# Report of Shri Pratap Singh, member of the team for site assessment, submitted along with the report of Dr A Rahmani on proposed DEMWE Lower Hydroelectric project in Arunachal Pradesh

My team collegue Dr. Asad Rahamani has submitted report on the impacts of Lower Demwe Hydro-electric Project on wildlife. In continuation of the report I submit my disagreements and some additional points.

### Mandate of the team

1. The Standing Committee of the National Board of Wildlife formed this team prescribing its mandate as "to make a first hand assessment of the possible impacts on wildlife in the project area as well as the area downstream of the project likely to be impacted due to implementation of the project proposal and submit a report to the Committee on the feasibility of the proposal".

I am therefore of the opinion that it would be *ab initio* beyond the professional ambit of the team to take up for examination or to draw conclusions there from, on the following issues observed by my esteemed team member, along with the cultural/heritage issues touched upon as part of the issue on siting of the project.

- 1) Strategic importance and first user rights issue
- 2) Development of Arunachal Pradesh (as well as Lohit river basin in particular)
- 3) Likely impact on local communities in Arunachal Pradesh and Assam

### **Down-stream Impacts**

- 1. While my esteemed team member has raised serious doubts about the WAPCOS study, citing the likely absence of field observations, it is felt that the study has primarily modeled the river flow regimes and is relevant in that perspective. Based on this study, my esteemed team member has pointed out that the divergence of the altered flow regime from the natural flow scenario is a matter concern and suggested independent study through a consortium over 2-3 years. In this regard, it is felt that further scientific study may be necessary to objectively determine the effects of the fluctuating diurnal flow and measures to mitigate such effects. If project is approved such studies can be undertaken simultaneously and if impacts are found to be immitigable by other means, water flow can be suitably modified to minimize the impacts.
- 2. My esteemed collegue has raised issues on possible impacts on species like Dolphin, Asiatic Wild buffalo, Bengal Florican and grassland ecology. He has also pointed out that down-stream impacts can not be assessed based on present level of information. These potential impacts and their mitigatory measures can be studied, and if mitigatory measures do not substantially reduce the impact, water flow regime may be needed to be suitably modified. Since flow regime management can be done post facto, studies can be undertaken simultaneously if the project is approved.
- 3. As discussed with CCF (Eastern Circle) and other forest officials most of the the Chaporis are part of Unclassed Sate Forest and they are located at varying levels having grassland and mixed forest vegetation. The Chaporis have various pressures such as unregulated cattle grazing, fuelwood/firewood and thatch collection. These are not covered

under management for conservation of wildlife. Hence it would be appropriate to bring the Chapori under wildlife management.

4. As per available information there have not been any indepth studies of water level variation on Brahmaputra Chaporis and at this stage it will be difficult to say about quality and quantity of impacts. Some of these impacts can be assesses only after actual diurnal flow variation. Therefore as suggested a simultaneous multidisciplinary study would be appropriate, so as to undertake remedial measures including flow regime management.

# Siting of the Project

1. It is to mention that the Govt. of Arunachal Pradesh has submitted a proposal for Eco-sensitive Kamlang Wildlife declaration of zone around Sanctuary CWL/D/12/2002/Pt(II) 5049 dated 8<sup>th</sup> September 2011. The proposal was drafted by the members of a committee constituted for the purpose on 20<sup>th</sup> July2011. As per the proposal based on presence of deep river gorges and high ridges except on southern side, where Namdapha NP has common boundary, the committee has identified the Eco-sensitive zone ranging from 100 m to 500 m except on the southern boundary where the sanctuary has common boundary with Namdapha National Park. The width of Eco-sensitive zone in the western side, close to proposed Lower Demwe HEP is 100 m. As per the proposed regulations reservoir/pondage created within eco-sensitive zone as part of Hydro-electric Project will be allowed, however submergence in the sanctuary will be regulated as per provisions of Wildlife (Protection) Act 1972. Moreover Standing Committee of State Board for Wildlife in its meeting held on 27<sup>th</sup> May 2011 observed that due to steep mountain range of more than 6000 feet the project area is separated from the sanctuary.

