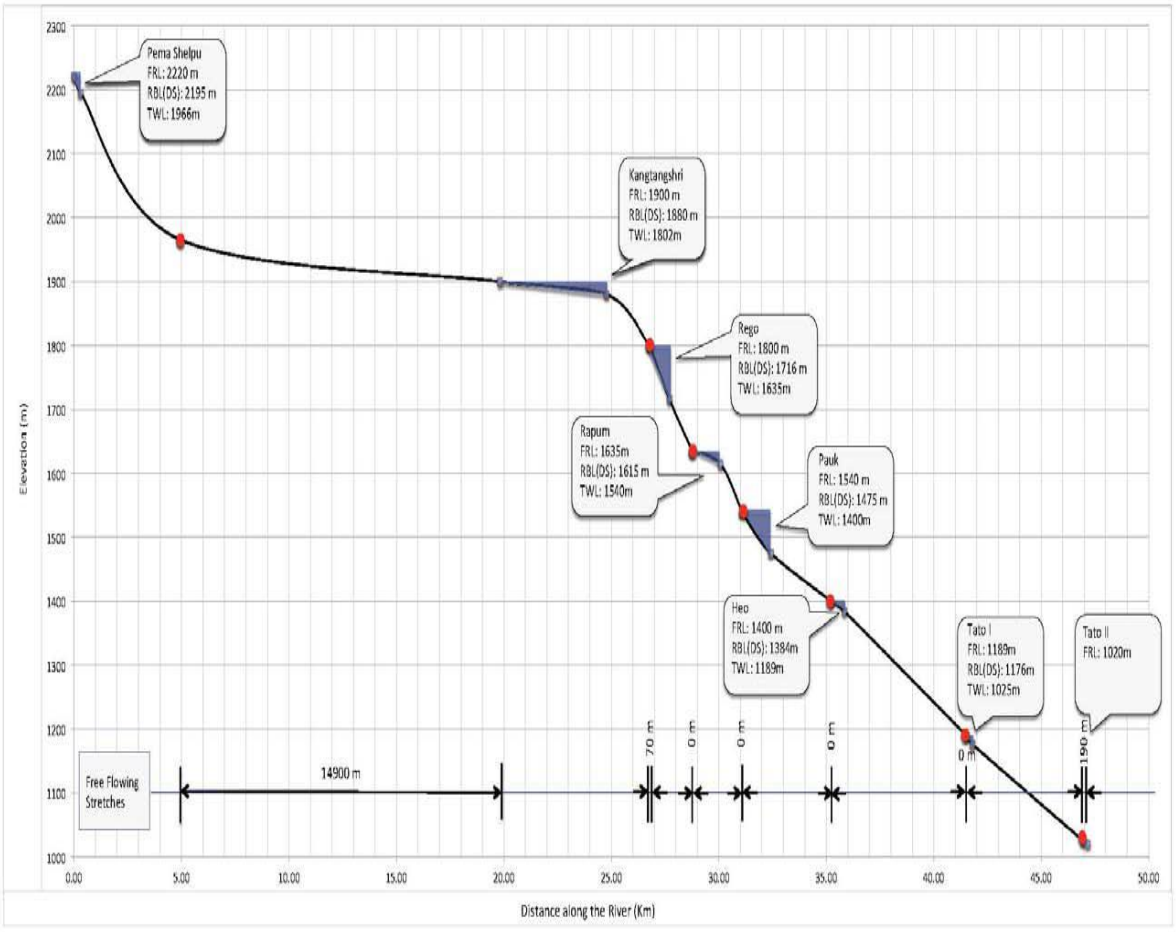
Comments on EIA of Kangtanshiri HEP in Arunachal Pradesh by WAPCOS

The 80 MW Kangtanshiri HEP on Yargyap Chu river (a tributary of Siyom river, which in turn in tributary of Siang River in Brahmaputra basin) is to be considered for EC by EAC of RVP in Nov 11-12, 2013 meeting. Our comments on the EIA of the project done by WAPCOS are given below. These are preliminary comments; further comments would be submitted once full EIA-EMP-PH documents are put in public domain.

1. The first sentence of the EIA says a lot: "Hydro power is a renewable economic, non - polluting source of energy. Hydro stations are the best choice for meeting the peak demand." An EIA agency is supposed to be independent, non biased entity since an EIA is supposed to be an unbiased assessment of impacts of a project. The EIA starts with such biased statement that is also irrelevant. This is along the lines of WAPCOS being pro project agency in terms of track record, in terms of its business model and in terms of it being an agency of Govt of India's Ministry of Water Resources. Such an agency should not be accredited to do EIAs.



L Section of Yargyap Chu river as given as fig 3.3 in CWC study of Siang basin

2. The Yargyap Chu River already has seven large proposed projects all of which have been given TOR ok by EAC, even when the project parameters were contrary to even the weak norms of EAC of at least 1 km distance between projects. In addition, there is Tato II project which also submerges part of this river. In addition there are at least two more projects of 12.5 and 15 MW on tributaries of Yargyap Chu, also having substantial impacts. As things stand now, there is zero distance between several of these adjacent projects. Even between Kangtanshiri and next downstream project, namely Rego, there is just 70 m of river as shown in L section from CWC report shown above. This is clearly not adhering to even the bare minimum norms of EAC. The EC for Kangtanshiri project should not be considered till the distance is increased to at least 1 km as per the norms followed by EAC now (these norms too need to change to increase this distance and also adopt other necessary norms).

3. The CWC study of Siang basin says about the Yargyap Chu River that the EAC had earlier recommended, "Cumulative Environmental Impact Assessment Study of Yargyap Chhu river to ensure environmental sustainability of seven projects." This is yet to happen and considering EC for any of the projects in the basin before that would not be proper.

