

HINDON YATRA SYMPOSIUM

Monday 27 June 2016, Auditorium, UP Irrigation Department, Lucknow - The symposium marked the first multi-stakeholder gathering of experts working in the Hindon basin towards the rejuvenation of the river. 2030 WRG and its partners brought together 60 participants from local government, industry, NGO, private sector and academia from Saharanpur, Shamli, Muzaffarnagar, Meerut, Baghpat, Ghaziabad and Noida under a common platform. The objective of the symposium was to demonstrate how every dimension of the complex processes involved in rejuvenating a river are already in motion in the Hindon. The lessons from the wealth of experience from these practitioners can be leveraged to develop a hundred new projects to rejuvenate the Hindon by 2030.



INTRODUCTIONS

On behalf of the Irrigation Department, Mr. CK Verma, Chief Engineer and HOD opened the symposium with a warm welcome to the 60 participants from the Hindon basin.

1. Welcome address by Rajendra Singh, India Waterman & Founder, Jal Jan Jodo Abhiyan

- Shri Rajendra Singh acknowledged the effort of Government of Uttar Pradesh related to River Rejuvenation in Gomti, Varuna and Hindon Rivers. He stated that there is a need to work more intensively on River Rejuvenation agenda in the state. Shri Singh said Society and State should work together for ensuring rejuvenation of Hindon River. He informed that since last one year Jal Jan Jodo Campaign along with 2030 Water Resources Group, Jal Biradari and other CSOs has undertaken significant efforts for rejuvenation of Hindon River. The Government of Uttar Pradesh should make budgetary provisions for Rejuvenation of Hindon River.
- India's Waterman appealed to UP Government to set up a Water University. He suggested that there is a need to form a Regulatory Authority for assessing the status of river rejuvenation and revival of traditional water bodies in different parts of the state. He also acknowledged the effort of the government for constructing 100 water bodies in different part of Bundelkhand region. He requested that administrative forces should work in more transparent ways for strengthening of water governance in the state.

2. Welcome address by Dr. Veena Khanduri, Executive Secretary, India Water Partnership

- Dr. Veena Khanduri welcomed all the senior delegates and participants in the Hindon Yatra Exhibition and thanked them for contributing to the preparation of the Case Studies Handbook. She said that the book is just a tip of an ice berg and there are many success stories which are worth documenting. She also said that there is so much going in the basin and all these efforts by different stakeholders has to be brought in the same direction for which 2030 WRG is working since last year.
- Dr. Khanduri said there is an urgent need for a scientific analysis of the situation in the basin which will can form a basis for replicating the successful projects and develop new projects.

3. Welcome Remarks by Anders Berntell, Executive Director, 2030 Water Resources Group

- Mr. Bertell presented the work of 2030 WRG in various countries and the work flows adopted by them. In the presentation he highlighted the objective and focus areas of 2030 WRG and their strategy to work with various governments and why in UP working together with stakeholders for innovative solutions to solve water solutions is important.
- Mr. Bertell provided an overview of WRG's work streams in the sugarcane sector in Karnataka and setting up a Cotton Platform in Maharashtra. He defined the purpose of the Hindon Yatra exhibition and symposium as a multi-stakeholder process for a basin wide and integrated tributary approach to river rejuvenation that could be scaled up in other parts of the Ganga basin.

GLOBAL WATER FRAMEWORKS & NATIONAL BEST PRACTICES

4. Henriette Faergemann, EU delegation in Delhi

- Ms. Faergemann gave a presentation on the EU-India Water Partnership whose main purpose is to strengthen technological, scientific and management capabilities in the field of water management; support the Indian 'Clean Ganga' and 'Clean India' flagship projects; bring together EU Member States, Indian States, European and Indian institutions, businesses and civil society for knowledge sharing; and promote business and technology opportunities between the EU and India in states like UP.
- She spoke about the relevance of the EU Water Framework Directive to India as it develops comprehensive approaches for basin wide management of its rivers. Ms. Faergemann also mentioned that the EU-India Water Partnership is planning to organize a workshop dedicated to the Hindon in Lucknow in September in partnership with 2030 WRG. The workshop would be a multi stakeholder session on water & Industry introducing technology platforms from Europe to share best practices in the adoption of new water treatment technologies for industrial effluents polluting the Hindon.

