

Interim Reply

FOR THE SAKE OF EARNING LIVELIHOOD – OPPOSING HYDROPOWER PROJECTS IN INDIA in the name of environment and communities

**Rejoinder to a highly biased Report of Professional Project Opponents on
ADB Financed Hydropower Projects in HP**



(July-August 2011)

**HIMACHAL PRADESH POWER CORPORATION LTDⁱ.
(without any outside support)**

List and explanation of abbreviations and colloquial terms used

ADB	Asian Development Bank
CA	Compensatory Afforestation
CAT Plan	Catchment Area Treatment Plan
Crore	Indian unit - Equals 10 millions
CSO	Civil Society Organization
Cumec (m ³ /s)	Cubic Meters per Second
Cusec (ft ³ /s)	Cubic feet per Second
DAV	Dayanand Anglo-Vedic
EAC	Expert Appraisal Committee (under MoEF for River Valley Projects)
EIA	Environment Impact Assessment
EMP	Environment Management Plan
EPH	Environment Public Hearing
FCA	Forest Conservation Act, 1980
FRA	Forest Rights Act – short for Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act
GHG	Green House Gas (or its plural)
GHNP	Great Himalayan National Park (in district Kullu, HP)
GoHP	Government of Himachal Pradesh
GoI	Government of India
GP	Gram Panchayat
GSI	Geological Survey of India
ha	hectare
HEP	Hydro Electric Project
HFL	Highest Flood Level
HP	Himachal Pradesh
HPFD	Himachal Pradesh Forest Department
HPP	Hydropower Project
HPPCL	Himachal Pradesh Power Corporation Limited
HPSPCB	Himachal Pradesh State Pollution Control Board
HRT	Head Race Tunnel
INR	Indian Rupee
kms	kilometers
LADA	Local Area Development Authority
LADC	Local Area Development Committee
LADF	Local Area Development Fund
lakh	A unit of measure in India, which equals one hundred thousand.
m	Meter/meters
<i>Magru</i>	Spout (for easy flow) from a spring

MAT	Main Access Tunnel
MoEF	Ministry of Environment & Forests
MW	Mega Watt
NEAA	National Environment Appellate Authority (now wound up on creation of NGT)
NGO	Non Government Organization
NGT	National Green Tribunal
NHPC	National Hydroelectric Power Corporation
NIRM	National Institute of Rock Mechanics
NP	National Park
NPV	Net Present Value
PHPO	Professional Hydropower Project Opponents
PO	Project Opponent
PP	Project Proponent
PPO	Professional Project Opponent
PPR	Panchayat Parivar Register
QCI	Quality Council of India
QED	<i>Quod erat demonstrandum</i> meaning “which was to be demonstrated”.
ROR/RoR	Run-of-the-River
RoW	Right of Way
RR	Resettlement & Rehabilitation
RTI/RTI Act	Right to Information Act
SANDRP	South Asia Network against Dams Rivers and People
SIA	Social Impact Assessment
SoI	Survey of India
sq kms	square kilometers
SSNC	Swedish Society for Nature Conservation
ST & OTFD RFRA	Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act
TBM	Tunnel Boring Machine
Tehsil	An administrative unit under a Sub-division (a district is divided into many subdivisions) – similar to County. Average area of tehsil in HP is around 675 square kilometers.
ToR	Terms of Reference
TRT	Tail Race Tunnel
UNESCO	United Nations Educational, Scientific and Cultural Organization
USD	United States (of America) Dollar
WHS	World Heritage Site
WLS	Wild Life Sanctuary

Interim Reply and Comments on the report titled “In the name of clean energyⁱⁱ” on the Asian Development Bank financed hydropower projects in Himachal Pradesh prepared by Him Dhara supported by SANDRP (May 2011) financed by SSNC.

Preliminary comments and findings:

Himachal Pradesh Power Corporation Ltd (HPPCL) has gone through the impugned report and is surprised to find that the report is totally silent on the positive and new initiatives taken by it. Not a single word is uttered in the report about a number of positive interventions that HPPCL (the Project Proponent – PP) has made some voluntarily and others in compliance with ADB safeguards. This conspiracy of deliberate and selective silence needs to be understood by the discerning readers. In order to enhance such an understanding, following additional facts are brought to the fore.

1. That the report is a sponsored study with financial support from abroad for opposing hydropower projects in India. Hence, it lacks spontaneity and sense of balance. The fund giver has shown it on its website (<http://www.naturskyddsforeningen.se/english/international-cooperation/>) but fund receiver never shows it on his/her website – so much in the name of transparency actually practiced while expecting total transparency from all other (particularly government) agencies!
2. That there is no objective primary fact finding, no analysis of information and no research done for preparing this report. Instead it is merely a collection of:
 - i) Some unsubstantiated newspaper (and similar other media) reports planted by certain vested interests who earn their livelihood by opposing any and all hydropower projects (in India) being their full time vocation or in short Professional Hydropower Project Opponents (**PHPO**) or further in brief Professional Project Opponents (**PPO**)- being polynymous, they masquerade under various names;
 - ii) Excerpts from variously and without reference to context quoted reports of their own i.e. Professional Project Opponents (PPO) who have helped cobble up the present impugned report);
 - iii) Views of certain people claiming to be affected by a (yet to start) project as already expressed by them repeatedly in various forms, which have been considered by independent, impartial third party reviewers/authorities and not found acceptable;
 - iv) Unethical, immoral and illegal referencing from two appeals pending adjudication before the NGT - National Green Tribunal (filed before the then National Environment Appellate Authority - NEAA) and without grant of interim injunction though repeatedly and vociferously pleaded by the appellants with support of PPOs where their views is also thus presented (*matter subjudice, hence misquotation and taking it up at any other forum is contempt of court*);
 - v) Unethical, immoral and illegal referencing by taking selected excerpts from a Civil Writ Petition pending adjudication before Hon’ble High Court of HP filed by a few vested interests based on falsification of documents, misrepresentation of facts and wishful interpretation of records. PP’s case has also been presented and no injunction or directions have been issued by the Hon’ble Court. (*Petition subjudice, hence misquotation and taking it up at any other forum is contempt of court*);
 - vi) Extremely superficial and highly biased analysis of published articles, government documents and research papers and that too without mentioning their relevant page numbers.

One such example is reference {*the only scientific paper (mis)quoted at page 26 of the impugned Report*} at serial No. xix from Current Science Vol. 99 No. 5 relating to Anthropogenic impacts on sediment flux in Sainj and Tirthan watersheds for the paper's study area as intercepted at Larji has been quoted with a highly biased interpretation and without reference to context. Even a little bit of impartial probing would have been able to note that upper regions of both (Sainj and Tirthan) watershed are Wildlife Sanctuaries and National Parks, thus, fully protected, and in Tirthan watershed hydropower project is not (and can not be) planned as it is reserved for Trout fish breeding (HP Hydropower Policy 2007). **Thus, even without a hydropower project, high sediment flux is reported.** Hence, the scientific paper's authors have rightly not blamed the hydropower projects for all the ills but have found a variety of anthropogenic reasons. In such circumstances **an impartial and positive minded reporter/researcher would have relied upon factual position** and would have given a right conclusion in terms of calling obviously for a comprehensive and effective Catchment Area Treatment, which currently only hydropower projects are providing in this particular region. It would advocate for more such treatment plans to be prepared and implemented with the help from hydropower projects, thus, serving both purposes, reduction of silt flow and at the same time power generation! But PPOs, as is their wont, are not known for such impartial reporting.

- vii) Out of context quoted and antiquated photographs without crosschecking facts (e.g. photo at page 38 is Communist Party's rally – **note the sickle and red flag** in their hands, even some people are smiling – Is it protest?);
 - viii) Reproduction of unrelated statements with inappropriate contextualization;
 - ix) Without reference to context, partial quoting of information obtained using RTI, though such activity is prohibited under the provisions of the Act *ibid* and Rules thereof.
3. That there is deliberate distortion and omission of important facts. For instance the *in-principle* (or first stage) forest clearance accorded by the Government of India Ministry of Environment & Forests (GoI, MoEF) for Kashang HEP Stage-II & III vide its letter No. 9HPC366/09-CHA dated 22.03.2011 has been ignored (page 29) being too inconvenient for the PPOs although it was **granted full two months before impugned report's publication**. Final (second stage) forest clearance has also been accorded vide MoEF letter No. 9HPC366/09-CHA dated 14.06.2011 though certain PPOs tried to stall its issuance by filing false complaints. Thus, they have **a conflict of interest with fair assessment of hydropower projects** (conformity or agreement with fairness will obviously be loss of their livelihood, which runs on opposing hydropower projects and similar other developmental projects). Hence, they can not be expected to be judicious, fair and transparent in their assessment of anything related to hydropower. The impugned report is a *QED* of this expectation.
 4. That further deliberate omission of certain important and legal reports are noticed like the site inspection (October 2010) report of the Member of the then NEAA accompanied by an expert, who examined each issue threadbare in the field while affording to the appellants and their supporters full opportunity to present their case and did not find merit in their claims. Many issues raised in this impugned report are already settled like those relating to problems in Chilgoza pine's regeneration etc (page 17 of impugned report).
 5. That the impugned report adopts piecemeal approach and does not take into account the impact of the project in totality; instead it confines only to construction phase. Whereas the life of the projects in the operation phase is estimated to be more than 100 years and

the construction phase limited to about 5 years, entire list of objections contained impugned report (ref: part VII. The Safeguard Smokescreen, Pp 23 – 36) confines itself only to construction phase when the EIA has actually taken both phases into account.

6. That the report at page 6 admits that its entire assessment is based on oral evidence from the local people which is an attempt to conceal truth and absolve itself from any accountability at the cost of credibility.
7. That the impugned report has prematurely judged the application of GHNP for declaration as WHS under UNESCO (Page 17 of impugned report). GHNP is not yet a WHSⁱⁱⁱ. The application for grant of status of WHS is still (August 2011) pending consideration and site visit by independent assessors/verifiers is also to take place.

Further, there is anachronism in applying the rigors of WHS site to Sainj HEP. The process of filing application to UNESCO (start 2009) was completed towards the end of year **2010** whereas all clearances were in place for Sainj HEP by end of year **2009**! The EIA was completed much before, as its EPH was held on 19.06.2008. Despite high expectation of the PHPOs, the PP is not blessed to be prognosticator of this magnitude. Even if the GHNP ultimately gets WHS status, it has no implication for Sainj HEP being well outside the boundaries of the NP. Moreover, hydropower development is not barred in the surrounding area of a UNESCO listed WHS site^{iv}.

