

Comments on the ESIA of The Proposed Allain Duhangan HEP in Kulu district in HP

**ESIA done by: ERM, India
ESIA done for: IFC**

Compensation is structurally incapable of regenerating the income and living means possessed before resettlement... Our research done on a global level and this over a time span of twenty years shows a simple fact: sufficient compensation does not exist... Evidence demonstrates that the use of cash ends up with the acquisition of an amount of goods that is below the level of the amount of goods possessed before... Land deprivation is the leading form of capital loss and poverty creation. This is so because people loose both the natural capital and the capital they created with their own hands i.e. by working their lands.

Michael Cernea, the World Bank Sociologist, September 2003

**SANDRP
South Asia Network on Dams, Rivers & People
New Delhi**

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Executive Summary

The Allain Duhangan Project (ADP) proposes to divert Allain and Duhangan, two tributaries of Beas river near Manali in Himachal Pradesh in North India for a 192 MW installed capacity hydropower project. The project that the International Finance Corporation, the private sector arm of the World Bank intends to fund will lead to destruction of what the ESIA calls "Pristine valley" of Allain and Duhangan. The project would also lead to destruction of habitat of a number of threatened, rare and endangered species for a project whose need, hydrology and benefits are in doubt, basic impact assessments have not yet been done, local people not even been informed about the implications of the project and No document have been given to the local people. Even the social impact assessments have not been done and most of the resettlement measures proposed are in violation of the World Bank norms. The project is thus in violation of many of the basic norms and policies of the World Bank and IFC.

The ESIA fails to say that the project has gone through outdated environmental sanctions and the project does not fulfil India's current environmental clearance norms, nor has there been any public consultation on the project as is required for any such project in India today.

The ESIA has shown its callousness at a number of places. The ESIA has lifted full paragraphs and statements from other documents without giving the source or saying this is a quote from another document. In fact through out the ESIA no source or reference given for any of the facts and figures given. The ESIA agency does not seem to have proper knowledge of the river basins or the dams in the Beas basin where the ADP is proposed. It does not know how many trees will be felled for the project, even as it tries to give precise numbers for this. It does not seem to know basic norms like the per capita drinking water requirements.

The ESIA suffers from many fundamental problems. It shows its bias for the project and project proponents at numerous places. The ESIA in fact does not objectively look at the project benefits, and in stead exaggerates the project benefits. It tries to justify the project when an ESIA agency is supposed to assess the project impacts in an objective manner without assuming that the project will go ahead. In fact, ESIA is supposed to be a decision making tool and also supposed to include a crucial section on options assessment, to assess if the project is the best option.

The ESIA shows that a number of studies that should have been part of or done before the ESIA has not been done at all. These include: Carrying Capacity, Cumulative impacts of dams and other developments across the basin, Assessment if the project will impact wildlife migration routes, Significance of Floods, Earthquakes and Landslides on the project and project impacts on such events, Disaster Management Plan, etc.

A number of studies done for ESIA are incomplete or misleading: Survey of Environmental aspects across a year, Full Social Impacts Survey, Base line study with respect to various ecological aspects, Impacts of a number of project components (as the project component details are yet to be finalised), including roads, transmission lines, the number of trees to be felled for the project, Downstream impacts, etc.

At a number of places the ESIA makes unsupported or wrong or contradictory statements. Examples include: "No NGOs", "No common Property resources taken", "No rare, endangered or threatened species in the project area", etc. This critique shows these are all wrong.

Even with respect to the height of the various dams, the ESIA makes ambiguous statements like "likely to be", "maximum height", etc, all the heights, miraculously, is shown to be less than 14.5 mts, none shown

above the deepest foundation level, which is against international norms. Possibly to escape some of the provisions that would be effective if the height is above 15 m.

The Options Assessment Section in the ESIA is a joke, to put it lightly. It does not assess the options available in Himachal Pradesh or Northern Region. In fact, the ADP is to lead to destruction of some of the options. Basic issues like Demand Side Management, Peak Management, Reducing T&D losses, improving end use efficiency, Increasing supply side efficiencies and exploring the generation options are not even mentioned in the ESIA.

The ESIA documents on IFC website are incomplete as a number of sections are missing and at other places the chapters have been left incomplete halfway through a sentence.

The ESIA fails to look at the track record of the RSWML that has built a 86 MW Malana HEP in the nearby area. The track record shows that the company has cheated the affected people, the project is performing very badly in terms of even the quality of construction and power generation and its environmental record shows callous disregard for environment and environmental norms. The project authorities, in fact tried to browbeat the affected people in a meeting held on Nov 13 in presence of the IFC persons who know the local language. That meeting was held subsequent to the October 2003 letters sent by the affected people and SANDRP with other NGOs, raising concerns about the fundamental violations in the project. In the meeting on Nov 13, the project authorities promised the affected people who had been called for that meeting that they will be provided with copies of all the ESIA documents in Hindi in a week or two, but those documents are still not given to the affected people. The project authorities have also promised the affected people in the meanwhile that a public hearing will be held in the village sixty days after provision of Hindi documents and that an independent will assess the public hearing. Only time will tell how many of those promises will be fulfilled. The project authorities, in the meanwhile showed total disregard of public safety when on Dec 6, 2003, boulders showered on unsuspecting women of affected villages. The enraged affected people had to demand that no project work be taken up till basic issues are settled.

Unless a fresh ESIA is carried out and completed by a more credible and independent agency, in close participation with affected people, the new ESIA documents are made available to people in the language they can understand and a public hearing held sixty days or more thereafter, supervised by independent panel gives support for the project, the World Bank/ IFC support for this project would seriously violate many key safeguard policies of the Bank as mentioned above. Under the current circumstances, the project would be neither be beneficial for the local people or for the state.

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Abbreviations

ADP Allain Duhangan Project
 CEA Central Electricity Authority
 CAT Catchment Area Treatment
 DFO Divisional Forest Officer
 EIA Environment Impact Assessment
 EMP Environment Management Plan
 ERM Environment Resource Management
 ESAI Environment & Social Impact Assessment
 Ha Hectare
 HEP Hydro Electric Project
 HP Himachal Pradesh
 HPPCB HP Pollution Control Board
 IFC International Finance Corporation
 MW Mega Watts
 PAF Project Affected Person
 RSWML Rajasthan Spinning & Weaving Mills Ltd
 R&R Resettlement and Rehabilitation
 SANDRP South Asia Network on Dams, Rivers & People
 SIA Social Impact Assessment
 SSP Sardar Sarovar Project
 WB World Bank

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Important Dates

1993-4: Original Environmental Study conducted

March 31 1996: In principle Techno Economic Clearance given by CEA

March 21 and April 1, 1997 DFO certifies that the project will have no wildlife impacts

Dec 15 1999: Application to MEF for clearance of 58.16 Ha of forestland

Dec. 12 2000: Environmental clearance given on the basis of an earlier EIA

Oct 18 2002: Clearance for diversion of 32 Ha forestland given

May 7 2003: Meeting in Prini held, which is wrongly referred to as consultation meeting.

May 27 2003: Draft ESIA submitted

Aug 11 2003: ESIA documents disclosed as per IFC website

Oct 23 2003: Affected people write to IFC/ WB about violations of IFC guidelines in ADP

Oct 30 2003: SANDRP, MATU and Navrachna write to IFC/ WB about concerns on ADP

Oct 31 2003: Original IFC board date; board date postponed

Nov 13 2003: IFC and ADP authorities meet with selected affected people and try to unduly pressurise them.

Nov 15 2003: Affected people write to IFC/ WB protesting against Nov 13 meeting

Nov 21 2003: SANDRP and MATU write to IFC/ WB with main points of critique of ESIA

Dec 2003: Huge Boulders fall on the people of affected villages from the road building for the project, people write to WB to stop work, they get the work stopped

Project The Allain Duhangan Project (ADP) proposes to divert Alain and Duhangan, two tributaries of Beas river near Manali in Himachal Pradesh in North India for a 192 MW installed capacity hydropower project. The project that International Finance Corporation, the private sector arm of the World Bank intends to fund will lead to destruction of what the ESIA calls “Pristine valley” of Allain and Duhangan. The project would also lead to destruction of habitat of a number of threatened, rare and endangered species for a project whose need and benefits are in doubt, basic impact assessments have not yet been done, local people not even been informed about the implications of the project and No document have been given to the local people. Even the social impact assessments have not been done and most of the resettlement measures proposed are in violation of the World Bank norms. The project is thus in violation of many of the basic norms and policies of the World Bank and IFC.

ERM ERM claims (ESIA, Exec Summary, p. 2) that it is “one of the world’s leading providers of environmental consultancy services”. If this is true, the standards of world environmental consultancy services leave much to be desired if the ESIA done by ERM for ADP is any guide of its standards.

Biases towards the project and the project authorities Throughout ESIA, the ESIA agency makes statements of assurances on behalf of project authorities. But that is not what an ESIA agency is supposed to do. ESIA agency is supposed to prepare impact assessment and management plan and put together mechanisms to ensure that the management plan is implemented. The statements of assurances by ERM, the ESIA agency on behalf of project authorities are meaningless and they only show the bias of the ESIA agency for the project authorities.

The ESIA begins with statements like, “India is plunging head-long towards energy crisis” (pp 1, Vol. I), “Indian power development needs priority correction by substantial addition of hydropower generation capacity” (pp 6, Vol. I), “The project would be one of the cheapest sources of power generation in the Northern region” (pp 7, Vol. I). Such statements should have no place in an ESIA report. ESIA is supposed to be an objective assessment of the Impacts of the project among various options. These statements

show the bias of the ESIA agency in favour of the project, the project authorities and hydropower projects. These should be sufficient to debar such an agency from being assigned such tasks. Moreover, the ESIA fails to make a case that ADP is indeed required. If the ESIA agency had bothered to look at the realistic demand projections and projected increase in installed capacities just from ongoing projects they would have seen that the project is not required even for the peak power needs of northern region for the next 15-20 years.

When talking about involving NGOs in the project, the ESIA says (p 166, Vol. I), "However, it would be worthwhile to engage some NGOs in mobilising the community in favour of the project". This clearly shows the bias of the ESIA agency toward the project and project authorities. The involvement of the NGOs and the community should be with a view to seek effective participation of the people in the project right from its decision making phase and not to mobilise support for the project.

Again while talking about involvement of financial institutions, the ESIA says (p 167, Vol. I), "The financial institutions need to ensure that the project does not get delayed resulting in escalating of costs". Such statements clearly reflect the bias of the ESIA agency in favour of the project.

On p 246 (Vol. I) the ESIA makes a shocking statement when it says hydropower "is one of the most common renewable, economic, non-consumptive, non-radioactive, non-polluting and environmentally benign sources of energy". This clearly shows the bias of the ESIA agency for such projects. As a matter of fact, experience has shown that hydropower projects are not renewable as they do get silted up or otherwise gets destroyed. HEPs are not necessarily economic if all the costs of the project are included. HEPs are not the most environmentally benign if all the environmental costs are included. And hydro reservoirs can also emit green house gases as documented by the report of the World Commission on dams.

Destruction of pristine area As mentioned in the ESIA (p 36, Forestry and Watershed Management) "Upstream of Duhangan and Allain are pristine areas with luxuriant forests and road building in these areas will contribute to the damage of these pristine habitats." Thus the project will be damaging some of the last remaining pristine areas of Himachal Pradesh and Himalayas in general. It would be better to consider leaving such areas alone rather than go for a project of questionable need and benefits. As agreed in the ESIA on the same page, the project can in fact lead to opening the ways for destruction of further pristine habitats like Spiti, till now inaccessible.

Incomplete Documents Annex A (all the clearance papers) not given as mentioned in Vol. I. Similarly Annex E, F and G were also missing from the ESIA Vol. I.

