRM expert- EU SPP) appreciated the presence of women participants in the workshop. In second session, Dr. P K Singh(Associate Professor, College of Technology and Engineering, Udaipur) demonstrated various technologies of watershed management and water resources development, Mr. Jitendra Mehta (Founder Director, ALERT) explained the rotational distribution system of irrigation water management.

The third session was on “Panchyat Raj System & IWRM”. In this session Mr. Hemraj Bhati(Deputy Director, Vidya Bhawan School of Local Self Government & Responsible Citizenship), Mr. Madan Nagada(Founder Director, Gandhi Manav Kalyan Samiti), Mr. Mohan Dangi(Director , Prayatna Samiti) and Rajkaran Yadav(President, Hanuman Vikas Samiti) interacted with the participants on list of subjects transferred to the PRIs in Rajasthan and explained the role of Gram Sabha( Village Assembly) and Gram Panchayat(Village Council) in constructing IWRM plans based on river basin and watershed approaches.



During fourth session, the participants interacted on inclusive & participatory development; water ethics of Rajasthan ; conflict management and resolution. The learned panel included Mr. Mahendra Mehta(Former Water Commissioner, Government of India), Mr.



O. P. Sharma(Director,Wells for India), Dr. J. C. Dube(Eminent Hydrogeologist, Member,JSS) and Dinesh Sharma( Director, CASA,Udaipur). Mr. Mahendra Mehta discussed the traditional wisdom on water management while Mr. Dube presented the SWOT analysis of community managed water management project funded by Swiss Agency for Development Cooperation's (SDC) Global Environment Facility Fund and facilitated by a multi-stakeholder group, consisting of National and International Consortiums. Mr. Dinesh Vyas discussed on conflict resolution mechanism vis-a-vis concept of IWRM.

The fifth session was on livelihood issues. The participants shared and discussed various means and opportunities of livelihood enhancement in the ambit of IWRM approach. Mr. Shailendra Tiwari(Programme Officer, NRM, Sewa Mandir) , Mr. A. S. Jodha,Mr Praful Bhatnagar, Dr. V. S. Saini, Mr. Moti Singh Rathor( All Scientists at KVK , Vidya Bhawan) guided the participants on Scientific Agriculture, Horticulture, Animal Husbandry, Poultry, Fisheries etc.



In the sixth session, the participants shared their understanding and experiences on the subject “IWRM & Ecological Concerns”. The panel included Dr. Satish Sharma(Forest Officer, Government of Rajasthan) , Dr. Jagdish Purohit (SPWD) and Mr. Yash Shethia( Unit Head, Foundation for Ecological Security). Mr. Yash and Dr.

Purohit, while elaborating on IWRM, guided the participants on various methods and techniques of biodiversity conservation and management.



The valedictory session was graced jointly by Ms Priyanka Singh(CEO Sewa Mandir),Mr. V. S. Mehta(President, Dr. M. S. Mehta Trust) and Mr. J. M. Roussel( Team leader, EU-SPP).Ms. Priyanka expressed the need of synergic efforts and collaborations for the successful implementation of IWRM. Mr. Roussel expressed EU-SPP's willingness to partner in capacity development programmes of JSS & GWP(IWP). The workshop was convened by Mr Anil Mehta and Mr Nand Kishor Sharma. A 125 page comprehensive user friendly, "IWRM Capacity Development Manual" jointly edited by Mr. Anil Mehta and Dr. Veena Khanduri, and authored by many prominent experts, was given to every participant at the time of registration. The participants extensively discussed various chapters of the manual in different related session. Mr. Mehta practically demonstrated the Pot Method of disinfection of open wells and water tanks.

### **Outcome of Workshop II :**

The capacity building workshop paved the way for adoption of a strong IWRM and effective implementation of new Rajasthan Water Policy in the State. It was first time in the state of Rajasthan that all key stakeholders came on common platform and shared, discussed and learnt how to implement IWRM approach right from the bottom grass root level to top policy planning level. The authors of different chapters of the IWRM Manual personally interacted with the diverse groups of the stakeholders. The material developed by the JSS/IWP was highly appreciated by the EU- SPP team and is helping them further in developing strategy for effective implementation of IWRM State Water Partnership Programme. The Chief Minister of Rajasthan office considered the event worth and forwarded the workshop proceeding to the Water Resource Department for necessary action.

#### 4.3. Workshop III : IWRM and Drainage Planning :



On 24<sup>th</sup> June 2011, a workshop cum consultation meeting was organized for senior engineers of Water Resources Department, Urban local bodies and other agencies. The prominent participants were Additional Chief Engineer of Water Resources Department(WRD), Mr. A. B. Mathur, Superintending Engineer ,WRD, Mr. D.L.

