# Awareness and Brainstorming On Urban Wetlands

# World Wetlands Day - 2013





...towards global sustainable development

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#### For more information

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# Background

TERI (The Energy and Resources Institute) is a globally renowned not for profit research institute committed to provide sustainable solutions in the areas of energy, environment and resource management. As a part of TERI's commitment towards conservation of wetlands, TERI's Western Regional Centre has been celebrating WWD (World Wetlands Day) for the past 6 consecutive years under its flagship program entitled "WeMaP (Wetland Management Program)" with an objective to sensitize diverse stakeholders through their active involvement.

It is a well-known fact that the wetlands such as lakes, rivers, swamps, mangroves, coral reefs, estuaries, paddy fields, ponds, reservoirs, tidal flats, and so on, help maintain the balance of various ecosystems. However, it is equally important to note that these wetlands are also an integral part of the urban ecosystem, performing several functions like prevention of storms and floods, stabilization of the coastline, control of soil erosion and providing habitat for several species of flora and fauna. Besides this, they also contribute immensely to the country's economy by providing water, fishery resources, timber, wildlife resources, medicines, agricultural products and tourism opportunities.

Hence, on the occasion of WWD-2013, TERI focused on identifying the need, gaps, and devising strategies for long term conservation of "Urban Wetlands" of Maharashtra, India. To involve maximum stakeholders and extend the outreach, a two pronged approach was adopted to commemorate the WWD-2013 a) by involving the citizens and b) by involving policy makers. The two specific events organised are enlisted below:

Date	Event	Target group
February 2 <sup>nd</sup>	Urban Wetland Clean-up Activity	Corporate organization, Citizens, Youth, Volunteers
February 4 <sup>th</sup>	State level Brainstorming session - Development of Urban Wetlands- Need, Gaps and Way forward	Senior state government officials, commissioners of ULB (Urban Local Bodies), city engineers and so on.

The detailed proceedings of WWD-2013 are presented in this report.



## **Urban Wetland Clean-up Activity**

February 2<sup>nd</sup>, 2013

Navi Mumbai the upcoming twin city of Mumbai is blessed with ample of wetlands. Being a coastal city, Navi Mumbai has a rich mangrove forest and creek front. The city is also visited by thousands of migratory birds such as Lesser and Greater Flamingos in the winter season especially between November – March. Hence, to highlight the importance of "Urban Wetlands" the clean-up activity was conducted at Sagar Vihar, at Vashi in Navi Mumbai. It being the peak season of migratory flamingos, their presence in abundance formed the perfect backdrop for the event.

At the outset, Dr. Anjali Parasnis, *Associate Director, TERI* extended a warm welcome to all the dignitaries (Picture No. 1) and participants including employees of NMMC (Navi Municipal Corporation), TERI, Fugro Survey India Pvt Ltd and NSS (National Service Scheme) volunteers of Rajiv Gandhi College of Arts, Commerce and Science, on the occasion of World Wetlands Day- 2013.



Picture No. 1: From left to right: Dr. Anjali Parasnis, Associate Director, TERI, Shri Ajay Sankhe, Executive Engineer, NMMC, Dr. Reshma Suri, Assistant Professor, Rajiv Gandhi College of Arts, Commerce and Science, Shri Mohan Dagaonkar, City Engineer, NMMC, Shri R K Jain, Chairman, IMC, Shri Ravi Chitnis, Director, Fugro Survey Pot Ltd and Shri Subodh Mule, Dy. City Engineer, NMMC.

Thrilled to see the numerous migratory birds flocking the shoreline of Vashi creek, the enthusiastic participants proceeded for a nature trail guided by Mr. Aniruddha



Dhamorikar, *Research Associate, TERI*. The trail helped the participants to understand the migratory pattern of the flamingos which fly to Navi Mumbai all the way from Rann of Kutch in Gujarat, their feeding behaviour, and also about the uniqueness of mangrove and mudflat ecosystems.

Taking the program further, Dr. Anjali Parasnis explained the importance of wetlands in maintaining the delicate balance in the environment and their key functions. She emphasized that conserving wetlands is the need of the hour in the purview of global issues like climate change.

While highlighting the significance of the wetland ecosystem and the need for its conservation, Shri Mohan B Dagaonkar, *City Engineer, NMMC*, the esteemed Chief Guest of the event, emphasized on maintaining cleanliness of the urban wetlands. He also stressed on changing the mindset of the people in the society by undertaking more of such activities. He promised to extend all the necessary support to TERI and the associate organizations to achieve the objectives of Navi Mumbai "Eco City" project and especially to protect the wetlands of the city.

Shri Ravi Chitnis, *Director, Fugro Survey India Private Limited* conveyed that they were very glad to partner with TERI for this initiative and would like to be associated for similar endeavours in future. He requested TERI to plan a year- long activity for protection of Sagar Vihar which would be supported by his company.

All the participants appreciated the proactive approach and willingness of a corporate organization like Fugro Survey India Private Limited towards protection of local environment.