- The Annex C in Vol. I is supposed to contain "Record of Interagency and Consultation Meetings", but it contains a report on only the May 7 2003 meeting. This means that no other interagency or consultation meeting has taken place. Moreover, since the affected people were provided no documents prior to the May 7 2003 meeting, as is required in IFC policy, that meeting too cannot be called consultation meeting.
- The Chapter 4 in Vol. I ends abruptly, mid sentence on page 133, while discussing the history of landslides in the region.

No studies

- **Carrying capacity** No study of the carrying capacity of the Allain, Duhangan streams and catchment or the Beas river basin has been even mentioned in the ESIA. This is clearly a glaring gap in the ESIA.
- **Cumulative impacts** Even without listing the largest projects in the basin, the ESIA tries to talk about cumulative impacts. And it just talks about cumulative impacts, without identifying or assessing the impacts. In stead, the section on cumulative impacts ends with a sermon to the project proponents: "It is therefore important that RSWML is aware of these possible scenarios and implements the Environment Action Plan carefully to minimise cumulative impacts in the Beas Catchment." Surely an ESIA is supposed to do more than that?

- **Emergency Response Plan** As ESIA makes it clear (Exec Summary, p 20), the project authorities or ESIA agency has not prepared the ERP or what is more usually known in India as Disaster Management Plan. But should not this have been done before ESIA or as part of project formulation? In fact ERP should be a public document and people should be involved in its formulation. Not having done it is violation of prudent project plans and IFC norms. The fact that ESIA (p 290, Vol. I) says, “RSWML must prepare an elaborate and detailed emergency response plan to counter any event” shows that the project authorities have not prepared a plan and on this ground to ESIA is incomplete.
- **No Survey of affected population** The ESIA admits it has not conducted the full survey of the affected community even as the number of affected families is only in the region of a couple of hundred. No SIA has been conducted for this project in the past (Vol. I, p 8). Under the circumstances, the ESIA must be considered fundamentally incomplete. Moreover without full survey of affected community, there can be no resettlement action plan as required under IFC norms. The ESIA thus violates another of IFC policies.
- **Significance of floods, earthquakes, landslides** The sections where these issues are discussed are all incomplete (e.g. section 4.7 on “Natural Hazards in the Area” on p 131-3 in Vol. I) as the discussion in ESIA does not include how the project would be impacted by these and how the project would affect the occurrence of such events and their impacts. For example, on p 131 it is stated, “there is no doubt that earthquakes must be factored into any consideration of risk from natural hazards”, but does not say how this will be achieved or if it has been achieved. Similarly, on the issues of floods and landslides. ESIA does not even show as to for what worst flood conditions is the project designed and what is the recorded or calculated worst flood that the project is likely to face. On p 179 (Vol. I) it is stated that “The design flood discharges for 50 years return period for the Allain and Duhangan are 662 and 287 cumecs respectively”. But the norm is that such structures should be designed for 1 in 100 to 1 in 1000-year return floods, which can be predicted based on models. The ESIA is incomplete without showing how these issues are factored in.
- **No NGOs?** The ESIA claims (p 166, Vol. I), “There are no NGOs working in any of the three villages covered for the sample survey.” This is clearly incorrect. There are NGOs in Jagatsukh and Prini and they have already written to the World Bank, expressing their concerns on the project.
- **Blocking of Wildlife migration routes** ESIA says (p 36, Forestry and Watershed Management), “A detailed study, spanning over different seasons would be required to confirm whether the proposed sites fall on animal migration routes.” This is another instance that shows that the ESIA is incomplete and project would be violating IFC norms if allowed to go ahead without completing such studies and assessing the impacts. ESIA further says, “Upstream Duhangan and areas above the reservoir site are known to have musk deer populations. Road building will damage their habitats and will restrict their movements. Roads will also make these areas easily accessible and the chances of poaching incidences may also increase.” The area is also habitat for ibex and brown bear, all of this may lead to increased poaching.
- **“Options to avoid habitat destruction” not explored** ESIA says (p 36, Forestry and Watershed Management), “Protection of sheltered valleys on the slopes of Duhangan would require special consideration. This is more so, as these valleys, or spots of increased biodiversity, fall on the proposed route for road construction. Since the width of these sheltered valleys are not much, options to avoid habitat destruction should be explored.” But ESIA should have explored such options, without which neither the ESIA is complete, nor the project should be considered for funding.

Outdated data, clearance process The project has been given environmental clearance by the Union Ministry of Environment and Forests based on, as mentioned by ESIA (p 7, Vol. I), an EIA study done by RITES Limited, a govt of India Enterprise, based on baseline data of 1993-4. The project that is to start work in Dec 2003 was given environmental clearance in Dec 2000 based on 1993 data! It is clear that the project was given environmental clearance based on outdated EIA study and ten years latter, the project authorities must be asked to submit fresh EIA and follow India’s current legal clearance requirements, which the project has clearly not followed.

The project, though it was given environmental clearance only in Dec 2000 and forestland clearance in Oct 2002 based on EIA study with 1993 data, the project has not followed the legal requirements for an environmental clearance prevalent either in Dec 2000 when the project was cleared or today when the project is to start work. The current legal requirements, as stipulated in MEF notifications of 1997 says that the project must hold a public hearing supervised by an independent panel and 30 days before such a public hearing, the local people must be given the full EIA and EMP documents in the language they can use. In case of ADP these legal requirement of the day has not been followed and no public hearing has been held for the project. This legal requirement was waived for ADP on the flimsy ground that the application for environmental clearance for the project was submitted prior to the date when the 1997 notification for public hearing requirement came in place (p 17, Vol. I). This is clearly unacceptable and the project must go through the legal requirements prevalent today.

The ESIA says (p 31, Vol. I) that the Divisional Forest Officer of Kulu Wildlife Division has certified on March 21 and April 1 1997 that the project will be “no threat to the rare and endangered species of flora & fauna in the area”. It is strange how the DFO could have given such a certificate as the project authorities applied only in 1999 for clearance of forestland for the project. It is not clear if the Kulu DFO knew that the project will be leading to deforestation of forest land in pristine area habited by some of the threatened, rare and endangered flora and fauna species and that parts of the transmission line will also pass through extensive forest areas. In fact the project transmission line is to pass near or over the Khokhan and Bandli sanctuary. The ESIA says (p 27 of “Reconnaissance Environmental and Social Assessment of Transmission Line Corridor”) says, “Review of maps and the filed visit by ERM indicates that the route passes through reserved forest areas and might interact with the wildlife passageways, due to proximity of the route to Khokhan and Bandli sanctuaries.” It is thus clear that the wildlife clearance claimed to have been given for the project is either given without full information or full diligence.

Is the project needed? The ESIA report tries to justify the project, which it should not be doing in the first place. Moreover many of the facts and figures it uses are factually wrong, it makes tendentious misrepresentations and it uses outdated estimates or estimates that have already proved to be wrong.

➤ It is said that the energy requirement in HP is likely to increase from 1487 MU in 1990-1 to 4576 MU in 1999-2000. The correct figure for projection for 1999-2000 as per 16th EPS of CEA is 3113 MU, much lower than the exaggerated figure given. Similarly it said that peak load demand in HP would go up from 325 MW to 939 MW in the same period, when the correct figure as per 16th EPS of CEA for peak load demand in 1999-2000 is much lower at 610 MW. Thus, with the use of wrong figures, attempt is made to justify the project, which it should not be doing in any case. The peak demand in HP even in Oct 03 is 536 MW.

➤ The EIA report dated May 2003 uses outdated and exaggerated figures to justify the need for the project. Thus, for example, while the report could have given the figures of actual peak demand in India, it gives figures from 15th EPS of CEA, which have already proved to be exaggerated, as seen below. Actual peak demand in India in 1997-98 as per the ministry of Power Annual report of 2002-03 was 65435 MW.

(MW)

	Peak Demand Projected	Actual Peak Demand	Projected Rise above 1997-98 level	Actual Rise above 1997-98 level	% Exaggeration in rise in projected Demand
1999-2000	75012	72269	9577	6834	40.14
2000-01	79856	78037	14421	12602	14.43
2001-02	85132	78441	19697	13006	51.45
2002-03	90510	81492	25075	16057	56.16

It is clear from the above that the figures projected by 16th EPS of CEA are already proved to be highly exaggerated and the EIA report could have used actual demand figures to give clear picture instead of using outdated figures to justify the project.

- As a matter of fact, the CEA projections of power demands have consistently proved to be overestimations. To give another instance, in 1987, CEA projected that in 1995-6 (see the World Bank's Staff Appraisal Report for NJP, p 23), peak load demand in Northern Region will be 25600 MW (Actual peak demand in that year was 15937 MW and that figure of peak load demand in Northern Region is yet to be reached even in 2003) and energy demand was projected to be 131 000 MU when actual demand in 1995-6 was 105836 MU.
- The ESIA repeatedly says that the project is required to correct the hydro-thermal balance in the power sector and that more hydro project like ADP are required for this. What it does not state is that for at least half the year ADP will be working as base load station and not peak load station. Secondly, as far as Himachal Pradesh is concerned, out of total installed capacity in HP of 764.8 MW (as per Annual Report of Ministry of Power for 2002-3, possibly includes only HP share of the central sector stations), Hydro constitutes 634.57 MW. This means the hydro-thermal power sector balance in HP is hugely in favour of Hydro and HP does not need more hydropower stations for its own consumption. Moreover, as the World Bank's Project Implementation Report of the NJP (Sept 2002) makes it clear, HP is power surplus during most time of the year and is a power exporter.

As far as Northern region is concerned, a large number of hydropower projects are under construction already, including Tehri (1000 MW + an additional 1400 MW is also planned under the same project), Nathpa Jhakri (1500 MW, two units of which have already started generation), Baglihar I and II (900 MW), Chamera II (300 MW, one unit has already started generation), Baspa II (300 MW, started generation in early 2003), Dulhasti (390 MW), Dhauliganga (280 MW), Chamera III (231 MW), Sewa II (120 MW), Lurgi (126 MW), Kashang I (66 MW), Shahpur Kandi (168 MW), Dhanwari Sunda (70 MW), Vishnu Prayag (400 MW) among others. BBMB is up-rating its plants to add about 36 MW in Pong project. These projects alone add to almost 7000 MW of additional hydro capacity, all of which are planned to be commissioned before the ADP. If we add these capacities to the existing Northern Region capacity (29284.5 MW, of which hydro capacity is 9234.8 MW) and even if we assume that 7000 MW of additional thermal and nuclear capacity will be added in North by the end of Xth Plan, we see that hydropower capacity in North would go above 40% of the total installed capacity in the North. Moreover, as India strengthens its National Grid, the possibility of importing power during peak periods from peak surplus regions like East, North East and from the neighbouring countries like Bhutan and Nepal would increase.

In fact, Northern region is already exporting peaking capacity to rest of India. The situation is also reflected by the events at the 86 MW Malana HEP of the same RSWML in location just near that of the proposed ADP. Here, as Power Line noted in its February 2003 issue, "Power offtake, to start with, was significantly low as it could not be sold to power surplus HPSEB. Also, it found no takers in the other neighbouring SEBs as most of them were financially sick." Thus, as ADP does not have a Power Purchase Agreement, there is every likelihood of ADP not being able to sell its power if and when the project comes up.

In fact it is amazing to see ESIA exaggerating power demands even beyond those predicted by the 16th EPS of CEA. Here is a comparison.