8. That PP is being held responsible for certain perceived impacts which are certainly not under the control or authority or influence of the PP like perceived (yet to be studied – ToR presented to MoEF) cumulative impacts (page-20); overall hydropower planning in the state or a river basin (page-21); Khadra landslide (page-23); river basin carrying capacity (page-25); alleged concretization of mountain in Parvati-II HEP (page-26); demand for complete moratorium on all HEPs in HP (page-40) etc.
9. That some findings against large dams have now been directed to the ADB assisted small structured run-of-the-river projects (second paragraph on page 4 of impugned report) without even modest modification to make it at least appear *mutatis mutandis*.
10. That despite persistent, repeated, frequent and continuing public consultations (in each of its project) held by the PP, the report of the PHPOs argues the other way round.
11. That there is deliberate distortion of facts like the obvious difference between ‘award of work’ and actual ‘start of work’ though well understood by PHPOs and PPOs has been distorted to make it appear as violation (first bullet point at page-29 of impugned report).
12. That while seeking applicability of FRA (Scheduled Tribes and Other Traditional Forest Dwellers Recognition of Forest Rights Act) its preamble and existence of detailed, well documented and printed Forest Settlement Reports which were prepared by the then British Government has again been ignored (Pp 30, 39 & 41 of impugned report) being too inconvenient for the cause of earning livelihood by PHPO through opposition to hydropower projects by hook or crook.

For instance rights in case of Kashang HEP: The Rights and Concessions on forestland involved in the project (as also for all the forests in district Kinnaur) are identified, recognized, well defined, admitted, documented and recorded in a Settlement Report titled as ‘Forest Settlement of Satluj Valley Bushahar State’ of 1921 AD. These rights are inheritable through succession. Local people are enjoying these without any infringement since as early as 1921 AD. Thus, **historic injustice** is absent.

It is further submitted that the communities living in the district Kinnaur are although recognized as Scheduled Tribe yet all of them they do not fall in the category of Schedule Tribe pastoralist communities as required under the ST & OTFD (RoFR) Act, 2006. The

district is developed and people live in settled and well demarcated villages which are entered as such in revenue records and having access to basic amenities like electricity, water and access roads at least up to the Gram Panchayat level. Hence, these communities are **neither primitive nor forest-dwelling** (not ‘*van-vasis/banbasis*’) Scheduled Tribes. The rights in the forests have been admitted in lieu of the right/duty to protect, regenerate and conserve forest resources. Status of performance of duties is a contentious issue.

Besides, while recognizing the forest rights of the local ST population, HP Power Corporation Ltd, in order to compensate them for the same has formulated and is implementing a scheme for providing compensation in lieu of Forest-Rights to the ST right-holders. Copy of the scheme is available on the website of HPPCL.

As such, it is clear that all rights over the forestland involved are already settled and recorded, which has been testified by the DFO/Forest Department. This is perfectly in tune with the purpose of the Scheduled Tribes & Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 as enshrined in its Preamble and definitions. These are being compensated also.

13. That HPPCL - the Project Proponent has not been consulted before making this false and fabricated report public thus damaging its image, reputation and financial interests. It is against the principle of natural justice to condemn without affording an opportunity of being heard.
14. That the impugned report is not peer reviewed. Therefore no credibility can be attached to it. Presumption of truth is against such fabricated reports.
15. That the impugned report has been prepared by an agency not registered with the QCI – Quality Council of India, which is the sole agency authorized to accredit evaluating agencies. This puts serious question mark on the competence of the evaluating agency to undertake such a serious assessment which ends up tarnishing the image and market reputation of a well meaning corporation, thus harming its financial interests irreparably.
16. That the purpose of writing the impugned report is shrouded in mystery and is probably known only to its authors, supporters and financiers. Whatever may have been its objective, it finds no mention in the impugned report.
17. That the impugned report throughout uses phrases like ‘it has been proved’, ‘has proved to be’, ‘has been established’, ‘has been concluded’, and ‘has been found’ without quoting the basis or reference or authority.
18. That the impugned report for examining the subject in detail has solely relied upon oral evidences from communities (ref page 6 para ii). That’s all in the name of credible scientific evidence! It tells a lot about the credibility of the impugned report.
19. That the impugned report is not reviewed or scrutinized or approved by any authority whatsoever.
20. That the impugned report contains **mistakes** (Ladakh shown in Himachal – ref point No. 3 at page 40); **editorial shortcomings** (e.g. missing word between words ‘on the’ and ‘also faces’ in second paragraph on page-7, missing words at No. xix on page 43 after ‘in which authors’, hydropower projects beings - unnecessary usage of letter ‘s’ at page-9, serial numbering of emerging issues at Page - 41 – it begins at No. 5); **factual errors** (Kashang project being in cold desert – ref page-12; barrage height 14 m which still is 9 m above riverbed – ref page 13, water being stored in the diversion trench-weir structure – page 24; etc); and even **hate material** (mentioning Mr. Avay Shukla as Additional Secretary, ref page 8 of impugned report, whereas he at the relevant time was Additional Chief

Secretary – this is not a mistake but a product of perpetual and deep contempt that PHPOs have towards government servants in general).

21. In view of the above alone, the impugned report is found to be a mockery of fair, transparent, impartial and unbiased assessment of any work let alone those subjected to stringent examination and due diligence by the ADB, rigorous approval process of GoI and well studied reports prepared by independent credible third parties. Thus, the **impugned report is totally unreliable** and worth being consigned to dustbin. It might be a good idea to report this fraud to the international financiers of this impugned report for full cost recovery for doing such a shoddy work, which should not cost more than INR 20,000/- and should not take more than two weeks time of only two persons to prepare.

It is noticed that mischievous and professional complainants or PHPOs, before (or even after) filing appeal in Court of Law, have started a malpractice, to which the government agencies like MoEF unknowingly become a party while complying with RTI or a multilateral funding agency like ADB fall prey due to their commitment to transparency and all inclusive examination of projects. Such committed vested interest PHPOs have made it a standard practice to file objections before MoEF or ADB on the ground on which they propose to file a court case (or already filed one like appeal against environment clearance of Kashang HEP) and force these unsuspecting organizations to seek reply from project proponents and then obtain the same under RTI or under transparency laws/principles by its patent and blatant abuse to strengthen their court case by plugging loop holes (or falsifying information steering clear of what is already available on record) and making advance preparation for arguments to the injudicious disadvantage of project proponents. It is humbly prayed that information given by HPPCL at this stage may not be released without hearing the project proponent as its impeccable reputation will be tarnished; its business interest and fiduciary interests will be irreparably harmed; and its position in a future (and/or continuing) court case, which complainants have (filed) contemplated and planned, would be seriously compromised. It is requested to take suitable steps to stop this malpractice of PPOs/PHPOs and to this extent a Caveat may be applied in the matter.

HPPCL being a government owned company has adopted all regulations and complies with the same. When such scrutiny is being done at all levels this application should not merit consideration at the moment and await Hon'ble Courts decision which we feel will not be swayed by such improper documentation.

Brief summary of new and positive initiatives taken by HPPCL:

This is an illustrative (but not conclusive) list of the new and positive initiatives taken by HPPCL (the project proponent – PP) either voluntarily or in compliance to ADB safeguards that has been conveniently ignored by the PPOs while preparing the impugned report. All these initiatives have hitherto been unheard of in the power sector or in the State of HP. It has made marked difference in the approach which is bound to set new standards in the hydropower sector. Of course, all such initiatives are unpalatable to the PHPOs who cannot find any chinks to make entry and attempt to hijack the working. Thus, if they do not suppress such facts, they can not pose themselves as saviors of environment and society to continue earning their livelihood (to support their posh life

styles) by indiscreetly seeking various types of grants from a host of agencies - local, national and/or international.

1. HPPCL, despite having got permission, has not felled all the trees involved in the project area even if their cost is paid in full. It attempts to save as many trees as possible. At times due to presence of such un-felled trees the area is mistaken as forestland being used by PP without permission (ref: photographs of some muck dumping areas contained in the impugned report). As a remedy, HPPCL now has decided to put sign boards on all such sites.
2. For the first time in history, squatters have been paid for totally unauthorized (temporary but deliberately referred in the impugned report as permanent) structures erected overnight on the land acquired by HPPCL as it is committed to the ADB safeguards although it is leading to malpractice where increasingly more and more people are resorting to this illegal act. Earlier such structures were simply demolished being illegal and paid nothing in lieu.
3. Instead of replacement value as advocated by ADB, HPPCL has paid the highest land value irrespective of classification of land in the relevant area. In the case of Kinnaur district projects, Rs. 2.50 crores/ha (equivalent of USD 0.56 million) have been paid which is highest in the State for rural area. Since land value is not same in the entire state, there will always be a difference in the value paid in different parts of the state.
4. HPPCL has proactively prepared a RR Plan which is standard and model for the sector in the state. It provides for many new things and also for liberal and focused grants to the affected people with much sharper definitions. All benefits under the RR Plan are in addition to compensation. The same is available at its website: <http://www.hppcl.gov.in>.
5. HPPCL has launched a number of new RR schemes for the benefit of all the affected families including those from whom land or structure has not been acquired. Benefits under the RR Schemes are in addition to compensation and RR Grants. All the schemes are available at HPPCL website: <http://www.hppcl.gov.in>.
6. For reckoning affected families, instead of placing reliance on entries of a family in the revenue record, Panchayat Parivar Register (PPR) is being relied upon although it results in higher number of families being recorded as affected families. And in many cases people have attempted to rig the process in order to show each adult member as separate family in PPR.
7. Frequent, intensive, extensive, detailed and repeated consultations have been held (and are still being held) with local people on a range of subjects including rates of compensation, impacts of the project, RR benefits available, guidance for investment and yield enhancement as also other income generating activities etc.
8. HPPCL is paying for the community's rights over minor minerals through a dedicated scheme available on its website.
9. HPPCL is paying for the income lost in exercise of forest rights to the Scheduled Tribes, through a dedicated scheme available at its website.

