December 2005

Questions to SIDA/ Evaluators

SANDRP critique of SIDA's evaluation of URI HEP

In Jammu & Kashmir, India

In November 2005, Draft report of the SIDA's evaluation of the 480 MW URI HEP in J&K in North India, part funded by SIDA and commissioned in 1997, became available to SANDRP. Following are questions that arise from this evaluation and this is being sent to SIDA with a view to getting their response. The questions are divided into two sections: One set of questions if for SIDA and another set is for the evaluators. We request SIDA to share the questions with the evaluators and send us the respective responses to SANDRP at cwaterp@vsnl.com or ht.sandrp@gmail.com. SANDRP sent this file with a covering letter to SIDA on December 16, 2005 with a request for response and also onward transmission to the consultants with a request for response from them too.

Questions to SIDA

1. What did SIDA do to make this evaluation a participatory exercise, as recommended in WCD report, particularly when SIDA/ Swedish govt is now intending/ agreeing to adopt WCD recommendations into its policies? Was it not a lost opportunity? Particularly when participatory or otherwise post facto evaluations are so few?

2. What is the guarantee of Scott Wilson's evaluation to be a truly independent evaluation? What was the process through which Scot Wilson was selected?

3. What would SIDA do ensure that the evaluation and related base documents are easily made available to civil society in India, so that everyone can get to know about the lessons learnt from the project and also see if how good and independent the evaluation has been? Should not the basic documents and the evaluation report be put on the website and information about the same is widely disseminated? (SANDRP would be happy to help disseminate the information about the review and existence of the document on a website through *Dams, Rivers & People* that SANDRP publishes.)

4. What was the SIDA policy on environment, R&R, public consultation and Information sharing related policies when SIDA approved the loan/ aid to the project in 1989? Why has the evaluator not assessed the project compliance with such policies?

5. What would SIDA do to address the outstanding issues in the project, some of which comes out in the evaluation (e.g. downstream releases, proper catchment area treatment and management in perpetuity, making the local people beneficiary in the project, etc)? What is SIDA's response to the recommendations of the evaluation, e.g. (page 3-49) conducting further research on fish pass, (page 3-53) declaration of the Uri area as Aquatic Biodiversity Management Area, and others?

6. How will SIDA ensure this is achieved in any future projects?

7. Will SIDA say, blacklist the responsible organisations or otherwise make it clear that promises of such organizations responsible for compliance cannot be believed? Who were the organizations responsible for non compliance? What other steps SIDA intends to take to ensure compliance?

8. It is strange that the meeting called in Swedish embassy on Oct 20, 2005 did not have any participant except the companies concerned, though it is claimed that all the stake holders were present. Does this now show the utter inability of the Swedish govt to give any place to civil society representatives in such an evaluation?

Questions to Evaluators

1 **Assumption about Dry Cycles** The reason you (the evaluators) have given for lower than expected generation is dry cycle. But for the years considered (1997-2005), India has experienced relatively better monsoons as can be seen from the figures below, with four of the nine years having average or above average rainfall and three more years having over 90% of average rainfall. Even in case of J&K, the cycle is not particularly bad with three years almost average or above average rainfall and three more years having 90% or above that. Moreover, it should be noted that Jhelum (on which Uri project is situated) is a snow fed river and the river depends on snow fall and snow melt for substantial part of the flow.

Year	**Rainfall compared to normal rainfall – All India**	**Rainfall compared to normal rainfall – J&K**
1997	**102 %**	**124%**
1998	**105 %**	85%
1999	96 %	92%
2000	92 %	**99 %**
2001	91 %	**106 %**
2002	81 %	89 %
2003	**105 %**	90 %
2004	87 %	75 %
2005	**100 %**	88 %

Source: India Metrological Department website www.imd.gov.in, various dates

It seems the evaluator has not really gone into the depth of the issue before making the assertion about dry years and it seems to have been made more to justify the project.