Comparison of projections of Power Demand in 2011-2

	Projection by ESIA	Projection by 16 th EPS	% Exaggeration by ESIA
Peak demand, MW	176 647	157 107	12.44
Energy Demand, BU	1058	975.222	8.5

It is clear from above that in a report in 2003, the ESIA is using figures of 1997 (Fourth National Power Plan for 1997-2012 was made in 1997 based on Fifteenth EPS, which is outdated), which are already outdated and proved to be exaggerated and when the figures of Sixteenth EPS are already available. In fact, as in the past, the figures of 16th EPS, which was submitted in 1999, have already proved to be outdated and exaggerated as proved above and the time for a more realistic 17th EPS is already due. By

using such outdated and exaggerated figures when more realistic figures are available, the ESIA has shown its bias for the project.

Two paragraphs on page 6 of Vol. 2 ESIA, starting from “According to Fourth National Power Plan, ...” and also “The detailed power planning studies ...” have been lifted word for word from the following paper by a pro hydro lobby persons: PLANNING POWER DEVELOPMENT IN INDIA - EMPHASIS ON HYDRO PROJECTS, available at http://www.worldenergy.org/wec-geis/publications/default/tech_papers/17th_congress/1_1_25.asp. This uncritical acceptance of facts and figures from paper from pro big hydro lobby, without even mentioning the source shows the callousness, dishonesty and bias of the ESIA agency and should be sufficient to disqualify the agency from doing the objective work of taking up ESIA.

In an attempt to justify big hydropower projects like ADP, the ESIA even gives wrong figures. For example the ESIA says (p 246, Vol. I) that only 11% (14912.15 MW) of hydropower projects are in operation, when the figure from CEA monitored stations is almost double at 27 325.2 MW. Similarly, while the projects under construction are shown to be only 7.2 % (9750.25 MW) of the potential, whereas the figures in CEA tenth plan for Hydro stations to be commissioned during the plan comes to almost 14000 MW. It is clear that the ESIA agency is using wrong figures with a view to push ADP.

Hydrology The hydrology figures given for the project in ESIA raise many doubts. The project hydrology is based on only 22-24 years of flow measurement data (p 71, Vol. I), when generally, actual or projected flow data for at least 80 or more years is considered necessary to arrive at more reliable conclusions. Also, precipitation runoff consistency could not be checked “in absence of precipitation stations in catchments of Allain and Duhangan”. In such a situation, it would have been considered prudent for the ESIA agency to do some internal consistency tests on the hydrology data. The doubts about hydrology figures are further strengthened by the following.

- The Allain 90% dependable flow is given as 3.028 cumecs, which is much higher proportion of its 50% dependable flow and also average flows, compared to the same figures for Duhangan river.
- Contribution to flow per unit catchment area is much higher in case of Allain than is the case for Duhangan river. This looks strange for the contiguous area in the same river basin, with same topography and similar altitudes.
- The combined river flow for the 90% dependable year is given as 4.467 cumecs, which is higher than the sum of the individual stream flows at the same dependability, while the combined flows at 50% dependability and average combined flows are lower than or equal to the sum of the individual stream flows.
- While the combined river flow for the 90% dependable year is given as 4.467 cumecs in table 4.5 (p 72, Vol. I), if we look at the last column in table 4.6 (p 72-3, Vol. I), we see that at least 25% of the time in the 90% dependable year, the combined flow is lower than the figure of 4.467 cumecs. This is puzzling as the combined flow should be equal to or greater than the designed throughout in a 90% dependable year.
- If we look at the flow data given in the Annexure with the Hydrology Study (Vol. IV), we see that Oct 1 to Nov 20 and again Dec 1 to 31 and then again Feb 1 to 20, the water flow in Duhangan stream is greater than the flow in Allain in case of the 90% year (1973-4). This sounds strange, as Duhangan catchment area is almost half of the Allain catchment area.

All these anomalies raise doubts about soundness of the hydrology data given in ESIA. That would in turn put question mark over the benefits of the project.

The ESIA concludes that RSWML should maintain a minimum flow of 0.15 m³/ sec downstream of the Allain and Duhangan barrages all the time. However, it is not shown on what basis this has been arrived at. Without factoring in the needs of the people and ecology, how can one arrive at such a figure? In any case this figure is lower than the lowest available flows in these two streams. If it turns out that higher than projected releases will be required for downstream areas, that will have direct impact on the projected power benefits of the project.

Benefits The question marks on hydrology of the project also put question marks over projected benefits of the project. Moreover, contradictory information is given in the ESIA about real benefits from the project.

➤ For example, on p 7 (Vol. I) it is stated that project would generate 673.13 MU at 90% dependability and 786.76 MU at 50% dependability. Then on p. 34 (Vol. I) it is stated that the project will generate “as much as” 774 MU, equivalent to 4000 hours of full capacity operation. On p. 47 it is stated that energy generation at 95% availability and 90% dependability would be 698.18 MU, higher than the figure given on p 7.

However, a calculation based on flow data given on p 72-3 (Vol. I) shows that if that hydrology data is correct than the project could operate only for 3426.6 hours in a 90% dependable year and in which case the project would generate 657.9 MU if the project machines are available for 100% time. This figure is lower than all the other figures given in the ESIA. If the availability were lower, as is generally the case, the projected generation would go down to that extent. However, there are doubts about the hydrology figures, as mentioned above. Moreover, the generation is likely to be much lower if the downstream release norms are assessed correctly and factored in the calculation.

The ESIA claims (p 7, Vol. I) that the project will be providing at least 4 hours of peaking energy throughout the year. If we look at the hydrology figures given on p. 72-3 (Vol. I), we see that in fact in a 90% dependable year, between Dec. 21 and April 10, for full 110 days, the project will not be providing even 4 hours of peaking energy. So another of the claimed benefit of the project is in doubt.

Signs of Callousness

Sections lifted from another document of the past? It seems parts of the ESIA report has been lifted from other documents. One example is given above where full paragraphs are lifted (without caring to mention the source). In possible another instance, it is stated in ESIA (p 42, Forestry and Watershed Management), “The work on raising of the nursery will start right from current year i.e. 2000-2001.” This statement that seems to have been written before 2000-2001 appears in a report written in 2003, which is supposed to be based on surveys done in 2003. This raises the suspicion that sections of the ESIA has been lifted from some past documents and used uncritically without even mentioning the source. Another sentence in the same paragraph as the one in which the previous quote appears strengthens this suspicion, “As the gestation period of main species i.e. fir is more than 4 years main planting thrust will be in the year 2004.” This is a clear sign of callousness of the ESIA agency.

Poor Basin Knowledge A number of places one can see the signs of callousness on the part of ESIA agency. For example, it is stated (Exec Summary, p. 13) that Kol dam is in Beas basin, when Kol Dam is under construction in Sutlej basin. Moreover, while listing the existing and proposed project in Beas basin, the ESIA agency does not even mention some of the biggest existing projects in Beas basin including 207 MW Mukerian HEP, 110 MW Uhl I HEP, 60 MW Bassi HEP, 360 MW Pong Dam (the highest earth fill dam in India at 132.6 m) and Beas Sutlej link project that includes 76 m high Pandoh Dam, 990 MW Dehar Power Plant and which can transfer upto 254.85 cumecs of water from Beas to Sutlej river. Other project in Beas basin not mentioned in EIA include: 6 MW Binwa HEP, 12 MW Baner HEP and 10.5 MW Gaj HEP.

Moreover, the CEA (Central Electricity Authority) ranking study (published in October 2001) includes 7 projects in Beas basin, to be taken up for study. Besides ADP, these include 29 MW Rana Khad HEP, 420 MW Nakthan (Parbati I), 85 MW Gharopa HEP, 27 MW Sainj IV HEP, 26 MW Tirthan III and 520 MW Sainj (Parbati III).

Per Capita water consumption not known Another sign of callousness on the part of the ESIA agency is evident when it says (e.g. p 43, Vol. I) that 100 people working during the operation phase will use 4.5 m³/day water and generate 3.6 m³/day wastewater for which project authorities will make treatment

arrangement. Now 4.5 m³/ day for 100 persons translates to only 45 litres per capita per day water consumption, which is lower than the national or WHO norms for per capita water consumption. The likely water consumption would be higher than 100 litres per capita per day and in which case the necessary wastewater treatment facility would be of higher capacity. The fact that the ESIA agency has overlooked such discrepancies in the figures of project authorities shows both the callousness of the ESIA agency and its biased in favour of project authorities, unbecoming of an ESIA agency.

Number of trees to be felled not known At a number of places ESIA says 797 trees will be felled, though like in case of all figures it does not give the source of information for this number. Then on p. 47 (Vol. I) ESIA says, "The enumeration of trees that needs to be felled is currently in progress." If that is the case than how could it give precise no of trees and their species wise break up elsewhere?

This is further contradicted on p 14 (Forestry and Water Management, Vol. IV) where it is stated that 703 trees will be affected at Allain site and 94 trees will be affected at Duhangan site. This makes it 797 trees. But what about the trees that will be affected at Forebay reservoir site, intermediate reservoir site, colonies, roads, tunnels, plants, diversion channels, etc? This clearly means that the ESIA has no idea about the total number of trees to be felled and ESIA is incomplete without this basic assessment and impacts thereof.

Moreover, on p 34 (Forestry and Watershed Management, Vol. IV), there is information about volume of timber and loss of revenue only about 331 trees. In that estimation, it is stated that 197 of these trees will be lost due to dam/ reservoir and 142 other trees are lost due to road. This information does not match with the information given on p 14 of the same chapter and this contradictory information only further shows the incompleteness of the ESIA and callousness of the ESIA agency.

This is further contradicted by the statements of HP forest minister (see Annexures) where he says that over 1500 trees to be felled only from the forest area. Another media report suggests that the project will mean cutting down of over 4000 trees. All this raises doubt about the reliability of the facts and figures in the ESIA.

Downstream Impacts It is stated in ESIA (p 182 Vol. I), "Further, there will be change in flow of Allain stream in the stretch falling between tailrace outlet to the point of confluence in Beas River. In this stretch, a peak flow of approximately 26.8 m³/ sec will be discharged during 4 hours of peak power generation period." This is clearly a wrong and misleading statement. The peak flow will in fact be there for a minimum of 4 hours and maximum of 24 hours. For about 50 days from June 1 to July 20 (in a 90% dependable year) the increased flow will be for almost full 24 hours. The impact of this hugely increased flow on the Allain stream has not been assessed.

Another kind of downstream impact not taken care of by the EIA or EMP is the increased silt level (due to release of concentrated silt from the desilting basins) in the water downstream of the diversion weirs. Particularly in case of Duhangan stream, the silt level in the remaining water downstream of the diversion weir will be very high and it has, as ESIA accepts (p 184, Vol. I), "potential for negative impact due to deterioration of water quality", requiring, in case of Duhangan stream, "special mitigation measures". But the ESIA mentions no mitigation measures.

The minimum flow of 0.15 cumecs that ESIA has recommended downstream of the diversion points on Allain and Duhangan streams is only 8.38% and 11.76% of the "minimum flow ever observed on" respective streams.

While at most places ESIA recommends that downstream water releases from Allain and Duhangan HEPs be 0.15 cumecs, at other places there is uncertainty about this. For example, on p 306 (Vol. I) the ESIA says that the project is in the process of receiving Consent to Establish from HPPCB with the conditions that include: "Maintenance of requisite percentage of water flow downstream of the diversion works in

order to maintain the riverine ecology and furnish basis of arriving at this percentage". This clearly means that such flow quantum is yet to be arrived at?

There is further contradiction in this regard when the project authorities, in response to the questions raised by affected villages in May 7 2003 meeting, say (see Annex C of Vol. I), "only 90% of the flow in Allain and Duhangan streams would be diverted into the tunnels". But this is patently false as 0.15 cumecs is not 10% of flow in Allain river at any time and for most of the time in case of Duhangan river. Moreover, in that answer the project authorities claimed that the minimum flow was based on "the Ministry of Environment and Forests, Govt of India guidelines". But to the best of our information, there are no MEF guidelines for quantification of downstream flows.