10. HPPCL sponsors students to Industrial Training Institute with a view to enhancing their employability wherein full fee is paid with a monthly scholarship of Rs. 1000/- to the sponsored candidate.
11. HPPCL provides scholarships to meritorious students from affected families from class 6 to 12 and also in professional diploma and degree courses.
12. To encourage self-employment instead of running after government jobs or company provided jobs, HPPCL has a scheme to provide assistance of Rs. 50,000/- to the affected family as grant.
13. For dual purpose muck utilization, a playground is being built by using muck from HPPCL's Sawra-Kuddu Hydropower Project in DAV school. Thus a public utility is being created in the process. Similar efforts will be made in other projects of HPPCL.
14. A traffic tunnel in Sainj HEP has been constructed in place of conventional road to save dense forest growth below the road alignment.
15. All the diversion structures of the HPPCL projects would be provided with fish pass, whether fish is reported or not.
16. Afforestation has been undertaken by HPPCL in its project sites, wherever feasible during construction phase.
17. Project roads and all muck dumping sites are regularly sprinkled with water to prevent dust emission.
18. Labor colonies are provided with hygienic toilets with septic tanks and also colonies are given entertainment facilities.
19. Land to affected families has been provided in Kashang Hydropower project as was feasible as land in hilly terrain is a very limited resource.
20. All water sources and houses have been inventorized to compensate for any loss due to project construction. In many cases compensations have been paid liberally.
21. A scheme for compensating loss of crop yield due to project activity on land not acquired for project has been approved by the State government on the initiative of HPPCL.
22. Infrastructure over and above committed Local Area Development Fund has been made and is agreed in many of its projects.
23. Identity cards have been issued to project affected families.
24. Dedicated and trained RR and environment staffs have been posted in the projects to maintain close and direct liaison with the affected families and to attend solely to the environment, social and RR issues. This has left no room for entry of PHPOs in the process, much to their chagrin.
25. Common power evacuation lines for basin have been planned by the State Government on the request of HPPCL.
26. In all its project sites, HPPCL is supporting opening of health care centers and police posts for convenience of the people. It also provides ambulance service and runs free medical camps.

27. Contracts of value affordable by the affected families are reserved exclusively for them as also hiring of project vehicles.

The list is endless but for brevity and for demonstrating that HPPCL which is more than willing to take initiatives and set new standards in the sector as also for illustrating the selective suppression of facts by the PPOs, the ones enumerated above should suffice to prove HPPCL's honesty of purpose.

Interim reply to questions raised in the report:

In view of various environmental safeguards taken by the project, the execution of these projects will not make any serious intrusion on the ecological landscape of various sites. Moreover, it may not be lost sight of that hydropower projects are a source of clean, green renewable energy and do not consume natural resources like Uranium and Coal. If these projects are not undertaken as recommended in the impugned report, then equivalent power will have to be generated from thermal power plants in which case there will be huge consumption of coal and resultant air pollution and emission of GHGs (Green House Gases) on daily basis triggering severe environmental and health problems and climate change. In view of this merit alone, genuine environmental activists always recommend launching of hydropower projects as against thermal power plants. They find these projects as panacea for all the ills of air pollution and climate change. Because of their green nature, hydropower projects have the potential to earn carbon credits also.

Despite the obvious benefits, the impugned report is still critical of hydropower projects on flimsy and wayward grounds. The reporter in other words wants that the State of Himachal Pradesh should not take up any hydropower project in future and import power from other states where power generation is already based on thermal power plant. The most fallacious part of the impugned report is that it does not distinguish between storage and ROR (Run-of-the-River) projects and its criticism is blind. The saddest part of the project is that it does not suggest any better alternative to harness the vast hydro power potential of Himachal Pradesh rivers to make the State self sufficient and prosperous, as has repeatedly been advised by successive Finance Commissions of the Central Government. Finding faults is easy but suggesting an alternative is a challenge.

The agency has a clear ploy. It did not bother to discuss any of the issues with the Senior Functionaries of HPPCL. Had it done so then all their putative perceptions would have been cleared and the agency would have been morally duty bound to write a rational, unbiased and balanced report. Now the report transcends all limits of reasoning. For example see some of the paragraphs reproduced below and any discerning reader (including the ADB) would be convinced about the mischievous nature of the agency and the absurdity of the contents of the impugned report.

- i) The integrated Kasang HEP is coming up in Morang Tehsil of Kinnaur, a tribal district of the State is a cold desert area (para 2, page 12). (The impugned report at page 17 says that

Morang tehsil is abode of Chilgoza pine – **an oxymoron!** - two diametrically opposite observations).

- ii) Questions have been raised on ADB's involvement, similar to that of World Bank's in its interests in restructuring of the power sector which would ultimately mean an increase in private participation and higher tariffs (para 2 page 10).
- iii) Whole Sainj Valley which is going to abode of four huge massive hydro electric projects is in verge of collapsing, many mountains which are falling apart due to project construction activity have been sealed with iron and concretized (para 3 page 26-also look at the grammar of the prose).
- iv) In the last section i.e. Emerging Issues at page 39 reports states "the Hydro Energy is far from clean, green, cheap or renewable". Will anybody agree with this ludicrous statement? It shows that there is no limit to absurdity and naivety on the part of the agency.

The agency in its final recommendations wants that there should be a complete moratorium on all hydropower projects until an independent review is carried out – a dangerous doctrine. The report calls EMP documents as smoke screen. This shows that the report is naive, mischievous, and malicious and should be treated with the contempt it deserves. The drafting of the report is also grammatically poor. The agency which has drafted this report should be blacklisted, if it is listed anywhere.

Comments on the photographs of the impugned report are given at the end of this reply as a separate section for ease of reading.

The main points of criticism against the four hydropower projects are briefly described below and these are commented simultaneously. **The report at page 6 admits that its entire assessment is based on oral evidence from the local people which is an attempt to conceal truth and absolve itself from any accountability at the cost of credibility.** The report does not analyze and assess that all the 118 hydropower projects (including those planned, operating or under execution) in Himachal Pradesh are based on ROR model and its chief merit is that most of the environmental impacts are only marginal and of temporary nature.

1 That all rivers in the Himachal are dotted with large number of hydropower projects and the entire flow is diverted through tunnels thus rendering all the rivers dry for eight months of the year creating an identity crisis to cause loss of perennial face of the rivers (general refrain).

Answer: The reporter does not know that there is a provision of allowing 15 % downstream discharge/inflow to spill over the diversion structure to the downstream. And in some cases MoEF has asked for releasing more than that. This value can be adjusted to provide adequate flow during the day and also during night. This flow would be able to

keep the river alive and meet the requirements of consumptive use of water by the downstream communities, animals, fish spawning and other flora and fauna. It is also a fact that all the river and tributary beds consist of a thick layers of rolling stone and moving debris affording little potential for fish spawning grounds, aquatic life and flora and fauna. The flow during winters in the main rivers and in the tributaries reduces considerably being snowfed. The population living along the river banks particularly in the upper reaches is very scanty. Therefore, discharge of 15 % flow across the barrage meets all the hydrological needs of the river. Hence, all the exaggerated fears in the impugned report are totally unfounded and aimed only at raising false alarm. There is no loss of perennial face of river as downstream discharge is mandated from all diversion structures.

2 *That 6154 hectares of forestland has been consumed by these projects and laying of transmission lines. The submergence of the vast forest areas has deprived large number of families of fuel fodder and use of medicinal plants and therefore caused livelihood crisis (page 6).*

Answer: The area of forestland use by hydropower projects when analyzed with unbiased minds is an eye-opener. Firstly, all hydropower projects actually and really seek prior approval under Forest Conservation Act, 1980 (FCA) with all facts laid bare in an open and transparent manner. It means there are no hidden cases or suppressed figures of area of forestland diversion in HP. Secondly, the RoR type projects have almost all components underground except the water diversion structure. But in the forestland diversion cases, area equivalent to underground components is included (ostensibly on the premise of being similar to mining). Thirdly, all temporary use land which is returnable to forest department after due restoration is also included in the proposal. Thus, the area figure gets inflated without actual permanent diversion. When analyzed impartially, it reveals that only about 40 % of the forestland shown as diverted is actually diverted to non-forest use (being surface area with permanent diversion to non-forest use). Fourthly, the Right of Way (RoW) of the transmission lines is also notional diversion as the land underneath the lines is always available (and is actually used) for vegetative growth and also subjected to unimpeded exercise of forest-rights of the local people. And, instead of having multiplicity of power evacuation lines, the State of HP has adopted a common corridor and only one or two lines for each basin, thus, reducing land requirement for them. Fifthly, the forestland diversion permission has a condition that legal status of forestland shall remain unchanged. Hence, the figure of forestland diversion quoted in the impugned report has to be seen in the light of this reality obtaining on the ground. **Such an analysis was expected from the authors of the impugned report but being biased and motivated, they have neither done justice**

with the subject nor shown sensitivity required while treating this important subject.

As stated above, real use and diversion to non-forest use would be much less than about 2500 ha against the figure quoted in the impugned report for diversion to non-forest use of 6154 hectares (ha) of forestland throughout the state of Himachal Pradesh (against its geographical area – 55,67,300 ha; total forest area – 37,03,300 ha^v) is not a big deal (well less than 0.067 %!!!). Therefore, the livelihood crisis due to diversion to non-forest use of forestland for hydropower projects has been exaggerated beyond proportion, obviously without sensible application of mind. Moreover, as per the stipulations of the clearance letter issued by MoEF, Compensatory Afforestation (CA) over double the forestland diverted is raised at project cost in addition to payment of NPV of forestland ranging from INR 6.99 lakh per ha to INR 10.43 lakh per ha for suitable remedial measures to restore environment. Besides, hydropower project fund CAT Plans which is about 2.5 % of the project cost. All these works are labour intensive giving employment opportunities to the local communities. So the alleged livelihood crisis is just another hoax.

In view of the above facts, analyses and remedial measures, the finding of the impugned report by deliberately suppressing information are proved to be misleading, fallacious, biased, motivated and mischievous.

3 *All the four projects have met with stiff resistance from the people as the compensation paid for the acquired land is poor (page 7).*

Answer: In none of the project sites, have local people ever objected to the construction of the project *per se*. People of the villages where the project is located and from where land is being/has been acquired have never objected to the construction of these projects. This is amply documented in the informal and formal public consultations. They have been demanding various benefits in addition to land compensation paid and host of other Relief and Resettlement/ Rehabilitation benefits.

