

To
The Chief Minister
Government of Himachal Pradesh

5th June 2103

and

The Minister of Environment and Forests
New Delhi

Subject: Issues related to tunnelling for hydropower projects : Need for immediate action

Sir

On occasion of the World Environment Day we write to you to draw your attention urgently towards issues in relation Hydropower projects being constructed, specifically in Himachal Pradesh and in general across the Himalayan region. With regard to the same, concerns have been raised several times by local communities on issues of the **tunnels being constructed** as a part of the project design. The planning and monitoring mechanisms that exist currently for hydropower projects have completely failed to take into account the various issues that exist with tunnels built for hydropower projects. There are three broad areas of planning, impact assessment and governance failure that we would like to raise in this context.

1. **EIA not taking into account the impact of tunnels:** Tunneling for hydropower project using the blasting technique can be compared to mining or quarrying. It has a series of direct and indirect impacts which have already been documented, some of which we are listing here:
 - **Impact on Water Sources:** Series of data that we have extracted from the Irrigation and Public Health department (IPH) confirms that villages located directly above the tunnels have been impacted as a result of reduce in discharge or complete drying up of water sources and springs. Data exists for the Karchham Wangtoo, Budhil, Chamera, Parbati II, Parbati III and Larji hydroelectricity projects which indicates this. **(Annexure 1-4: Data from IPH)**. Moreover, no studies are conducted as a part of the Environment Impact Assessment process whether alternative sources of water are available in case of drying up of existing water sources and no budget kept for the mitigation measures. Like in case of Karcham Wangtoo HEP the money given to IPH for alternative arrangement is from Local Area Development Fund (LADF) which for overall development of the project affected area and not for the mitigation measures due to impact of the project.
 - **Obstruction of the Natural flow of the river:** This is perhaps the most serious issue as far as a tunnels are concerned considering that there are hardly any long stretches of the rivers Ravi, Sutlej, Beas and Chenab that will be free-flowing once all the projects that are being planned, come up. This is bound to lead to an ecological crisis in the long run. More importantly, for a river to be called a 'river' there needs to be free-flowing water in it.
 - **Impact of quarrying – disturbing the stability of the land and hampering agriculture and horticulture production:** While the government may claim that it will come up with alternative arrangements and schemes for water supply to these villages, it may not be in a position to relocate the villagers who encounter frequent landslides, erosion and cracks that have begun to appear in their houses as a result of the underground blasting activities. This is a common feature in areas where tunnelling work is being carried out. Other issue is the dust in air arising out of muck and debri excavated from tunnel, which hampers the

agricultural and horticulture production. Yet the villages are excluded from the definition 'project-affected' in project reports, environment impact assessment studies and rehabilitation plans. While there are many other issues with tunnel construction these are the three main ones whose impacts need to be studied in detail. Unfortunately EIA studies do not look at tunnel impacts in the kind of detail required. The tunnel issue should also be studied as part of carrying capacity and river basin level impact assessment studies that should be an important part of planning hydropower development but are not being carried out.

2. **Failure of the regulatory mechanisms and bodies to monitor compliance conditions related to muck dumping; environmental flows and safety issues**

- **Muck Dumping:** We have studied data of the Pollution Control Board for three separate projects – Parbati, Chamera, Karchham Wangtoo – and found that the violation for which maximum show cause notices are issued to projects is dumping of muck in unallocated sites along the river bed and absence of adequate mitigation measures like construction of retaining walls etc. More than 95% of the times there is no follow-up or punitive action by the Pollution Control Board beyond issue of the notice. **Whenever unauthorised muck dumping damages forest wealth or grasslands, the State Forest Department just imposes a fine on the project proponents, which is not enough to prevent recurrence of these offences and are also a violation of Forest Clearance conditions.**
- **Safety Issues** In December 2012 during an inspection by the officials of the CWC, DOE and CEA in the case of the 1200 MW Karchham Wangtoo project profuse leakages were found from the surge shaft possibly due to cracks and fissures that may have developed. Through an RTI application we had sought some information wrt the incident and we found the following (**Annexure 5 – Response of DOE to RTI Application dated**) :
 - ➔ The letter issued to the project proponent by the authorities provided no details of the exact nature and extent of the leakage. A news report which appeared in The Tribune on January 27th 2013 (**Annexure-6**) mentioned the quantum to be 5 to 9 cumecs which is a substantial amount.
 - ➔ The response also clearly states that so far there is no authority in the state for control and monitoring of safety and water flows as required by the Hydropower Policy 2006 of the state of Himachal Pradesh.
 - ➔ In the meanwhile while several hydropower projects have been/are being constructed and some are even ready for commissioning in the absence of any safety control monitoring authority. This is a matter of serious concern considering.
 - ➔ Further, this is not the first time that there has been a safety issue reported for a hydro project. Please refer to news item of the Tribune dated 17th April 2012 regarding leakage from the head race tunnel of Chamera III HEP (**Annexure-7**)

Even today, local communities from villages around the Karchham Wangtoo tunnel are reporting that leakages in some portions of the tunnel. Until and unless a strict monitoring mechanism is created this problem is unlikely to be resolved. In such a scenario the state government should take measures to not commission projects unless the safety issues have been addressed and an authority is in place to examine the same.

- ## 3. **People affected by tunnels should be treated as project affected people/families in the Rehabilitation Plans:**
- To ensure a fair compensation to families affected as a result of the loss of access to water sources or the river itself as well as for any other kind of damages caused by the construction of the tunnel it is critical that they be recognised as project affected people in all the reports – be it the EIA, the DPR or the Compensation and Rehabilitation Plans. In projects like the 588 MW Luhri Hydropower Project there are 78 villages which will be affected by the tunnel but there is no detailed impact assessment in

the EIA report as to the number of springs and water sources in the area and the livelihood needs these sources cater to, for example. Despite this the EAC has recommended Environment Clearance to the project.

Here are the action points that we would like to put forth:

1. Carrying Capacity Studies on the river basin should be mandatory before allocation of Hydropower Projects. Until and unless such studies are conducted along with Cumulative Impact Studies which assess the impacts of tunneling in cascade of projects there should be a moratorium on further construction
2. The TORs for River Valley Projects involving tunnel construction should include 'Assessing the impacts of tunnels – both ecological and socio-economic' as part of the EIA studies
3. Tunnel Affected communities should be included in the list of Project Affected Families and should be eligible for compensation
4. Until an Authority for Safety Control is established there should be a halt on further commissioning of projects
5. Projects that are violating muck dumping related guidelines and conditions should be eligible for punitive action in a timely manner after issuance of show cause notices. Penal action, rather than imposition of fines should be initiated in case of forest offences. Compliance monitoring mechanisms need to be strengthened to ensure regular inspections by PCB and regional authorities

The above are basic measures that need to be taken on a priority basis.

Sincerely

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