2. It is to further mention that MPCA site is yet to be finally notified. According to information received from the Member Secretary, Arunachal Pradesh Medicinal Plant Board (quoted below) the area will not be under submergence.

"The proposed MPCA under Lohit Forest Division in Denning RF is for 200 ha and does not fall under reservoir area of Athena Demwe Power Ltd. The proposed reservoir of Lohit hydro project is at 424.8 mtrs from MSL where as the proposed MPCA area falls 576 mtrs from MSL which does not intersect with the full reservoir level of the Lower Demwe project. Hence MPCA area does not come under the submergence area due to construction of the proposed Dam. Further, the proposed MPCA sites is yet to be notified and subject to alteration."

3. As pointed out by developers the project has taken into consideration impacts on Parashuram Kund by restricting construction activities to the right side except providing tunnel for supply of water to Parashuramkund itself. The aspects regarding the Parashuramkund have been deliberated in the EAC meeting held on 22.10.09 and 16.11.2009. As per the specific conditions of the environmental clearance the following provisions have been made.

"xvii. The project will release normal lean season flow for a period of 7 days during mela (sankranti) period in Parashuram Kund, in the month of January as per condition stipulated by Parashuram Kund Improvement Society.

xviii. The financial allocation for the protection of Parashuram Kund should be enhanced from Rs. 2 Crore to about Rs. 10 Crore as suggested by the EAC. The said amount would be utilized for creating appropriate amenities, infrastructure, structures and safeguards etc.,

as decided by Parashuram Kund Improvement Society who are looking after the developmental activities related to the Parashuramkund."

## Provisions under Wildlife (P) Act 1972

5. My esteemed collegue has pointed out legal position regarding flow variation within Dibru-Saikhwa National Park. Section 35(6) is quoted below:

35 (6) No person shall destroy, exploit or remove any Wild Life including forest produce from a National Park or destroy or damage or divert the habitat of any wild animal by any act whatsoever or divert, stop or enhance the flow of water into or outside the National Park, except under and in accordance with a permit granted by the Chief Wild Life Warden, and no such permit shall be granted unless the State Government being satisfied in consultation with the National Board that such removal of wild life from the National Park or the change in the flow of water into or outside the National Park is necessary for the improvement and better management of wild life therein, authorises the issue of such permit.

As per the provision the permission for water flow variation within National Park and Wildlife Sanctuary has to be obtained from Chief Wildlife Warden for better management of wildlife, with prior approval of State Government and National Board, even in cases where physical location of a National Park or Sanctuary is very far from the source causing variation, which in the present case is about 100 km. The provision has far reaching implications such as rights of upper and lower riparian states and geopolitical issues and therefore the provision may require examination at appropriate level regarding its careful application in inter-state cases keeping in view the spirit of the provision in the Act.

Recovery of potential habitats: A significant contribution to conservation of Chapoririverine ecosystem can be made by way of making additional habitat available to wildlife.

Dibru-Saikhwa National Park has two unauthorized villages having 27 sq Km area located
within it. This is potential habitat for grassland and riverine species. If these villages are
shifted out by offering suitable package, the vacated area can soon become suitable
habitat for many of the species. Similarly, wildlife habitats on other Chaporis upstream in
Arunachal part can be made available by removing illegal occupants on the Chaporis.

Conclusion: From the above it is clear that some of the issues raised by my esteemed colleague are beyond the scope of the mandate. Downstream impacts of the project can be studied simultaneously if the project is approved as corrective measures, including flow regime variation, will be possible post –facto also. Facts presented regarding siting of the project are not as per existing records. Issue pertaining to Wildlife (P) Act 1972 application for water level variation has geo-political consequence and the spirit behind the provision of the act needs to be looked into.