In district Kinnaur, the project proponent (Himachal Pradesh Power Corporation Limited or HPPCL in short) has paid the highest compensation (Rs. 2.5 crore per hectare) in the entire region, so much so that even many outside agencies (including lobbyists and their impugned report) have begun pleading that similar compensation be given in all ADB projects irrespective of their location, prevailing land prices, potential for land development and loss of income etc. Villagers of only one village namely Lippa (not affected by the project; also reported as such in the site inspection report by the Hon'ble Member of erstwhile NEAA - National Environment Appellate Authority) are not willing to support the construction of stage-II of the Kashang project. The villagers are being misguided by disgruntled splinter groups and some outsiders. They

want some soil conservation measures in the adjoining Pager Nallah, which HPPCL has already committed to do, once the work on the project starts. HPPCL officials are now having fresh round of discussions with them and all issues will be sorted out amicably.

As such, local people of the village where project is located and from where land is being acquired are neither against the project nor have opposed it. However, people of adjoining areas, in the hope of getting some benefit or even for gaining publicity or under undue influence of outsiders (including some anti-hydropower lobby organizations masquerading as NGOs/Civil Society Organizations - CSOs), have been sending various protest letters to a number of offices, agencies and organizations including to the ADB. It is categorically stated that there is no resistance let alone 'stiff resistance' from local population, for keeping their lands and rivers intact by not constructing the project.

- 4 ***The state is in the thick of a climate change crisis. The rainfall pattern has changed. There are floods and landslides during the rainy seasons. Kinnaur region is receiving rainfall twice the average value of the precipitation in the past. Accordingly, there is more sediment flow and the projects are showing diminishing returns (page 7).***

Answer: The State does not face any climate crisis because there are no significant GHG emissions throughout the state. There are no complaints of acid rain either. Instead, if the hydropower development is stalled as is being tried by the authors and supporters of the impugned report, the national power grid will have no other option but to rely on thermal power run on fossil fuel emitting GHGs and thus adding to climate change problem. If one looks at the past records of rainfall at any place over the past 100 years, one will always find very wide variations in the annual rainfall figures. Rainfall has never occurred with the same intensity and duration on the same dates of the consecutive years at any place. It always varies. Flooding of rivers is not a new phenomenon as these come in conformity with the rainfall pattern. Therefore, construction of 118 hydropower projects by 2022 will not cause any change in the climate pattern of the state.

- 5 ***The report quotes that Shukla Committee report has recommended a moratorium on hydropower projects in the future as per recommendations given below***
- i. ***That valleys like Ravi, Beas and Sutlej have been saturated with Hydel Projects and that there should be a complete moratorium on hydel projects till river basin studies are conducted and an appropriate policy evolved.***
 - ii. ***That most of the projects studied do not follow the criteria for minimum discharge of 15% and that this failure is not of compliance but of the design of***

the project itself.

- iii. That there should be free flowing river for a minimum distance of 5 km (ad hoc suggestion pending detailed studies) between the place where the Tail Race Channel of the upstream project and the Full Reservoir level (including back water impact) of the downstream project.*
- iv. No project should come up above 7,500 feet msl.*

The role of World Bank and ADB (at page 10) in restructuring the State Electricity Board and also financing these four hydropower projects in contravention of the recommendation of the Shukla Committee report (page 21) is also questionable (page 8, 9 & 21).

Answer: The Shukla Committee Report has not been accepted and is pending adjudication before the Hon'ble High Court. Hence, forcing implementation of its recommendations is mischievous and amounts to jumping the gun aimed at causing miscarriage of justice.

So far in all the river basins in the State of HP, only about one-third of the total hydropower potential is harnessed. So the alleged saturation is far from having actually occurred. Moreover, the Government of HP has started the process of basin-level studies (Cumulative EIA Studies) beginning with preparation of basin-wide CAT Plan for each river basin in the state. ToR for CEIA studies for Sutlej has already been presented before MoEF and EAC's suggestions duly incorporated in the final ToR.

The downstream discharge regulation was promulgated in middle of the last decade by which time many of the hydropower projects were already in existence. So to expect them to have foreseen the requirement and to have made provision for downstream release in their structures is an unfair expectation. Efforts are being made to evolve a computerized system that will ensure uninterrupted 15% downstream discharge.

The issue of distance between two successive projects in a cascade in any river basin is addressed by allocating domain to each project. This aspect is also examined by the MoEF at the ToR approval stage of EIA process. Further, remedial measures are being considered to address the real issue of less flow between diversion and tailrace outlet of each project which would in turn address the distance issue as well.

There is no scientific basis of suggestion of moratorium on hydropower projects above 7,500 feet altitude.

Criticism of the World Bank and the ADB is unfair because The Electricity Act 2003 has been held as Magna Carta of electricity reforms (page 17).

- 6** *All the four projects have been located in Eco-frazile and seismic zones (IV). All the four rivers are glacial rivers. Sainj project is close to The Great Himalayan National Park and Sainj Wild-Life Sanctuary. Kasang project at village Lipa is also close to*

Asarang Wild-Life Sanctuary. Therefore the construction activity of these projects will leave behind the ecological footprint in these sensitive zones. The large number of labor force deployed at various sites will also affect the local ecology.

Answer: Entire Himalayan region with all its hydropower potential falls in seismic zone-IV and more severe zone-V, for which projects are designed suitably. No accidents have occurred so far. All the projects being constructed by the HPPCL are designed to withstand earthquakes of magnitude expected in the seismic zone in which they fall.

The water diversion structures of all the four projects besides not being 'dams' are located far away from glaciers. In one project only 'trench-weir' structure is being made which does not rise above the riverbed level. In other three projects, small 'barrage' is to be constructed and not 'dam'. Since hydropower projects' viability is dependent on glaciers, obviously project construction would avoid any activity which may impact it adversely. Further, presence or absence of water bodies have no bearing on melting of glaciers as a number of such natural water bodies exist very close to glaciers. It is not a scientifically established parameter, and, hence has not even been considered for inclusion in the EIA study by the Ministry of Environment & Forests. Construction activity is so far from glacier (elevation comparison in the table below) and so small in size and very restricted in construction period that it cannot have any negative impact on glaciers.

In Himachal Pradesh, all the national parks and wildlife sanctuaries have been formed with large enough buffer areas around them. And since all the projects are at safe distance of National Park and Wild-Life Sanctuaries (NP and WLS), no adverse impact on the ecology of these protected areas is likely to occur.

The pondage near the barrage will improve the ecology of the area rather than affect it adversely. The labor force at project site (safely away from NP and WLS) will not be more than 300 persons and their colonies will be set up only on the non-forestlands with all the facilities of sanitation etc. The residence in these colonies will be temporary in nature not exceeding 3 or 4 years.

Hence, the allegations in the impugned report are not true.

7 ***All the four projects involve a diversion of 221.54 hectares of forest land. These lands have Alpine pastures, Deodar & Chilgoza trees and other plants of medicinal values. Morang tehsil is abode of Chilgoza trees. These species cannot be regenerated under compensatory forestry schemes. The construction activity will change the water aquifer regimes and increase the pressure on the forests and a threat to bio-diversity (page 17-18).***

Answer: As already stated that the figure of forestland diversion to non-forest use needs to be analyzed properly. The real surface land permanent diversion to non-forest use would

be less than 40 % of the area quoted. Thus, only about 88 ha forestland against 800 MW power – nothing when compared to i) total geographical area of the State and total forest area of the State ii) thermal power project of equal capacity with coal mining needed to sustain it. The density of forest trees at the project sites is very low. Therefore, the diversion of forestland will not affect the livelihood of the people and biodiversity of the area substantially or wholly. The CA (Compensatory Afforestation) with local indigenous species will more than mitigate any perceived loss. Since the climate of the catchment area is not different from the climate of project site, most of the species planted under CAT Plans will also be replicated. Kinnaur district with over 6000 square kilometers (sq kms) geographical area supports many areas with Chilgoza pine and not just Morang Tehsil (area about 1000 sq kms). This edible nut pine is also found in Chamba district (Luj area). Chilgoza pine is planted by HPFD (Himachal Pradesh Forest Department) in many afforestation schemes in Kinnaur district (and in Chamba district) with reasonable success and it is continuing to do so under various plans and schemes. Therefore, there is no reason to doubt the capability of HPFD to regenerate this pine. Instead the real reason for danger to natural regeneration of this pine lay elsewhere.

The real impact on and threat to the very existence of the Chilgoza trees (*Pinus gerardiana*) does not come from any hydropower project but it is due to the greedy and unmindful collection of its edible seeds, which is highly priced commodity in the market. It is a common knowledge that right holders do not collect the seeds themselves as enshrined in the Forest Rights Settlement. Instead, they employ outsiders to do the job, which is done recklessly by lopping the trees rather mercilessly leaving no small branches and leaving not even raw seeds let alone a singly ripened seed. This is resulting in absence of substantial natural regeneration of the specie. This is *an inconvenient truth* from which each right-holder shies away from admitting and instead people like PHPOs make every possible effort to not let this truth become public knowledge. This whole fact when brought to the knowledge during their site inspection was well appreciated by the NEAA. However, recognizing the problem of its regeneration and being alive to the need, the MoEF has included implementing a plan for Chilgoza pine as a condition of in-principle clearance for some other hydropower project in the district.

Construction of a hydropower projects only improve the aquifer regime because of pondage of water.

Thus, the alleged impacts are unrealistic and a figment of imagination not being real.

- 8 ***The Pubber river, Sainj valley and river Satluj are prone to flash floods and have been hit by the floods in the past. The flood level has risen up to 25 m. Clearly any construction activities on this river will only cause further damage and threat to***

downstream areas. Kasang Project is dotted with 150 water springs and people of nine villages are dependent on these springs for irrigation and drinking water supply in this cold desert. The tunneling work has a major impact on the flow of the springs and trigger soil erosion. The Pubber valley has already been declared as landslide prone by the geological department of the project. Kasang project located on a steep slope mountains with loose rock formations and prone to landslides (page 18, para 2).