Shri Ajay Sankhe, *Executive Engineer, NMMC*, Shri Subodh Mule, *Deputy Engineer, NMMC*, Shri R K Jain, *Chairman, IMC (Indian Merchant Chamber)*, Dr. Reshma Suri, *Assistant Professor, Rajiv Gandhi College of Arts, Commerce and Science* and representatives of the senior citizens group expressed their concern over the degrading environment around the city and appealed the young generation to take charge for protecting the environment.

A total of 42 bags of waste comprising of biodegradable waste (organic waste), plastic, polystyrene (Styrofoam), and clothes were collected with the help of more than 75 participants. The collected waste was further disposed off responsibly with the help of a garbage collecting vehicle provided by NMMC.

Ar. Namrata Kaur Mahal, *Research Associate, TERI*, proposed vote of thanks to all the program partners and participants and the event ended with a very positive note as the participants expressed their continual commitment and taking concrete steps towards the cause of wetland protection.



# Development of Urban Wetlands: Need, Gaps and Way forward – State Level Brainstorming Session

#### February 4th, 2013



Shri J. K. Banthia, Hon'ble Chief Secretary, GoM

A half-day state level brainstorming session on "Urban Wetlands" was organised in collaboration with Urban Development Department, GoM (Government of Maharashtra) and The Ramsar Convention on Wetlands. More than 75 officers including Municipal Commissioners and town planners from across 18 districts of Maharashtra participated in the program. Hon'ble Chief Secretary, GoM graced the occasion as the esteemed Chief Guest; Whereas, Smt Waheeda Rehman, a well-known film personality and brand ambassador of TERI's WeMaP initiative, was the Guest of Honor of the program. The

brainstorming session was chaired by Dr. R. K Pachauri, *Director General, TERI* and *Chairman, IPCC (Intergovernmental Panel on Climate Change)*. The panel for the brainstorming session comprised of Shri Praveen Pardeshi, *Principal Secretary, Forest Department, GoM*; Shri Manu Kumar Srivastava, *Principal Secretary, Urban Development Department (I), GoM*, and Smt Valsa Nair Singh, *Secretary, Environment Department, GoM*, Dr. Asad Rahmani, *Director, BNHS (Bombay Natural History Society)* and Dr. Anjali Parasnis, *Associate Director, TERI*.

In his keynote address, the Hon'ble Chief Secretary emphasized upon the major drivers responsible for degradation of natural resources such as increasing population and urbanization. He underlined his concerns about the lack of sites for appropriate waste disposal which finds its way into a wetland. He further gave several examples of local wetlands such as Mithi River, saltpans and lakes which have been badly affected in Mumbai. Further, the Chief Secretary specially mentioned about the wetland restoration initiatives undertaken by several state departments and ULBs, which includes rejuvenation of lakes with the support from NLCP (National Lake Conservation Plan), the Mithi River clean-up work taken up by MMRDA (Mumbai Metropolitan Region Development Authority) and so on. In addition to these initiatives, he mentioned that the high court has also intervened by prohibiting non-forest activities in mangrove belts. Not only did the Hon'ble Chief Secretary welcomed this step but also highlighted it to be the most significant one. While appreciating TERI and Urban Development Department, GoM for organizing the brainstorming session, he appealed to the



participants to proactively identify and restore the significant wetlands of the state and to take the full advantage of this interactive program to enhance their awareness and capabilities.

Smt Waheeda Rehman expressed her concern about the degradation of urban environment and especially of mangroves, coastal areas and rivers which are important urban wetlands. Given her commitment towards protection of the environment, she promised to extend all the support to ensure effective outreach of the program amongst diverse stakeholders and especially the citizens.



Smt Waheeda Rehman, a well-known film personality and brand ambassador of TERI's WeMaP initiative



Dr. R K Pachauri, Director General, TERI and Chairman, IPCC

In his message, Dr.R.K. Pachauri congratulated the state government for taking exemplary initiatives in the context of wetland conservation and management. He gave a larger picture of the current situation of wetlands and impacts of climate change on them. He further requested all the senior officials as well as the participants to look at the broader and futuristic scenario of ecosystems in order to manage our local resources. While emphasizing on the point "whatever gets measured gets managed", he stated that it is essential to map such important resources at the state level which then would get preserved sustainably.

The panel discussion provided valuable insights about the laws, regulations, various schemes of central and state government and specialized policies for wetland conservation and management. The gist of the discussion is presented below.

Shri Praveen Pardeshi pointed out the issue of reduction in groundwater recharge in urban areas due to concretization, and highlighted the need for technology to tackle such issues. He stressed on the fact that the wetlands are vulnerable to increasing pressure of disposal of



Shri Praveen Pardeshi, Principal Secretary, Forest Department, GoM



debris from new construction sites as well as redevelopment activities. Further, he was glad to announce that three wetlands in Maharashtra have now received the status of Ramsar sites. He especially requested the participants to understand the significance of wetlands in broader perspective and not to regard them as wastelands.



