

India's Gwalior a leader in development

Shahana Singh, editor of *Asian Water*, the region's leading magazine on water and wastewater, last year won the prestigious Developing Asia Journalism Award (2008) in the Infrastructure Category for this article* on a UN-HABITAT water project in Gwalior, India. What she saw, revealed many surprises...



The Water for Asian Cities Programme aims to bring clean water and better sanitation across the region

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“**O** King, I will marry you on the condition that you arrange for water from my village to be delivered to the palace in Gwalior,” said an audacious girl to the besotted King Man Singh of Gwalior. The King acquiesced and the girl went on to become famous as Queen Mrignayani. Considerable engineering expertise was exercised to ensure that water from River Rai was delivered via an aqueduct to the palace of the assertive queen.

Water, which was the central concern of a queen in the 15th century continues to be a subject of major importance even today in the city of Gwalior situated in the Indian state of Madhya Pradesh. Incidentally, the main source of water for the city is the Tighra Waterworks which is not far from the medieval queen's hometown.

The historical city of Gwalior, along with three other cities in Madhya Pradesh – Bhopal, Indore and Jabalpur, has been targeted by the Water for Asian Cities Programme. This programme is a collaborative initiative of the UN-HABITAT, the Government of the Netherlands and the Asian Development Bank (ADB) and countries in the region for achieving the Millennium Development Goals (MDGs). This includes Goal seven, Target 10: to reduce by half the proportion without sustainable access to safe drinking water and basic sanitation by 2015.

The Water for Asian Cities Programme

The Water for Asian Cities Programme was officially launched during the Third World Water Forum on 18 March, 2003. Several cities in India, China, Nepal, Laos and Vietnam have been covered under this programme. In all these cities, the Programme seeks to promote pro-poor governance, water demand management,

increased attention to environmental sanitation and income generation for the poor linked to water supply and sanitation. To achieve this, the programme aims to mobilize political will, raising awareness through advocacy, information and education; training and capacity building, by promoting new investments in the urban water and sanitation sector; and by systematic monitoring of progress towards MDGs.

"A loan of USD 181 million has been approved by the ADB in the four towns of Madhya Pradesh mainly for the improvement and expansion of urban water supply, sewerage and sanitation, water drainage and solid waste management," says Aniruddhe Mukerjee, Chief Technical Advisor, UN-HABITAT.

How effective has the Water for Asian Cities Programme been?

In the Gwalior slums of Laxmanpura, Ramaji ka Pura, Subhash Nagar and New Mehraon, a range of schemes are in various stages of completion. In order to not deter the poor with high water connection charges of Rs 750 (USD 17), they are allowed to pay in easy instalments. User charges are a flat Rs 80 (USD 1.80) per month.

From the smiling faces at Laxmanpura slum in the heart of the city, it was clear that the availability of water to drink, wash and cook had eased a number of woes. When asked whether they were using water indiscriminately on account of the flat water charges, one woman exclaims: "Of course not! We know that we should not use water wastefully. If we do that, there will be less water for others in this settlement. We have formed a committee to keep a vigil on water wastage, so we regularly walk around to inspect."

At the hillside slum cluster of Ramaji Ka Pura, Islampura and Subhash Nagar, some 4,000 households do not get water despite piped connections, due to low pressure. In the households where the pressure was sufficient, water was supplied for only two hours in the middle of the night. But hope is in sight thanks to UN-HABITAT and the local municipal corporation.

With considerable community participation including the active role of women, the construction of a surface water reservoir and an overhead tank along with a network of distribution lines are about to be completed.

"It will be a relief when water starts flowing," sighs a woman. "It is such a torture to stay awake at night to fill buckets of water. Once the water starts flowing at regular timings to our

houses, we women will get more time to take up some income-generating activity like embroidery, which will ease the burden of household expenses." Most of the men in this slum work as labourers or vendors in the city.

