

# Jalvaani

## 23599

### Women masons and mechanics celebrate their empowerment

For women masons and handpump mechanics in the rural water and sanitation sector, making inroads into a traditional male bastion is a cause to celebrate! Earning a livelihood in this male-dominated sector has been a giant step towards empowerment and has brought about a significant change in the quality of their lives. Women in other sectors could possibly learn from their myriad experiences.

The common problems that women in rural areas face — long treks to fetch water, broken village pumps, and health problems due to inadequate water and sanitation — may soon be forgotten. Groups of women in different parts of the

country are being trained as mechanics and masons to provide water and sanitation services. They have broken out of the shackles of tradition and have left no stone unturned in their quest to improve their day-to-day lives.

To bring these women entrepreneurs together and celebrate their achievements, a mela was organized in Chitrakoot by the Water and Sanitation Program, in partnership with UNICEF and Vanangana, a local all-women NGO. The response was overwhelming. More than 50 women from 10 projects in eight states attended the mela. Their enthusiasm was evident — a number had traveled for over two

days to participate in the event and for many it was the first time they had stepped out of their village!

Fun and festivity marked the celebrations as the women shared their experiences of empowerment. Innovative games to compare skills ensured that all the women participated with enthusiasm. These women did not need a common language. They told their stories in novel ways — through music, song, dance, theatre and *phad* (a cloth painted in bright colors illustrating the narrative).

Though the women came from different parts of the country, their stories of empowerment were similar. Sudha now works as a master handpump mechanic in Tamil Nadu. Her story reflects other women's experiences. Her new skills have made her economically self-sufficient and given her extra money to pay for the education of her children, something she would "definitely not have considered before".

Empowerment goes hand-in-hand with social acceptance and an increased sense of self-worth. According to Mony V.R., a master mason in Thiruvananthapuram, "Earlier I had to work very hard for very little. Now I am my own master and have more dignity; my family members respect me and I am recognized in the community."

These women entrepreneurs have also proved that working in





non-traditional jobs in the water and sanitation sector does not just provide them with a livelihood and empowerment but shows that they can actually compete with men as equals.

Common concerns were discussed. Can women earn a living through water and sanitation related work? Can women successfully challenge male bastions and play an active role in water and sanitation projects? What are the factors that contribute to the success and failure of programs in this sector? Although there were no clear

answers, the women participated with spirit and humor.

Challenging a traditional male bastion has never been easy. Many women spoke of being ridiculed as the "weaker sex," especially in the early stages of training. "This is nonsense," says Shantaben, a respected mechanic from Gujarat. "Who says we are weak? Women are used to working in the fields, lifting heavy weights and walking long distances to fetch water for the whole family." In most cases, the women have proved themselves through the

quality of their work and are now treated with respect. The group came up with solutions — organizing gender sensitization courses for local leaders and inviting officials to observe work during training.

Equal pay for equal work is still an unfulfilled dream for many women. In some communities, women are expected to repair handpumps free as a community service! According to Chandra, a master mechanic, "Improved social status now needs to be reinforced by a more equitable system of payments." To be

considered equals, it was felt that women should be trained to negotiate a wage rate based on current market prices.

Lack of availability of spare parts was a common problem among women handpump mechanics. Decentralizing the supply of spare parts and allowing local groups to place orders through existing rural outlets were solutions that came from the group.

In most cases, the Government did not recognize the women's crucial role in providing water and sanitation services. The women suggested forming a registered society of masons and mechanics, and involving block officials in training, which would give them higher visibility and greater acceptance in the community.

A pioneering initiative, the mela proved to be a great success, with the participants demanding that it becomes an annual event. Echoing the mood at the mela, one participant observed, "This mela has helped us understand the difficulties that women face and has given us the energy to find solutions to our problems."

*Participants of the mela are celebrating their success. The mela has been the first step towards...*

## FEEDBACK

« I take this opportunity to congratulate you on publishing *Jalvaani*, Vol 2, No 4, which focuses on innovative initiatives and decentralized rural water supply and sanitation management. I sincerely hope project implementers at various levels will learn and adopt the best practices from such innovative projects and make rural water supply and sanitation sustainable in their own localities.

