

# INTEGRATED DOMESTIC WATER MANAGEMENT



## Brainstorming Workshop

5th JUNE 2010

TARAGram Orchha, Madhya Pradesh (India)

## Proceedings

*Organized by:*



*Supported by*

*Arghyam*

*IWP*

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## Introduction to the Workshop

Water forms, the very basis of life. A person's survival depends on drinking water. Numerous other activities such as agricultural, industrial, household, recreational and environmental activities, etc also require fresh water, which is in short supply. It has been estimated that by 2025 more than half of the world population will be facing water-based vulnerability<sup>1</sup>. Reports suggest that by 2030, in some developing regions of the world, water demand will exceed supply by 50%<sup>2</sup>.

Agro-climatic regions such as those of semi-arid areas (Bundelkhand, Gujarat, Rajasthan and Maharashtra) are considered particularly vulnerable to water stress due to their almost complete dependence on water and other natural resources for livelihood and survival. In such regions, the approach needs to be built around community based water management in terms of source creation; resource management, of both in terms of quantity and quality augmentation measures.

Integrated Domestic Water Management (IDWM) aims at providing safe, sustainable water for all. It lays emphasis on community owned, managed systems with appropriate institutional mechanisms to ensure inclusion and equity. IDWM promotes integrated handling of issues around domestic water supply, rational use, reuse and recharge to arrive at a holistic solution that is based on participation of local stakeholders.



**Participants getting assembled**

A one day workshop was organized by **Development Alternatives (DA)**, on **5<sup>th</sup> June 2010** in TARAGram, Orchha, Madhya Pradesh in association with **India Water Partnership (IWP)** supported by **Arghyam Trust** to understand different models of IDWM that have been effective in the

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<sup>1</sup> Kulshreshtha, S.N (1998). "A Global Outlook for Water Resources to the Year 2025". *Water Resources Management* **12** (3): 167–184.

<sup>2</sup> "Charting Our Water Future: Economic frameworks to inform decision-making" **McKinsey & Company**

country. The aim was to bring together people, representing different stakeholder groups from various parts of the country, to share their experiences on Domestic water management through innovative institutional systems, appropriate finance mechanisms and alternate sustainable technologies.

### **Key themes of the workshop were:**

- The need and role of **Integrated Domestic Water Management** in abating the water scarcity concerns
- **Knowledge sharing** and exchange of good practices with respect to IDWM.



**Knowledge-Sharing**

## Key Issues Identified

- Access to adequate water is one of the leading factors limiting development in India. Agricultural, industrial and domestic uses are competing more and more for a limited supply. Domestic needs claim only a small portion of the annual water withdrawals.
- Factors contributing to the water crisis include :
  - Overexploitation of groundwater leading to reduction of low flows in the rivers and declining of the groundwater resources
  - Over canal-water irrigation in some command areas
  - Increasing pollutant loads from point (Pollution originating from a single, identifiable source) and non-point (spread out throughout a large area) sources.
- Domestic water usage is generally the prerogative of women. In water scarce regions they are the one who have to spend several hours in finding water sources and have the burden of carrying water from distant places. This can lead to serious social implications in terms of lack of education and livelihood opportunities for women caging them in the vicious cycle of poverty.
- In spite of the importance domestic water has in our daily life it is often neglected in national policies and programs. The Government has prioritized uses as Drinking water and Irrigation. There is no mention of different quality of water needed for different uses of water. The government. is more interested in treating the water problem as a whole rather than encouraging domestic management
- For all administrative purposes water falls under the state list. Water resources are controlled and managed by the state government machinery. There is exclusive control by the government machinery over water resources instead of a participatory; essentially local management approach of water resources can be made.

## The Workshop

The workshop benefited from the presence of practitioners from different regions who were closely involved with on field implementation. They extensively shared their experiences and lessons related to various aspects of Integrated Domestic water management. The workshop opened with **Mr. Manoj Mahata**, DA introducing the workshop and TARAGram. **Dr. Alka Srivastava**, DA anchored the workshop and gave the participants an insight into the themes and expectations from the workshop. The aim of the workshop was for field practitioners to meet at a common platform to share their learnings from the grassroots. Through the means of a series of consultations, we intend to develop a policy document on the need for integrated domestic water management.

