

BY SPEED POST/EMAIL

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Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
(National Water Mission)

2nd Floor, Block No. III
CGO Complex, Lodhi Road
New Delhi-110003
Dated: 26th June, 2019

Subject: Summary record of the proceedings of the Fourth Water Talk organized by National Water Mission on 21st June, 2019.

Sir/Madam,

The undersigned is directed to forward the summary record of the proceedings of the Fourth Water Talk held on 21st June, 2019 at 3:00 PM in Dr. Ambedkar International Centre, New Delhi.

J.P. Singh

(J.P. Singh)

Deputy Secretary to the Government of India
Ph: 011-24368984

Enclosure: as above

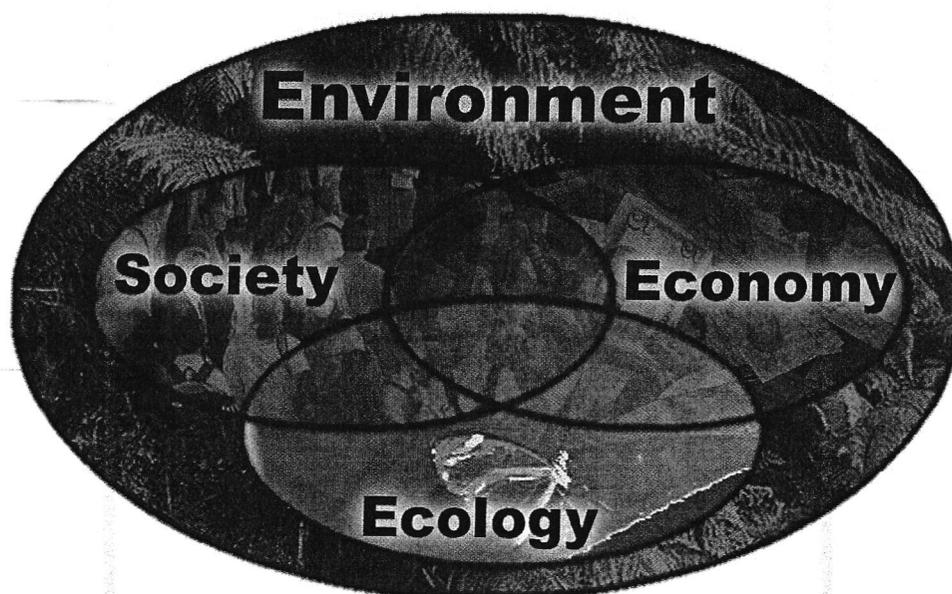
To

1. ✓ Secretary, Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Shram Shakti Bhawan, Rafi Marg, New Delhi – 11000.
2. Dr. Anil Joshi, Director, HESCO, Dehradun, Uttarakhand
3. ✓ Sh. Rajiv Ranjan Mishra, Director General, National Mission for Clean Ganga, National Mission for Clean Ganga (NMCG), 1st Floor, Major Dhyan Chand National Stadium, India Gate, New Delhi – 110002.

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4. Smt. T Rajeshwari, Additional Secretary, DoWR, RD & GR, Ministry of Jal Shakti, Shram Shakti Bhawan, Rafi Marg, New Delhi – 110001
5. Shri Nitishwar Kumar, Joint Secretary (Administration), DoWR, RD & GR, Ministry of Jal Shakti, Shram Shakti Bhawan, Rafi Marg, New Delhi – 110001
6. Shri Jagmohan Gupta, Joint Secretary (JS & FA), DoWR, RD & GR, Ministry of Jal Shakti, Shram Shakti Bhawan, Rafi Marg, New Delhi – 110001
7. Shri Akhil Kumar, Joint Secretary (IC & Ground Water), DoWR, RD & GR, Ministry of Jal Shakti, Shram Shakti Bhawan, Rafi Marg, New Delhi – 110001
8. Shri K C Naik, Chairman, CGWB, Central Ground Water Board, Bhujal Bhawan, NH-IV, Faridabad.
9. Sh. S Masood Husain, Chairman, Central Water Commission, R. K. Puram, Sector-1, New Delhi-110066.
10. Shri K Guite, Adviser, Economic Advisery Wing, DoWR, RD & GR, Ministry of Jal Shakti, Shram Shakti Bhawan, Rafi Marg, New Delhi – 110001

WATER TALK
(The 4TH IN THE SERIES)



On
"Ecology Inclusive Economy"
By
Padamshree Dr. Anil Joshi, Founder, HESCO

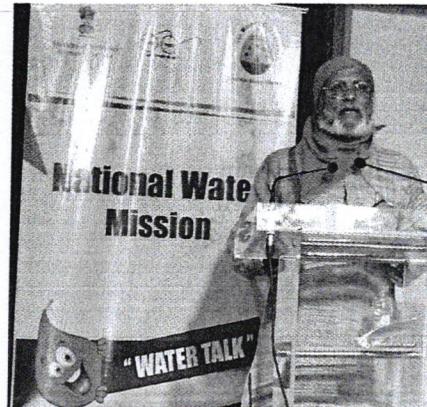
Organized by
National Water Mission
On
21-June-2019

Venue
Dr. Ambedkar International Centre, New Delhi

Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
(National Water Mission)

National Water Mission (NWM) has initiated a seminar series- 'Water Talk' - to promote dialogue and information sharing among participants on variety of water related topics. The 'Water Talk' is intended to create awareness, build capacities of stakeholders and to encourage people to become active participants in conservation and saving of water. NWM had already organized three 'Water-Talks' on the topics - "Water for All", "Groundwater" and "Water Conservation" on 22nd March 2019, 1st May 2019 and 24th May 2019 respectively.