### K. Balachandra Kurup

*Team Leader, Community Participation Management Consultancy, Bangalore*

» It was a pleasure to receive the November 1999 issue of *Jalvaani*. The newsletter contains useful information on projects being carried out in different

states in the rural water supply and sanitation sector.

### S.R. Kshirsagar

*Hon. Director (Technical), Indian Waterworks Association, Mumbai*

« I found *Jalvaani*, your newsletter on rural water and sanitation, very informative. This newsletter will be extremely useful to field-based persons.

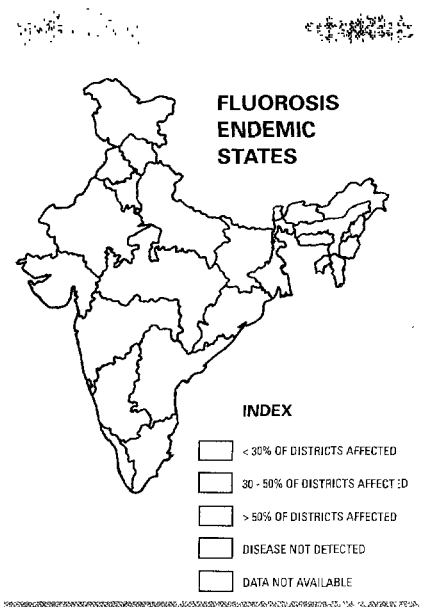
### J.S. Brar

*Block Development and Panchayat Officer, Muktsar, Punjab*

» *Jalvaani* is a lively and informative newsletter and I would recommend that professionals in the rural water supply and sanitation sector read it.

### S.M. Doria

*Assistant Director (Public Relations), IEC Bureau, Public Health Campaign Dept, Jaipur*



**TOOLS FOR MONITORING AND BENCHMARKING FOR SUSTAINABILITY AND EFFICIENCY OF RURAL WATER SUPPLY AND SANITATION SERVICES**

The World Bank Water and Sanitation Program organized a workshop in Bangkok from 13-15 December 1999 on 'Tools for Monitoring and Benchmarking for Sustainability and Efficiency of Rural Water Supply and Sanitation Services'.

Around 20 externally-funded large-scale investment projects in the Asian region have adopted new approaches to monitor the sustainable delivery of rural water supply and sanitation (RWSS) services. Drawing on the experience of these projects, the workshop provided a platform to network and share experiences to develop a viable and sustainable framework for monitoring the sustainability of RWSS services in Asia and the Pacific.

The workshop specifically focused on the following issues:

- Reviewing the existing monitoring systems, sharing experiences and showcasing innovative interventions in the RWSS sector
- Formulating viable tools and a simplified framework to monitor the sustainability of services in this sector
- Designing a conceptual framework to benchmark the delivery of services within this sector.

*The proceedings of the workshop will be available shortly at WSP-SA.*

**NEW MISSION DIRECTOR**

Mr Anil Kumar took over as full-time Mission Director, Rajiv Gandhi National Drinking Water Mission, in November 1999. An IAS officer from the Uttar Pradesh cadre, Mr Kumar was earlier a Joint Secretary in the Ministry of Rural Development.

*In a country as diverse as India, a number of innovative and successful initiatives are being adopted in the rural water supply and sanitation sector. In the new millennium, Jalvaani will continue to share these with our readers and to learn from their experiences.*

*Recognizing that women are the primary stakeholders in the water and sanitation sector, the lead story in this issue focuses on the empowerment of women handpump mechanics and masons. The sharing of their experiences at a mela in Chitrakoot revealed common problems in challenging this male-dominated profession. Empowerment has improved the quality of women's lives and enhanced the social and economic status of these entrepreneurs.*

*In a novel scheme, every village panch in Madhya Pradesh has pledged, among other things, to safeguard water sources and provide safe drinking water to all villages. The pledge also extends to conserving water by constructing a water-harvesting structure in the village. A similar sense of commitment and ownership across the country could go a long way in augmenting water reserves.*

