

Comments on the Nyamjangchu Stage-I HEP in Arunachal Pradesh to considered in 69th EAC for discussions on Environmental Flow

Subject: About Eflows recommended for 780 MW Nyamjangchu HEP, Tawang, Arunachal Pradesh

We see that issues related to eflows from Nyamjangchu Project will be discussed in the upcoming 69th EAC meeting on the 11th and 12th November 2013. This is despite the fact that the project was granted EC on the 19th April 2012, with specific eflows recommendations.

Communication from the proponent and response from MoEF about eflows or any other issue, in this case should be put in the public domain. We had requested the same to the Member Secretary on November 1 2013. However, no such communication has been uploaded on the MoEF website.

As this is violating CIC orders, the project should not be discussed by the EAC in its 69th Meeting.

We have some pertinent observations about e-flows recommendation for Nyamjangchu. In the clearance letter, MoEF states “Minimum flows of 3.5 cumecs or 20% of flows of four leanest months in 90% dependable year, which ever is higher for sustenance of riverine ecology and downstream use. Average release during monsoon months shall be at least 30% of the monsoon discharge”. (3.5 cumecs has been recommended by Central Inland Fisheries Research institute (CIFRI). Please note that eflows for Nyamjangchu is a very critical issue as the river has cultural significance to the local Monpa tribe and also because, as 48th EAC meeting has noted, “The Project is locking almost 1/3rd of the river with a long Head Race Tunnel therefore, depriving the downstream reach of the pristine flow and impacting the aquatic bio-diversity”. Actually almost all of the river length in India will be diverted through a tunnel.

1. No Site Specific recommendations: MoEF should have called for a site specific basin study with local participation before recommending these flows. The eflows recommended by MoEF are not arrived at through any scientific study. Hence, if there has to be any change in eflows recommendations, they should be increased and not decreased, following the precautionary principle.

2. Diversion of Taktsang Chhu not considered: Nyamjangchu project envisages diverting flows of Taktsang chhu River. As per the proponent, this will be a minimum of 5 Cumecs diversion. As per CIFRI Report on Minimum Environmental flows, commissioned by BEL, the total flows from Taktsang chu are **less than 5 cumecs in 2 lean season months and just about 5 cumecs in one more. This means Taktsang chu will be completely dry for almost 3 months of the year.**

This is clearly unacceptable and a part of EAC and MoEF mandate as the diversion of taktsangchu is an integral part of 780 MW Nayamjangchu project. **MoEF should recommend eflows for Taktsang chu river as well.**

3. Faulty Report by CIFRI: MoEF has noted “All recommendations of CIFRI’s site specific report should be implemented”. However, no reliance can be put on CIFRI’s report (2011) on

“Minimum Environmental Flow for the Sustenance of ecology and biodiversity of the Nyamjangchhu River for Nyamjangchuu HEP, Tawang” commissioned by proponent BEL. The report is seriously flawed, has not done sampling at all sites, and has made serious errors while recommending eflows.

The study **deviates from its TORs** given by the MoEF which had asked BEL to study: “estimation of **environmental flow** required for maintaining aquatic life in the river shall be conducted”. The study assesses “**minimum**” environmental flows.

It **has not considered diversion from Taktsang chu** River, though the report states that the confluence point of Nyamjangchhu and Taktsang chhu river (BTK) is critical for fish diversity and seed collection. Neither has it recommended any eflows for Taktsang chu

All methodologies used for estimating eflows are incorrect. It assumes unjustifiably low class for the river as per Tennant’s method, category selected for Hugh and Muster method is not stated, claim of use of Building Block methodology is incorrect.

This has been stated also by WWF, who have worked on eflows of Ganga basin using BBM, in which EAC member Dr. K.D. Joshi (also from CIFRI) also participated. WWF’s submission in this regard is attached.

4. Projects on Tributaries: The project proponent or the MoEF should not base eflows allocations on tributary contributions. Of the 8 tributaries of Nyamjangchhu, diversions or hydel projects exist or are planned on at least three tributaries (Taktsang chu, Shakti stream and BTK stream[1]). Looking at several needs (including drinking water needs of the huge workforce), other projects may be developed on these streams. Hence, eflows prescribed from Nyamjangchhu Barrage should not depend on tributary contributions, but should be optimal for the ecosystem and social needs in their own right.

5. Shayro and Khangteng Projects: As per the website of the project developer for the 780 MW Nyamjang chhu project, the NJC Hydropower Ltd., the current ‘Project Status’ of the project (http://njchypower.com/project_status.html) includes: “Work on Khangteng HEP (7.5 MW) and Shayro HEP (3.0 MW) to be utilized for construction power is in progress.” Please note that NJC Hydropower Ltd. is a SPV set-up specially for building the 780 MW Nyamjang chhu project. The 7.5 MW Khangteng HEP and 3.0 MW Shayro HEP are integral part of the 780 MW Nyamjang chhu project, specially being built by the project developer provide construction power.

At the time of env. clearance, although the EAC had sought some basic information on project features of the 7.5 MW Khangteng project, there was neither impact assessment nor appraisal of the env. impacts of this project (including eflows). The 3 MW Shayro project does not find even a mention in the EIA reports, EAC minutes etc. Therefore the question of prescribing eflows etc. does not arise.

Therefore, non-inclusion of the impacts of the 7.5 MW Khangteng and 3.00 MW Shayro project (including eflow aspects) at the stage of earlier Appraisal appears to be a blatant violation of the EIA notification 2006, in particular the section 9.4 of Form I which requires impact assessment of all ancillary components which are integral part of the project (e.g. 7.5 MW Khangteng & 3 MW Shayro being integral part of 780 MW Nyamjang chhu project), as well cumulative impact assessment with other projects (e.g. cumulative impacts with other Tawang basin projects). Even a limited discussion on eflows for the 780 MW Nyamjang chhu project is incomplete without addressing eflows in the 7.5 MW Khangteng and 3 MW Shayro projects which are an integral part of the Nyamjang chhu project.

6. Even if CIFRI report is claimed to be a report on fisheries (with serious problems and looking only at a single target species of fish), **there has been no estimation of flows required for social and cultural purposes**. Urgent studies need to be conducted in this regard as the project plans to divert the entire river length (In India) through tunnel.

It may be noted that just below the point where TWC of Nyamjang Chhu HEP enters the river, the river enters Bhutan. The downstream impact of the project for the stretch of river within India and for the river entering our friendly neighbor should also be a matter of concern and assessment for us.

We hence urge the MoEF to reject CIFRI's report as well as recommended 3.5 cumec flows in lean season and commission a multidisciplinary study on eflows with local participation using state of art methodology. In the meantime, there should be no reduction in the prescribed eflows.

Looking forward to your response to the points raised above.

Thanking You,

**Yours Sincerely,
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Freshwater Fish Specialist Group, IUCN**

[1] <http://www.arunachalpwd.org/pdf/ACA-SPA%20during%202007-08.pdf>