Answer: The flash floods are the result of heavy rains in the catchment area and mere construction of a barrage of 24 m height will have no role in the aggravation of floods. Instead, depending upon the time of occurrence of the incident, it may partially moderate the impact as the storage capacity of these structures is very small. It certainly cannot aggravate the situation. The barrage will only serve as a benchmark to measure and regulate the flow. HRT with about 3.6 m diameter of impervious concrete tunnel deep inside the mountains will never affect the flow of springs because these springs are quite far from the tunnel alignment both horizontally and vertically. There is usually some leakage of water from the ceiling of tunnel during its construction but this leakage is plugged immediately with concrete or at least the shotcrete. During operation phase leakage or seepage, from the tunnel or into the tunnel, cannot be tolerated as it would impact the project itself and its life. The report does not tell about the coordinates and the record of 150 springs – a mere figment of imagination? It is extremely doubtful that all these springs are being used for irrigation and drinking water supply. Therefore, the prediction in the impugned report that the flow of all these springs would be affected adversely is malicious and sensational and totally far from the truth.

9 *Families using access to forests due to tunneling, blasting and loss of pedestal path have not been included in affected families. The diversion of forest areas will affect more than 1000 families at Kasang project where only 223 families will lose the land. According to the residents of Pangi and Purbani villages, dust arising from initial construction activity on stage I of Kasang project is hampering the growth of apple crop very badly. The fruit setting is not happening properly and the apple is not developing appropriate color for which Kinaur apple is famous for. The production is also declining. The 6.3 km long tunnel will also trigger soil erosion and landslides. Purbani village on the opposite site of Power House is already facing the problem of dust, sliding of land and cracks in houses due to construction activities. At Swarakuddu project also (the famous apple belt) people are worried about similar consequences. Similarly in Sainj valley there will be adverse impact on traditional crops like maize and wheat and other off-season vegetables. The construction of two roads to the Pressure Shaft are and the other from Sambha village to the dam site are*

dumping the muck in a reckless manner leading to drying up of water sources, destruction of pedestal path and access to forest and grass plots (page 18-19).

Answer: Forest areas remain accessible for all communities despite miniscule quantum of actual forestland diversion. Access footpath has not been cut-off and it is PP's commitment to restore the same wherever these get damaged due to project activity. Figure of 1000 families in Kashang HEP Stage-1 is highly exaggerated. Even as per Panchayat Parivar Register (record of families kept at Gram Panchayat Office); in the entire Gram Panchayat only about 550 families exist. It is an official record and can be easily obtained under RTI, which PPO did not find suited to its nefarious design.

As regards damage due to dust emission it is added that comments in the impugned report are based on hearsay and are very far from ground realities. A study conducted by another hydropower project on the same river through CSK HP Agriculture University (located at Palampur, District Kangra HP) did not find any adverse impact on agriculture and horticulture crops due to dust emission. And despite this finding, giving due respect to the putatively held belief, GoHP has formulated a scheme for compensating, after necessary verification by a committee, losses occurring due to impacts of the project. Purbani village is more than 1000 meters (vertical difference) on the opposite bank of Sutlej River from MAT - Main Access Tunnel (completed in the year 2007) of powerhouse of Kashang Stage-1 HEP (powerhouse is further about more than 700 meters deep inside the mountain). As such, there is no question of landslides and cracks in houses in Purbani due to Kashang Project's construction. In all other projects mentioned in the impugned report, the situation remains the same.

Construction of two new roads in Sainj HEP has already begun benefiting the local people as they are using them for their convenience also. Traffic lights too have been provided by the project proponents (HPPCL) for convenience of the local people. This shows that the intent of the impugned report is to create imaginary fears and sensationalism in the minds of its readers be it the local people, the ADB, various offices of the Government of India and Government of HP as also many other forums, offices, courts and media etc.

Cumulative impacts on river basins and valleys

10 *The river Pubber has been planned for setting up of five hydroelectric projects with an installed capacity of 313 MW in a stretch of 72 kms and the tunnel length will be 68 kms leading to total disappearance of the river in this long stretch.*

Part of the Beas river basin, which has an operational capacity of 1829 MW (16 projects) and an additional 16 projects of more than 2700 MW under various stages of execution, planning and commissioning, the Sainj Valley, which is about 25 kms

long is completely choked with large Hydroelectric projects like Larji, Parvati II and III.

Satluj river is in dire straits. 23 projects are under different stages in Kinnaur valley itself. Many projects will be located up to the farthest reach in i.e. Lahul- Spiti region. Accordingly the river is in the threat of disappearance. Weather pattern has become erratic due to climate change Kinnaur region is receiving 200% more rainfall than its average which is a serious threat to the area comprising of fractured rocks embedded in sand. The buildings in Reckong Peo township are showing cracks Geological Survey of India recommended to the Himachal govt. against any new construction activity (page 20-22).

Answer: As already stated the fear of disappearance of the river is imaginary because i) the release of statutory discharge to the downstream of the barrage will not let any stretch remain totally dry and ii) intervening stretch between two successive projects will have normal flows. The downstream discharge is further augmented (in each case) by all the streams/tributaries joining in the intermediate stretch between diversion and tailrace outlet. Further, the tunnel length does not equal the river stretch affected due to diversion as assumed in the impugned report. Moreover, some river stretch between two successive hydropower projects in cascade is being kept free, interspersing the stretches of reduced flows. This is common to all the river basins mentioned in the impugned report. Hence, to say that the rivers will disappear completely in long continuous stretches is an exaggeration to sensationalize the issue.

All the projects in each basin do not belong to HPPCL and also are not funded by the ADB. As such to blame the HPPCL and/or ADB for this alleged cumulative impact is again heightening with obvious motive to create fear in the minds of people and authorities concerned with a view to stall project construction by any means, unfair means not excluded.

It is clarified that Pabbar River is a tributary of Tons River, which is tributary of River Yamuna. Large stretches of River Yamuna (and its major tributaries) are left unaffected by hydropower development.

Sainj and Parvati are two separate tributaries of River Beas. The Dam of the Parvati Stage-II hydropower project (being constructed by NHPC) is located on River Parvati and it will be using the water of River Parvati and not River Sainj. Larji hydropower project is neither located on River Parvati nor on River Sainj; instead it is located on River Beas many kilometers downstream of the projects mentioned in the impugned report. In fact, upstream of Larji there is no hydropower project on the main Beas right up to its origin – a riverine stretch of nearly 100 kilometers! Thus, it is established

beyond any reasonable doubt that there is deliberate total misrepresentation of facts in the impugned report. These facts also hold true for other basins in the State.

The rainfall pattern in Kinaur valley is natural and is not part of climate change phenomena. Some days and/or years do receive rainfall more than average and some receive less and that is how we arrive at the average – common sense logic. Variation in rainfall patterns in a year or two is not abnormal. A rainfall pattern at any place always shows wide variations. To assume that it has become the established pattern or permanent change is mischievously fallacious and lacks scientific evidence.

Construction of tunnels deep inside the hill ranges will hardly have any impact on the buildings located far away both horizontally and vertically. There is no hydropower project constructed or under construction as of now (August 2011) at Reckong Peo; hence, the alleged cracks in buildings there are not (and cannot be) attributable to hydropower projects. The relevant portions of Geological Survey of India have not been quoted (by authors of the present impugned report) to substantiate its stand and therefore the report (of GSI) has been referred out of context showing a mischievous attitude.

11 The project does not assess the downstream impacts in any credible or comprehensive way. Without assessing the impacts one cannot even start considering making compensations for the impacts. All these projects would actually accelerate and accentuate the climate change impacts and reduce the people's capacity to adapt to the climate change impacts. The destruction of forests, hills and rivers by the project is just one of the factors. The construction of such projects at higher elevations would also accelerate the melting of glaciers, will lead to decrease in snowfall, increase in rainfall, flash floods, reduce ground water recharge and also reducing the access to natural resources that people have, thus reducing their coping mechanism. The impact assessment of the projects has not taken any of these factors into account in a credible way. The changing water flow regime due to all these impacts due to climate change and accentuated by the projects would also affect the acclaimed generation of power from the projects themselves. The decreasing generation from hydropower projects mentioned above is thus bound for further downward journey due to such projects like the ones ADB is funding.

Answer: People in the State of HP are generally not dependent on main rivers or their major tributaries for sustenance or for drinking water supply. If at all there is some dependency, it barely requires any significant amount of flow/water. As already stated 15 to 20% downstream release of flow, which in any case is more than 35 cusecs (around thousand litres per second of continuous flow) even in the leanest season when no irrigation is done, is sufficient to meet the needs of the people because the population inhabiting along the banks of the river is very small in upper reaches.

Melting of glaciers in summer season followed by snow fall during winter and melting again next summer is a natural cycle. Melting of glaciers takes place in hot summer (no rains) season only and the flow is rarely more than 300 m³/s (even in main river Sutlej) with no chance of any flash flood. Projects are located at much lower altitudes than being made out in the impugned report. Melting of snow after the spring season is desirable to meet the drinking, irrigation and power needs of the people residing both in the hills and plains. It is again reiterated that hydropower projects even during construction phase do not (and cannot) cause or accelerate glacial melting. As already stated in detail in reply at point No. 2 in the foregoing, forest and hills are never destroyed by HEPs of RoR type, as all the constructions are underground only. It is wrong to suggest that ground water recharge is reduced during flood and increased rainfall seasons. It is the other way round. Similarly, the fear and allegation that power generation will go down in the ADB funded project is not based on facts. This possibility is so remote that it is ludicrous to use it as a risk factor. Hence, hydropower projects do not come in the way of local people's capacity to adapt to climate change or coping mechanism for the same. This is as obvious as a universal truth not requiring to be proved again in the impact assessment and thus is wisely never included in the ToR for EIA.

The Safeguards Smokescreen (Page 23)

12 ***Inadequate EIA reports: The environment impact assessment reports for all the four projects that have been prepared for HPPCL, despite the "Terms of Reference" from the Ministry of Environment Expert Appraisal Committee as well as the ADB's own guidelines, severely fall short in highlighting and dealing with the issues raised above. While detailed critiques of all the EIA reports have been provided by environmental groups and local residents during the public consultations, some of the common issues emerging across the projects are:***

- a) ***Defining affected areas without considering all impacts; impacts of tunneling severely underplayed; Natural resources-livelihood linkages underplayed***
 - i). ***Chauri and Jaarla streams were not shown in the affected area in the EIA report of Sawarakuddu***
 - ii). ***The EIA study of Kasang project showed only four affected villages namely Pangi, Lippa, Toktu and Asarang with 253 affected households whereas more than one thousand families will be affected. The tunneling work in a stretch of 6.3 kms will affect all the nine villages.***
 - iii). ***The argument that entire construction will be underground and size of the reservoir being small downplays the impacts of tunneling and blasting particularly in area like Morang which is notorious for landslides. NH 22***

had to be shifted from right bank to left bank therefore a small disturbance can slide the earth and create problems. Cracks have appeared in agriculture fields and houses in Raghera area of Pungi Panchayat due to the use of explosives. Same is the case with Purbani village. Rocks are falling due to heavy snowfall.