*This issue also covers the first-ever State water ministers' workshop on policy reforms. An important outcome of this workshop was the Cochin Declaration, where delegates reached a unanimous agreement on the principles and strategic actions needed to implement rural water supply reform in India.*

*In an effort to focus attention on water harvesting systems and rejuvenate existing structures, CSE has launched a network of water harvesters. The objectives and activities of the network are documented here.*

*To address the problem of chronic water shortage in the hills of Kumaon, deep infiltration wells and handpumps are being introduced. Specially designed for hilly areas, this technology could easily be replicated in other upland regions of India.*

*We also carry an interview with Mr S.K. Tripathi, Secretary, Department of Drinking Water Supply, Ministry of Rural Development, Government of India. Mr Tripathi outlines the agenda and strategies of the newly-constituted Department.*

*As always, we have had a tremendous response from our readers. We look forward to your suggestions on future issues of the newsletter.*

*Anil Kumar*

**Anil Kumar**  
Mission Director  
Rajiv Gandhi National Drinking Water Mission  
Government of India

 **NOTICE BOARD**

**APRIL FORUM**

The World Bank Water Supply and Sanitation Forum will focus on 'Investing in Sanitation'. Parallel sessions will be held on 'Hygiene, Rural Water and Sanitation' and 'Urban Wastewater and Sanitation'.

5-7 April 2000  
Washington, D.C.

**HANDPUMP TECHNOLOGY NETWORK WORKSHOP**

A workshop on 'Civil Society and Government Partnership in RWS' is being jointly organized by the Handpump Technology Network, Government of India, Government of Andhra Pradesh, UNICEF and Swiss Development Co-operation.

6-10 March 2000  
Hyderabad

**Water**

**Promises to keep...**

**Every panch in Madhya Pradesh pledges to conserve water**

It may be the answer to the country's water requirements! In Madhya Pradesh, 465,000 panchs took an oath on 11 February 2000 to conserve every drop of water that falls in the area. This could mean that villages in the state will soon become self-sufficient in their drinking water and irrigation needs.

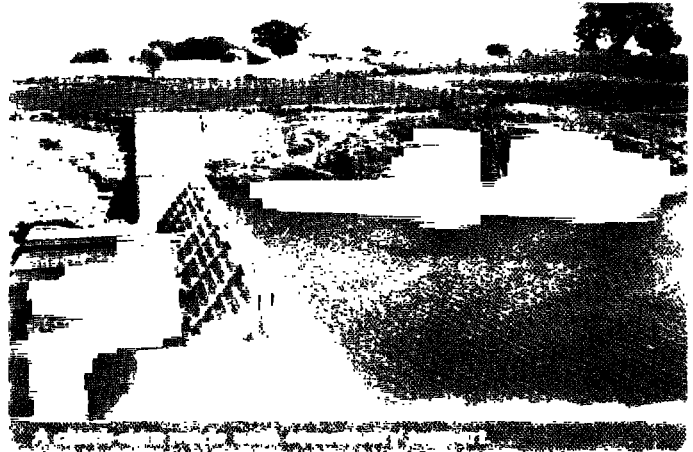
'Ek panch ek talab' is an innovative scheme launched by the Madhya Pradesh Government to ensure that every village has a safe and sustainable supply of water. Through this scheme, every panch in the state has taken an oath to conserve water by constructing a new tank or renovating an existing water harvesting structure in the village over the next five years. Administered by the eldest literate person in each gram sabha, the oath was taken in the presence of the electorate.

This novel scheme brings together all levels of the Government and the community to realize a common cause. The state will partially finance the project. Mobilizing social capital to

supplement financial resources will be the task of the elected representatives. The vast potential of the community will be harnessed through *shramdan* (voluntary labor) and financial contributions.

Community participation is an integral component of this scheme, which will generate a sense of ownership and commitment. Traditions of self-help and community service will also be reinforced through this project. By rejuvenating existing water harvesting structures, the past will be rediscovered and ancient techniques of tank construction and maintenance revitalized.