Woes of open defecation

Open defecation in rural areas and urban slums remains a major problem faced in India over the centuries. For the rural folk, it is the norm to walk to distant fields to defecate. While men can do this at any time of the day, women need to go early in the morning before sunrise. The same unhealthy practice is being followed in most urban slums. Incidentally, many cases of sexual abuse are reported in the early mornings when women go to answer the call of nature.

Earlier efforts by financing organizations and governments to build toilets for the poor have often failed miserably because the poor, who are unused to sitting within the confines of a toilet, prefer to relieve themselves in the open. Also, they began to use toilets as storerooms to store grains and other articles, defeating the very purpose for which they were built.

It was realized by international organizations that without community participation and training, it was pointless to execute any scheme. Accordingly, the focus was shifted to educating people, especially women and children on various aspects of hygiene such as the need to defecate in allocated spaces, washing hands after toilet-use, etc. A number of demonstration toilets have been built in the slums to illustrate the benefits of having them.

The efforts to educate people seem to have borne fruit at the slums covered by the Water for Asian Cities Programme. "A scheme has been evolved whereby if a toilet costs Rs 3,000 to build, the slum dweller would need to put up Rs 1,000 in terms of labour and materials, while the remaining Rs 2,000 could be obtained from a revolving sanitation fund," says Mr. Mohan Mudgal, Technical Advisor to UN-HABITAT.

Women are at the forefront of the movement to build toilets for their households. "It is a boon to have a toilet in your own house. There is no need to get up early in the morning to walk to the fields. We don't have to worry about the safety of our daughters and daughters-in-law," says a woman from the slums. Implements to build squat toilets are being provided free. A change in the mindset is evident from the enthusiasm displayed by the slum dwellers to show off their toilets.

Schools are spreading the word

Every slum cluster has a primary school in its vicinity. Apart from regular subjects, children are being taught hygiene and good values, which are so important for the betterment of a community. Innovative ways to impart the message of hygiene include the teaching of nursery rhymes on the subject.

"We must wash our hands with soap before eating, after eating, after using the toilet, before cooking and whenever our hands get dirty," chant the children in unison at one of the schools visited. On being asked why one should wash hands, a child quickly answers, "Because germs will get into our body and make us sick!"

"The children come back from school and teach us so many things," smiles a proud mother at Laxmanpura. On being questioned whether she believed in an education for her daughter, she replies: "Of course. Both my daughter and son go to school."

Many schools have rainwater harvesting facilities on their rooftops, an initiative that needs to be pursued more vigorously.

Empowering women

It is evident from the confidence of women at the slums targeted by the Water for Asian Cities Programme, that the right strategies have been adopted. Being involved in all aspects of decision-making and giving them ownership of assets has given the women a new sense of empowerment. The men could be seen listening deferentially to the women or making way for them to speak at various meetings.

"Women can do everything that men can do," says one beaming woman. This leads to some jovial bantering between the men and women seated at the gathering. At a meeting in another settlement, a woman was spotted breast-feeding her baby gracefully within the confines of her saree while taking part in a debate. A sense of sisterhood prevails among the women who cooperate with each other to get tasks done.

"We are saving money for the hard days," says one woman, showing her bank pass book with a total of Rs 500 in her account. When any one of us needs money for some urgent expenses, we lend to each other," says another woman.

Mayor says social component is important

A visit to the Mayor's office located in an elegant building dating to medieval times, revealed a person who is deeply involved in

Gwalior slums fast facts

Even in a small city like Gwalior, there are 230 slums. The WAC programme has only covered 16 slums so far. In the other three urban centres of Madhya Pradesh under the purview of the Programme, the number of uncovered slums is even greater. Besides, the four cities of Madhya Pradesh are just a minuscule fraction of India – a country bursting with over one billion people, and 22 percent below the poverty line. Mumbai's Dharavi slum, the world's largest, is home to one million people.