2. **Lower than assumed Power Generation** On page 3-5 it is stated: It was expected to generate at full output almost continuously for five months of the year (April to August) with production falling to lower levels in the winter months. The "Firm" (90% reliable) output was estimated at 2663 GWh/yr, and the average (50% reliable) output was estimated at 3080 GWh/yr."

Page 3-6: "Since the start of commercial operation NHPC has recorded the generation from the project as follows:

Financial Year	**Generation GWh/ yr**	**% of design average energy**
1997-98	2178.5	71
1998-99	2575.3	84
1999-2000	1948.9	63
2000-01	1780.6	58
2001-02	2088.3	68
2002-03	2453.7	80
2003-04	2873.5	93
2004-05	2206.7	72
Average	**2263.2**	**73**

A shown in the Table, the energy production from the scheme has not matched the anticipated levels; the average generation in the eight years since commissioning has been 2263 GWh/yr. In only one year (2003/04) has the 90% reliable level (representing a 1 in 10 year drought) been achieved. The production is around 73.5% of the design average production, and around 85% of the design 90% dependable production. [Even in the current year, that is 2005-6, the generation has been below the design and average figures till Oct end, the figures being available only till this period.] **It is clear that URI is generating about 26.5% less than the projected production rate. This is a huge gap between the projected and actual benefits. The power generation figure would go down further if NHPC were to adhere to the minimum flow required, which it has not been adhering to.**

The conclusion of the Evaluators about this huge under performance is: "we conclude that the low output is primarily due to low flows in the Jhelum River. We initially considered it likely that the long-term average flow had been overestimated. However we have now concluded that it is more likely that the last eight years constitute an unusual dry period, and that the long-term energy production will be close to the design estimates." If we look at the India monsoon figures or J&K monsoon figures, we see that this conclusion is not warranted, and it seems the evaluators have reached this conclusions without adequate support of facts and the only plausible reason for such a conclusion seems to that they are attempting to paint a picture that is more rosy than what is the reality.

3. **No month wise analysis of power generation** The evaluation does not provide an analysis as to what was the projected month wise power generation and what was the actual generation. This is very important part of performance evaluation. For example, monthly generation figures available for five years (2000-01 to 2004-05) show that in at least two months (July and August, the peak production months), the actual generation did not reach the designed generation in any of these five years.

4. **No peaking power benefit** It is strange that the evaluation does assess if the URI project is providing peaking power benefit. Hydropower projects in India are justified saying that they provide peaking power to the grid. However, it seems that URI does not provide this advantage. (NHPC petition to CERC in 2004-5 said that URI is a non peaking station.)

5. **Mohra HEP generation destroyed by URI** A 9 MW Mohra (wrongly stated on page 3-48 that it is a 7 MW HEP) hydro power project existing on the Jhelum river since June-July 1962 has become practically defunct as URI diverts all the water from upstream of this project. Salient features of Mohra HEP:

> Diversion level: 1460 m (note that FSL of URI is 1491 and head is 252 m, which means that Mohra is situated in the Jhelum river stretch downstream of the diversion for the URI and upstream of the point where the water from URI returns back to Jhelum), Head: 122 m, Annual generation: 70 MU, as per CEA Report on Small Hydro Potential in India.

Available figures of generation from Mohra suggests that it has generated no power in 2000-1, 2001-2, 2003-4 and 2005-6 (till Oct '05). In 2002-3 it generated 2 MU and in 2004-5 it generated 1.1 MU. This clearly shows that URI has destroyed the potential of Mohra HEP, whose effective capacity remains at 9 MW in 2005, as per the Northern Region Load Dispatch Centre (www.nrldc.org) report for 2004-5. The evaluator should have noted this and URI in fact should have compensated J&K for this loss of power.