With the current emphasis on decentralization and empowering local self-government institutions, it



is crucial that the community takes the initiative in the management of water resources. This unique scheme in Madhya Pradesh promises a lot but it remains to be seen if these promises can make a difference to the lives of the people in the villages.

**Extract from the pledge**

...I firmly resolve that my village will have safe drinking water facilities and hence people will not fall prey to diseases. I will, along with the people of my village, try and conserve each drop of water. I will also try and safeguard the sources of water in my village.

During my tenure, with the help of the village community, I will construct a source for water collection, like a lake or a pond, or set up a water conservation scheme. I will also work towards conserving rainwater and rejuvenating existing water sources in the village...



For further information, contact  
**R. Gopalakrishnan, Secretary to the Chief Minister and Co-ordinator of the Rajiv Gandhi Missions, Govt. of Madhya Pradesh, Vallabh Bhavan, Bhopal 462 004**

## Water Harvesting: A Business!

### A network of water harvesters in India provides a forum to promote community-based water management

Recognizing that water should become everybody's business, the Centre for Science and Environment (CSE) has launched a National Water Harvesters Network (NWHN) to promote community-based water harvesting systems. The network is essentially a forum for like-minded people to exchange ideas and experiences. It currently has a national presence, with 212 members in different states. CSE provides the network's national secretariat.

Local water scarcities are often the result of poor distribution systems, lack of knowledge and inadequate management of local resources. CSE believes that unless all the stakeholders—individuals, households, farmers and industrialists—in urban and rural communities are involved in water management, it will be difficult to meet the growing water crisis in the country.

NWHN aims to promote greater participation, efficiency and sustainability in water management systems through its network. By documenting and disseminating success stories and new technologies in water harvesting, it seeks to promote 'water literacy'. Through this forum, researchers and practitioners of water harvesting will be provided information and

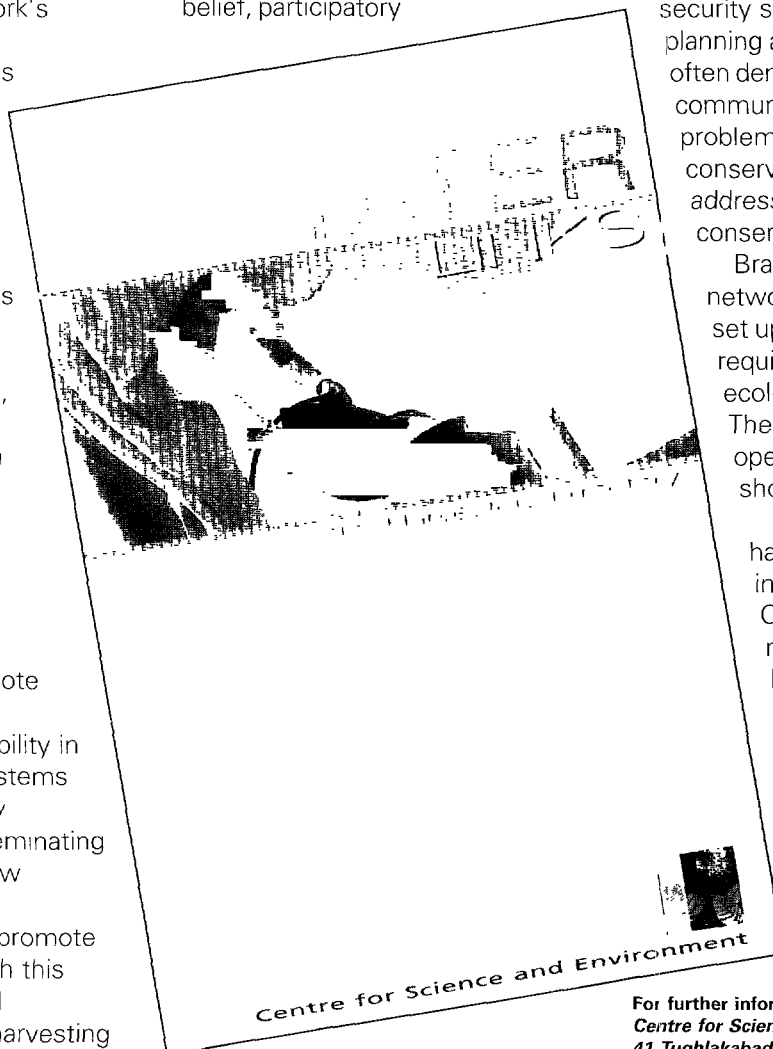
support. The network will also serve as a forum to advocate changes in policy, programs and institutional structures. NWHN will support local initiatives and work with all levels of the Government, especially at the grassroots, to promote water harvesting at every level.