Moreover, when ESIA says (p 290, Vol. I), "it is recommended that periodic water releases be optimised in a strategic way to maximise revenues and minimise environmental impacts of the project", the ESIA agency is violating the basic role of the ESIA. The ESIA is not supposed to be bothered about maximisation of revenues. It is supposed to assess and recommend ways of avoiding and mitigating impacts. Mandatory water releases have to be adhered to and there can be no role for maximisation of revenues in that.

The recommended downstream release of 0.15 cumecs is clearly arbitrary as it is not based on calculation of downstream social or environmental needs or based on fisheries study and the requirements thereof. In any case the recommended flow is much lower than even the "minimum flow ever observed" in the streams. What is required is that the recommended flow should be based on such calculations and in any case should be higher than the minimum flow ever observed. Thus there is clearly a need to reassess the downstream flows and also reassess the project performance thereafter.

Even for ensuring minimum flow, the only measure in ESIA is (p 291 Vol. I), "RSWML is to ensure this monitoring of minimum recommended water flow by installing electronic and manual measurements devices at the diversion structures". This is clearly insufficient, as measuring devices cannot ensure minimum flows. Project authorities, who would try to maximise power production, can clearly not be depended on to ensure minimum flows.

Risks not assessed in full On p 195 (Vol. I) under 7.8.2, there is a paragraph titled "Risk due to Failure of Forebay Reservoir Dam". However, the ESIA should have assessed the risk of failure of Intermediate dam and also the Allain and the Duhangan weirs and the risks due to simultaneous failures. In fact the storage capacity of the intermediate reservoir and the Allain Barrage are larger than the capacity of forebay reservoir and any failure of the upstream storages can be a big risk for the downstream storages and structures. Thus the ESIA has not fully assessed the risks.

The ESIA (p 36-7, Forestry and Watershed Management) makes it clear, "Special precautions would need to be taken while road construction in the mountain harbouring Hamta village. This would be important, as the soil in this region is loose and incidences of landslides may dramatically increase due to the activity of road building. Constructed road would need to be supported while construction itself (sic)." Similarly, as stated on p 37 of the same document, the increased flow into Allain from tail end releases may be "leading to landslides". But these general statements of precaution only shows that ESIA agency has not done its work. ESIA agency should have assessed the specific risks and their locations due to such impacts and suggested mitigation measures.

Moreover, under 7.8.4 (p 196, Vol. I), under the title "Risks due to Slope Failures – Landslides", it is suggested in ESIA, "It is important that before start of construction activities areas prone to landslides are identified periodically and suitable measures for slope stabilisation are undertaken as per the need." But ESIA is not supposed to make such general suggestions, but rather is supposed to identify vulnerable areas and include necessary measures in the EMP. This again shows that ESIA has failed to do what it was supposed to do.

Same is the situation in case of risks due to Avalanches under section 7.8.5 where again instead of recommending specific measures to prevent project induced avalanches, the ESIA stops at making general statement that the project authority should be careful.

Incorrect Height of the Dams?

Note the following interesting statements in the ESIA about the heights of various dams to be constructed as part of ADP:

- **Allain Diversion Barrage** (p 32, Vol. I): “The maximum height of the barrage will be kept as less than 14 m.” Same information is repeated on p 48. Does this mean the height and such other features of the diversion barrage are not yet fixed? If that is the case than one cannot know the storage capacity, submergence areas, displacement and so on. In any case, ESIA would be incomplete without knowing this. Moreover, ESIA should have clearly stated what is the height of the Allain Barrange above the deepest foundation, as is the international norm. It is a mystery why “maximum height” is stated. Moreover, from the different heights given, it seems that 14 m is the height of the barrage above the river-bed level and not above the deepest foundation level.
- **Intermediate and Forebay Reservoirs** (p 33, Vol. I): “The height of reservoirs will be less than 14.5 m each.” (This is again a very mysterious way of stating the heights of reservoirs and seems to mean that height and hence the impacts are not certain yet. Thus ESIA is incomplete without knowing the exact height of each of the reservoirs above the deepest foundation levels and impacts thereof.) However, while giving salient features of the project components on p 44-46 (Vol. I), no information is given separately for the intermediate and forebay reservoirs and under “Storage Reservoirs” information is given for full supply reservoir level and minimum reservoir level. However, the two reservoirs when Forebay reservoir comes downstream of intermediate reservoirs cannot have the same levels. This is another sign of callousness of the ESIA agency. Also, on p. 45, crest level and also the full supply reservoir level of the storage reservoirs is given as 2753 m. Nowhere, the height of the dams over the minimum foundation level is given, as is the international norm.
- **Intermediate reservoir** (p 48, Vol. I): “Maximum height will be less than 14.5 m.” Does this mean the height and related features are not yet fixed?

The EIA keeps saying that the height of the forebay and intermediate reservoir is 14.5 m each (see e.g. section 3.2.4 on page 33 and section 3.3.9 on page 40, Vol. I). It is clear from page 40 and elsewhere that this height is from the riverbed level. But dam heights are measured from deepest foundation level (see ICOLD or WCD norms) and nowhere is the height of any of the dams from the deepest foundation level mentioned. This exercise of trying hard to show that the dam height is below 15 m is possibly to escape the implications of IFC policies like the OP 4.37 that mandates requirements for dams above 15 m (see p 29, Vol. I).

In fact, in the salient features given on p 44-46, there seems to be contradictory information as the average bed level and maximum reservoir level of Allain barrage and also the intermediate storage reservoirs are given as 2740 m and 2753 m. But it is impossible that both the reservoirs that are to be on the same stream in a series will have same levels. The information given is thus clearly contradictory and confusing and shows the incompleteness and callousness of the ESIA on crucial aspects.

Violation of Consultation and Public Disclosure norms IFC OP 4.01 for Environment Assessment require that the project sponsor must consult project affected groups and local NGOs before finalisation of the ToR for Environmental Assessment and once draft report is prepared. The ToR and the draft report are to be provided in local language before respective consultations, at least 60 days prior to the consultation in case of consultation on draft EIA. In case of ADP, no Documents were given in local language, no public hearing held, thus project violates the IFC 4.01 on several counts. In fact, none of the steps described in Section 3.3.2 (p 11-2, Vol. III) has been followed by the ESIA or Project authorities.

At one stage ESIA accepts (p 203, Vol. I), "Some of the concerns (of the affected people) are arising primarily due to lack of adequate information with the local people, and this will be rectified in the course of public consultations". But the consultations have not been held at all and no project documents are provided to the local people in their language.

The ESIA (Exec Summary, p. 2) claims that a public consultation was held on the draft ESIA. This is totally false claim, as the draft ESIA report has never been made available to the local people in Hindi. Further claim of the ESIA on the same page: "RSWML has made copies of the ESIA documentation available locally" is also totally false as the local people were not given copies of the ESIA documentation.

ESIA possibly assumes that meeting held in Prini on May 7 2003 fulfils the role of public consultation as mandated by IFC norms. However, none of the draft ESIA documents were made available to the local people at least sixty days before the May 7 2003 meeting as mandated by IFC norms. In fact sixty days before May 7 2003 the ESIA would not even have been complete as the ESIA team was still surveying the area (e.g. fisheries base line survey) as late as in April 2003. Thus no public consultation has been held as required by IFC norms, either before beginning the ESIA report or when the ESIA draft report was ready.

The ESIA claims (p 277, Vol. I), "The community development plan is based on the following principles: Consultations with community members and key stakeholders through all the phases of the project". However, this has not been done even with respect to the EIA, SIA and EMP presented in ESIA. The local people were never given any copies of these documents.

In fact the whole stakeholders consultations strategy (section 10.11.2, p 279-281, Vol. I) have been formulated with a view to "ensure the local support" and not with a view to ensure participation of the local people in the project right from decision making stage. In fact the ESIA agency sees the need for involvement of NGOs (p 33, SIA, Vol. III) as "it would be worthwhile to engage some NGOs in mobilising the community in favour of the project". This clearly shows that the ESIA agency has no value of participation of various stakeholders, but has only the interest in getting support for the project. This again shows that the agency is biased in favour of the project and is nor worthy of the work of ESIA.

The EIA keeps talking about public consultation, but does not acknowledge that not a single project document has been made available to the people in Hindi, without which there can be no consultation. The project thus violates IFC's OP 4.01, Environmental Assessment, Paragraph 14, OD 4.30, Involuntary Resettlement, Paragraph 8, IFC policy on Disclosure of Information, and the new OP 4.12, Involuntary Resettlement, Paragraphs 6 (a) and 13. (IFC's website still lists OD 4.30 of 1990 as its Policy on Involuntary Resettlement, and it is not clear whether OD 4.30 or the new World Bank OP 4.12 are relevant for IFC projects involving involuntary displacement.)

Incomplete Studies

➤ **The study area** The ESIA says (p 54, Vol. I) that the study area includes 128.9 km² in Allain river and 66.2 km² in Duhangan river. As made clear on p 44, these areas are the catchment areas in the respective river basins till the barrage site. But the ESIA study should go beyond this and also include the downstream areas in both the rivers right upto confluence with Beas and even beyond, the area through which headrace tunnels are to be dug, say in Pahali river basin and also areas where other project components are to be built.

➤ **Full Base line survey not done** It is clear that field surveys for the ESIA were all done only once in the winter months, mostly during January to April 2003. This is clearly inadequate. Any ESIA has to do the survey all across at least one year so that full base line situation and possible impacts can be documented. The ESIA is fundamentally incomplete on this score. If for example it has not assessed fisheries in the monsoon when the rivers and streams are full of fish biodiversity, how can it know the full extent of fisheries in the river? Similarly, as noted in section 4.5.5 (p 99, Vol. I), as the ecological assessment was done in winter, "many of the wild animals were not observed. The population sizes of the observed species was also low. Some of the higher reaches of the project catchment were inaccessible

due to snow cover". Again, ESIA says (p 102, Vol. I), "Most high altitude forests and scrub forests could not be visited due to heavy snow." Under the circumstances, the ESIA cannot be dependent on to give a true picture of base line ecological situation in the project area.

➤ **Impact on Irrigation not assessed** The ESIA does not assess the impact of the project on the irrigation in the affected villages. It is clear that the diversion of the two of the biggest streams in the area will have impact on the irrigation. ESIA notes (p 170, Vol. I), "Most farmers (about 85%) had irrigation facility in at least a part of their land holding. Source of irrigation was usually a stream in all the three villages, which had been channelised into irrigation channels". This clearly means that the diversion of two of the biggest streams in the region will have an impact on irrigation for the people. However, the ESIA does not even assess the impact of the project on the irrigation, nor does it talk about how this will be compensated. (What is given in section 7.3.2 on p 182, Vol. I is not sufficient to show that the project will not impact irrigation in the villages in the region as there is no assessment of the quantity of water used and provided.) This is further evident when (p 203 Vol. I) ESIA says, "the villagers are not convinced that the remaining water will be adequate. This issue needs to be monitored during the construction and operation phase. ... These fears were not only expressed by the PAFs but the larger village community in all the villages." But ESIA should not be saying that this issue needs to be monitored, but rather should be making specific recommendations.

➤ **Impact on Appal trees not assessed** The ESIA does not assess the impact of the project on the apple plantations, which is the biggest source of cash income for the village people. Nor does the ESIA say how such impacts would be compensated. That such impacts do occur is apparent, for examples from other areas like Kinnaur where the coming of hydro projects have had serious impact on the productivity of apple trees over long distances.