6. **Inadequate Hydrological Appraisal** One would have expected the report to make it clear that the hydrological appraisal of the project was far from adequate and a 480 MW project was not viable. The evaluation does not do proper analysis of the hydrological assumptions. It does say in the recommendations, "It is recommended that analysis of the hydrology should be supported under the intervention for such projects", but that is all the more reason to have an analysis of the hydrology. If the report had to say such a self evident basic requirement as first recommendation, than it is clear that the hydrological appraisal was inadequate and the project is not viable one.

7. **Very High Capital costs** The completion cost of the project as stated by evaluator is Rs 3388 crores on project completion. For a 480 MW project this comes to Rs 7.06 crores per MW, which very high even at current (2005 costs). Why has the project cost been so high is not properly investigated or explained by the evaluator.

The analysis in the evaluation on page 3-60 shows that URI is costlier than the projects constructed around that date in India and elsewhere. The reasons given for higher cost do not justify it as the same reasons apply to all the other hydropower projects in India. This again shows the bias of the evaluator.

8. **Corruption Charges not investigated** Linked with the issue of abnormally high capital cost of the project is issue of corruption. There have been reports about specific corruption in this specific project, attributed to the India's highest investigating agency, namely CBI (Central Bureau of Investigation) in a case in the India's highest court that is Supreme Court of India, as given in a media report below:

- "According to the letter, Lal (former CBI investigator) had initiated a scrutiny of power projects like Kawas, **Uri** and Dulhasti, for which S K Jain had allegedly given kickbacks to politicians and a quid pro quo had been established by the CBI. It was his belief that for these and other projects likes the Chamera power project in Himachal Pradesh, the country was paying much more than the world average. Keeping in view the need for such extended investigation, he had already called for the files of the power projects and had identified experts who could help the CBI scrutinise the contracts. However, in July 1995, he was transferred to the CBI's Northern zone." (Highlight added, http://www.financialexpress.com/ie/daily/19970511/13150373.html)

Swedish authorities should have investigated these charges, which were never investigated. Why did the evaluator not look into these issues? Particularly when SIDA claims that it has zero tolerance for corruption?

9. **98.6% cost escalation** The final project cost has gone through a 96.6 % escalation. This is indeed very high. It is not sufficient to say that it is only because of exchange rate changes. The fact is that for the Indian public, the cost has doubled and this certainly needed more investigation than such a statement.

10. **18 months time over run** As is clear from the dates given, the project has suffered 18 months delay. Again the evaluator has tried to explain it away by saying this is due to security reasons, delay in land acquisition, delay in explosives license, etc. But the point is that for the Indian pubic, this means that the planned capacity was not available and in spite of incurring all the costs, the benefits remained unavailable for so long beyond the planned date completion date.

And yet the evaluation claims (p 2-7), "The completion of the Uri Project within the contract period (other than the awarded extension of time) has given NHPC and others in the hydropower industry the confidence that projects can be completed in a much shorter period, and a number of recent projects, such as Chamera II (NHPC) and Malana (private) have matched or bettered this timescale." This claim is not only factually incorrect about URI, but is also far from accurate about the other projects mentioned in the quote above, where the situation is quite different. One expects such independent evaluator to be more careful about facts before making such statements.

11. **Availability claims are wrong** The evaluation claims, "The availability of the station to generate with the flow available in the Jhelum is typically more than 99%". On page 3-6/7 it is stated: "Some loss of production will have been caused by failure of equipment at the power station, such as the oil-filled cables and the main transformers. However according to the current measure by which such losses are judged – the Capacity Index – such loss of energy should be around 1%, or less than 30 GWh/yr."

This is clearly a false claim. For example, the project availability was 92.49% in 2002-3 and 93.06% in 2003-4 (see the reports of the Central Electricity Authority of Govt of India on Performance of Hydropower stations for these respective years). [These are the only two years for which the official availability figures are available in public domain.] These figures show how wrong the claim of the evaluator is. Why does the evaluator have to make such false claims?