5. Suresh Babu, WWF India

- Suresh Babu presented a Case Study of the WWF project in the Ramganga.
- For water management within a basin a multi-stakeholder approach is very important and it is important to have a shared vision. Mr. Babu stressed the need for liaisoning between various water user groups within a watershed to ensure better management of water resources.
- According to him, only capacity building and spreading awareness among the stakeholders is not enough as everybody knows the problem and its amplitude. There is need to find ways by which the willing and enthusiastic people can contribute effectively on ground.

6. Prof. Vinod Tare, IIT Kanpur

- Prof. Vinod Tare emphasized the importance of the tributary approach and stated that just like Ganga action plan; interventions are needed for each small tributary which will automatically lead to a clean and healthy river. The vision should be to clean even a small drain.

- The objective of the Ganga Centre at IIT Kanpur is to share knowledge and best practices and to replicate them where ever appropriate across India.
- According to Prof. Tare, everything should be knowledge driven considering that states are always in election mode and there are many political constraints.
- Isolating a city/town from a river is not a solution for preventing the river to get polluted, but we should see how sewage entering into the river can be prevented from polluting the river.

PANEL SESSION on WATER TREATMENT TECHNOLOGIES

7. Waste water re-use in Greater Noida STP, Hemant Bhat, MD HNB Engineers Pvt. Ltd

- Mr. Hemant talked about the problems which are faced in convincing people to re-use the treated waste water.
- He elaborated that in Noida, they are treating 15 Million Litres per year of waste water but bidders are not comfortable in reusing the treated water. Although the district administration is supporting them and encouraging people on re-use of treated water.
- He gave one more example of Pune where they are treating waste water. In Pune, the treated water is being used for Power Generation by NTPC.
- Convincing people to use the treated water is a big challenge. It is the responsibility of government to make it obligatory to use treated waste water by various sectors.

8. Waste to Wealth & Cleaner Production, Pankaj Aggarwal, Bindlas Duplux Ltd, Muzaffarnagar

- Mr. Aggarwal said that paper and pulp industries in Muzaffarnagar have spent more than 100 Crores for setting up monitoring systems for monitoring quality of discharged waste water from the plants; for upgrading ETPs; and in research on recovering and reusing the bi-products of waste water (black liquor). According to him, in the last 2-3 years Paper & Pulp industries have reduced water consumption upto 75% by modifying their processes.
- A research has been conducted in collaboration with the MIT Tata Center of technology and a brick has been invented which is completely prepared using the ash produced in the paper manufacturing plants. This brick is very efficient in construction of roads and work is in progress to use these bricks for constructing roads in Muzaffarnagar.
- Mr. Aggarwal opined that small ETPs should be planned instead of a single big ETP which would help in reducing the cost of waste water transportation. There is proposal to create a model of ETPs in Muzaffarnagar.

9. Bioremediation techniques, Sunil Nanda, Managing Director, JS Water Energy Life Co.

- Mr. Sunil talked about their experiments and products for reviving ponds and treating drains using latest bioremediation techniques. Bioremediation is a water pollution control technique involving use of nutrients to remove/neutralize pollutants from a contaminated water body. The so-called “Nualgi” technique can mitigate impact of vast amounts of untreated sewage discharged into a drain or river. Mr. Nanda has conducted a pilot project which showed promising results along the Saibabad drain in Ghaziabad. Further studies and pilots were required to be conducted in the Hindon.

10. Constructed wetlands, SWINGS project, Dr. Nadeem Khalil, Aligarh Muslim University

- Dr. Khalil talked about the need to develop a comprehensive approach to the management of water bodies. He said any Vision for the Hindon should be “toilet to tap” which is very prominent in the European Countries. Dr. Khalil described the EU funded SWINGS project for the management of Wetlands. The ability of constructed wetlands to transform, store and remove organic matter, nutrients and even heavy metals without any energy input and with a very nominal maintenance cost has resulted in often being described as "the kidneys of the landscape". This ability of constructed wetlands is being exploited for water quality improvement across the Europe, North America, Australia, China and thus the interest in the implementation of constructed wetland in developing countries like in India is also accelerating.

PANEL SESSION on GROUNDWATER RECHARGE AND BIODIVERSITY

11. Check dams and flow augmentation, CK Verma, Engineer in Chief & HOD, UP Dept. of Irrigation

- Mr. Verma said resources are very important for implementing any project and we should work on generating resources with the help of 2030 WRG for implementing projects well in time. He provided an update on the work being done by the Irrigation department to increase water flows into the Hindon through bringing in water from the Upper Ganga canal and building new check dams and water recharge structures.