Initiatives that involve the community in managing water systems have a number of advantages. Contrary to popular belief, participatory

management leads to stronger community ties rather than disputes and conflicts over water. Unlike mega-water supply systems that have limited reach, community-based programs impact a large number of people and diverse ecosystems. Involving the community could help to mobilize finances and labor—a growing need, given the current fiscal deficit. Community participation also helps to promote local food security since local water planning and management are often demand-driven. Through community-based systems, problems of water pollution and conservation can be effectively addressed and a water-conserving culture promoted.

Branch units of the network are currently being set up to meet the requirements of different ecological regions in India. The Tamil Nadu unit is now operational and is already showing results!

By linking water-harvesting structures and involving the community, CSE's recently-launched network has taken the lead in ensuring a culture of equitable and sustainable water distribution. CSE's initiative could be a stepping stone to better water management.



For further information, contact  
Centre for Science and Environment,  
41 Tughlakabad Institutional Area,  
New Delhi 110 062

## Politician for reform State Water Ministers' Workshop on Rural Water

For the first time ever, State water ministers came together for a workshop on Rural Water Supply Policy Reforms in India. The workshop resulted in a commitment by State ministers and senior civil servants to further the Government of India's reforms in the rural water supply and sanitation sector.

The workshop concluded with an agreement on the principles and strategic actions needed to implement rural water reform in India.

This high-level workshop was jointly organized by the Government of Kerala and the Water and Sanitation Program-South Asia, in association with the World Bank Institute and the World Bank.

The Chief Minister of Kerala, Mr E.K. Nayanar, inaugurated the workshop and the Deputy Chairman of the Planning Commission, Mr K.C. Pant, delivered the keynote speech. The participatory design of the workshop kept all the delegates enthusiastically engaged throughout the process.

The workshop began on a light note with an exhibition of cartoons and a millennium calendar by the noted cartoonist, Mr Sudhir Dar. These cartoons took an irreverent look at the dilemmas in the rural water and sanitation sector and were extensively quoted at the workshop. The exhibition was inaugurated by Mr K.C. Pant.

For further information, contact  
India Country Team, Water and Sanitation  
Program-South Asia, 55 Lodi Estate,  
New Delhi 110 003

Sixty-five delegates from 14 states, including 11 State ministers, senior civil servants from the Government of India and State Governments, and representatives from NGOs and external support agencies participated in a workshop in Cochin, Kerala, on 7 and 8 December 1999 and reached an agreement on the principles and strategic actions needed to tackle the problems facing the rural water sector. The Cochin Declaration reflects these deliberations and endorses the reform process.

The State Governments, with assistance from the Government of India, are committed to ensuring that all of India's 1.43 million habitations have access to safe drinking water. Though significant efforts have been made towards this end, all the stakeholder groups agreed they are a long way from achieving this objective.

The participants agreed that the problems in the sector derive not simply from the enormous scale of required investment, but also from inadequate sector management. Many public rural water supply services today are unsustainable and do not adequately serve the needs of user communities. The Government of India has responded to this challenge through policies in the Ninth Five Year Plan (1997-2002). New policies for service delivery have been developed, but these reforms now need to be implemented. For the reforms to be successful, State-level endorsement is vital.

The following *principles* should guide the reform process:

- Adopting demand-responsive approaches and the use of participatory processes
- Changing the role of the Government from provider to facilitator
- Establishing financial viability and sustainability of rural water supply services, and
- Promoting integrated water resource management.