➤ **Fisheries** It is repeatedly mentioned (e.g. Exec Summary, p. 11) that the base line survey on fish catch was attempted in January and April 2003. But this is clearly inadequate to know the base line information about fisheries. Proper survey at least across one year is necessary to get the base line picture and possible impacts. The ESIA is clearly incomplete on this ground. The ESIA in fact recommends (p 5-6, Fisheries Study), "In order to perform the monitoring of fish during a calendar year for establishing the baseline for each month of the year, it is necessary to investigate the possible impact and find the means of mitigating the same. It is also recommended that detailed fish catch studies be carried out at the following locations and with the frequency mentioned along with." But this only shows that ESIA is fundamentally incomplete and basic baseline information, impacts and mitigation measures are not known, as is accepted by ESIA. Under the circumstances, the project cannot be allowed to go ahead till these are in place and show in what form the project can be allowed to go ahead.

➤ **Water quality studies** While giving results of water quality testing of ground water and springs (p. 81-6, Vol. I), it is not stated when the samples were taken. To get the true picture of state of water quality, it is necessary to take samples across a year, including in summer, monsoon and winter and also across a day. So single point water quality tests as given above do not give true picture.

➤ **Bio monitoring** As ESIA mentions (p 293 Vol. I), the project is awaiting clearance from the HPPCB with the condition that the project will "conduct bio monitoring of macro invertebrates both upstream and downstream of the diversion works". However, this should have been done across a year for base line case, by the ESIA, which clearly has not been done.

➤ **Social Impact Assessment** The ESIA keeps saying (e.g. Exec Summary, p 16), "A full census will be carried out in the beginning of the implementation stage of the project that will identify all the directly and indirectly impacted families." This is amazing. How can an ESIA be completed without doing the full survey of the affected families and without identifying all the directly and indirectly impacted families?

In fact it is evident from the ESIA that neither the project authorities nor the ESIA agency knows the full scale of displacement due to the project. This is evident from what ESIA says on the subject. On page 147 (Vol. I) ESIA says, "The timeframe for the field survey was estimated on the basis of a list of 16 families provided by project proponents. However initial interactions with the concerned villages revealed that the actual number of project affected families was much more than that." Thus, at the beginning of survey in February 2003, the project proponents told the ESIA agency that 16 families are to affected. The ESIA agency says, "it was originally planned to carry out census survey of the project affected families". So the

ESIA planned to do survey of “full” 16 families. Then it realised that the number of affected families is much larger. On enumeration by the project proponent, it was found that affected list now had 263 families, that is over 16 times the original list! That list also had many discrepancies. ESIA decided to survey a quarter of the new list. So at least three quarters of the affected families have not even been surveyed. That is if the list of project authorities can be believed, which would be very imprudent if past is any guide. One of the affected village has not be surveyed at all.

This is again evident from section 7.9.1 (p 197, Vol. I), where the ESIA gives break up of just 11.76 Ha of private land to acquired, which is just 30% of the total of 36.565 Ha of private land to be acquired for the project. Even this 11.75 Ha of land includes a total of 212 titles. It is clear that the either the project authorities or the ESIA agency has no idea about the number of families who will be losing land and who all will be affected.

Moreover, it is stated on p 202 (Vol. I) of ESIA, “3.3% of PAFs reported that they had irrigation channels constructed in the land acquired for the project.” This is clearly a misleading and an understatement. Moreover, no compensation is even proposed for this loss. There no mention of the total number of families that would be affected due to the diversion of streams on which their irrigation sources depend, nor how many non PAFs will be affected due to irrigation channels on the acquired land.

Further, on p 202 (Vol. I) it is stated, “This needs to be further investigated and sharecroppers loss of income assessed during the census survey of the PAFs in the implementation stage.” This clearly means that ESIA agency or the project authorities do not know the losses that the sharecroppers will suffer and without this the Social impact Assessment or Action Plan cannot be formed. The ESIA is clearly incomplete on this score too. Same is the case when ESIA says on p 203 (Vol. I), “However, loss of income for employees needs to be considered during the census survey in the implementation stage.”

Moreover, the project authorities plan to seek more land (over and above the land mentioned in the ESIA) from govt for the project, as mentioned in ESIA (p 287, Vol. I), “RSWML proposes to arrange for a short term lease for a period not exceeding 10 years of Government Land for temporary works for the construction of the project, on such terms, conditions and rates as may be prescribed/ fixed by the govt from time to time”. Firstly, it is not clear how much land the project intends to take. Secondly, this will also have its social impacts and without that the ESIA is incomplete on another ground.

Further, the ESIA says (p 27, PCDP), “Discussions will be held with villagers to seek a solution to loss of grazing ground for a temporary period...” this clearly means that over and above the land required for the project, the people will face deprivation on this another front, the full quantum of which is not even known to the ESIA or the project authorities. The ESIA is incomplete without this information and assessment of impact and mitigation measures thereof.

And since no Social Management Plan or R&R plan can be prepared without knowledge of full impacts, this means that the ESIA has been completed without either full knowledge of social impacts and without the proper R&R plan. This is in violation of Paragraph 11 of OD 4.30.

- **Transmission Line Impacts** Similarly, the ESIA accepts (e.g. Exec Summary, p 16) that since the route of the transmission line is not yet decided, the full social and environmental impacts cannot be known till that is achieved. So this is another count that shows that the ESIA is fundamentally incomplete and inadequate. This is in violation of Paragraph 11 of OD 4.30.
- **Road Alignment** The ESIA accepts (Exec Summary, p 14) that the road alignment passing through the Hamta village is still not finalised. Without which basic social and environmental impacts cannot even be assessed. Similarly (p 49, Vol. I) the ESIA accepts, “The final right of way for the road (from Jagasukh to the proposed Duhangan weir site) is in the process of being finalised.” Without knowing these alignments, the social and environmental impacts of the road cannot even be known.
- No aspect of decommissioning impacts are included though IFC guidelines require this.

- The fact that reservoirs in climates like that in India emit Green House Gas emissions is not mentioned even as the EIA keeps claiming that hydropower is clean, green and renewable source of energy.
- In summary of impact assessment: Water resources (Exec Summary, p. 9), following is not mentioned: impact on fisheries, impact on agriculture, impact on horticulture, impact on forests, impact on possibilities of increased flood damages due to destruction of forests due to the project, GHG emissions, decommissioning impacts.

Unsupported conclusions

- **Ambient Air Quality** It is claimed (Exec Summary, p 10), "... it is expected that the AAQ will remain within the prescribed limits." However, it is not substantiated as to how this conclusion is arrived at.
- **Damage due to ground vibrations** It is claimed (Exec Summary, p 11), "... the ground vibrations generated by blasting during the tunnel excavations will not effect the structures proposed in the vicinity of >81 m from the point of blast with 20 kg of charge per delay." However, it is not mentioned what will be the impacts on the existing structures and structures within 81 m range?
- **No impacts to homestead land** The ESIA claims (Exec Summary, p. 14) that "the project would not impact any homestead land or residential structures". This is clearly not true as the project authorities have already started hiring houses in Prini village. Moreover, with the survey of a number of project components like the transmission line and the road alignment yet to be finalised, the project could lead to impact on homestead land.
- **No emissions** The ESIA says (p 231, Vol. I), that the project will have "no emissions" and that "Hydroelectric power generation (is) free of air emissions". This is not true. In fact, as recorded by the report of the World Commission on Dams, hydropower reservoirs also emit green house gases in tropical countries like India.
- **Incorrect, manipulative values assigned** In tables 8.4 and 8.5 in ESIA (Vol. I), at many places totally unsupported values have been assigned to RPII and EII in case of a number of parameters. It looks as if this has been done in a manipulative way to assign positive results to the projects. For example, positive EII values given on p 226 and p 236-7 for Socio economic aspects as a result of project construction and operation activities is totally incorrect as experience shows that not only people lose employment and livelihoods when such projects come up (loss of land, forest, river and impacts thereof on employment), but also local people get no worthwhile employment. Similarly the positive EII value given on p 227 and p 238 for Tourism is also not correct as the project may in fact deprive the area of existing tourism flows due to various project impacts and also destruction of some of the wildlife habitats and tracks. Similarly zero value assigned for EII for Fuel requirement for workers is totally wrong as past experience shows that such projects invariably increase pressure on surrounding forests for various project related needs and impacts.
- **No non-forestland for afforestation?** The ESIA claims (p 37, Forestry and Watershed management), "due to non-availability of non-forest land, 64 land (sic – it should be Ha) approximately, will be afforested near the project catchment." There is nothing to show that a serious attempt has been made to look for non-forestland. Moreover, there is no information about the status of forestland to be afforested. In fact, even the demarcation of the land to afforested does not seem to be complete as per the same page of ESIA. The ESIA is incomplete without this. There is no place for people's participation also in any of these efforts.

"No Common Property resources taken"

The ESIA claims (e.g. Exec Summary, p 14) that the project has made every effort to avoid any impacts on common property. This is clearly a false statement. The project is taking common property resources like Potato seed farmland, forests, rivers, etc. The ESIA clearly states (p 48, Vol. I), "The (forebay) reservoir site is spread over 8 hectares of land which was previously owned by the government agricultural department and was used for potato farming. The last crop was harvested two years back before the site was handed over to the project authorities." It is amazing that the ESIA agency makes such patently false statements. What is clear from this is that the impact of the project is already upon the

people for over two years even as the IFC and WB board is yet to take a decision on funding the project. Such actions are used to make the project a fait accompli even before fulfilling the basic consultation requirements and even before giving basic information to the affected people, in complete violation of WB operational norms.

- In fact the ESIA accepts (Exec Summary, p. 19) that for labour accommodation, “RSWML proposes to arrange for a short term lease... of government land for temporary works for the construction of the project”. This govt land to be taken for upto 10 years will again be a common property resource and will again affect the people.
- On p 48 (Vol. I) the ESIA clearly states, “On the way to village a religious structure made of stone with attached ‘devattar’ property falls in the way of (road) alignment.” This is another instance of common property resource being taken for the project.
- Further on p 48 (Vol. I) the ESIA states, “On the way, there was a small patch of wetland called ‘Padnuropa’, which is of mythological significance and is linked to a temporary resting place for the Pandavas in the Mahabharata.” The ESIA does not clarify if the wetland will be affected by the project or not.
- On p 165 (Vol. I) the ESIA states, “Once the project gets into the construction phase then it will not be possible for these cattle and goats to graze freely in the *gauchar* as they will be affected by the increased volume of traffic and construction activity.” This is another instance of the project’s impact on common property resources of the people.

Contradictory statements At several places ESIA makes statements that are contradictory to what is said elsewhere. For example on p 193 (Vol. I) the ESIA says that during the Ecology study done in April 2003 (when such a study should have been done across the year), “No endangered or localised endemic, except a few rare species were recorded”. In reality, as noted on p 114-120 of the same document, a number of Rare, Endangered and Threatened species have been observed in project area.

On p 33 (Forestry and Watershed Management, Vol. IV), it is stated, “The three rare species identified in the survey viz. *berberis*, *Equisetum* and *Scurulla* do not lie in the project component area and shall not be affected adversely by the project.” This statement has no bases and unless it is substantiated, it will only show the slipshod conclusions of the ESIA. Moreover, there are other threatened, rare and endangered species identified in the project area, the impacts about which there is no clarity in the ESIA.

Absence of Compliance norms or mechanisms

- **Downstream flows** ESIA repeatedly mentions (e.g. Exec Summary, p 21) that RSWML is to monitor the minimum recommended water flow by installing electronic and manual measurement devices. But how can RSWML, whose basic aim is to maximise power production be entrusted to ensure and monitor this? The objective of maintaining minimum flows in the downstream region is in contradiction with RSWML’s over arching objective of maximum power production most of the time during the year and there is clear conflict of interest here. What is required is an independent monitoring body dominated with affected community representatives for this and such other objectives.
- **Fisheries monitoring plan** ESIA recommends (e.g. Vol 1, p 21) that RSWML is to ensure that suitable temperature and velocity of both streams are maintained for sustenance of any biological life. ESIA also says that RSWML will ensure adequate sewage treatment plant for domestic wastewater from the project and colonies. Here again, can the project owner expected to ensure this?
- **Muck Dumping** The ESIA takes the word of the project authorities for granted that the muck will be dumped at designated places. However, as experience of hydro projects in HP and elsewhere has shown, the project authorities, left to themselves, throw the muck anywhere, including into rivers. This has been the experience with Larji, Nathpa Jhakri and a number of other projects. In case of ADP, as events of Dec 6, 2003 show (see below), the ADP authorities have already started showing their colours when boulders were showered on unsuspecting local people. The project authorities cannot be taken at their word and a credible independent agency is required to ensure that the management plan is implemented properly.