4. The EIA of the Kangtangshiri project does not cover following very important aspects:

i. Options assessment

ii. Climate Change impacts

iii. Impacts of project on climate change adaptation capacity of the people and area

iv. Impacts of mining of materials for the project

v. Impact of peaking operation of the project

vi. Impact of changes in sedimentation dynamics and impacts thereof on the river and people

5. In terms of the impact of the project on water resources, the EIA project ignores the stretch of the river between the dam site and power house. Impact of the dam in that stretch will very significant since that area will have very reduced flow of water and sediments.

6. Regarding the impact of extraction of boulders and gravel from the river bed the EIA states "The pits at sites after extraction of construction material will be under constant action on account of erosion in high flows and deposition under low flows."

But the EIA does not explain what it means by 'constant action' and impacts thereof. The contention of EIA consultants: "Thus, no major impacts are anticipated o this account" can not be accepted. Here WAPCOS completely ignores the case of flash floods in Gai River in Dhemaji district on 15th August 2011. People from Dhemaji and Lakhimpur have been saying that the extraction of boulders from the river for construction of Lower Suabansiri HEP and Bogibeel bridge are a prime reason for these flash floods. WAPCOS was also the EIA consultant for Lower Subansiri project and the impact of their shoddy job there is now being felt by all concerned, including the consultants.

7. Landslide in hill ranges of Arunachal Pradesh is very common and blasting operations for dam and tunnel construction will surely intensify that. But the EIA of Kangtangshiri makes no mention of that while discussing blasting operations. It may be mentioned here that the upstream Pema Shelphu HEP had to change the location of the dam because of the heavy landslide during investigations, as recorded by the EAC in its minutes of May 2013: "During the process of further investigation, a landslide occurred on the left bank of proposed barrage axis, which after further investigation, resulted in shift of barrage axis about 300 m upstream." In view of the situation the EIA should have done the impact of the various activities of the project on landslide potential in the area and recommend measures for reducing, mitigating, or avoiding such impacts, but has not done that.

8. The impact on soil erosion of a upstream dam can intensify sedimentation of downstream dam but this aspect was completely ignored by the EIA while discussing soil erosion impacts in section 9.5 in page number 9-17. The impacts of soil erosion need to be assessed more thoroughly since there are several projects on this river with very short distance between them.

9. The EIA report very surprisingly undermines the role muck disposal from project in increasing sedimentation. It states "The muck disposal sites cause increased sedimentation in the rivers (though insignificant compared to natural sedimentation) and totally spoils the visual aesthetics of the area." The sedimentation from muck disposal is not insignificant, rather it has catastrophic impacts on the river. It has already been proved that in the recent Uttarakhand flood disaster the muck disposed from upstream projects like Phata Byung, Singoli Bhatwari and Srinagar had intensified the disaster impacts in the downstream. Even after such glaring examples, statements from state owned EIA consultant clearly shows pro-project bias.

10. The height of the dam above the riverbed level is 20 m. This is appropriate height for a fish ladder, but no provision has been made for a fish ladder.

11. The EIA mentions about fishing in the river, but has not assessed who all will be affected due to the project and how such impacted people will be compensated.

12. Yargyap is a pristine river and this dam will have huge impacts on the aquatic and terrestrial biodiversity. However, the EIA does not do proper study of the impact of the project on such biodiversity. For example, page 64 of EIA says: "The presence of wildlife was also confirmed from the local inhabitants depending on the animal sightings and the frequency of their visits in the catchment area." However the rest of the document says there is no wildlife in the area.

13. The lack of understanding of hydrology on the part of EIA consultants is reflected when they say (p 9-9): "In Kangtangshiri hydroelectric project, the discharge for 90% dependable year is higher than the rated discharge (94.86 cumec) for a period about 90 days from 11th June to September (barring second and third 10 daily of August). The project envisages generation of 80 MW of hydropower using 2 turbines of 40 MW capacity each. Thus, in monsoon months, both the turbines can be operated and pre-project level of discharge will be maintained in river Yargyap Chu between barrage of Pemashelpu hydro-electric project and Rego hydro-electric project." This is very strange statement that even with all the projects in place, "pre-project level of discharge will be maintained between barrage of Pemashelpu HEP and Rego HEP". This is clearly not possible with the turbines running since running turbines will be diverting the water and thus the river downstream from the barrage will not have pre project discharge.

14. In fact in the entire EIA document, there is no mention of the situation small length of the free flowing river downstream from the project or how the upstream project operation would affect the operation of Kangtangshiri HEP. The EIA also does not provide a map of the area that they have included in the assessment. There is no mention how far from the project are the protected area. The 256 page EMP document put on the MoEF website is clearly far from adequate document.

15. The 256 page document with EMP on the title page does not seem to be full EIA-EMP since the document keeps saying the mitigation plans will be given in EMP, but we find no full mitigation plan. Thus for example, in the section 9.5(a)(iv) on muck disposal on pages 9-17 to 9-20, there is no mention of the specific 5 ha of land where this muck will be disposed off with the map showing the location of muck disposal plan.

16. The EIA document uploaded on the MoEF website also does not contain the catchment area treatment plan, compensatory afforestation, rehabilitation plan, dam break analysis, disaster management plan, public hearing report, mention of how the issues raised at public hearing were responded to, and so on. None of the aspect of the

EMP seem to be included in this document. If this is the whole of EIA-EMP than this is shockingly inadequate and should be rejected in toto and appropriate punitive recommendation made against the consultants. If the full EIA-EMP document is not uploaded than this project should not be considered in this meeting and should be considered only after the full documents are uploaded in full.

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