

# 4<sup>th</sup> INDIA WATER WEEK 2016

## WATER FOR ALL : STRIVING TOGETHER

### APRIL 4-8, 2016

## FILMS ON WATER CAN HELP SOW SEEDS OF CHANGE IN SOCIETY ON CONSERVATION: UMA BHARTI



India's rapidly growing water demand is likely to lead to water conflicts among different user group as well as basin States if the country's various water related challenges are not addressed properly and in a time-bound manner, said Union water Resources Minister Uma Bharti on April 6.

The Minister, who inaugurated the Water Talk Film Festival bring organised by India Water Partnership (IWP), Wapcos Ltd, CMSR Foundation and ICID during the ongoing India Water Week-2016, added the note of caution while

stating that films were the best medium for sowing the seed of change in the minds of audience and discussing about the water issues and solutions that can help in decision making.

"A drop of water is worth more than a sack of gold to a thirsty man goes the saying. It is impossible to think of our lives without water. It is comforting to think of water as renewable source but we must also know what limitless exploitation of a resource can lead to".

Though India is gifted with huge fresh water resources including life giving

rivers like Ganga, Yamuna, Brahmaputra, Indus, Mahanadi, Godavari, Krishna, Cauvery, Narmada and Tapti; inland water bodies like lakes and ponds; and fresh water aquifers, yet we are facing water scarcity in many parts of the country due to climate change and other human activities, she added.

"This film festival being organized by India Water Partnership and WAPCOS is an interesting combination of both and I feel delighted to be part of it. I also encourage that every success story in the country should be documented and

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## IRRIGATION PROJECTS NEED INNOVATIVE FUNDING; SUBSIDIES TO AGRI SECTOR MAY NEED TO BE TONED DOWN: PANEL

There is a need to come up with innovative funding mechanisms for undertaking irrigation projects in India and states like Maharashtra and Karnataka can show the way ahead to many other states after having already experienced success in this area, felt experts at a brainstorming session on 'Financing of irrigation projects' on April 6.

The panellists at the session felt that lessons learnt from Maharashtra on water pricing and from Karnataka on fund raising would be worth looking at while upscaling irrigation projects.

Financing of water resources projects require front loading and considerable capital investments need to be made before the gains become evident. This makes deployment of private capital difficult in the area. Multilateral lenders like Asian Development Bank have also slowly tapered down their investment in the area.

The present model of evaluating and accounting for the benefits especially from irrigation projects requires an overhaul in the context of changing economies and capital availability at Government level.

The panel, which was chaired by Special Secretary, Ministry of Water Resources Amarjit Singh, was of the opinion that high subsidies that are given to the agriculture sector presently may have to be curtailed and amount saved thereof invested in development of additional irrigation potential.

The panellists were of the unanimous opinion that Water Users Associations (WUAs) should be strengthened both technically and financially. This is evident from the fact that successful projects have been backed or supported by strong WUAs.

The experts at the brainstorming session also called for bringing in higher efficiency at the pre-project stage to avoid procedural delays later and felt that the existing capacity of people needed to be further built.



It is acknowledged that procedural delays are quite prominent within the existing system of processing/appraisal/examination/clearance of project proposals. In majority of cases deficient proposals are submitted in haste, a move which necessitates reframing or revision of the proposal later, resulting in changes in estimated costs.

The panel underscored the need for bringing in higher efficiency during the processing stage by minimizing the procedural delays both at the Central and State levels. Capacity building of officials associated with the project examination can be an initial step in this direction.

During their presentations, the experts also talked about the compatibility of measures for fund raising in energy and transportation sectors with irrigated agriculture. While the capital cost recovery could be difficult, the operation and management cost would be feasible by enhancing 'service quality' and delivering right amount of water at the time of its requirement alongwith suitable policy change required for capacity building on farming, they felt.

Wapcos Ltd Senior General Manager R K Agrawal, in his presentation, pointed out the problems in irrigation financing. For capital investment, there were limited resources available with the Central and state governments and even the external

funding was available only occasionally for a few projects. The private sector funding is negligible, that too, mainly for micro irrigation of select cash crops.

Agrawal pointed out that the financial requirement for future irrigation projects would be quite different from those already undertaken. "It would be much more than those of projects completed so far due to the fact that project construction would now be at relatively more difficult sites as most of easier sites have already been developed".

Also, more stringent requirements for planning and design of projects to address increased demands for environmental and social safeguards and disaster management as well as challenges of dealing with the adverse impacts of climate change on water resources.

The panel was of the view that since productivity of irrigated agricultural land is at least 2-3 times that of rainfed, it offered scope for examining agricultural income being moderately taxed to enhance available finances for future schemes. This would be a better option than levying a 'cess' for irrigation development.

Also, PPP mode or contract farming should be encouraged wherein the facility will be provided by service provide at a predetermined minimum support price (MSP).

# WATER QUALITY & HEALTH: EDUCATE MASSES, HAVE BETTER MONITORING MECHANISMS, SAY EXPERTS

One of the major challenges faced by a country like India is of water quality. Rapid urbanisation in India, growth in agriculture and industrial activity along with climate change are exerting mounting pressure on not only the quantity of water in India, but even the quality of water resources.