There is no proper or credible institutional arrangement suggested either for compliance, monitoring and evaluation or for credible grievance redressal for any of the management measures suggested. For example, while that ESIA suggests that project authorities will be allowing certain flow of freshwater in the river downstream of the dam, there is no credible arrangement in place either to ensure compliance or to redress if the compliance is not there. Similarly, in the R&R committees, there is no place for the affected persons! In many places the ESIA repeats the assertions that project authorities have assured that this will be done, which clearly is not good enough, if past experience is any guide. The lack of monitoring and compliance mechanisms is in violation of OD 4.30, Paragraph 22.

Unjust R&R norms

While talking about compensation and rehabilitation, the ESIA does not take into account the full resource base of the affected persons, including the loss of forests, rivers, lands and common property resources. In fact, ESIA keeps saying that no common property resources of the affected people have been taken when forests, rivers and Potato Seed Farm (already destroyed) are crucial common property resources of the people on which they depend for many of their needs. It was amazing to know that as late as on Nov 13 2003, one of the Chief Engineers of ADP, Mr VPS Chauhan, did not know about the acquisition of the Potato Seed Farm for the project and its impacts on the people.

The ESIA indulges in various definitions of vulnerable and most vulnerable PAFs. What's required are just R&R norms as has been accepted in some of the World Bank funded projects like the Sardar Sarovar Project. The ESIA does not even mention these norms. If these norms were acceptable and necessary over ten years ago in the poorer tribal areas of Gujarat, Maharashtra and Madhya Pradesh, why should anything less be acceptable or just today in relatively better off areas of Himachal Pradesh? In case of SSP, every family losing more than 25% of its holding is considered affected and all such affected families are to be given minimum of 2 Ha of irrigated land from the project authorities. The ADHEP project authorities need to accept all such norms and improve upon them where necessary, but not to dilute those norms at any cost. The suggested norms for ADP affected people are in violation of the Bank principles, policies and operational norms as expressed in Paragraph 13 of OD 4.30, and Paragraphs 11 and 12 of OP 4.12.

- The ESIA claims (Exec Summary, p. 14) that no PAF will be left with less than 0.08 ha of land. What is the significance of 0.08 Ha here is not clear except possibly that 0.08 ha equals one Bigha, a local unit for land measurement. But what should be pertinent to note is if any PAF is left with economically unviable holding and a clear, credible definition of unviable holding should be mentioned. The project authorities have to ensure that nobody will be left with economically unviable holding. That is the only way to ensure that a project will not leave the affected people worse off or below the poverty line.
- Even where the ESIA talks about providing land for the most vulnerable families that lost over 75% of holding (here those losing more than 75% income should also be added as a norm as for landless families, loss of income would leave them further below the poverty line) (Exec Summary p. 16) or for tribal families (p 264, Vol. I), it provides a clear escape route by qualifying the norm with "wherever feasible and available". This can just not be acceptable. Minimum 2 Ha of irrigated land for every family losing over 25% of their holding (or income) must be a norm as in case of SSP and there should be no escape clause therein. The norm should also mention that this entitlement should be applicable to families even if they are losing less than 25% of land or income if they are left with marginal holding or left under the poverty line.
- All the R&R norms need review in the light of above.
- The sections on "Focus on Women" (Exec Summary, p 17), "Community Development Plan" (Exec Summary, p 17-8) and "implementation Mechanism for RAP" (Exec Summary, p 18) all leave much to be desired and practically all these sections are given for namesake and there is no substance in the measures suggested in them. In RAP implementation mechanism, there is no place for affected people.

Here we would like to quote Michael Cernea, a well known sociologist of the World Bank, (*The Truth about the Resettlement of the Apuseni Mountains*) on implications of cash compensation of affected people: "Resettlement has been undertaken in an irrational manner, based on simple negotiation. Government officials claim that the resettlement is not their problem which is wrong because severe situations will result, situations that the State, not the mining company, will have to resolve. Through this rushed resettlement, and whilst claiming to reduce poverty, a new poverty will take root... The drawbacks of the compensation principle are severe. Compensation is structurally incapable of regenerating the income and living means possessed before resettlement... Our research done on a global level and this over a time span of twenty years shows a simple fact: sufficient compensation does not exist... Evidence demonstrates that the use of cash ends up with the acquisition of an amount of goods that is below the level of the amount of goods possessed before... Land deprivation is the leading form of capital loss and poverty creation. This is so because people lose both the natural capital and the capital they created with their own hands i.e. by working their lands. Studies undertaken in Brazil, India, Kenya, and Indonesia show that land loss has more severe consequences than home loss. Regarding employment, the chance of working ones own land or another persons land is the best circumstance. Self-sustainable family farms will disappear..."

It is clear that World Bank group (IFC is part of this) has learnt no lessons from past experience. Cash compensation can just not be an acceptable form of resettlement, as is prescribed in case of ADP.

Environment Mitigation Plan There is no place for affected people in monitoring the implementation of environmental mitigation measures, except mentioning that such participation will be ensured (e.g. p 286, Vol. I). Such mentioning for the namesake without clearly laying down ways of achieving it is clearly meaningless.

It is not clear who has formulated the Catchment Area Treatment plan mentioned on p 284-6 (Vol. I). It is clear however, that local people have had no role in this. Nor has the plan been approved as yet. In fact the statement in ESIA (p 286), "it is submitted that the Area identified for providing Catchment Area Treatment Plan may kindly be approved" that the plan has not even been approved and the section has been lifted from the project authorities' application for the same. It is not clear on what basis the CAT plan has been made.

Mockery of Options Assessment

Chapter 9 on "Analysis of Alternatives" is a joke, to put it lightly. The chapter has nothing by way of analysis of options available for meeting the energy or peak load requirements of Himachal Pradesh or northern region. Options like Demand Side Management, increasing supply efficiency of existing plants, increasing capacities of existing projects through renovation and modernisation, additional generation through small and mini hydro, reducing T&D losses, increasing end use efficiency, peak load management etc are not even mentioned! Table 9.5 titled "Alternatives considered for the Allain Duhangan Project" is in fact a list of project features and not a single alternative is even suggested in the table. This table looks like an attempt to fool the readers.

- The project will in fact destroy possible options. As mentioned in ESIA (p 207, Vol. I), due to ADP, a number of possible small hydro projects will have to be given up. For example, "RSWML has already approached HPSEB for waiver of the two of the downstream small hydropower projects at Prini (1 MW) and Aleo (capacity unspecified), for which HPSEB has reportedly cancelled the MoUs with the private entrepreneurs." Thus to push a larger, more destructive project, a number of small projects are being sacrificed!
- One possible option that should have at least been discussed is the use of Allain and Duhangan streams individually for power production, as that would have reduced the cost and impacts in terms of additional tunnel and reservoir construction.

- Another possible option that should have at least been discussed is the use of Pahali stream in place of Duhangan stream. Pahali stream flows between Allain and Duhangan stream. Use of Pahali stream (depending on the amount of water available therein) would have reduced the length of construction of the tunnel to the Allain stream.
- The ESIA makes unsubstantiated statement on p 250 (Vol. I), “for both streams (Allain and Duhangan) in their individual capacities the project viability of the proposed magnitude is very low.” How can one accept this statement without any facts or figures? The impacts and costs of separate projects on the individual streams would have certainly been lower than the costs and impacts of the proposed project. How different the benefits have been is difficult to say unless clear facts are given. This statement again shows the bias of the ESIA agency for the project.

The bias of the ESIA agency in favour of large hydro projects is apparent when the ESIA (p 245, Vol. I) says that “there are a few advantages of hydroelectric power generation versus schemes/ projects based upon renewable energy sources” when the reality is exactly the opposite!

This section is in violation of the requirement to minimize displacement under OD 4.30, Paragraph 3 (a), and OP 4.12, Paragraph 2 (a).

No references given

The whole document makes so many statements and gives facts and figures without mentioning source for any of them. Thus it becomes impossible to give credibility to such statements or facts and difficult to verify or crosscheck.

Attempts to browbeat the affected people

A letter has been written by the affected persons’ representatives following a meeting held on November 13 2003 at Project office in Prini village in Kullu district in Himachal Pradesh. At the meeting, we understand IFC persons were present and where an attempt was made to divert the fundamental issues and in stead raise the non-issues of outsiders creating problems. An attempt was also made at the Nov 13 meeting to browbeat the affected people into signing on blank papers. The officials from the project authorities also tried in vain to convince the selected affected people called for the meeting that public consultation has already been done. This when basic documents about the project are yet to be given to the people. What came out very clearly is that there is little evidence of the project authorities and IFC (As IFC staff persons who also claim to know Hindi language were present at the meeting, it is natural to assume that all that transpired at the meeting was happening with their full knowledge and consent.) doing an honest attempt to understand or address the fundamental issues raised by the affected people.

Past record of the Project proponents

The RSWML that is supposed to take up the proposed ADP has constructed the 86 MW Malana HEP on another tributary of Beas River in the nearby area in Kulu district of Himachal Pradesh. If the experience of that project is any guide, the ADP project would lead to serious problems for affected people, the standard of construction of project components is likely to be so poor that there would be serious risk to the local people and environment, environmental norms are likely to be violated and project performance is likely to be far from optimum.

Malana Performance: Affected persons When SANDRP representative visited the community affected by the Malana project, the affected people narrated a story of how they were ill treated and cheated by the project authorities and how now they are living under constant threat of water leaking from the tunnels of the project. In fact, the day the project was inaugurated, a part of the reservoir subsided, leading to sudden release of water downstream of the dam, washing away trees and cattle in the downstream areas. Not only the project authority refused to accept responsibility for this incident, but in fact it refused to even

pay compensation for the damages caused to people's properties. As mentioned in the letter to the World Bank from the people to affected by the Allain Duhangan project, the people affected by Malana project were threatened and forced to sign voluntary retirement papers from the jobs they were initially given in the project as per promises they made initially.

Malana project performance: Dam crack, tunnel leakage As mentioned above, the quality of construction of the project components were so poor that on eve of the project inauguration (Oct 20, 2001), a part of the reservoir subsided, leading to sudden surge of flood wave downstream from the dam, leading to washing away of cattle and trees from the downstream river. Then in November 2003, about two years from the date of project commissioning, the tunnels of the projects started leaking, leading to stoppage of power production for a few days and continued low power generation in November and December 03. Both the incidents show the poor performance of the project authorities. The project is producing less than three hours of peaking power during the last one-month (upto Dec 18, 2003).

The fact that the project authorities had to keep the project shut down for some time (see PowerLine, a power industry magazine in India, Feb 2003 issue) as there were no takers for the power produced at the project.

Malana Performance on Public Consultation and Environment This is what a research done by the the Shastri Indo-Canadian Institute about public hearings in hydro projects in Kullu districts has to say about Malana project, "The public did not have access to the detailed EIA Project Report prior to the public hearings. In fact, the project proponents in the Malana case indicated to the study team that the documentation was "secret"... The study team found that in the cases of Parbati II and particularly Malana the EIA reports were very poorly written and difficult to follow. In the case of Malana it was not even possible to discern a clear project description." This clearly shows the standards of environment impact assessments and public participation in the Malana HEP.