12. **100 MU/ year Transmission Line losses** The evaluation describes the problems associated with the transmission of the electricity generated at URI HEP and says, "NHPC estimate that they have lost at least 100 GWh of generation on average per year due to the problems with the 220 kV Pampore-Kishenpur line". This is a huge loss. This should be accounted as poor performance of the project, for, what is the use of the power generated if it does not reach the consumer? It is not good enough for the evaluator to claim that the Swedish companies were not responsible for the transmission line. The point is that the project did not deliver these benefits due to lack of completion of all the necessary components and this must be counted in any project evaluation.

13. **R&R of those affected by Transmission Line still outstanding** As accepted by the Evaluation (Page 4-8): "This pressure resulted in land being acquired and payments of compensation being made in less time than would normally be available for resolving conflicts with landowners and other stakeholders.

Regrettably, some compensation claims remain sources of conflict and unresolved as late as October 2005." **So compensation issues remain unresolved over eight years after completion of the project. This state of affairs is clearly shocking and not acceptable.** SIDA may say that it did fund the transmission line and hence is not responsible for this state of affairs, but this is rather strange explanation. As the evaluation says, transmission lines are integral part of such projects, without which the project cannot function. The project itself became possible only because of SIDA funding, as evaluator says. Hence SIDA becomes responsible for all the injustices and violations that happen for any component of the project. Unfortunately, the evaluation does not give any further details of the pending compensation issues, nor makes it clear that SIDA should own responsibility for this and what should be done to settle the outstanding claims.

14. **Displacement and Rehabilitation: SIDA sanctioned the project even without a R&R Plan**

On page 2-19: Families affected due to the land acquisition:

Houses	30
Houses and land	47
Land only	169
Total number of family properties affected	**246**

Table: Properties Affected by Uri Hydroelectric Scheme

Beside the above, a mosque and custodian land were also affected. The villages affected due to land required for the Project were Buniyar, Gingle, Pringal, Nowagran, Rajarwani, Bandi, Lagama, Mohura, Gantamulla, Helad Peernia, Bela Salamabad and Chahal.

"A "parallel road" was constructed during the project for the transportation of materials to the was constructed dur work site. This road runs parallel to national highway NH1A, but on the side of the Jhelum River, whereas NH1A is on the south side. The aim was to keep much of the heavy construction traffic off the main highway, which is the traditional route from Muzzafrabad to Srinagar, and to facilitate the movement of construction vehicles. Around 20 hectares of land was acquired for the road construction. The total number of families affected was 225, as follows:

Houses / shops	44
Land	181
Total number of family properties affected	225

Table: Properties Affected by Parallel Road Construction"

"The "Rehabilitation Plan of Uri HE Project" was prepared by NHPC in 1992 after completion of the socio-economic survey; the document was prepared by the ex-Revenue Department appointee. The plan was prepared while the land acquisition process was already in progress." How could SIDA approve funding for a project in 1989 when the rehabilitation plan was not prepared? How can the land be acquired before having a R&R plan made through participatory process. And most shockingly, there is not even a mention about any consultation about even R&R plan. Is this acceptable state of affairs?

On page 2-20: "Neither the Monitoring Team nor the Panel of International Experts included a specialist in sociology or rehabilitation."

On page 4-9 the evaluation accepts that paying cash compensation for land "has led to a loss of livelihood and reduced standard of living." One would have expected that the evaluator would suggest that this injustice must be set right and those thus affected should be helped to regain their standard of living by proving them land for land policy as the evaluator has suggested this has greater chance of success for the affected. Unfortunately, the evaluator has not made the recommendation.

Similarly, as the evaluator says (page 4-9/10): “Contractor undertook to employ at least one member from each of the Project Affected Families.” However, this undertaking has not been fulfilled.

Thus what we find on R&R front is a very shocking state of affairs: SIDA sanctioned funding for the project even without an R&R plan, without any consultation with the local people about the R&R plan, SIDA then did not know the full extent of social impacts of the project, R&R plan did not include land for land provision, promises were made by Swedish contractor, but not fulfilled till date, It is clear that the project has lead to impoverishment of the local people.