We, the workshop participants, resolve that we shall implement the above principles in our respective states through the following *strategic actions*:

- Increasing engagement with NGOs and Panchayati Raj Institutions; encouraging greater private sector participation; and changing the Government's role through reorienting PHEDs
- Improving financial viability through implementation of pilot projects with partial capital cost recovery; implementing user financing of operation and management for local schemes; capacity-building of Gram Panchayats, and advocacy to increase acceptance of cost recovery policies amongst key stakeholders
- Supporting community management by shifting decision-making to the grassroots level; increasing participation of women and the disadvantaged sections of society in management of service delivery, management of investments and ownership of assets
- Creating an enabling environment which promotes transparency and strengthens true partnerships between the Government, Gram Panchayats, NGOs and communities. NGOs and community-based organizations (CBOs) must play a more significant role in advocacy and capacity-building, and
- Developing and implementing sustainable comprehensive water resource management and service delivery policies and actions; introducing water conservation, recharge and rehabilitation measures; supporting the enactment and enforcement of legislation to prevent depletion and contamination of water sources; and implementing water quality monitoring systems.

## Intermediate technology combines deep infiltration wells and the installation of handpumps

With the loss of tree cover in Kumaon, traditional water sources, like *nalahs*, are drying up and can no longer be harvested. Recently, deep infiltration wells and handpumps based on intermediate technology have been introduced in this hilly terrain to address the problem of chronic water shortage in the area.

Conceived and developed by a British geo-hydrologist, Tim Rees, and promoted by Grassroots, a Kumaon-based NGO, these tube-wells combine water harvesting with handpump technology to provide a constant supply of water.

The design is highly adaptable—in combination with submersible pumps, deep infiltration wells have been used to lift water as high as 80 meters in many areas!

Specially designed for the hill areas, this technology has a number of advantages. Large quantities of water can be harvested since deep seepage lines are tapped. These structures are cost-effective as water is not carried over several miles from distant water sources to problem villages. The per capita investment is a mere Rs 500, compared to Rs 3,000 for conventional gravity flow piped water systems. To keep

the primary water resource base going, the immediate catchment area has to be recharged and protected, which will benefit the area ecologically. The handpump allows water to be drawn out of a completely closed well so relatively uncontaminated water is supplied.

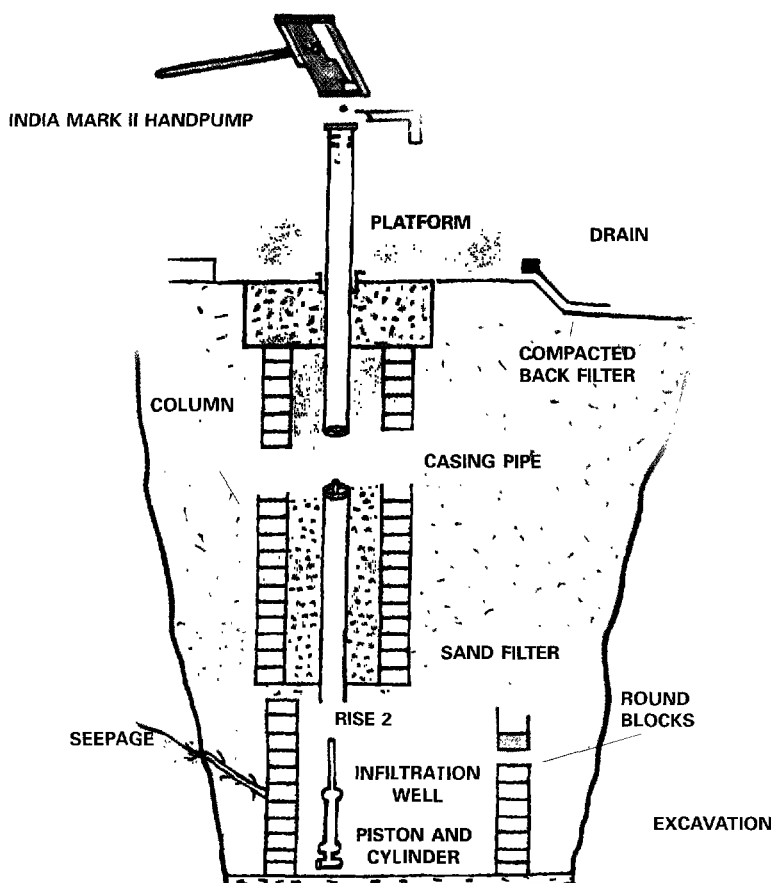
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In summer, a perennial underground water source is identified and a cylindrical well, approximately 2 meters in diameter, is excavated. The depth of the well is such that water should accumulate at a standing depth of 1.2 meters. Once the desired depth is obtained, a 7.5 cm thick plain concrete slab is laid at the base of the well.