Dangi, Executive Engineer, Urban Improvement Trust ,Mr Anil Nepalia, Executive Engineer , Municipal Council ,Mr. Rajiv Garg, Prominent engineers from Institution of

Engineers(india) , Mr. G. P. Soni, Mr B. L. Mantri, Mr. S. L. Godawat Mr. Anil Mehta explained the IWRM approach and Tree model. The participating engineers discussed in detail how to address drainage aspect while developing IWRM plans. Dr. Kapil Gupta, Professor at IIT Mumbai and Member on National Committee on Disaster Management, and Convener (drafting committee) of revised drainage manual of Government of India, delivered his expert lecture on “Urban Drainage in the



context of IWRM”.

#### Outcome of Workshop III :

The participating engineers agreed that IWRM is not just limited to the water resource development and irrigation water distribution. They arrived on the understanding that IWRM is about coordinated development and management of water, land, forest, livestock and human resources. They also understood the principles of sustainable

development, good governance and conflict management. The river basin approach was explained in detail and based on the basin approach, urban drainage principles and techniques were discussed. The participants expressed that the workshop would help them in developing IWRM plans.

#### 4.4. Workshop IV : IWRM and Eco- Techniques:



On 27<sup>th</sup> July 2011, an interactive seminar cum workshop was held on behalf of IWP with members of Yamuna Pollution Control Unit (YPCU) and representatives of NGOs working on Yamuna. Mr. Anil Mehta gave presentation on river

basin management approach and explained eco-remediation techniques to treat and



improve polluted river basins. It was agreed that in order to work on integrated lake basin management approach and IWRM, the active and dynamic participation of civil society and citizen groups is the first and foremost requirement. JSS has installed an unique treatment project in Ahar river of Udaipur based on the approach of ILBM ,which is further extension and sub set of IWRM

approach. The representatives of Rajasthan Chamber of Commerce and Industry and Udaipur Chamber of Commerce and Industry also participated in the programme.

#### 4.5. Workshop V : Workshop on Water and Health:

A seminar cum workshop on IWRM (focusing human health hazards) was organized on 1<sup>st</sup> September, 2011 at Udaipur, Rajasthan. In the workshop, Mr. Anil



Mehta, Joint Secretary, JSS invited the Doctors, especially the lady nurses to generate mass awareness among the people regarding water borne diseases. Mr. Mehta further said that by providing safe drinking water and community toilets, water borne diseases can be minimized by 50 %. He

also said that personal hygiene and community hygiene is important for avoiding human health hazards. The participants were shown the demonstrations on proper hand washing and solar disinfection .

#### Outcome of Workshop IV and V:

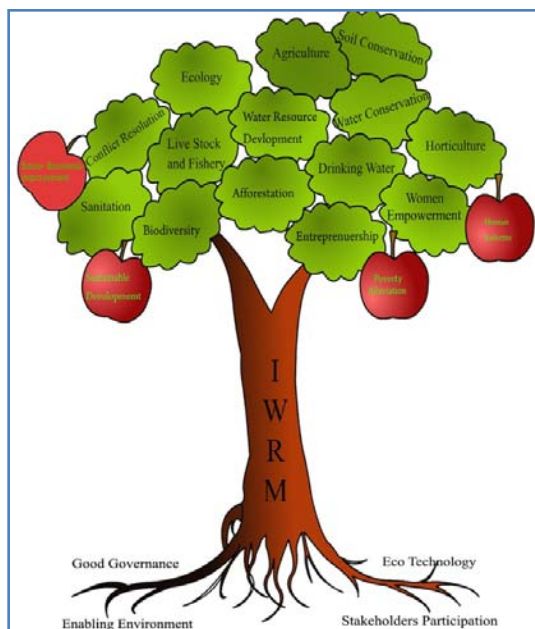
These two activities were in continuation of capacity building of different stakeholder groups on various aspects of IWRM. The main focus was on basin approach, eco-technology and sanitation. The participants are forwarding the education and information gathered in the respective workshops.

#### 4.6. Workshop VI : . IWRM Capacity Building Workshop for Women Self Help Groups:



A workshop for Women Self Help Groups on Integrated Water Resource Management (IWRM) was conducted on 10<sup>th</sup> Oct 2011 by Jheel Sanrakshan Samiti, Vidya Bhawan Polytechnic and Dr. Mohan Sinha Mehta Memorial Trust under the banner of

Global Water Partnership and India Water Partnership. The workshop held at Vidya Bhawan Polytechnic College was attended by Self Help Women Group of 21 towns and villages situated in the basins of Wakal and Banas rivers ; and representatives of Anganwadis of Southern Rajasthan. Many prominent personalities, who dedicated their life in preserving and managing water resources, were present in the workshop and shared their suggestions on the subject. The participants raised the point that though the State Water Policy underlined the participation and involvement of women in all policies and plans including management and operation, right from small village hemlet to the cities, the role of women in water resources management is very meagre . Mr. Anil Mehta emphasized that the management of various water related crisis ,including growing poverty, need involvement of women in all aspects of water usage and management. Mehta said that role of women should be recognized in planning, construction, management and safeguarding of water resources. The Dublin principle also underlines the importance of women in integrated management of water resources. The women play a key role in the collection and safeguarding of water for



domestic use and agricultural use. The burden of water collection falls on women and girls, who generally expend considerable time and energy on this activity.