12. Rainwater harvesting ponds in rural Baghpat, Dr. Kishanpal Singh, Jal Biradri and Chairman, GVPS

- Dr. Kishanpal described how a proactive community and a responsive district administration set a water agenda for themselves. Supporting each other in reviving as many as 17 ponds, they have enlisted help from different quarters, scaling up their own capacities to undertake the task of rejuvenation. Dr. Kishanpal emphasized the need for water literacy at all levels to create awareness about the need for water conservation starting with educational programs in schools. This would create a culture for valuing natural resources like water and energy.

13. Biodiversity and Ecosystem Revival: Katha River, Dr. Umar Saif, Natural History Research & Conservation Centre

- Dr Saif defined an ecosystem approach to river rejuvenation with a focus on biodiversity conservation from fish to butterflies. He is leading a bold effort to revive the Katha river in Shamli, one kilometer at a time. The local community is funding the revival of the Katha River with a “One house, One pot” water donation movement and a commitment to build check dams, dig ponds as well as reviving the adjoining ecosystem. Dr. Saif is looking at replicating the model in parts of the Hindon, East Kali and Krishni rivers.

PANEL SESSION on SOLID WASTE MANGEMENT & COMPOSTING

14. Legal Action to Stop Solid Waste Disposal in Water Bodies, Advocate Vikrant Sharma, Jal Biradri

- Advocate Sharma has been actively involved in using the rule of law to protect the rights of the river in Ghaziabad. He shared examples of his work to file legal notices to the National Green Tribunal against land encroachment and urban construction projects that could have a devastating impact on the Hindon. He has successfully partnered with local communities in Baghpat to get the local authorities to issue a legal notice imposing a fine of Rs. 30,000 for any solid waste dumping in the river. The challenge remains enforcement.

15. Public Private Partnerships for Solid Waste Management, Mewalal, Chaudhari, Secretary, Muskan Jyoti Samiti

- Solid waste is a major contributor to pollution of water sources especially near cities/towns. While solid waste management planning is present in some cities in the Hindon basin, their implementation leaves much to be desired. Mr. Chaudhari described how Muskan avoids 500-600 tons of crude dumping using the formula of “reduce, reuse, recycle, compost” to reach desired zero waste levels.

16. Waste as a Resource: Manufacturing Compost Manure, Deepak Agarwal, Joint MD, A2Z

- Mr. Agarwal described how contractual arrangements between Municipal Corporation and A2Z Waste Management Services saw marked improvement in cleanliness but waste must generate revenue for financial sustainability. For towns which have outsourced their solid waste management to private firms or NGOs, these organizations are yet to fully unlock the market potential for products created out of waste such as compost. A2Z shows the way.

BACKGROUND INFORMATION

The 2030 Water Resources Group ('2030 WRG' - www.2030wrg.org) is a public-private-civil society partnership that supports governments accelerate reforms with the aim of ensuring sustainable water resources management for the long term development and economic growth of their country/region. It does so by helping to change the 'political economy' for water reform in the country through convening a wide range of actors and providing water resources analysis in ways that are appealing for politicians, administrators and business leaders outside the traditional water sector. The 2030 WRG acts as an independent entity and offers no political, partisan or national nuance to its advice.

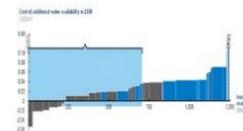
The 2030 WRG deploys its distinctive 'ACT' (Analyze-Convene-Transform) approach with a focus on accelerating particularly demand-side solutions involving public, private and civil society stakeholders across agriculture, industry and urban development.

Following recent initiatives taken by Shri Rajendra Singh to mobilize civil society and other local stakeholder in the Hindon basin, the 2030 WRG facilitated several leadership meetings in Delhi under guidance of UP State Government officials. The aim of the participatory process is to catalyze a long-lasting revival of the Hindon River and promote sustainable and equitable water management, including good irrigation practices and ground water management. The Hindon River would be an early focus area; hereafter lessons learnt from this multi-stakeholder initiative can be utilized to replicate to other water bodies across the state of Uttar Pradesh.

The 2030 Water Resources Group's ACT Process

Step 1

■ **Analysis** to support better decisions



- Comprehensive fact base with broad agreement.
- Cost, Benefit or Risk analysis depending on countries needs

Step 2

■ **Convening** public-private-civil society stakeholders



- Multi-stakeholder platforms to help government shape and take forward priority programs, plans and actions

Result

■ **Transformation** to higher performance and sustainability



- Concrete proposals to ensure lasting change on the ground
- Can be programs, policies, (PPP-)projects or financial mechanisms