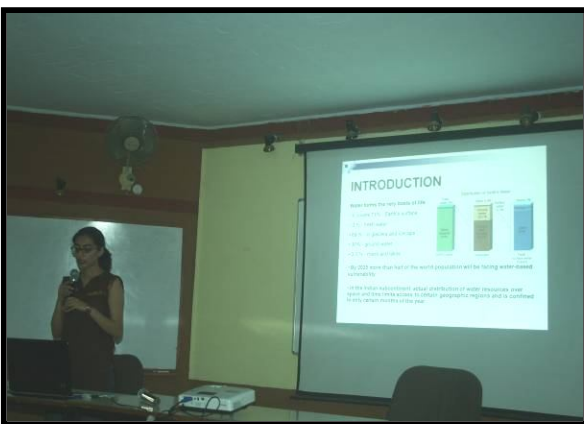


Introduction by Dr. Alka

**Dr. S.N. Pandey**, DA shared his learnings from the field and brought to light many of the issues faced on ground. He highlighted the water-health nexus and the rampant spread of diseases due to the unavailability of clean water. He stressed on the adoption of low cost appropriate technology to reach out to the masses.

The workshop was divided into a pre lunch technical session and a post lunch working session. The sessions adopted an interactive approach encouraging the participants to contribute to the proceedings of the day. The workshop saw very active participation during the course of the day.

## Technical Session



Presentation by Kriti

The workshop started with an introduction to '**Integrated Domestic Water Management**' (IDWM) by **Ms. Kriti Nagrath**, DA. The presentation highlighted the water concerns faced by the country today and gave an insight on the concepts of IDWM. Given the water scarcity in the world and especially developing countries today, an integrated approach to water

management is the need of the hour. Among water management, domestic water is rather neglected in spite of the importance it has in our daily life. The presentation touched upon these



concerns and opened the floor for discussion. A framework identifying the key characteristics of IDWM was shared with the participants.

The presentation was followed by an interactive session, where all the practitioners having worked in different states of the country shared their inputs.

**Key points of discussion:**

- While mapping the parameters defining IDWM, the financial requirements and the practicability of reaching the goals within a pre determined time frame should also be taken into account.
- The importance of convergence in development activities was highly debated. Two contradictory points of views were put forth. Certain groups had a positive experience applying the convergence principles in leveraging funds for development activities. Others did not find favour with the concept as their experiences had led them to believe it to be purely theoretical with little scope for on ground implementation.
- It was pointed out that the government machinery itself is beginning to lay a lot of stress on convergence between various interrelated programs and departments. They are also looking at collaborating with NGOs. The understanding of the concept is present however actual implementation is still finding its feet. They have not yet adopted a synchronized approach while dealing with developmental issues. Also a lot depends on the individual in power. Thus the process has not been streamlined as yet. There is a dire need of capacity building initiatives at different levels of administration, especially at the gram panchayat level. CSOs can take an initiative in this process.
- An integrated approach is required to establish a link between different agencies (CSOs and government agencies like:- Gram Panchayat) for successful perpetuation of any project. Issues like water, sanitation, energy, agriculture and livelihood are closely related. There is a need to orient the process towards communities to understand the needs of the people and equip them accordingly. A convergence committee can be formulated to keep a check on any conflicts between government agencies and CSOs.
- One of the main causes of concern is not the financial aspect; but the mindset of the community, which tends to be the major source of hindrance. They are not very open to interventions especially those related to sanitation. There is a need to sensitize the community towards these issues. An immediate need to change the attitude of



people towards interventions rather than just implementation of these projects is required.

- People need to be made aware of the relevant schemes and policies. External agencies can only provide knowledge and ideas to the people but successful implementation in the long run is only in the hands of the people. A demand and supply chain should be established for these services by making information available and building the capacity of the communities in terms of their rights and dues.
- Women are an important part of the community as they not only act as the foundation of the society, but their lack of involvement proves to be the missing link. They should be included in the micro planning of the village resources. Micro planning processes can form a common platform for the government, community and civil society organizations (CSOs) to work together towards convergence of rural development issues.



**Participant Discussion after Technical session**

- A wide scope of experiences was shared ranging from the flood plains of Kosi to the drought prone regions of Chitrakoot. They shared the challenges they faced in each of these agro climatic zones and their efforts to overcome them. Perceptions and needs of people vary from region to region; as a result a common model cannot be implemented at all places. Necessary improvisations need to be made before implementation.
- There is a need to shift focus of all organizations from quantitative to a more qualitative approach. Many projects work well through the project period, but suffer neglect on both accounts fiscal and personnel. Results need to be impact based and not quantified in terms of numbers. Sustainable convergence may help in making the system self sustaining.