Under the Community Managed Water Supply Scheme in Ramaji ka Pura a distribution network to provide water to 1,200 households (about 6,000 people) has been completed. The system is being successfully operated and managed by the Community Water and Sanitation Committee. The residents are getting water for a fixed monthly fee. A community managed sewage scheme has also been completed with support from UN-HABITAT under the Water for Asian Cities Programme. It benefits 2,500 households.

The Slum Environmental Sanitation Initiative in 16 Gwalior slums has helped about 5,000 households (25,000 people), with water and sanitation facilities. The Management System for Community Toilets at Laxmanpura developed under the Water for Asian Cities Programme was shortlisted as a model for best practices on sanitation for National Urban Water Awards 2008 instituted by the Ministry of Urban Development, Government of India.

Other initiatives being implemented by Gwalior Municipal Corporation in partnership with UN-HABITAT include the renovation of 10 community toilets serving some 5,000 people; a community movement of more than 300 residential and welfare associations mobilized to improve water and sanitation and awareness in Gwalior's slums.

Source: UN-HABITAT

water and sanitation issues. "A lot of work has been done to improve the situation in our city, but a lot more needs to be done," admits Mr. V.N.Shejwalkar, the Mayor of Gwalior. "We must increase the capacity of treatment plants. We need to move with the times and have modern tools for monitoring. We must carry out 100 percent metering. At the moment, we only charge flat rates for water. We also need to reduce non-revenue water. We must achieve zero open defecation."

At present, Gwalior does not have any sewage treatment plants since sewage is directly discharged into water bodies. "We have constructing two sewage treatment plants; one in 2007, and the other in 2008," says Mr. Shejwalkar. He adds that it was important for the social component to be included in engineering projects. "Community participation is a must," he asserts.

WATSAN classroom

An excellent initiative of the Water for Asian Cities Programme is the WATSAN (Water and Sanitation) classroom. This is a state-of-the-

art classroom equipped to train children and teachers alike about important issues related to water and sanitation. Groups of children and teachers from schools all over Gwalior are regularly brought to this classroom. Similar classrooms have been set up in other cities covered by the Programme.

With creative posters giving a wealth of information in the local language Hindi, models illustrating the process of water treatment and an area for presentations, the classroom provides an atmosphere highly conducive for learning. There is also a stress on values related to water such as the need to pay water bills regularly and not to use water illegally. The importance of inculcating these values at an impressionable age cannot be over-emphasized.

On one wall of the classroom are some original, innocent poems related to water issues composed by children for themselves at a recent contest. At another corner of the room, an interesting experiment has been laid out. "We ask the children to leave a tap open for say five minutes and make them



The delivery of clean, running water is vital for health of slum dwellers

PHOTO © UN-HABITAT

collect all the water which flows. Then we make them measure the volume. In this manner, they learn how much water is wasted each time they leave a tap running," explains Mr. K.K. Srivastava, Manager of the Urban Water Supply and Environment Improvement Project. Indeed, the reactions of the children noted in the visitors book reveal that most of them have absorbed a great deal of information.

Community participation – the key to success

It is clear that the successes of the Gwalior initiatives are due to a great deal of community participation and cooperation between a multitude of organizations, not to forget NGOs such as Sambhav and Water Aid – all working towards the same goals.

Many committed officials have taken personal interest in the project. The intensive training imparted to officials at various levels has helped to keep them focused on the goals. An integrated structure which takes into account everything from financing to motivation of individuals is evident in the programme. There was a heartening sense of optimism about the future.

Yet slums keep growing. As Dr. Kulwant Singh, Chief Technical Advisor, UN-HABITAT observes: "Supposing we achieve the Millennium Development Goals related to water and sanitation in 2015, we will still have the same number of unserved people as we do today." ♦

**This article was edited to meet space restrictions. For a full version and further information see, www.asianwater.com.my or www.shpmedia.com/pub_asianwater.htm*