

## **Sustainable development and dams**

It is now clear that the policy of Hydro Electric Projects by GOI through the MoEF was one of 'exploitation' of the resources of sub Himalayan region of the country inhabited mostly by our rural and simple tribals – through its 4 Hr Generation Dams of arbitrary levels of power generations for maximization of profit for the Developer at the total destruction of ecology, safety and livelihood of the riparian people – be it in Himachal, Uttarakhand, Sikkim and Arunachal.

**In this model, an arbitrary level of high and ecologically unsustainable power generation is fixed for maximization of profit specially in the lean months. The height of the dam and the reservoir capacity is fixed accordingly.** The flow of the river is held up for 20 hours or so and maximum electricity is generated in 4 hours period or so in the evening / night by running all the turbines **to maximize 'operational profit'**. In case of SLHEP, 8 turbines are envisaged to run for 4 hours to **generate 2000mw of power**.

In this model, there is no consideration for downstream ecology of the river or the livelihood of the riparian people, as practically no water will be released for 20 hours when the project is 'off grid' for 20 hours: This model completely flouts the National Water Policy 2005 and the Brahmaputra Board Act where some benefits like irrigation, navigation, ecology, hydropower etc. and flood control is envisaged to accrue from any hydel project. It does **not give** any benefits to the riparian people **but it plans to snatch away what they have, a flowing river, in the winter that gives them sustenance and a life style.**

Subansiri Hydro Electric Project (SLHEP) is a **such 4 Hour Generation Hydro Electric Project** – it is not a Run of the River (RoR) project as claimed by NHPC / MoEF. We may term it as a Maximum Benefit for the Developer Project through an arbitrary level of generation of 2000 MW.

### **Uttarakhand disaster of June 2013**

Because of faulty planning of these 4 Hr. dams, every hydro electric project in the Mahakali basin was severely damaged. The Power House of NHPC Ltd's 280mw Dhauliganga Hydro Electric Project was completely damaged. The 400 mw Vishnugardh Pipalkoti hydro power project dam of Jay Pee Hydro Power Corporation was entirely buried and over run with boulders and cobbles on the 17<sup>th</sup> June 2013. (*Source : River Pulse of Himal Prakriti – A Trust of Nature*)

A Supreme Court appointed panel has blamed hydro projects in Uttarakhand (same as 4 Hr. generation model) as being responsible for intensifying the magnitude of the catastrophic flood that hit the state in June 2013. The panel has recommended scrapping of 23 of the 24 projects valued at about 20,000 crores. The committee submitted its report on April 16. (*Economic Times of 24 April'14*)

### **4 Hour Generation Dams :**

#### **Ministry of Environment does a volte face about Uttarakhand HEPs.**

The NDA Govt plans to link hydro-electro projects (HER) with its ambitious Ganga rejuvenations plan, for which MoEF has proposed a **new set of norms** that all projects proponents will have to comply with, before procuring environmental clearances.

In its affidavit to the Supreme Court on 8/10/14, the MoEF stated that it wanted to make sure the clearances to HEPs donot obstruct or hamper the Ganga clean up in any manner since **“they (new set of norms) hold the key to the successful rejuvenation and restoration of the wholesomeness of the river”**

The Govt. proposed a new set of 3 imperatives conditions :

- **Maintenance of a minimum quantity of environmental flow**
- **Longitudinal river connectivity**
- **Aviral dhara ( continuous flow)**

The 3 conditions are required, **to maintain ecological integrity and biodiversity of the river and for non disruptive biota movement and sediment transportation.** 24 of the 39 projects of the state are now stalled.

Supreme Court held they were significantly impacting biodiversity in two sub basin of Alakananda and Bhagitelhi rivers. **These aspects of environmental flow was not adequately addressed.**

The MoEF said it proposed to conduct a full fledged carrying capacity and **cumulative impact assessment study of all sub basin of Ganga in Uttarakhand to get a holistic and integrated view on impact of the project.**

Admitting that the aspect of environmental flow was **“unfortunately not adequately addressed”** while granting environmental clearances for the **HEPs** in Uttarakhand the MoEF said it would make such clearances mandatory for the projects below 25mw capacity also.

MoEF said, the issue of ‘aviral dhara’ and longitudinal connectivity shall also apply for all HEPs, **regardless of the capacity and size, since they are essential for rejuvenation of Ganga.”** *(Compiled from Indian Express 9 Oct’14)*

#### **Arunchal Dams in context of MoEF Volte face in Uttarakhand 4 Hr HEP**

One should feel happy at what’s happening in Uttarakhand, but, MoEF cannot **have one set of guidelines for Uttarakhand** because it is linked now to Ganga rejuvenation plan and **another for Arunachal and other regions.** Maintenance of **Environmental flow, Longitudinal connectivity and Aviral dhara** (continuous flow), – these 3 are **birthrights** of the riparian people and all the people of regions affected by these 4 Hr Generation Dams.

**All ‘Development’ must be ‘sustainable’. All dams of Arunachal including SLHEP must be converted to 24x7 continuous generation dam cum weirs where water will flow naturally over the dams.** Developing India needs sustainable power 24x7 and not for just 4 Hours.

#### **We are shouting hoarse over Chinese dams over Brahmaputra**

The Chinese are completing the 510 MW Zangmu Dam over Brahmaputra 9 km northwest of Gyaca in Tibet. 2 more dams up stream of Zangmu Dam – 640 MW Dagu and 560 MW Jiexu are planned to be constructed within 18km of Zangmu. Another dam is planned downstream of Zangmu, - 320 MW

Jiacha Dam. **These 4 dams together will generate 2030 MW of electricity.** These are true Run of the River dams with water flowing naturally over the dams generating **sustainable power, unlike the 4 Hr Subansiri Lower Hydro Electric Project which will generate an arbitrary level of 2000MW at total destruction of the ecology and the livelihood of the riparian people.** The same is the story of Siang, Dibang and Lohit Dams.



*510 MW Zangmu Dam (Wikipedia)*

**Changeover to 24x7 RoR model will break the present stalemate**

Change over from the present 4 Hr. dam model to true 24x7 Run of the River Model of SLHEP **will remove the present stalemate of construction of SLHEP since Dec, 2011.** Balance work can be completed quickly as height of the dam will be reduced greatly. **People accept progress and is agitating only against the 4 Hr. format of dam** that destroys ecology, livelihood of the riparian people, and creates grave safety risks to thousands of riparian people.

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