- iv). Intake structures for stage III and IV of Kasang Project may not be safe because weathering process is very active and the impact of the reservoir on weathering process has not been studied in the EIA report. The safe distance of 0.5 km from the Wildlife sanctuary is disputable. The tunnel boring machines as demanded in the public hearing are not being used.*
- v). There are two lakes i.e. Urank –Sowrangwa and Radden- Sorad on the ridge at an altitude of 3500 m along the tunnel alignment and there is no mention of it in Kasang EIA report.*
- vi). In Shongtong EIA report, 63.5 hectares of forest land will be diverted to the project but dependence of the local communities including tribal communities have not been settled and assessed under Forest Right Act 2006. The dependence on this forest for fuel, fodder, grazing has also not been assessed. Livestock dependence has also not been highlighted. The impact of blasting, tunneling and other construction activity on seismicity exacerbate the losses during earth quakes etc has not been highlighted.*

Answer: It is incorrect to say that the EIA documents fall short of the ToR or ADB's safeguarding policies. The assumed and exaggerated alleged impacts of the HEPs are imagination of the PPOs which they erroneously believe should have been part of the EIA studies. EIA studies have been done by reputed agencies and the terms of reference are strictly according to the guidelines of ADB and MoEF. The answers to the issues raised by local groups during consultations have also been incorporated. It is also emphatically denied that there is underplaying of any realistic impact. The EIA and EMP are not smokescreens but are real, practical and implementable documents.

- i). Chauri and Jarala streams are seasonal ones and hence not included.*
- ii). HPPCL stands by the number of affected villages and families. The quoted figure of families in the impugned report is entirely wrong. Total population in these villages (as per Census 2001^{vi}) is 2647 in 555 households. Population in these areas does not increase exponentially as may be case elsewhere. Tunneling is take place very deep inside the mountains and far above the alleged villages. It will not impact the villages as is assumed in the impugned report.*

- iii). HPPCL also stands by its argument that blasting operation inside deep tunnels has little impact on all the surface of the hill slope. The alleged landslide prone areas of Morang are very far from the proposed project's tunneling sites. It is categorically stated that the diversion structure of the proposed project does not have any reservoir as it is a trench-weir structure; hence, assumed impact is imaginary only. As regards cracks in the houses/buildings, it is reiterated that tunneling does not cause them. However, as already committed during public consultations and also in the EPH, damage to houses as compared to baseline inventorization, will be restored or compensated by the PP without going into inquiry whether it is caused by the project or not as a measure of ample goodwill gesture. As already demonstrated in reply to point No. 9 in the foregoing, Purbani village is not being impacted by the Kashang HEP Stage-1 in any manner. Rock falls due to snowfall are not caused by the project.
- iv). Weathering process in cold climates remains slow. Further, as already submitted in the foregoing, reservoir will not be created at the (trench-weir type) diversion structure of the proposed Kashang HEP. So where is the question of alleged accelerated weathering of rocks due to reservoir? Hence it was neither supposed to be studied nor has it been done. HPPCL stands by its commitment that all stages of Kasang project are at a very safe distance from the Lipa-Asarang Wildlife Sanctuary. Use of Tunnel Boring Machine (TBM) for tunneling has not been found techno-economically feasible. The TBM can not be used in the rocks of the nature found in the area and tunnel drilling with blasting process is the best bet.
- v). The impugned report does not give the coordinates of the two lakes and this observation is based on hearsay. This allegation was leveled even while EIA was under consideration of the EAC of MoEF and it has been replied satisfactorily. The alleged lakes do not exist in the EIA Study area and these do not find any mention in the SoI sheets of the relevant area and also are not seen in the Google Earth. The process of tunnel drilling has no relevance with the seismicity of the region. The experience so far in the Himalayas has not established the alleged exacerbation. Therefore this observation speaks more of the ignorance of the reporter than knowledge about the issue.
- vi). The forest rights of the local people have already been settled much before the independence of this country and these are well documented and being exercised by the local communities. The Rights and Concessions on forestland are identified, recognized, well defined, admitted, documented and recorded in a Settlement Report. These rights are inheritable through

succession. Local people in the project area of Shongtong-Karcham HEP are enjoying these without any infringement since then. Further, they do not fall in the category of Primitive Tribal Groups nor Pre-Agricultural Communities. All areas in the villages in the project area are developed and people live in well-settled and well demarcated villages which are entered as such in revenue records and having access to basic amenities like electricity, water and access roads. The rights in the forests have been admitted in lieu of the right/duty to protect, regenerate and conserve forest resources. As such HPPCL is offering compensation in lieu of forest-rights under its RR scheme specifically formulated for the purpose. This scheme has been introduced in view of such an impact. The total area of forestland sought for diversion, as already established in reply at Point No.2 includes notional areas. As already stated that forest density is very low and the impact of diversion of forest land is insignificant. Hence it is incorrect to assume that these have been ignored. Moreover, EIA report has to remain focused on the environmental impact and it cannot supplant the SIA report, which is done separately.

b) River basin carrying capacities not studied and cumulative impacts not assessed; Feasibility study and options assessment weak (page 25).

- i). The EIA study of Kasang project does not indicate the cumulative affect of all the four stages. Likewise likely impact of Jungi Thopan and NH 22 is also not reflected.*
- ii). In the EIA report of Song-tong Project does not describe the upstream projects incase of river Satluj and the Parchu lakes causing flash flood in river Satluj*
- iii). In Sainj valley four big hydroelectric projects are in progress and mountains are falling. The road from Aut to Siyund is in hopeless conditions and vehicular traffic is causing severe pollution in the area. The EIA report is silent on this issue.*
- iv). The sediment flow in Sainj and Tirthan watersheds is very heavy. This data is missing in the EIA report and its impact on down stream projects.*
- v). The EIA report is silent on the issue of climate change and decreasing glacial flows and their impacts on the power generation capacity.*

Answer: Any river basin level studies cannot be made part of any particular project more so for a project which is located only on a tributary and not on main river. Similarly, the cumulative impacts are also separate from project specific EIA as it would involve studying impacts of more than one project. Hence, project specific EIA does not contain such an impact assessment. This is true for all HEPs throughout

the region and country. To assume it to be different in case of projects of HPPCL and those funded by the ADB is an unfair expectation.

As regards option assessment it worthwhile to note that against an ideal mix of 60:40 for thermal and hydropower, in India it is near 75:25, thus being tilted heavily in favour of fossil-fuel based emission loaded thermal power projects. Hence, till the time ideal mix is not achieved this option assessment alone is more than sufficient. But this is not acceptable to PPOs without assigning any reason for the same. Since PPOs consistently oppose hydropower projects (mostly on frivolous grounds), one is led to believe that the opposition to hydropower is aided, abetted and funded by coal (and other fossil fuel) lobbies. Many of the PPOs themselves may actually be lobby organizations masquerading as NGOs/CSOs. It can be established only through a fair, open, consultative and transparent inquiry into the sources of funding of the PPOs and various items of their expenses. This is a tall order given that PPOs lack courage to submit themselves to such transparency, while expecting much greater transparency from government sector PPs even in subjudice matters. But voluntary submission to such an inquiry will help the genuine NGOs/CSOs come clean. In these circumstances the option assessment provided is the best one can have.

i). The entire impact of the Integrated Kashang HEP has been included in the EIA report of the same. Impacts have been assessed in totality. Jangi-Thopan HEP is located on main Sutlej River and not on the tributary on which Kashang HEP is located. Further, it is staggered in time as well i.e. it is not coming up concurrent to the Kashang HEP. Execution of all the projects will not be taken up simultaneously. What is meant by the impact of the existing NH 22 is not clear. If the reference is to its now proposed improvement/widening, it is only in hindsight that such an expectation is being suggested. At the time of EIA study, no such proposal was known in public domain. This work too will be staggered in time and is located far from the Kashang HEP.

All the tunnels of three entirely different and unrelated projects will not be constructed together/simultaneously. There is time gap in constructing each tunnel and also any two tunnels are separated with appropriate distance. There is sufficient rock cover available for each tunnel to have any impact on the surface slope stability. None of these tunnel constructions has started yet. It is reiterated that tunneling in such deep seated locations has no impact of land slide on surface.

ii). This is a frivolous observation because Parchu lake falls in China and very far from the project site. Since upstream projects are also on RoR model and

staggered in time their execution will have no impact on this project. This is amply proven by the resilience of the existing power projects to withstand such floods.

- iii). There are only two projects of NHPC in Sainj Valley which are under construction and are nearing completion. Sainj HEP lies in the upstream and is small as compared to NHPC projects. Which one is the fourth project referred to in the impugned report is not known. Metaphor of 'mountains are falling' is also not understood as no mountain has actually fallen in the Sainj HEP area. As regards road condition and vehicular traffic coupled with emission due to vehicular movement, it is assessed under the Air Quality parameters. Road condition is generally uniform in the area, and traffic too is almost constant (showing no great variation) and hence, pollution level being stable is part of the environmental baseline for Sainj HEP. Hence, to say that it has not been taken into account is not based on facts and its unbiased analysis. Had the PP and its consultants known that they would have to later deal with such naïve objections, they certainly would have written the same in so many words.
- iv). It is rather paradoxically ironic to see that NP and WLS becoming fountainheads of silt flow when they have been created with one of their many objectives being watershed protection from degradation and consequent erosion and silt generation. The catchments of both (Sainj and Tirthan) watersheds are Wildlife Sanctuaries and National Parks, thus, fully protected. Further, there is hardly any habitation in their upper catchments and there are no hydropower projects. As such, there is every reason to doubt the authenticity of the findings.