Mehta shared that the marginalized role of women in water resources management is related to social, educational and cultural traditions. Therefore, there is an urgent need to give attention to the specific needs of women and evolve strategies to empower them so that



they become able to play effective, competent, sustained and dynamic role at all levels of water resources management.

The President of M. S. Mehta Memorial Trust, Mr. Vijay S. Mehta said that it is necessary that society provides equal opportunity of development to women, seek their suggestions and treat them at par with men. To attain the goal of integrated and inclusive development the women need to have equal access and participation at all levels. He emphasized that health and education of women are the key factors to enhance and ensure their dynamic participation in all IWRM processes and plans.

Mr. Nand Kishor Sharma, Social Scientist, said that the effective, efficient and equitable management of water resources is only achieved when both women and men are involved in consultation processes; and in the management and implementation of water-related services.

The women present in the workshop agreed to increase their role and participation in the implementation of State Water Policy and projects held in the region. The women representatives of Self Help Group said that one of the major causes



of their low interest is lack of education and awareness. Ms. Parvati Bai of village Ogana, Ms. Kalibai of village Kotadi, Ms. Shanti Devi of village Pipawas said that Women's convenience, in terms of time and distance, should be first criterion while deciding the time and place for Gram Sabha and WUA Meetings. The

participant women further reveals that out of them only 8 % women have so far attended the meetings of Gram Sabha. In the meetings of SHG, no fruitful discussions are held.

The hand-pump and other water supply schemes are sanctioned near places of influential persons only. The women have to bring water on head from 2 to 3 kilometer distances. The WUAs meant for distribution of irrigation water functions arbitrarily and there is no voice of women in those meetings. We, the women members of the community , are most susceptible to water borne diseases due to our role in water



collection, washing and other domestic activities. We have to travel long distances to fetch water and carry it on our heads, which leads to diseases related to spine, neck, shoulders etc.

The participant women further shared that if any member of the family suffers from any water borne disease, then the responsibility to take care of the diseased member falls on them .Women and girls feel unsafe when they have to go far from their houses to defecate since no nearby toilet facilities are available. Women and girls suffer from problems like malnutrition, illiteracy and anemia.

Mr. Madan Nagda, Secretary of Gandhi Manav Kalyan Samiti; Dr. Tej Razdan of JSS, Dr. L.L. Sharma, Limnologist, Member of JSS; Jitendra Mehta, Director of Alert Organization; Mr. Mohan Dangi, Secretary of Prayatn Samiti; Ms. Haribala Sharma of Vidya Bhawan Angan Badi and Ms. Jyotsna Jhala of Pahal guided the participants on various aspects of integrated water resources management mainly on Warabandi, Irrigation Water management, Prevention of Water Borne Diseases, Role of Panchayati Raj Institutions, Livelihood Generation, Conflict Management etc.

### Outcome of Workshop VI :

(1) Village women got the chance to articulate their problems and suggestions.

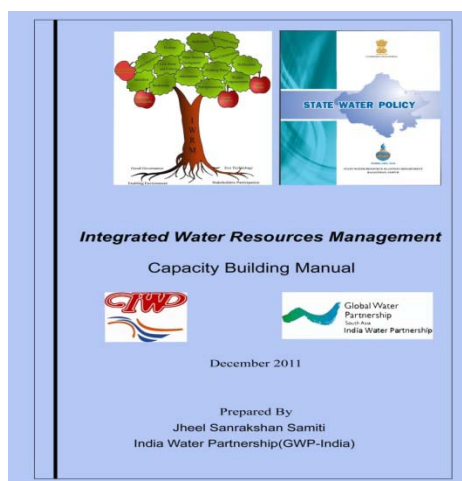


(2) The leaders of women SHGs understood the need and importance of participation of women in village councils in general and in WUA in particular.

(3) The participating women were given orientation on personal and community hygiene, nutrition, rotational distribution of water, women literacy etc.

## 5. Results and Discussion:

The project has achieved the targets far more than conceived while formulating the project. The participation of diverse stakeholder groups in large number in all activities conducted is indicator of success. The project has also lead to synergic networking of different stakeholders involved in IWRM process. The material developed during the project is being used and practiced by various agencies including European Union. The project has given great recognition to GWP- India efforts in implementing IWRM in the state of Rajasthan for sustainable water resource development and socio-economic up-lift of all sections of the society.



The mass media coverage spread the GWP/IWP/JSS initiative and efforts to millions of the people across the state of Rajasthan.

The efforts and action need to be continued in future also as IWRM is not fix set of rules and methods. We need to consistently work on this and continue to improve our manuals and capacity building methods and tools.