

Crisis puts water projects in top gear

Experts Want Integrated Approach

Radheshyam Jadhav
@timesgroup.com

Pune: The civic officials and elected representatives are in a huddle as the city staves at a severe water crisis. A series of meetings have been held in Mumbai and Pune to expedite pending water projects. Experts, however, say that traditional business-as-usual approach to water management will not help resolve the crisis permanently.

On its part, the PMC has accelerated the Bhama Ashed pipeline project. Guardian minister Girish Bapat called a meeting in Mumbai last week to discuss hurdles in the way of the project. The civic body is also seeking help of international funding bodies to launch its ambi-

tious 2x47 water supply project. The work on direct, closed pipeline from Khadakwasla to Parvati water works has also gained momentum. The PMC plans to improve its sewage treatment capacity.

"The state is keen on solving Pune city's water problem for forever. We are sure that in the next few years, Pune city will have sufficient water to meet the needs of its growing population," said Bapat.

Experts are not impressed by the efforts though.

The World Bank, which is willing to support Smart City Mission projects, has insisted on the need for an Integrated Urban Water Management (IUWM) programme.

"IUWM takes a landscape view of water challenges by looking at competing water users in a given catchment or river basin. Through coordinated and flexible planning among water using sectors, IUWM allows for optimal sequencing of traditional and new infrastructure with alternative management scenarios that leverage efficiencies

NEW CHALLENGES

- ▶ Growing cities face challenges that affect the provision of basic urban services. As a result, business-as-usual approach may prove too costly
- ▶ Such an approach, with traditional engineering solutions, too may fail to address the multitude of water issues (flooding and drainage, water supply quality and quantity, sanitation, urban irrigation) that cities face
- ▶ The availability of water in cities' catchments is shrinking due to land-use changes, demands for irrigation and energy, environmental degradation, climate change and new urban settlements upstream. Often there is not enough water to satisfy all users



and promote conservation," states the World Bank document.

Veena Srinivasan, a research fellow with Bengaluru-based Ashoka Trust for Research in Ecology and the Environment (ATREE), says that cities must not look at water as an isolated issue. Her research analyses the dynamics of water supply in the city of Chennai as a case study of water resources management in a developing country urban centre. Says Veena, "Water

resources, treatment, pollution, water charges and policies go hand in hand. Water is a comprehensive issue which is interlinked with many other urban factors. For example, if managed well, lakes can play a major role as source of water supply control run-off and recharge groundwater. But this factor is not considered in water management models of a majority of cities."

Experts even link solid waste management with water. "The lack

of solid waste collection and its safe disposal affects the capacity of cities to deal with floods because garbage clogs up drainage lines. It also presents a risk for human health as well as the environment. The poor maintenance of pit latrines and lack of control of wastewater effluents pollutes water bodies which in some cases are essential for supplying water to the city. The competition over the same resource between cities and other sectors also has implications at the river basin level," say Alvar Closs, Matthias Schuring and Diego Rodriguez in their research paper on sustainable water management.

City-based Nagrik Chetana Manch has repeatedly raised questions on city's model of water supply. Major Gen S C N Jatar (Rtd), a representative of the Manch, insists on small, but important steps. "The PMC must rationalise water supply and crack down on illegal water connections. The civic body must also regularise water connections wherever possible," said Jatar.

Experts say that dependence and impact of cities on the wider watershed is also a fundamental part of integrated urban water management. Sustaining access to water resources for cities must take into account the needs of upstream and downstream users and incorporate planning measures at the watershed level. Additionally, the effects of upstream land-use changes, agriculture or deforestation can alter the hydrological regime (i.e. the availability and quality of water in river catchments) and cause stress on urban water supply systems. Conversely, cities can also have an impact on water quality for downstream users by releasing untreated wastewater effluents, or on water availability by reducing environmental flows, say experts.

Magsaysay award winner Rajendra Shingh, who was recently in Pune, highlighted this point saying that the real need is to understand water, to conserve water and then to organise so that it can be better managed.