Anthropogenic impacts on sediment flux in Sainj and Tirthan watersheds for the paper's study area as intercepted at Larji has been misquoted with a highly biased interpretation and without reference to context. It is a matter of record and common knowledge that upper regions of both (Sainj and Tirthan) watersheds are Wildlife Sanctuaries and National Parks, thus, fully protected, and in Tirthan watershed hydropower project is not (and can not be) planned as it is reserved for Trout fish breeding (HP Hydropower Policy 2007). As such, even without a hydropower project, high sediment flux is reported, which is seriously doubtful and hence not included in the EIA report. Since Sainj HEP lies in uppermost reach the sediment flow in this part is within manageable proportion.

Paper's authors have rightly not blamed the hydropower projects for such a situation. In such circumstances, an impartial and positive minded

reporter/researcher would have relied upon factual position and would have given a right conclusion in terms of calling obviously for a comprehensive and effective Catchment Area Treatment, which currently only hydropower projects are providing in this particular region. It would advocate for more such treatment plans to be prepared and implemented with the help from hydropower projects, thus, serving both purposes, reduction of silt flow and at the same time power generation! But PPOs, as is their wont, are not known for such impartial reporting.

As such, it is established yet again that the alleged shortcoming is not based on properly analyzed facts.

- v). The climate change is not an issue in hydropower project establishment. It in fact helps avoid global warming by reducing dependence on fossil fuel based thermal power. As regards alleged reduced flows due to global warming, the discharge (including glacial melt) flow data (part of the DPR) does not indicate any alarming change or pattern. The trend of the flow has been considered while designing the capacity of the project. Since it is part of the DPR, hence, it is not repeated in the EIA.

c. Downplaying impacts on socio-culture fabric in project affected areas (page 27)

- i). The full details of Buddhist and Hindu deities and worshiping of trees has not been given in the EIA reports of Kasang and Song-Tong projects***

Answer: There is common confusion amongst PHPOs that EIA and SIA are same and interchangeable. Or is it yet another ploy to create confusion in the minds of the readers? Let us first be clear that we are talking about EIA and not SIA and both documents are very different in nature and objectives. The EIA addresses primarily the environment impacts and does not delve into listing and documenting social practices and traditions. These details are therefore not included in the EIA reports of hydropower projects particularly those based on ROR model. Moreover, no such religiously important trees are being affected by the proposed projects and no such claim was made during a number of public consultations. Hence, this objection is merely academic in nature filed with a view to fatten the impugned report.

d. The Superficiality of EMPs and Mitigation Measures (page 27)

- i). The EMP documents do not contain comprehensive planning and interlinkages between biotic and a biotic components***
- ii). Measures not suggested to antidote the impact on springs. Similarly the details of right selection of species of plants to be planted in catchment area***

to ensure maximum survival rate not given.

iii). Community involvement of in drawing of EMP is lacking.

iv). Muck dumping site not selected above high flood zone level

Answer: The EMPs are not theoretical documents; instead these are really meaningful, practical, implementable and proven prescriptions with well intentioned mitigation measures.

i). EMP documents have been got prepared from renowned agencies and deal with all possible issues. The observation made by the report is very vague and non specific.

ii). The impact on springs is always negligible due to tunnel drilling. The impugned report fails to show the adverse impact on the springs by giving live examples (if any) from the executed projects and therefore creates imaginary fears. HPFD, the implementing agency of the CAT Plans has the necessary experience, skills, knowledge, expertise and know-how to deal with the subject. The forest officers are expert in selecting the right species to ensure maximum survival rate. PP has no doubt in this regard.

iii). It is reiterated that a number of informal and formal consultations have been done during EIA studies and preparation of EMP and all the points raised during such consultations have been incorporated. The issue of shoal flushing formed by Pager Khad is the most prominent example of such consideration.

iv). The muck dumping sites are selected to be safe from flooding. The base of the dumping yard is always provided above HFL, if the site selected lies on the river flank.

e. Compliance to environmental and forest clearance conditions (page 28)

i). The forest department is slow in utilizing the funds deposited by the HPPCL for CAT Plans.

ii). Compliance of conditions mentioned in environment clearance letter is flouted and monitoring is also not done. Six monthly compliance report are not shown on the website report.

iii). The conditions contained in the clearance letter from the MOEF also lack following vital issues

- Work not to be started on the project till forest clearance is also granted***
- NOC of Gram Sabha as a precondition for clearance.***
- Compliance of provision of the Forest Right Act 2006. Resolutions of Pangi***

Gram Sabha and Lippa Gram Sabha ignored.

- ***Dumping of muck on private land***
- ***Damage to building from tunneling operations not paid in village in Ragera area because the private consultants hire (NIRL) to prove the contrary.***

Answer: HPPCL makes every possible effort to achieve timely compliance of the conditions of clearances. Pace of implementation of some of the compliance measures are outside the domain of the PP.

- i). The funds for implementation of CAT Plans are deposited in CAMPA constituted under orders of hon'ble Supreme Court of India. There have some initial teething trouble in operationalization of the same leading to an impression that HPFD is slow in utilization of funds released by HPPCL. Now since the operational mechanisms are formalized, it is expected that pace of implementation would be upscaled.
- ii). The condition of clearance letter is never flouted. The Regional Office of MoEF checks the compliance report frequently. Also six monthly compliance reports are sent to MOEF on regular basis.
- iii). Except site clearance, work is never started till forest clearance is obtained. NOC from Gram Sabha is not a precondition for forest clearance for project like those being executed by HPPCL. FRA is already implemented in the area through the age old British period Forest Settlement Reports. Forest rights are being compensated through a dedicate RR scheme. Regular meetings have been held with GP Pangri and GP Lippa and their demands are adequately addressed. The alleged resolutions of Pangri and Lippa Gram Sabhas supporting the project have not been ignored. Wherever privately owned land has been used including for muck dumping adequate compensation is paid. It was comprehensively proved by NIRM that the cracks in the buildings were not due to blasting operations in the Power House site. The cracks and sliding occurred much before start of the HPPCL project. NIRM studies were undertaken much before the start of the project by the HPPCL.

Comments on recommendations:

The recommendations are loaded ones and are fraught with dangerous prepositions based on premises and surmises and the PHPOs want to start the whole process *de novo* for reasons not far to seek.

1. Moratorium sought on construction of HEPs is not justified at all. Similarly, the review sought is also not required. Moreover, basin level studies are planned which would be able

to afford such opportunities and also address the concerns – both perceived and real.

2. Eco-sensitive zones are not yet notified and hence demand for scrapping all projects is a wishful thinking.
3. People's resistance despite prior informed consultation cannot be a criteria for review of project construction.
4. Policy issue of prior consent of Gram Sabhas has political connotations and hence is too dangerous to be made prior and/or mandatory requirement.
5. Existing grievance redressal mechanisms under the Deputy Commissioners are functioning well and there is no need to create multiplicity of such committees etc. Local people and their representatives have adequate representation in such committees.
6. Compliance to FRA is done pretty well in advance in HP right from the British times. PESA is also implemented (consultation should not be confused with consent), Land Transfer Rules of HP are also implemented in letter and spirit. Nothing new is required.
7. Monitoring by statutory bodies is already done for all hydropower projects and six monthly monitoring reports are submitted.
8. There is absolutely no cause of action for putting on hold any of the ADB assisted hydropower projects in HP as they are best examples of better safeguards and RR measures. Putting them on hold will send wrong signals that ADB plays in the hands of PHPOs/PPOs and is ready to believe them without a fair assessment of the situation. It may cause demoralization of concerned people, staff and the agencies who through their dedicated and sincere efforts have been able to set new standards in the hydropower sector in HP.
9. HPPCL is already implementing RR schemes (available at its website) aimed at providing compensation for common property resources. HPPCL would welcome suggestion for their improvement.
10. Definition of project affected families is already wide enough to encompass almost entire population of the project locations. Adding few more criteria is of no use except that it will provide grounds to PPOs to pick holes in the smooth implementation of RR and other remedial measures.
11. Rates of compensation offered by HPPCL are already the best in each of the locality in which it is working. There is no end to demands for further enhancements.
12. Merely because few disgruntled elements and misguided people on some frivolous grounds have filed appeals or writ petitions, the argument for stoppage of work does not hold water as the concerned honorable Courts have not granted stay (interim injunction) despite vehement pleading and repeated requests. Such an action will amount to exceeding even the court's wisdom and jurisdiction.

In view of above, no action is warranted on the impugned report as it is biased, motivated, mischievous, erroneous, and fallacious and has no truth in it.

Comments on photographs depicted in the PPO report “In the name of clean energy”.

Please note that neither source of these photographs (in the impugned report) is quoted nor the date is given nor the name of the photographer is given without assigning any reason.

SN	Photographs title/description as given in the impugned report of PPO	Comments/reply by HPPCL
1	Photograph (No. 1; Page No. 6) of one water-mill (gharat) on Ranwi Khad in Sawra-Kuddu HEP area	This khad (stream) though falling between diversion and TRT outfall is not being affected in any manner by the Sawra-Kuddu HEP nor is its water to be used for power generation. The location of the water-mill in terms of village (or coordinates) is not given, hence it is impossible to ascertain how far upstream from the project component alignment it is located. Since the area is supplied with electricity, no one uses these traditional water-mills. Judging by the paling color of the photograph, it seems to be very old when there was no electricity in the area.
2	Photograph (No. 2; Page No. 7): Rally against hydropower in Kinnaur District	This is a general rally organized by a few PHPOs with only a handful participants given that it is purported to be at the district level. Rally is not directed against ADB assisted projects.
3	Photograph (No. 1 & 2; Page No. 12) of Kerang and Kashang Streams.	Note the torrential nature of the stream which does not permit any fish or aquatic life.
4	Photograph (No. 5; Page No. 13): Sutlej river in Kinnaur.	Requires no comments.
5	Photograph (No. 6; Page No. 13): Pabbar Valley	Though requires no comments but readers may like to note that this is the diversion site of Sawra-Kuddu HEP and may like to appreciate the orderly and safe manner in which muck (whitish in color) has been dumped at site (central part on left bank of the river – direction of river flow is from top left corner to bottom right corner).
6	Photograph (No. 7; Page No. 14): Sainj River at Neuli village.	Requires no comments yet readers may note that there is no dependence of local people on the Sainj river. Neuli falls between diversion and TRT outlet.
7	Photograph (No. 8; Page No. 17): Eco-fragile alpine area - Lipa-Asrang sanctuary will be adversely impacted by Kashang Project.	It is categorically stated that there will be no impact of Kashang HEP (all stages) on the WLS as the diversion site of even the Stage-4 has been shifted downstream to remain well outside the WLS. ADB is funding Stage-1 to 3 only.
8	Photograph (No. 9; Page No. 17): Geologically fragile Lippa Village.	There is no activity planned at this village. The diversion site on Stage-2 is about 2 kms upstream of this village and there will be no tunneling etc near or at this village. In fact this village may be saved with the help of and due to Kashang project.
9	Photograph (No. 10; Page No. 18): natural spring near Rarang – to be adversely impacted due to KK link tunnel	Firstly, the village Rarang is located far away from any project component of Kashang HEP. Secondly, the proposed KK link tunnel will pass about two kms inside mountains and will be very deep seated.