15. **URI did not replace thermal generation or fuel wood use** The statement on page III-IV of executive summary, “The project has largely achieved its objective in displacing thermal power generation. Although the Northern Grid has been short of capacity for most of the last eight years, and hence none of the existing thermal capacity has been displaced, the energy from the Uri project can be regarded as having displaced either thermal projects which did not have to be built, or less efficient and more polluting forms of primary energy use, such as paraffin or wood fuel.” is firstly self contradictory and secondly unfounded and misleading. There is no evidence to show if URI power has helped replace use of paraffin or fuel wood.

16. **NO Downstream flows: No basis for 6 cumecs as sufficient minimum downstream flow requirement** The project mandated 6 cumecs of minimum flow downstream from the diversion, but there is no basis for such a figure. Moreover this minimum flow has not been ensured.

The following quotes are revealing:

- Page 2-17: “The appraisal report pointed out that the minimum flow at the Uri barrage site was 36 m3/s in 1956 and that a release of this magnitude would have made the project unviable, and a release of 10 m3/s would have significantly reduced the project benefits from the standpoint of power economics. Detrimental impacts on the aquatic ecosystem were foreseen but were not ascribed any value. Indeed, with the limited data available to the appraisal mission in 1989, no robust evaluation could have been made.”
- Page 2-17 “It appears that the Department of Fisheries of J&K was not involved. Field surveys… taxonomic studies in Sweden… They led to a recommendation for minimum compensation flow releases at the Uri barrage of 5-10 m3/s for the downstream bypassed channel.” And “It is noted that no minimum flow was stipulated. No references to recommended flows have been noted in POE or Monitoring Team reports; these reports were awaiting final results of the aquatic impact study. In the event, no minimum flow rates were stated by the POE” (POE: Panel of Experts). And “Thus in terms of compensation flow for the Jhelum bypassed channel, from the toe of Uri barrage to the tailwater discharge portal, engineering provision is made for a maximum release of about 6 m3/s through the fish pass and lure water conduit. Any additional release would require opening a spillway gate. In this 2005 review, no daily records of fish pass and lure water flows have been seen.”
- Page 3-7: “It appears that the energy production estimates have not been revised to take account of the flow in the fish pass and compensation releases. If the fish pass and compensation flow results in the loss of 5 cumecs of usable water for six months per year, this could represent a loss of generation of some 50 GWh/yr. However since the main use of the fish pass is in the Spring months, when there is a surplus of flow over the generation capacity, it is believed the generation loss will be less than this figure.”
- Page 3-40: “No records of tributary or Jhelum flows are available for this reach since Uri power generation began in 1997.”
- Page 3-41: “Responsibility for determining compensation flow rates at Uri barrage for the 11 km bypassed channel – **usually the principal issue in any barrage or dam project environmental management plan** – was divided. Reading of POE and Monitoring Team reports indicates that **neither NHPC nor the POE would accept releases of minimum flows recommended** by the Institute of Freshwater Research which had been commissioned by Sida to carry out an aquatic impact assessment study. IFR recommended releases of 5 – 10 m3/s in its report dated September 1995. The POE, which had no specialist in aquatic ecology, then looked to NHPC to continue water quality monitoring in low and

high flow conditions and "prepare and implement water pollution control measures, if necessary" (emphasis added).

- It is clear from the description on page 3-42 that the Jhelum river water is also used for irrigation (to Rampur as mentioned on page 3-51) in the dried up 11 km stretch, and yet there is no mention in the evaluation as to how this has been affected due to the URI project. This stretch of the river is also facing increased pollution loads (e.g. from "the discharge of foul effluents from septic tanks at NHPC colonies at Uranbau and Gingle" see page 3-51) in absence of freshwater flows and would also impact the local people. And yet the evaluation could not assess this impact, saying that due to earthquake this could not be done. This also shows how **the assessment is incomplete**.
- Page 3-50: "At a general level, some maintain that the minimum flow release into the 11 km long bypassed channel should not be less than the minimum recorded flow in the record (36 m3/s in 1956). It was reported before construction took place that constant release of this flow rate would make the project unviable (Sida, 1989)."