Shri Manu Kumar Srivastava, Principal Secretary, Urban Development Department, GoM

Shri Manu Kumar Srivastava, emphasized on the significance of regulatory aspects of the CRZ (Coastal Regulation Zone) which are aimed at preserving the ecology of coastal areas and given the vulnerability of coastline ecosystems, he requested the participants to protect such areas from urban development. Interestingly, this year being also the 100<sup>th</sup> year of town planning, he mentioned that it becomes more imperative to take steps towards urban wetland conservation. With the current growth in building and construction sector, rampant dumping of debris in wetlands is evident. He encouraged the planners and urban managers to enforce stringent regulation to ensure

conservation and restoration of urban wetlands. He also highlighted a need to build capacity of town planners and city engineers to tackle the issues of wetland management.



Smt Valsa Nair Singh, Secretary, Environment Department, GoM

Smt Valsa Nair Singh gave a brief outline of the types of wetlands that are under the purview of Environment Department including the different schemes and policies that are available to safeguard wetlands such as NLCP (National Lake Conservation Plan). Owing to the fact that there are large numbers of lakes in Maharashtra which are badly affected and require urgent attention, she informed that the state government has constituted SLCP (State Lake Conservation Plan) in the year 2006-07 and has till date preserved 16 lakes across the state. In order to conserve the rivers of Maharashtra, the state had undertaken restoration of major rivers under the schemes like NRAP (National River Action Plan). The

other initiatives like inventory of wetlands in Maharashtra, carried out with the help of MRSAC (Maharashtra Remote Sensing Application Centre) and demarcation of areas under the River Regulation Zone Act, 2009 were also highlighted by her. Further, she underlined the need to create a single window to handle issues related to wetlands, as currently there are several departments involved in the decision making process to protect and restore wetlands which may render the process more cumbersome.



Given that, until recently, there have not been any wetlands identified as Ramsar sites from Maharashtra, the procedures and the criterion for identifying the wetlands as Ramsar sites illustrated by Dr. Asad Rahmani, were indeed very informative and encouraging. Further the examples of the wetlands from Maharashtra which are recently mapped on the global scale convinced the participants about the feasibility of the entire process. The advantages enlisted by him for getting such international recognition were noteworthy.



Dr. Asad Rahmani, Director, BNHS



Dr. Anjali Parasnis, Associate Director, TERI

Dr. Anjali Parasnis highlighted the importance to integrate riparian and the interactive zone while developing the urban wetlands. The participants were introduced to various aspects of wetland management which may be crucial while identifying and developing the wetlands within urban areas. She gave a brief overview of different schemes which Maharashtra and other states have undertaken for wetland management along with the status of the available funds at central level, state level and international financial sources. While giving a detailed analysis

of the GRs (Government Resolutions) issued by the state government in the past 63 years, she emphasized on the need to get "wetlands" in the forefront by our actions and initiatives as there has been very little emphasis on the integrated water resource management schemes. She requested the state departments to consider developing a single window apex body for addressing the wetland management issues to ensure its conservation and wise use. Further, she expressed keen interest in developing a white paper on the status of wetlands in Maharashtra and sustainable revenue generation models for local communities.

The workshop was concluded by Shri Manu Kumar Srivastava by listing out a set of action points, which included the following:

- To develop a policy paper focusing on urban wetlands.
- To suitably amend policies and by-laws and regulating development around wetlands.



- To identify sites for dumping of construction debris in urban areas on priority basis and strictly protect wetlands from dumping of urban waste including debris.
- To better disseminate information about available resources including both financial and technical, so as to facilitate conservation of wetlands.
- To build capacity through imparting training to city engineers and town planners highlighting the significance of wetlands and technological interventions for wetland restoration.

An assessment of feedback form received from the participants at the brainstorming session revealed the following:

- 92% of the municipal commissioners and town planners representing 18 districts of the state expressed their interest in developing and conserving the wetlands in their respective areas.
- The participants identified around 34 wetlands having resource potential, 30 of unique/historic significance and 29 of ecological significance which could be conserved using the state and central funding.
- 87% of the participants expressed their interest in developing the wetland as an eco-tourism spot.

The event ended on an enthusiastic note with a decision to organize frequent interactive forums and capacity building programs for the senior government officials of Maharashtra State to ensure sustainable wetland management.



### Photo gallery: Urban Wetland Clean-up Activity, 2<sup>nd</sup> February, 2013



Nature trail conducted by Mr. Aniruddha Dhamorikar, Research Associate, TERI





Enthusiastic employees of Fugro Survey India Private Limited, Citizen groups, NSS students and volunteers actively participating in the clean up activity



#### World Wetlands Day, 2013: Event Proceedings



The collected and segregated waste taken away by the NMMC waste collection vans and hence disposed off appropriately



### Photo Gallery: Brainstorming session on "Developing Urban Wetlands: Need, Gaps, and Way Forward" 4th February, 2013



Lighting of the lamp at the hands of Shri J. K. Banthia, *Hon'ble Chief Secretary, Government of Maharashtra* 



Inauguration of the brainstorming session at the hands of Shri J. K. Banthia, *Hon'ble Chief* Secretary, GoM and Smt Waheeda Rehman, *Ambassador of TERI's WeMaP initiative in presence of* Dr.R.K. Pachauri, DG, TERI.





Panel discussion on "Developing Urban Wetlands: Need, Gaps, and Way Forward"