Experts at a seminar on 'Water and Health – Managing Water Quality' on April 5 felt that water quality and health, which are directly related, need more attention and there should be massive education programmes introduced at all levels aimed at creating awareness at the grassroots levels on its aspects.

Drinking water, which constitutes a very small proportion of the total water, is used by the household and for rendering this small volume safe, point-of-use (POU) devices that address the important microbial pathogen classes, should be considered as an additional complementary measure for accomplishing health goals and reducing the burden of disease.

Necessary legislative and market regulatory measures should be taken to standardise the designs of POU devices and quality of treated water produced by them, felt the experts.

The combination of escalating water scarcity, increasing demand for

clean water, and worsening water quality was severely restricting water-related human activities, affecting human health and impacting the health of aquatic and terrestrial ecosystems.

Also, lack of monitoring and enforcement also makes it difficult for countries and regions to understand and deal with this challenge, said experts, adding that water quality issues are both complex and diverse, but deserve urgent attention and action.

The experts of the view that the water quality monitoring protocol needs to be uniform to bring in uniformity in sampling procedure, selection of parameters, their frequency and also of monitoring methods of analysis, data entry, data analysis and reporting.

Though the Water Quality Monitoring Protocol is in place since 2005, it needs to be updated in light of the publication of Ministry of Drinking Water and Sanitation on Uniform Drinking Water quality Monitoring Protocol (2013) covering all the parameters and procedures.

The experts said that Water Quality Index (WQI) is a very useful and efficient method of assessing the suitability of water quality. It is also a very useful tool for communicating the information on overall quality of water to the concerned citizens and policy makers.

Central and State Government water quality monitoring agencies should use this tool and the date should be made open for public use.

HydroNumerics Director & Water Resource Engineer Chris O'Neill gave a presentation on developing an online Water Quality Index (WQI) and a report card for the Ganga in Uttar Pradesh through the Ganga River Automatic Monitoring System (GRAMS).

In his presentation on 'assessment of groundwater quality of India, relevance to challenges of water supply' Dr Anil Yadav from the Faridabad-based Central Ground Water Board said the CGWB carried out water quality studies in 88 industrial clusters identified as polluted by Central Pollution Control Board.

It was found that contamination in groundwater was reported from nearly 90 per cent of the clusters. Contamination wherever reported were mostly found in phreatic aquifers. Presence of other basic elements in excess of permissible limit like salinity may be due to geogenic causes, said Yadav.

Constituents which were reported beyond permissible limits show very high variation in terms of their concentration. Electrical Conductivity, Chloride, Total Hardness, Sulphate, Fluoride & Nitrate are the parameters, which were reported beyond permissible limits.

The Central Ground Water Board recommended that public awareness programme should be arranged to make the people and industry aware about the menace of groundwater pollution and dwindling groundwater resources in the towns.

To check the pollution in the industrial clusters, it is imperative to ensure that the effluents from the industries are properly treated conforming to the standards; else, zero discharge norms may be adopted. Also, polluters pay principle may be adopted and stringent measures may be taken against the industries violating the discharge norms, said Yadav.



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shared to spread awareness among the larger masses”, said Bharti.

The Water Resources Minister said she was delighted with the theme “Water Talk Film Fest” which is not only a medium for screening the films, but was also an opportunity for the water professions, policy makers, youth, film makers, media, civil societies and other stakeholders to exchange their ideas and experience at this platform.

“I am also pleased to know that in this programme, films on the topic - wastewater management, water conservation, water pollution, climate change, drought, etc are going to be screened and these films are showing the

efforts of the Government, NGOs, urban local bodies, panchayats organizations and individuals”, said Bharti.

India Water Partnership President and Wapcos Ltd chairman-cum-managing director R K Gupta said the film festival was a celebration of water, the element that nurtures life in manifold ways and will bring to us the stories revolving around the theme from various parts of the country.

“The festival is also aimed to present stories of restoration of water to its pristine beauty. Viewing these visual narratives brings a true positivity and gives us all an opportunity to focus on the water crisis and engage in deep reflection

to conserve this life sustaining nectar for posterity”, said Gupta.

“In the era of Cyber World; films, media, Internet, mobiles are the most effective and fast means of communication and can be best medium for undertaking awareness campaigns on water conservation and its judicious use”, he added.

IWP Executive Secretary Veena Khanduri said the festival offered an opportunity to share and generate innovative ideas and insights, while recognizing the works of significance by individuals and organizations active in the water resource management in the region.



## THE YOUNG AMBASSADORS OF WATER CONSERVATION

A major objective of the India Water Week 2016 is to deliver the message of water conservation to young participants, particularly school children. Experts feel that children need to learn the value of water conservation, preservation and optimum use of available water and natural resources at an early stage of their life.

Several school children, from public and private schools, are participating at the India Water Week and have come up with innovative and interesting posters, slogans & balloon painting - all with the message of saving even a small drop of water.