2. Fourth Water Talk in this series was held on 21st June, 2019. Dr. Anil Joshi, Founder, Himalayan Environmental Studies and Conservation Organization (HESCO) delivered the Water Talk. Shri U. P. Singh, Secretary (DWR, RD & GR) MoJS; Shri Rajiv Ranjan Mishra, DG, NMCG; and Officers from CWC, CGWB, NMCG, CSMRS, NWDA and D/oWR, RD & GR attended the programme.



3. Dr. Anil Joshi delivered his talk on '**Ecology Inclusive Economy**'. The world has made advancement in the Science, however, we have not been able to understand the Science of the Nature. He said that there is no difference between Nature and God however, our attitude has been very different towards nature. Dr. Joshi emphasized on the urgent need of consciousness about the benefits of a healthy environment and understanding the importance of natural resources being provided by our surroundings. Dr. Joshi stated that development plan of policy makers has been based on the development model of cities and overlooks the loss of natural capital or its status and Ecology. Dr. Joshi stated that there is urgent need to make the policy makers and the consumers in plains, who use the eco-services provided by Himalayas, realize the significance of mountain states with regard to forests, water, air and environment as a whole. He urged to give due importance and efforts for understanding Science of the Nature otherwise we have to face the water crisis situation and events like Kedarnath, Cape Town, Chennai, Shimla etc.

4. Highlighting the importance of rivers, Dr. Joshi said that rivers are our history, present and future and have been serving us over the centuries. Dr. Joshi stressed on the current situation of rivers and added that 57 major rivers are on the verge of extinction and their catchment areas are shrinking. Mississippi river of USA, Yellow river of China, Kamps river of Australia and a number of other big rivers of the world are endangered. He pointed out that we have been at forefront of polluting our rivers and time has come for Societies to come together in conserving and managing water. Highlighting the significance of river for a

Nation, he stated that the as rivers function as arteries of the Nation, he and emphasis on keeping our rivers clean.

5. Dr. Joshi expressed concern over the shrinking water resources and stated that earnest efforts are required to be made in order to revive them through local interventions. Dr. Joshi stressed on the lack of public consciousness in this direction. He stated that Governments are not solely responsible for water management. He mentioned that since the nature belongs to everyone, the Society has to participate and contribute in water management by creating ponds, wells, tanks, rejuvenation of river bodies etc. Water management is collective responsibility and people including industry and individuals should be made accountable and responsible for the same.

6. Forest cover is one of the most important contributors in conservation of water. Forests are disappearing at an alarming rate and the local communities are suffering most from the degraded environment. Dr. Joshi said that though in 1982, the Government of India brought in an act to ensure that 33% of land in each state would remain under forest cover, however, most of the states have forest cover little more than 10%. The quality of our air and our soil has been degraded acutely over the last two decades. He said it is our collective failure that despite the policy in-vogue, the forest cover has not increased. Besides, local people do not participate in preventing forest fires. He pointed out the adverse impact of the excessive use of chemicals and fertilizers on degrading the soil quality and cited lack of knowledge sharing and awareness as major reason for degradation in soil quality. He added that Government has not taken effective initiatives to prevent land degradation.

7. Dr. Joshi said that resource depletion is jeopardizing rural livelihood but there is no ecological accounting in our Gross Domestic Product (GDP). Environment and Agriculture are strong pillars of the Indian economy, however, these are not given due importance while calculating the economic growth of our country. Dr. Joshi strongly advocated the need for introducing the concept of Gross Environmental Product (GEP) to indicate overall health of environment in India. Dr. Joshi added that it is high time that the country and the States collect data on forests cover created, amount of rain water harvested, number of springs revived, ponds and wells created/rejuvenated, number of trees planted, water sources created, quality of air & soil and measure the GEP to assess the health of our eco-systems.