## Work Session

The post lunch session was an interactive working group. Under the aegis of IDWM, the topics being discussed were water supply and sanitation. The focus was mainly on three aspects: -

- Problems encountered
- Practices followed
- Policy changes required



**D.A. Team as facilitators**

The participants engaged in a brainstorming session, where an intensive exchange of knowledge was seen.

### Key points of discussion:

- The primary concern is the timely and adequate availability of safe water. Government and CSOs need to converge their efforts with the community needs and expectations. There is a need to explore options like use of treated water and classifying use of water based on the quality available.
- Due to the severe water scarcity in the region, over the years there has been an increasing trend towards using ground water. Numerous tube wells are exploiting this resource much beyond its recharge capacity. The depths needed to reach water have been steadily increasing. As there is no focus on the aquifer recharge zones, once the water dries in an area the tube well is abandoned.
- Since water sources are quite limited, there is an urgent need to revive old water sources like dug wells and *bawlis*<sup>3</sup>. Suitable recharge methods such as check dams, rainwater harvesting structures, etc, should be practiced especially in acute water shortage regions. Traditional knowledge of the region should be tapped to unearth sustainable options.
- Beside quantity, the degrading quality of the water is another major area of concern. Though water testing kits are to be provided to each panchayat, the process is hindered by lack of kits or knowledge. There is a need to simplify and demystify the process so each villager can

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<sup>3</sup> Man made traditional community waster storage structures.

understand the importance of testing. Seasonal testing needs to be undertaken for each source.

- Many a times even after the water quality analysis has been done in an area, people are unaware of the results due to lack of proper information. Color coding of hand pumps can be used as a simple and effective means of communicating the water quality of the source.
- The age-old practice of corruption still proves to be one of the biggest hurdles in front of us. This is as much an issue from the demand side as it is from the supply side. Social audits which were developed to mitigate this evil have proved to be quite ineffective in the area due to inadequate information being relayed to other stakeholders and the lack of interest of government officials in the process. Thus the environment is not very conducive to these audits being held. This of course depends on the individual and there are exceptions.
- The constant clashes between the Government agencies and CSOs tend to have negative implications on the general population. There is an urgent need to establish a mutual relationship between the two agencies so that the two can work in harmony.