Curved concrete well blocks made with a simple well block mould are laid at the base of the well to form a circle. The annular ring is backfilled with clean sand and the cap sections laid. Cast column blocks are used to form a column around the casting pipe, which is inserted through a hole in the cap section. Sand backfilling continues till the cap is covered to a depth of 30 cm, after which the excavated material is used.

The block column is built to reach the desired elevation at which the feet of the handpump will be set. A platform is constructed, usually with the pump at the centre. The pump discharge faces downhill. Care should be taken that the drain discharge does not seep back into the infiltration well.

For further information, contact  
Grassroots, Post Bag # 3, Ranikhet,  
Uttar Pradesh 263 645



## Safe and sustainable drinking water for all

**S. K. Tripathi**, Secretary, Department of Drinking Water Supply, Ministry of Rural Development (MoRD), Government of India

What is the most important is the concern of the Government of India regarding drinking water? the

The Union Government is committed to provide clean drinking water to all villages in the next five years. Accordingly, it has created a new Department of Drinking Water Supply in the MoRD to implement this program.

What are the key areas where you would like to see an immediate change?

We have to give special emphasis to reforms, coverage, water quality and sustainability. Although India has an impressive coverage figure, problems related to quality and sustainability of sources and systems are serious impediments to ensuring the supply of safe drinking water to the rural population. The issue of water quality is an important one and there is an urgent need to tackle fluoride, arsenic, iron, etc., on priority.

What are sector reforms?

In order to achieve sustainability of the huge infrastructure and systems being built up, it is essential to shift from a target-based supply-driven approach to a demand-based approach where users get the service they want and are willing to pay for it. It is possible to institutionalize community-based RDWS programs if the local communities are empowered to generate resources and are trained and equipped to plan, implement, maintain and replace water supply schemes themselves in coordination



with Government agencies/private sector/NGOs. In essence, the approach focuses on the following main elements:

- Adoption of a demand-driven approach based on empowerment of villagers to ensure their full participation in the project through a decision-making role in the choice of scheme design and management arrangement
- Focus on village-level capacity-building
- Ensure an integrated service delivery mechanism by streamlining the

function of the agencies involved in project implementation


- Partial capital cost sharing and 100 per cent sharing of O&M cost by users
- Taking up conservation measures for the sustained supply of water through rainwater harvesting and groundwater recharge structures.


In accordance with the above concept, 20 per cent of ARWSP funds have been earmarked to demonstrate the sector reform process in 58 selected pilot districts in the country.

What has been the response to the Government of India policy reforms in the 58 pilot districts?

We are overwhelmed by the State Government's response to the piloting of Government of India policy reforms. Already, proposals for 36 districts at an approved cost of about Rs 960 crore have been sanctioned. The remaining projects are being processed. In future, we can only hope to take the reforms forward. ■

— Jalvaani —  
 jointly produced by

 **Department of Drinking Water Supply**  
 Government of India

 **Water and Sanitation**  
 Program South Asia

**Jalvaani**  
*Jal* means water and *vaani*, voice  
 This newsletter aims at communicating key  
 themes and messages on water and  
 sanitation to different stakeholders in India.

Contributions, comments, suggestions and requests for subscription may be sent to:

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