		<p>Thirdly, despite the greenery around (indicating peak melt and discharge in the rainy season) there is no water flowing in the spring (notice the <i>Magru</i> (spout) being dry), even when KK link tunnel work is yet to start.</p> <p>Hence, there will no impact on the spring in Rarang area.</p> <p>As a matter of abundant precaution, the PP has got all the springs in the vicinity inventorized with the discharge noted with date/season. In the EPH the PP has committed to restore any loss of water due to the project.</p>
10	Photograph (No. 11 & 12; Page No. 19): Rich apple economy under threat (Sawra-Kuddu and Kashang HEPs area)	Conclusion in the title has not any reason for the perceived threat. It is stated that there is no threat to apple economy due to these projects.
11	Photograph (No. 14; Page No. 23): Raanvi khad non-existent in the EIA, will go dry.	<p>Firstly it is patently false statement.</p> <p>Ranvi khad finds due mention in the EIA EMP at pages – 4-10 (table-4.2); 5-13 (table-5.2); 9-25 (table-9.2); and 9-34. It has been shown to have a discharge of about 0.17 cumec, which will not become dry. It may be noted that has very little discharge as also seen in the photographs where it is not seen at all.</p>
12	Photograph (No. 15; Page No. 23): Khadra landslide – 3 separate tunnels are proposed on this already fragile mountain.	<p>Firstly, this site is very far from the tunnel alignments. All the tunnels of three entirely different and unrelated projects will not be constructed together/simultaneously. There is time gap in constructing each tunnel and also any two tunnels are separated with appropriate distance. There is sufficient rock cover available for each tunnel to have any impact on the surface slope stability. None of these tunnel constructions has started yet. It is reiterated that tunneling in such deep seated locations has no impact of land slide on surface. The proposed (KK link) tunnel of Kashang HEP will be passing deep inside the mountain which is about three kms (horizontal distance) and about one km (vertical distance) from this site posing absolutely no threat to it.</p> <p>Secondly, most of the land slides in the region are attributable to faulty irrigation practices, wherein the farmers flood irrigate the thin soils with plentiful water available in the area and their cumulative/combined impact causes the land to slide. It is noticeable here too. The green line of grass etc depicts oozing water seeping from agricultural fields above with faulty irrigation practice.</p>
13	Photograph (No. 16; Page No. 24): Loose rock outcrop below which Tokhtu village is located and tunnel of Kashang Stage-IV is going to pass.	<p>Firstly, the rock outcrop is not above the village. It is on wayside of the village.</p> <p>Secondly, this site is very far from the tunnel alignments.</p> <p>Thirdly, there is sufficient rock cover available for the tunnel to have any impact on the surface slope</p>

		<p>stability. It is reiterated that tunneling in such deep seated locations has no impact of land slide on surface. The proposed (Stage-IV HRT) tunnel of Kashang HEP will be passing deep inside the mountain which is about one kms (horizontal distance) and about half km (vertical distance) from the rock outcrop posing absolutely no threat to it.</p>
14	<p>Photograph (No. 16; Page No. 26): Concretization of mountain in Parvati-II HEP in Sainj Valley.</p>	<p>Although it calls for no comments, yet it is added that the shotcreting and concretization has been done to achieve slope stability for powerhouse site. For the PPs, a catch 22 situation is made by PPOs. If the slope is left untreated (for stability) it is blamed for threatening slope stability and if it achieves stability, it is blamed for concretizing a mountain. PP is the like the poor lamb in the famous “Wolf and the Lamb” story.</p>
15	<p>Photograph (No. 17, 18 & 19: Page No. 27): Archaeological sites under threat of extinction due to reservoir in Sawra-Kuddu and impacts on Manu temple in Sainj and Buddhist temple in Rarang not included in EIA.</p>	<p>In EIA only those items are included on which impacts are anticipated and not anything and everything found in the area, locality or in the district at places far away from project sites.</p> <p>As far as archaeological site of Sawra-Kuddu HEP is concerned, the barrage has height has been kept low enough so as to ensure safety of this site. In addition protection walls have been provided for these structures as a measure of ample precaution and also caring gesture. EIA EMP document does assess the impact and provide measures (Ref: Page-3-39 para 3.17.1; 5-18 para 5.3.3; 8-2 Table 8.1) to protect them as cultural sites.</p> <p>Manu temple is very far from the project components and will have no impact on it. Hence, not included.</p> <p>Similarly, Buddhist temple in Rarang is also very far from the site as already clarified in case of water spring in the same village (S.N. 9 at photograph No. 10).</p>
16	<p>Photograph (No. 20; Page No. 28): Construction work at powerhouse site of Kashang Stage-1 – muck dumping sites are clearly not above HFL of Sutluj.</p>	<p>This is clever artifice of photography with nothing provided to compare scale. The photograph is from such distance as to show the site very close to HFL. Further, being close to river, there are no sites in vicinity which would be very from the river or it’s HFL. However, it is clarified that no muck has been washed away by the river as the same is well protected with walls.</p>
17	<p>Photograph (No. 21 & 22; Page No. 29): Muck Dumping at Sawra-Kuddu project site – violation of clearance conditions.</p>	<p>Firstly, this is not a muck dumping by Sawra-Kuddu Project as the label on the truck shows (magnification reveals it) mark ‘BLK’. None of the companies engaged in this project have truck with this mark.</p> <p>Color of the muck from the Sawra-Kuddu HEP is generally whitish (coming from deep inside mountain with no weathering of rocks) and the color of muck in the photographs is brownish and more earthy – a clear sign of earth surface material which</p>

		<p>was exposed to weathering!</p> <p>The other photograph does not show violation instead it shows protection with walls.</p> <p>HPPCL, despite having got permission, has not felled all the trees involved in the project area even if their cost is paid in full. It attempts to save as many trees as possible. At times due to presence of such un-felled trees the area is mistaken as forestland being used by PP without permission. As a remedy, HPPCL now has decided to put signboards on all such sites.</p>
18	<p>Photograph (No. 23; Page No. 32): Flat land and houses to be acquired for dumping purposes.</p>	<p>Firstly, the so called houses are not ‘houses’ and not body lives in them. There are the unauthorized structures erected overnight on sites for getting compensation as HPPCL follows ADB safeguards. Secondly, again it is catch 22 situation. If the sites are near river or sloping, these are blamed (by PPOS) to be violations and if away and flat, again blamed. This is typical of PPOs to blame PPs (as lamb) as in the famous story of ‘The Wolf and The Lamb’.</p>
19	<p>Photograph (No. 24; Page No. 32): Shesh Ram from Kartah village – Refused to accept compensation amount from HPPCL.</p>	<p>Thanks to HPPCL’s commitment to abide by the safeguarding principles of the ADB, some amount is being offered for an outrightly unauthorized structure erected overnight as previously such structures were simply demolished without anything paid. Not accepting compensation is a democratic right, which anyone can exercise and also go for appeal or reference petition.</p> <p>Further, by not taking compensation for unauthorized structure as moral duty of a conscience citizen not driven by greed is worth emulating by other claimants of such unauthorized structures.</p>
20	<p>Photograph (No. 25; Page No. 33): Carriage of apples to Sainj Market – An important livelihood for agricultural labourers finds no mention in R&R Plan.</p>	<p>Firstly, this is patently incorrect to say that RR Plan has ignored such PAFs. Please see the definition of PAFs in the RR Plan of HPPCL accessible at its website {Ref: Para 3.2.2 Project Affected Family (PAF) –(iii) Any agricultural or non-agricultural labourer, ...}. The lie of the PPOs gets badly exposed.</p> <p>Secondly, with the roads provided by the project, apple (and other produce and merchandise) can now be transported more economically for higher benefit to growers and farmers.</p>
21	<p>Photograph (No. 26; Page No. 34): Forest to be diverted for the project but no compensation to dependent local population.</p>	<p>One, enough compensation in the form of Compensatory Afforestation, Net Present Value, cost of trees and implementation of CAT Plans at project cost is paid which would not only compensate but also create much more forest resource than what is diverted for project.</p> <p>Two, the forestland to be diverted for the project is too small in the overall context of availability of this resource in the area to have any impact on local people.</p>

		Three, HPPCL is already implementing a RR Scheme for compensation for forest rights, which PPO has conveniently ignored.
22	Photograph (No. 27; Page No. 35): Mahila Mandal representative in Sawra-Kuddu area.	What is sought to be shown here is not clear. But taking this opportunity the PP would like to inform that HPPCL is running a RR Scheme for involving CBOs (details at HPPCL website) and also engaging them in the RR activities. PPO has deliberately ignored such an initiative just to score its point even by telling a blatant lie.
23	Photograph (No. 28; Page No. 38): People protest against Kashang Stage-1.	This is a Communist Party's rally – note the sickle and red flag in their hands. Even some people are smiling. Is it protest? This is not related with the project.

References:

ⁱ Himachal Pradesh Power Corporation Ltd is a Himachal Pradesh State Government owned company.

ⁱⁱ A Report on Asian Development Bank Financed Hydropower Projects in Himachal Pradesh (May 2011) as available at http://www.sandrp.in/hydropower/Report_Adb_Financed_HEPs_HP%20210511.pdf (date 07.07.2011).

ⁱⁱⁱ The UNESCO website does not list GHNP as WHS <http://whc.unesco.org/en/statesparties/in> . It is only on the tentative list as per application submitted.

^{iv} There is no bar on hydropower development in the surrounding area. See UNESCO website FAQ at <http://whc.unesco.org/en/faq>

^v <http://hpforest.nic.in/frst2.htm> (date 11.08.2011)

^{vi} http://www.censusindia.gov.in/PopulationFinder/Population_Finder.aspx