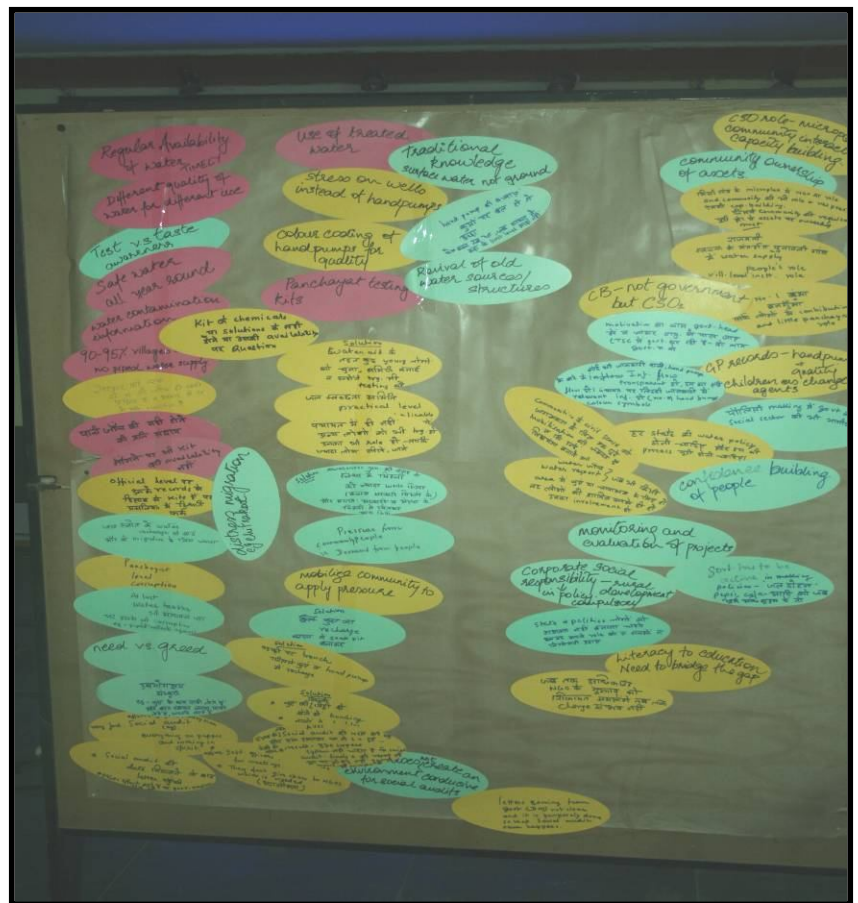


**Main points placed on board**

- When water is available it is used indiscriminately. There is no 2<sup>nd</sup> thought about the life cycle of water. The community needs to be sensitized towards this aspect and both government agencies as well as NGOs should play active and synergistic role.
- Good practices like using the soil being excavated during digging of trenches or bore-wells for bunding; soak pit near wells to recharge aquifers etc are being practiced at isolated locations. There is need to scale up and scale out.
- Mobilization of the community is the key to sustainable development. So, the CSOs and Government agencies need to make capacity building initiatives an integral part of their policies and schemes. The concept of community ownership of assets can help in sensitizing the people.

- Women form a core component of the community. The policies should incorporate the use of this untapped potential by strengthening the position of women. Even children are a great source of motivation, and can be used as effective change agents.
- Policy formulation should be made a social responsibility, instead of a corporate one. Special efforts should be made to create spaces and platforms where people can give their inputs for policy level interventions and sincere attempts need to be built-in to incorporate these inputs should be taken into consideration while formulating a policy.
- Each state is governed by different topographic, climatic, edaphic, political, cultural factors. There is a need to customize a state water policy individually.
- Monitoring and evaluation of ongoing and completed projects is essential to ensure that the desired impact has been achieved in a sustained manner. This should be carried out at a government and CSO level.

- Besides government agencies and CSOs there is a scope for corporates to play a role in this arena in the form of corporate social responsibility. For example, water bottling plants or cold drink plants earn enormous profits by using underground and surface water resources so they should also take the responsibility to ensure water recharge, water purification and water availability and



Data collected from the work session



Governments should be instrumental in seeing that this happens on the ground.

## Key Recommendations

- Use of low cost appropriate technology to reach to the masses.
- Need to focus on revival and use of traditional water storage and harvesting structures and measures.
- Village level committees to seasonally monitor water quality of sources and take necessary actions to communicate and treat as necessary.
- Stress on capacity building initiatives for the people, in order to ensure community involvement. 'Mobilization of Community' is the key to sustainable development.
- Identify the potential of women and increase their role in the existing and upcoming policies. Use of children as change agents.
- Capacity building initiatives for administrative staff at the panchayat, block, district and state level especially on convergence of various departments and schemes.
- Need for transparency and accountability to reduce corruption and ensure maximum benefits to the community.
- Need for intensive monitoring and evaluation of projects for mid course correction and assess post project impact



**Brainstorming session**

## **Annexure**

- i. Agenda
- ii. List of Participants
- iii. Presentation
- iv. Background Paper

## ANNEXURE-1:Agenda



**Development Alternatives**

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### **Integrated Domestic Water Management Workshop 5<sup>th</sup> June 2010**

#### **Workshop Schedule**

Time	Topic
10.30 - 11.30	Registration
11.30 - 11.45	Introduction
11.45 - 12.00	Technical session
12.00 - 01.00	Open Discussion
01.00 - 02.00	Lunch Break
02.00 - 03.30	Work session
03.30 - 04.00	Conclusion



## ANNEXURE-2: List of Participants

Name of the organisation	Name of Participant	E mail id	Address	Contact number
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D.A.	Santosh Gupta	<a href="mailto:skgupta@devalt.org">skgupta@devalt.org</a>	TARAGRAM	9936865989
D.A.	Akshat	<a href="mailto:aks666slipknot@gmail.com">aks666slipknot@gmail.com</a>	Delhi	9968281356

## **ANNEXURE-3: Presentation**

(Sent as attachment)

## **ANNEXURE-4: Background Paper**

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