In fact, in November 2001, it was discovered that the Malana project authorities had illegally felled 1400 trees spread over 61 Ha at Jari Village in Kullu District, without even informing or taking consent of the Union Forest Ministry or HP Forest Dept. Following a Newspaper Expose (Indian Express, November 8 2001), the project authorities were slapped a fine of Rs 1.23 crores as cost of tree felled. Faced with a police case and withdrawal of environmental sanction to the project, the project authorities promptly paid the fine (Indian Express, November 22 2001). However, on the basis of the newspaper reports, the Himachal Pradesh High Court took *suo motu* cognisance and issued notices to the company and the state government (Indian Express, November 28 2001). It is not known what happened to the court case. What is clear from all this is the scant respect or concern that the RSWML has for the environment. Its behaviour is not likely to be much different in case of ADP, if left to itself.

Project authorities insensitive to local people

➤ **Concern expressed at May 7 meeting** From the way project authorities reply to the concerns expressed by the affected people in May 7 meeting (see Annex C, Vol. I) it is clear that the project authorities are only trying to brow beat the affected people. For example when the people asked project authorities who gave the No Objection Certificate from their village and they would like to see the NOC, the project authorities gave no satisfactory answer nor showed the NOC or gave the date of NOC or told the villagers who has signed the NOC. The project authorities in stead used the govt officials to make the villagers backtrack from their demand.

➤ There are many signs that show that the project authorities are quite insensitive to the concerns of the local people. For example, ESIA says (p 174, Vol. I), "They (people of Jagatsukh) have already sent 2 GP (Gram Panchayat) resolutions to the project requesting them to come and discuss the project. They expressed their displeasure at not receiving any response from the project authorities. It was also mentioned that the GP might be willing to provide Panchayat land in stead of private land, which is to be acquired as it is the most productive land in the village."

➤ Project authorities trying to browbeat the people who are raising the concerns, e.g. at Nov. 13 meeting as described above.

From all these, it is clear that mere assurances of the project authorities about doing this or that is not good enough unless there are clearly defined, transparent and accountable institutional mechanism to ensure that such assurances are indeed implemented, failing which the project authorities are to pay clearly defined penalties.

HP Govt Approval still not given

In the meantime, we have learnt from media reports (see e.g. the attached report translated from Hindi) that Forest Minister of Himachal Pradesh has declared that the environmental clearance to the project is being reconsidered as the project would lead to cutting down of 1500 trees and he has appointed a three member committee to assess the environmental impacts of the project. In fact another report (also attached, translated from original Hindi) suggests that the project will lead to cutting down of over 4000 trees, as discovered by the committee set up by the state forest minister.

Thus the claim of the ESIA (Vol. 2, p 1) that the project has received clearances from the state govt is apparently not correct. This is further corroborated when ESIA says (p 293, Vol. I) that the project is still awaiting HP State Environment Protection and PCB consent to establish.

Work on the project started Even as the project authorities are yet to fulfil the basic WB norms and affected people are yet to get the first project document, the work on the project has already started. The Potato seed farm land has already been acquired over two years ago, thus already bringing the impact of the project on the people. Now even after the affected people wrote their first letter to the World Bank President on October 23, 2003, the project authorities have started work on the project in terms of road construction. This is to achieve two purposes. Firstly to show off to the affected people that their opinions and views have no place in the decision making, thus bringing pressure on the people to fall in line and accept the project. Secondly, this action is attempted to make the project a fait accompli and show at a latter date that now that so much money has already been spent, the project is a fait accompli. These tactics have been used by other WB funded dam projects in the past and the same seems to be attempted in case of ADP.

What occurred on Dec 6, 2003 (see some news report in the attachment) at the road construction should be an eye opener for everyone who is supporting the project or intending to finance it, particularly about the attitude of the project authorities towards the local people. That day, even as some women of the Prini Village, one of the villages affected by the project were working in nearby fields huge boulders suddenly started falling on them. They ran away with great difficulty and saved themselves. If some of the falling boulders had fallen on some of them, they could have been fatally injured. It turned out that the boulders were falling from the roads being constructed for the project. The villagers were so angry that they went to the project office and demanded that the work of the project be stopped. They also wrote a collective letter to the project authorities and another to the World Bank/ IFC demanding that work on the project be stopped as the project authorities do not have concern for minimum safety of the village people. It is clear from the incident that project authorities do not have any concern or system to take care of local people or environment (remember the claims of the project authorities that all the muck produced in the project will be safely and properly dumped at designated locations?) and the project authorities are not fit to take up such a project.

Conclusion

Under the circumstances, the ESIA done by ERM is far from adequate as it is fundamentally incomplete, full of unsupportable and contradictory statements, some of them clearly uninformed and false. Finally, it makes unfounded, biased statements in favour of the project and project authorities when and EIA report

is supposed to be an objective exercise to assess social and environmental impacts as part of a decision making tool of the project. Crucial pages and facts are missing. Unless a fresh ESIA is carried out and completed by a more credible and independent agency, in close participation with affected people, the ESIA documents are made available to people in the language they can understand and a public hearing supervised by independent panel gives support for the project, the World Bank/ IFC support for this project would seriously violate many key safeguard policies of the Bank as mentioned above. Under the current circumstances, the project would be neither be beneficial for the local people or for the state.

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Annexure:

TRANSLATED FROM ORIGINAL HINDI

Story: 1

FRONT PAGE NEWS:

Amar Ujala (a Hindi Daily newspaper of North India), Chandigarh edition, Nov 19 2003

TITLE: Hydropower project in docks due to Environment

By S Rajan Todaria

Shimla: The 192 MW Allain Duhangan Hydropower project to come up on Allain river near Manali seems to be getting into trouble. In view of the prospects of cutting down of over 1500 trees for the project, State Forest Minister Chandrakumar has refused to give green signal to the project. To study the environmental impacts of the project, the Forest minister has appointed a three-member committee headed by the Chief conservator of forest. Many hydropower projects in the state are in the docks over the issue of environment. These include big projects like the Parvati hydropower project and the Karcham Wangtoo hydropower project. The Forest minister has ordered review of environment aspects of the projects that have received environmental clearance. After the episode concerning Union minister of state for Environment and Forests Shri Dilipsingh Judev, the state forest minister Chandra Kumar has charged that the Union ministry of environment and forests has given environmental sanctions without thorough examination. He says that before giving environmental clearance the union ministry for environment and forest did not even feel the need to examine the ground situation. He says that till the CAT (Catchment Area Treatment) plan has provision for mitigation of all the environmental impacts of the project, no project will be given environmental clearance. Seeing this stance of the state Forest Minister, the govt and private companies involved in hydropower projects could be a frightened lot.

The 192 MW Allain Duhangan project near the village Prini (adopted by) of Prime Minister Atal Behari Vajpayee seems to be getting mired in trouble. Chandra Kumar has refused to give environmental clearance to the project. He has appointed a three member committee headed by the State Chief Conservator of Forest, who has been asked to give a report to the government on the environmental impacts of the project. According to highly placed sources in state forest ministry, about 1500 trees will have to be felled for the project, including important species like Deodar, Ban and Chir. According to sources seeing the prospects of cutting down of trees in large numbers, this committee has been set up.

However, many of the state projects are in doc due to environmental reasons. These include the central government schemes like Parvati HEP. To give sanction to this project, part of the area of (Greater) Himalayan National Park was denotified. According to Forest Department sources this is unacceptable action and denotifying the part of the national park for the hydropower project has made a joke of the environmental norms and legislations. The Forest minister himself has accepted that due to the Parvati Hydropower project the flora and fauna in the (Great) Himalayan National Park has been adversely affected.

The Forest Minister seems strict on the environmental issues. After the exposure of the episode concerning Union minister of state for Environment and forests, the forest minister has declared strict norms about environmental clearances. Raising strong objections to the action of giving whole sale environmental clearances for hydropower projects by the union ministry of environment and forests, he has said that before giving environmental clearance, the union ministry has not sent its team for field visit even once to assess the ground situation. Chandrakumar has said that even the projects that have been accorded environmental clearance will be re-examined. In the list of ongoing projects there are many projects like the Karcham Wangtoo project on the Ravi, Beas and Sutlej rivers that have violated the environmental norms. According to the Forest Minister the already completed projects have had serious impacts on the environment and the biodiversity. He said that due to these projects the breeding grounds of the various fish species have been destroyed. He said that due to the mining and hydropower projects biodiversity have been destroyed in a major way. Crores will be required for mitigating those impacts. He said that the central govt should mitigate the impacts on (Great) Himalayan National Park due to the Parvati HEP.

Chandra Kumar has said that the state govt will also change the prevailing form of CAT plans. He said that in future environmental clearance will be given only when CAT plan is prepared with all the details. In that not only

compensatory afforestation but mitigation of all the environmental impacts including those on forest life will have to be included.

(From a copy faxed from Manali by Paryavaran Evam Kalyan Sansthan, Jagatsukh, Manali.)

STORY: 2

Source: Amar Ujala (Hindi Daily Newspaper), November 28 2003

TITLE: People Protest the Allain Duhangan Project

Sub Title: New problems for the proponents waiting for environmental clearance

Staff Correspondent

Manali (Kulu): While the proponents of the Allain Duhangan Hydropower Project are trying to solve the problem of getting environmental clearance for the project, the banner of protests raised by the local people have added fresh hurdles for them.

Even as the work of the project has been affected due to the objections raised by the forest department against environmental clearance to the project due to cutting down of 1500 trees, the problems of the project proponents are increasing as the people of affected villages are raising united voice against the project. Dinesh Sharma, Director of the *Paryavaran Evam Kalyan Sansthan* (Environment and Welfare organisation) has said that due to the Allain Duhangan project the rare plants in the area will be destroyed. He has requested the World Bank should not give any financial aid to the project. Further raising the protest against the project, the colleagues of *Jan Vikas Sangh Evam Adhikar Manch* (Organisation for People's development and Rights) have started a house to house campaign in all the three affected villages. Dinesh Sharma and other colleagues have also started spreading the words through posters.

Village leader and social worker Jograj Sharma has told *Amar Ujala* that AD HEP will lead to destruction of environment in the peaceful and pious land of Kulu as the trees to be cut for the project are hundreds of years old. He said that even after ten years of getting environmental sanction, the local people have been given no information about the project, nor have they been taken into confidence. At the same time, the possibilities of destruction of rare plant species have gone up. People are also worried about the disposal of lakhs of tonnes of debris that the project will generate. The people of Jagatsukh will be deprived of their water source. The project has not taken care of the interests of the local people or those of the state. That is why the local people have started raising their voice against the project.

STORY 3

Source: Divya Himachal (Hindi Daily Newspaper)

Title: People wild at Duhangan Project

Staff Correspondent, Manali

Along with the state government, many of the organisations have started raising voice against the Allain Duhangan Hydropower Project. While the government has objected to environmental clearance to the project due to cutting down of large number of trees and destruction of environment, the people of affected villages have started raising voice against the project in self defence.

Dinesh Sharma, Director of *Paryavaran Evam Kalyan Sanstha* (Environment and Welfare Organisation), has requested the World Bank not to give any financial aid to this project. So that there is no adverse environmental impacts of the project and rare plant species can be saved. Dinesh Sharma had written to the state government to cancel the 192 MW project and give a sense of relief to the local people. He said

that no proper place has been demarcated for the lakhs of tonnes of debris that the project will generate. He said that if the water of Duhangan is diverted into a tunnel and taken to Prini, then the people of Jagatsukh will have to beg from door to door even for drinking water.