8. Dr. Joshi said that sufferer can give the best solution and briefed about the work done by his organization. HESCO has worked to revive a small river in Uttarakhand which earlier used to cater to the water needs of 18 villages, but later on dried on account of a number of reasons. Recognizing rain water as the biggest source of water, HESCO in collaboration with Forest Department, Government of Uttarakhand dug holes of 1 cubic meter in all the catchment area, thus creating 3200 holes in 10 hectare to store crores of litres of water. The efforts has resulted in the increase of water in the river, reduced erosion of the soil in rainy season and created favourable conditions for planation. Water flow rate from the rejuvenated river has increased from 100 litres/min to 900 litres/sec. The forest department of Govt. of Uttarakhand replicated similar model by digging up almost 20 lakh trenches in the chir-pine dominated forests to replenish these trenches with rain water to create moisture near the chir

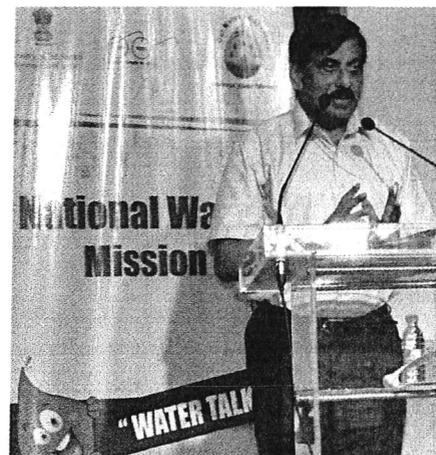
pine trees and prevent further occurrence of fires in future. The initiatives of HESCO have resulted in revival of a number of Dharas and water bodies in Uttarakhand and other States.

9. Due to revival of the rivers, the available water was used for run water mill. HESCO is also providing solution for upgrading the local water mills to make it an effective tool for grinding work as well as power generation and provided indigenous electricity to the villages. Till now, HESCO has completed large number of projects and reached 4000 villages through water mills. Dr. Joshi said that locally resource dependent economy can only bring real changes. There are approximately 83000 shrines in India, where produce from staple crop Maize could be used as prasad. His efforts on pilgrim centric rural economy has resulted in the employment generation as well as huge income to the villages cultivating millets and grains.

10. Dr. Joshi appreciated Secretary (D/o WR, RD & GR), MoJS for initiating a forum for dialogue, discussions & debate and advocated that similar initiatives should be taken by other Departments/Ministries. He pointed out that there is lack of coherence between society and the Government and thus constructive approach is missing in the system. Dr. Joshi stated that lack of dialogue will only create dispute. Dr. Joshi emphasized on cultural inclusiveness in our education system.

11. Dr. Joshi requested the Ministry to establish Nation-wide **Jal Jan Kendra** in collaboration with good institutions which are connected with local villages, having science as basis and implementing the practical solutions. The Jal Jan Kendra should provide education on water and disseminate the information on various aspects of water and issues/ challenges/ solutions and best practices. The center should also create warning and awareness on the critical water scenario. Dr. Joshi shared that he has undertaken tour of the country on bicycle two times to raise awareness of the role that nature plays in our economic and societal prospects. Dr. Joshi concluded his address by mentioning that we he have to find solution of water, soil, forest, ecology by putting collective efforts and joining societies to preserve nature.

12. **Shri U. P. Singh, Secretary, DoWR, RD & GR**, while extending gratitude to Dr. Anil Joshi for delivering the talk, highlighted the importance of small initiatives and participation of all stakeholders in water conservation & management. He said that in terms of water storage our main focus remains on the storage capacity of dams while we do not put much emphasis on increasing storage capacity of ponds, wells and small water bodies. He stated that every institution viz. Governments, NGOs, WUAs etc. has their strengths and weaknesses and we should collaborate with them to find the solution of the challenges posed in water sector. He



pointed out that the main intention of introducing the concept of water walk was to induct new way of thinking in the officers, particularly in the newly joined officers in CWC, CGWB and other Departments of the Ministry.

13. Shri Singh stressed the need to understand the role and importance of flood plains and said that flood plains are natural water holding bodies, lifeline for human being, must be preserved and protected from any encroachment. He said though water conservation has been inducted in curriculum to generate awareness, however, there is a need of communicating the critical situation of water in the Country to the stakeholders in a more effective and interactive manner.

14. Shri Singh mentioned that issue of scarcity of water is gaining prominence and this is one of the topmost priorities of the Central Government. He stated that discussions are held on making water conservation as a people's movement. Secretary said that water management is a bigger issue than the problem of availability of water. He further added that if we can manage water through interventions like roof top rain water harvesting, creating ponds in the fields and rejuvenating small water bodies, lot of water management problems can be addressed. He shared that he is in touch with Delhi Government urging them to take initiative to store water through roof top rain water harvesting and make it a people's movement in State.

15. Shri Singh highlighted the importance of traditional water conservation system and appreciated the work done by Apna Talab, Jal Saheli, Prithvi Foundation, SOS Organics and other similar organizations. He shared that SOS organics has not taken water connection and caters its water requirements (including 28 employees) from water stored from roof top rain water harvesting. Shri Singh emphasized the need to change cropping pattern and promoting less water intensive crops. He appreciated the initiative of the Govt. of Haryana in encouraging the sowing of crops like maize and pulses. Under his scheme, Govt. of Haryana will provide incentives to the farmers in form of the cash, seeds and most importantly the Government will procure the produce.

16. Earlier, Dr. C. V. Dharma Rao, Adviser, NWM welcomed the Speaker, dignitaries, participants and briefly discussed the purpose and aim of Water Talk and informed that the next Water Talk in this series will be delivered by Dr. Tushar Shah, Researcher Fellow, Integrated Water Management Institute (IWMI) on third Friday of July i.e on 19th July 2019.
