

Papers Presentations by Rivers of the World Team members at the 4th International River Summit

<http://4thinternationalriversummit.org/>

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NOTE: Please revisit <https://rowfoundation.org> for Powerpoint Presentations after the Summit Nov 22-24th, Cebu, Philippines

A. Plenary Speakers/Titles :

1. Approaches to Protect and Enrich Rivers and Streams

Engr. Subijoy Dutta, P.E, Founding Director,
Rivers of the World Foundation, Maryland, USA, <https://rowfoundation.org>



Abstract

In November 1992 I met a resident, living with his family on the bank of the Yamuna River, south of New Delhi, India. He asked me “I have a grey river and a dirty stream – our livelihood is at stake – What do I do? The water in the river was gruesome, and there was an air of sickness donning over the people and other living beings in the neighboring area. A very shocking sight for anyone visiting the area, especially for an environmental professional visiting from Washington, DC. Although the answer to the question was very complex for the understanding of that simple, suffering resident at that moment, it sprouted a multi-prong plan for the author to begin with –

○ Mass Awareness ○ Water Quality Monitoring ○ Periodic Cleanups ○ Demonstration Scale Treatment Projects ○ Training Students and Local Communities.

2. Rivers and Renewable Energy: The Water-Energy Nexus

Engr. Sunderasan (Subi) Subramanian,
Rivers of the World Foundation, Maryland, USA, <https://rowfoundation.org>

B. Session Speakers/Titles :

1. A Village-Level Outreach Program to Monitor and Protect the Groundwater Quality and ensure Sustainable Water Supply Management through Freshwater Recharge by the Brahmani River, Odisha, India



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Abstract

The Southeastern part of the state of Odisha is laced by the Bay of Bengal with its natural saltwater. The Lake Chilika, one of the largest freshwater lake in India/Asia constantly battles the saltwater intrusion and diffusion from the Bay of Bengal. A number of villages along the western border of Lake Chilika have shown signs of high Salinity and Total Dissolved Solids (TDS) in the groundwater. The seasonal high flow of the River Brahmani, Daya and others provides the freshwater recharge of the local groundwater. To that end it is critical to ensure clean and uncontaminated flow through these Rivers.

2. Water Pollution Trends in Major Rivers of Odisha, India – A Mass Awareness Plan for A Sustainable Solution

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Abstract

All civilizations in India and elsewhere have their center of origin surrounding a river valley. From the Amazon to the Yangtze this postulation holds true because water is an essential resource for our life. With the growth of the modern civilizations, our life is threatened due to pollution of both surface and groundwater. In India, especially in the state of Odisha, the pure drinking water is so scarce that 50% of urban population and 80% of rural population is affected by water pollution. In the present study, the author plans to involve local people and have an interactive outreach to convey the status of water pollution in two major rivers, namely Mahanadi and Brahmani of Odisha. The main source of pollution in the Mahanadi River is the sewerage systems in Sambalpur and Cuttack town whereas and the main pollutants of the Brahmani River comes from the effluents of Rourkela steel plant and many other chemical factories. This paper will look into various mass awareness options and educate the local people to develop a long term solution to the problem.

3. The Role of Environmental Indicators in Protecting Streams, Rivers and Waterbodies

Engr. Subijoy Dutta, P.E, and William E. Roper, PhD

Subijoy Dutta, P.E., Founding Director, Rivers of the World Foundation, Maryland, USA,
William E. Roper, PhD, President, Rivers of the World Foundation, Maryland, USA,

<https://rowfoundation.org>



Abstract

Watersheds and airsheds are the major focus of various environmental programs in federal, state, and local agencies today. A significant part of our regulations designed to protect the environment take up a good fraction of our resources for environmental management. Regulatory requirements of sampling and analysis of waste piles, open dump sites, mine drainage, landfills and emissions are on the rise with the advancement of technology. These requirements are often hard to comply with, especially for the small business owners, local municipalities, and other organizations. A healthy environment is often reflected by a few common indicators, which could be easily observed and monitored at a much lower cost and in a definitive manner with the use of local information involving community participation, and Environmental Indicators including remote sensing technologies.