STORY 4

Source: *Divya Himachal* (Hindi Daily Newspaper) 28.11.03

TITLE: Tunnel of Malana project tunnel breaches at four places

Sub Title: Uncontrolled water release is threat to Chouki village

There is news that due to technical problems the tunnels of the controversial 86 MW Malana Hydropower Project is leaking. The project was claimed to have been completed in record time.

As per available information, the tunnel of the Malana Project is leaking from four places, due to which water is flowing out at high rates. It is being reported that at point no 2.5, 4.5 etc tunnel has reached and water is coming out. The company is trying in vain to put a patch of high cost cement at the leakage points. Due to this leakage the Chouki village is in danger. This fact was exposed when some workers were seen working on the power shaft line of the project. Moreover, Chhape Ram and Thakur Keshav Ram of Chouki village have said that the tunnel of the project has breached at many places. At point no 4.5, 2.5 and two other places the water is coming out of tunnels. People connected with project are trying to dewater the tunnel. According to sources the project managers are trying their best to hide this mishap. It is being said that next month the project will be stopped to repair the tunnels. For the time being the project managers are in deep trouble. At the same time, the Himachal Pradesh govt is also losing on royalties. When the senior most manager of the project was contacted, he said that there is no such problem. He said that while some problems keep coming in such projects, there is no leakage in any tunnel.

PS: Malana project is owned by the same company, namely Rajasthan Spinning & Weaving Mills Ltd, that is also the owner of the proposed Allain Duhangan project.

Story: 5

(Translated from Hindi Daily Newspaper)

TITLE: Breach in tunnel of Malana HEP**Question mark on future of the hastily completed project**

(Report from Manmohan Sharma/ Kullu)

DIVYA HIMACHAL-Mandi Kullu 031203

There is a big question mark over the future of under construction power projects in Himachal Pradesh due to the politicians of the state who in the name of realising the hydropower potential of the state are giving priority to their self-interest.

Nobody knows how much attention the local government is giving to state's interests while bowing before the private parties. Some people of the state are facing the consequences of bowing to the big companies of private sector. People are getting trapped in the game of the companies who are pushing their selfish interests by making a few persons happy. People do not know that even after selling their lands, houses and settling at new places, whose interests are they protecting. The controversial 86 MW Malana HEP is a living example of how the government has sacrificed the interests of the people for the benefits of some private companies. This is the same project about which the Dhumal (previous Chief Minister of Himachal Pradesh) had so much praise when he said that it would be a milestone in history such projects. By singing praise of completion of the project in record time the previous government had asked the officials and workers of the state electricity board to learn from this project. Possibly the govt wanted to show the rich owners of the company that the govt is very happy with them and the officials of state electricity board are incompetent.

The songs of praise by the previous state government in favour of the project started falling apart on the day of the inauguration of the project when a part of the reservoir had subsided. But the sweet relations of the project management with the Union Home Minister L K Advani of BJP were so strong that he inaugurated a damaged project. Such efforts were made to suppress this fact that the district administration did not speak a word. And how could they have spoken when there was such strong pressure on the district administration from the office of the Union Home Minister. It is noteworthy that cost of 86 MW project has been approximately Rs 400 crores and the project management company from Bhilwara group had completed the project in less than three years, but the project was inaugurated on Oct 20, 2001, a part of the reservoir of the project has subsided and there was a flood downstream of the project. In these floods, besides hundreds of trees, the cattle of the people had also been washed away. The concept was started to crack at the time of inauguration of the project, when a part of reservoir had slid. But the relation of project management was so good with Deputy PM L K Advani, he had inaugurated the fractured project. So many efforts have been done for compressing this issue that even the district authority did not spoke anything. There were so many heavy pressures from the office of Union Home Ministry. It is known that the total cost of the 86 MW Malana project was Rs 400 crore (Rs 4 billion) and the Bhilwara group had completed the project within two and half years. But when the project was inaugurated on 20th October 2001, one of the parts of the reservoir had been slid and Malana stream faced flood. Hundreds of trees had been affected and several animals have drowned by the flood on that time.

Apart from this, due to seepage from tunnel, Adit-II and surge shaft, Chauki village and several hectares of forestlands were under threat of flood. When the people had forgotten the two years old incident, now again after heavy seepage from a number places on the tunnel of the project, people of Chauki village are under threat. Due to heavy leakage the people are spending sleepless nights and are now blaming the government, but there is uncertainty as to who will listen to their voices. It is known that the previous govt, in order to protect its name, had ordered high level investigation by a committee regarding breaching of the reservoir. But now nobody knows if the investigation has been completed or not.

Story: 6

(Translated from Hindi Daily Newspaper)

TITLE: Diversion tunnel again leaks*(DIVYA HIMACHAL 021203)*

Bhuntar, 1 December (Kumar): The completion of the 86 MW Malana hydroelectric project was scheduled for completion in 5 years. But whereas usually the project authorities demand extra time for completion of the projects, the Malana project management have completed the project in two years and three quarters.

The project was completed in quick time but before the inauguration of the project, due to breach in the dam, water rushed out suddenly leading to loss of livestock. But the project authorities somehow suppressed the facts and managed the issue. The Union Home Minister L K Advani inaugurated the power generation from the project. Now again there is heavy leakage of water from various points of diversion tunnel. At one place it is leaking like stream. Due to this leak, not only the road leading to

the dam site is damaged, but the forests have also been damaged. An elderly person Tikam Ram Negi of Chauki village, whose 40 bighas of land was acquired for the project, said that though there is very little flow of water in Malana stream now but water is leaking from many spots. The situation would be horrible when summer and monsoon would come. Earlier when the dam was breached we faced huge losses. If the diversion tunnel breaches near the village, the whole village would be washed away. The villagers say that the project management has very badly cheated us. Now all the time we are living under the shadow of fear.

Story: 7

(Translated from Hindi Daily Newspaper)

TITLE: The loop holes of the Allain Duhangan project clearance exposed Four thousand trees to be axed

(Dhanesh Gautam/ Kullu)

DIVYA HIMACHAL

The under construction 192 MW Allain Duhangan Project would see not the axing of only 984 trees but 1634 big trees will be axed. 2680 small trees would also to be axed. It may be recalled that the previous govt has accorded clearance to the Allain Duhangan Project. The MoU has been signed for the project. It should be noted that the MoU has shown that 984 trees are to be axed for the project. However after formation of new govt in the state, in a review of the Allain Duhangan Project, the number of trees to be axed has come out to be 1634.

The 2680 small trees have also to be axed for the project. It is now clear that the concerned company would have to take additional permission for cutting of 650 big and 2680 small trees. It is strange that the Union and the previous State govts have blindly given permission to the company inspite of the huge loss to the environment that the project would bring. Not only this, it is now been said that if the previous govt had again come to power then the number of trees to be axed would have still been shown as 984, without mentioning 650 big and 2680 small trees in the record. It is to be noted that the number of trees axed in the 86 MW Malana project had been hugely more than the recorded figures. When this issue was raised then Malana Power Company of LMJ Bhilwara had to pay additional money for destroying more trees. Now environmentalists have started a campaign against the 192 MW Allain Duhangan project, to be built at Prini, said to be the village adopted by the Prime Minister. After a meeting last month when the High Powered Committee of the state govt under the chairmanship of T C Janata visited this place, realised that hardly 150 trees could be saved from the axe. When the forest conservator Veenit Kumar was asked, he accepted that that instead of 984 trees in Allain Duhangan Project, 1634 big and 2680 small trees would be axed. He said that 58 Ha of forestland had been demanded for the project but the govt has given permission for only 32 Ha of forestland. The Centre has already given clearance for cutting the trees to be axed under the project. But after the number of trees to be axed has gone up, the Himachal Pradesh Govt has constituted a three member committee, which would try that least number of trees should be axed.

Story: 8

(Translated from Hindi Daily Newspaper)

TITLE: Seeping water creates a stream Malana tunnel in bad shape, residents of Chauki living under terror

(*DIVYA HIMACHAL*)

(Dhanesh Gautam/ Kullu)

The residents of Chauki village are living under constant threat due to seepage of water from different places from the tunnel of the controversial Malana Hydro Electric Project, built in a record time during the previous BJP govt regime. When correspondents from Divya Himachal and Electronic Media visited the project site, they saw that the main tunnel of the project is leaking from different points. Due to this several hectares of forestland has also been affected. Due to lower water availability, the project is running only for four hours a day with the water stored during rest of the day. But due to seepage at different points from main tunnel residents of Chauki village are living under constant serious threat. Ahead of Chauki village, at the joint of surge shaft a big stream is flowing out. Large amount of water is also flowing out from the tunnel. From the hills by the side of the Chauki village water is leaking out from Surge Shaft. Ahead of this place near the dam site heavy seepage is coming from the adit tunnel used to remove the debris. The Malana Power Company is trying hard to stop the seepage. Not only this, the company has given contract for taking out the water with pipes. The residents of Chauki village stated that they are spending sleepless nights due to frequent leakage of water. Sher Singh from Chauki village stated that as soon as leakage goes up, villagers have to rush out for shelter at safer places. The Rs 400 crore (Rs 4 billion) project was completed in a record time. Today due to the technical faults, the govt is facing losses due to this project on the one hand and on the other hand the residents of Chauki village

are spending sleepless nights. The villagers have already given their lands to the project and now project is posing a threat to them. Water leaking out from surge shaft is the posing great threat to them and people are afraid it could end their lives.

The residents of Chauki village stated that when the water leaking so heavily in winter season, in monsoon it would be hard to survive for them. When correspondents visited the project office to know their response, nobody was present to answer the questions. It was stated that General Manager has gone to Delhi and Senior Manager is on official tour.

Story: 9

(Translated from Hindi Daily Newspaper)

TITLE: Demonstration against Allain Duhangan project**Rocks slide in Prini, women escaped narrowly**

(DIVYA HIMACHAL 071203)

(Rajesh Sharma/ Manali)

The situation at the office of the Allain Duhangan Project at Prini become sensitive today when the angry women, men and youths suddenly staged dharna in front of project office.

During the construction work of approach road for Allain Duhangan project, suddenly four-five big boulders fell and about six women of the village escaped narrowly. The women complained that due to sliding boulders even thiya (Dupatta of head) also flew away. Screaming women reached their homes after escaping from rocks and in the process they had to leave behind their materials. It should be noted that according to their routine the women were going to collect dry leaves and firewood from the forests. On reaching homes they narrated their horrible tale. Suddenly the news of big boulders falling on the village women spreads across the whole village. The women, men and youths gathered in front of the project office, performed dharna and demanded to stop the work. When the correspondent talked with the villagers they stated that the project work is not being done systematically. Heaps of debris seen all around is the perfect example of the same and in monsoon days this will strike the village and create extreme danger.

A representative group from Prini village under the leadership of ex-pradhan of Prini Panchayat, Karmchand Thakur met from agriculture minister Rajkrishna Gaud at circle office Manali. The Agriculture Minister took their complaints very seriously and talked with higher project officials and ordered to take steps for safety of the villagers.

Story: 10

(Translated from Hindi Daily Newspaper)

Demonstration against Project Officer

(PUNJAB KESHARI 071203)

Naggar, 6 December (NITIN): Today the residents of Prini village gathered and staged dharna in front of Allain Duhangan project office. Yesterday six women of Prini village, namely Droupadi Devi, Budhi Devi, Ishra Devi, Jhanshi Devi, Hira Devi and Himi Devi had gone to the forest to collect dry leaves and firewood. When the women were collecting grass and firewood, some rocks slipped down from the debris, which was collected by the project labourers and with great difficulty the women could save themselves. Frightened women came back to their village empty handed, leaving behind their materials. Reacting strongly to the incidents, the villagers demonstrated before the Allain Duhangan project office. The state Agriculture Minister directed the higher project officials and administrative officials to work keeping in mind the well being of the villagers. He stated that the rights and wishes of the villagers should not be sidelined.