





Workshop on Environmental Flows

Towards maintaining natural flows in our rivers

6th May 2012, Indian Institute of Bank Management, Guwahati

Natural flow patterns are the heartbeat of a river. Each component of a flow regime – ranging from low flows to floods play an important role in shaping a river ecosystem and livelihoods of river-dependent communities. While many rivers in Northeast India are still in a pristine free-flowing state, ecosystems and communities dependent on natural flow regimes have already experienced the impacts of altered flow regimes due to engineering interventions such as dams in some parts of the region. Examples include the impacts of Ithai barrage in Manipur on ecology and livelihoods dependent on the Loktak lake and the downstream impacts of the 405 MW Ranganadi stage-I project in Arunachal on downstream river-dependent people in Arunachal and neighbouring Assam. Ongoing and proposed interventions seek to dramatically change the riverscape in the region in the future: whether it is the fragmentation of the Teesta river due to a series of hydroelectric projects being built with virtually no part of the river left to flow free or the impacts of massive unnatural daily flow variations in the Brahmaputra floodplains due to power-generation patterns of projects in the Eastern Himalayan foothills. Rivers in the Himalayas and Peninsular India are in a very bad shape due to massive human interventions over the years. Many of the rivers have either stopped flowing to the seas or the outfalls into the seas are dropping drastically over the years. Deforestation, dams and diversions, pollution and over abstraction can be cited as the main causes of such drastic reduction in flow of these rivers.

It is in this context that it becomes important to understand a major concept being used in current environmental decision-making on rivers in the country called 'environmental flows' or 'e-flows'. While there are a range of definitions of e-flows, the Brisbane Declaration 2007 defines them as: 'Environmental Flows describe the quantity, quality and timing of water flows required to sustain freshwater and estuarine ecosystems and the human livelihoods and well-being that depend on these ecosystems.'

E-flows assessment has now become a mandatory part of the Terms of Reference (ToR) for cumulative impact assessment of hydro electric projects across India. In order for us to make informed-choices about whether and how (on what terms) to engage with 'e-flows' issues with respect to existing and proposed interventions on our rivers, it is important to understand the science and politics of 'e-flows'. Some of the important issues include: the concept, need, objectives and modalities of environmental flows; understanding diverse methodologies; who all should be part of the assessment, implementation and monitoring; what are the negotiable and non-negotiables while assessing flows; and risks associated with current implementation in the country.

Against this backdrop, Aaranyak (Guwahati) and River Research Centre (RRC), Kerala are organising a oneday workshop with support from the International Rivers on environmental flows in the Northeast. A Primer on the What, Why and How of environmental flows is being published by the International Rivers(IR), authored by Latha Anantha from the River Research Centre and Parineeta Dandekar from the South Asia Network on Dams, Rivers and People (SANDRP). This will also be shared with participants during the workshop. The workshop will be held on the 6^{th} of May 2012 (Sunday) at Indian Institute of Bank Management, Khanapura, Guwahati from 9:30 am – 5 pm. The address of the venue is given below. Rooms have been booked on twin sharing basis for the 5^{th} and 6^{th} of May.

Indian Institute of Bank Management, Jawahar Nagar, Khanapara, Guwahati- 781 022, Assam, Tel: 91-361-2363155, 2363156, 2363157, 2363106. Fax: 91-361-2363103, 2363102. E-mail: <u>iibm_ghy@sify.com</u>, Website: <u>www.iibm.ac.in</u>

The tentative agenda of the workshop is given below.

Looking forward to a creative discussion,

Best wishes and regards,

Dr. Partha Jyoti Das, Aaranyak, Assam (partha@aaranyak.org)

Dr. Latha Anantha, River Research Centre, Kerala (rrckerala@gmail.com)

TENTATIVE AGENDA

Registration: 9:30 am – 10:00 am

Session 1: 10:00 am - 11:30 am

Inauguration by Prof D. C. Goswami (Former Head, Department of Environmental Science, Gauhati University)

Introduction to the workshop and participants – Dr. Partha Jyoti Das

Environmental flows – the concept, need, objectives and modalities - *Dr. Latha Anantha (River Research Centre, Kerala)* and *Parineeta Dandekar* (SANDRP)

Discussion

Tea break: 11:30 am – 11:45 am

Session 2 – 11:45 am – 1:00 pm

Understanding the 'Building Block Methodology' for e-flows - Suresh Babu, WWF India

Discussion

Lunch: 1:00 pm – 2:00 pm

Session 3 - 2.00 pm - 3.30 pm

Sharing of information and experience by participants-Moderated by Tseten Lepcha (Affected Citizens of Teesta, Sikkim)

Tea: 3:30 pm – 3:45 pm

Session 4 - 3:45 pm - 5:00 pm

Open session – Moderated by Samir Mehta (International Rivers) and Neeraj Vagholikar (Kalpavriksh)

Role of stake holders and way forward

Vote of thanks by Shyamal Datta (Director, Operations, Aaranyak)