If Jhelum received minimum flow of 36 cumecs in recorded past, than minimum downstream flow of that quantity in addition to the required for irrigation, drinking water, groundwater recharge for the downstream stretch should have been maintained. That was not done.

Alternatively, if the channel historically received between 236 and 88 cumecs in non monsoon months, than it is imperative that at least 15% of average flow (even if we take the 88 cumecs, the lower band of the average flow figure given) it would mean the project should have mandated continuous flow of at least 13.2 cumecs. [15% is the norm for decided by the adjacent state of Himachal Pradesh in North India for minimum flow in the downstream areas.] It is also shocking to see that NHPC is not adhering to follow even the mandated flow releases, and even after these violations, the project is not able to generate designed power. If NHPC were to follow the actually required minimum releases, than the power generation figure would go down further.

This is deplorable state of affairs and shows that SIDA failed to ensure this minimum monitoring of the water flow in the 11 km stretch of Jhelum river dried up due to the URI project. This also reflects very poorly on NHPC. The fact that the evaluator does not make it necessary to make any appropriate recommendation reflects poorly on the evaluation.

What is further shocking is that the evaluator does not state what was the standard for downstream releases in Sweden in 1989 (when the project funding was sanctioned) and what was the SIDA policy than.

17. **Muck disposal assessment: Crucial omission** This is a very important among the social and environmental measures that one would like to see the evaluation to have gone into, but it has not. How much muck was produced, where and how it was supposed to be disposed and how it was actually displaced and impacts thereof are some questions that one expects the evaluation to look into.

18. **Local populations did not benefit from the project** Uri is a NHPC project and NHPC is a central govt organization and power generated by NHPC mostly feeds the northern or national grid, even as J&K grid remains starved of power. The evaluation should have noted this, in stead of claiming that the project has benefited the local people. This point is important as it has been repeatedly shown (as also shown by WCD) that such big hydropower projects bring adverse impacts to the local people and whatever little benefits are generated go elsewhere, thus further imbalances the issues of equity (equality).

This conclusion gets strength when we read the second recommendation, "Since it is generally considered appropriate that local people should benefit from improved electricity supplies when a major power project is constructed, consideration should be given to additional support to the local electrical infrastructure and institutions." [This is further strengthened by the following recommendation: "The employment of Project Affected Peoples could be given increased priority in the long-term operation of projects as well as during construction."]

It is clear that the project area already had access to electricity much before URI project came into existence, that J&K state is unable to buy much power from URI due to high cost and that the situation of availability of power in J&K had improved since mid 1990s for reasons other than URI. Thus URI has played very limited role as far as power situation in J&K is concerned.

19. **Customer Suited lessons?** The Lesson that is mentioned on page V of executive summary: "Lessons learned from social and environmental appraisals of the Uri project include ones that need to be replicated in future projects. These are listed in the report. The principal lesson learned concerning adverse impacts is that projects should not now be funded unless they are supported, at the time of Sida appraisal, by comprehensive and completed social and environmental impact assessments and environmental monitoring, mitigation and resettlement plans. In particular, the determination of constant or variable compensation flows should be determined and agreed before giving support to river-related projects". This is a very weak statement. However, this kind of recommendation reflects very badly on the Uri Project. Today EIA and EMP are required under even Indian law and determination of minimum flow does not help if there are teeth in the implementation process, as is clear from the current case. The evaluator has clearly given very weak recommendations, basically to suit the image of SIDA. An independent consultant would have suggested amendments for the project under view. Such an evaluator would have also suggested stronger recommendations about participatory processes, about quality and content of EIA and EMP and about mechanisms to ensure that what is promised is actually practiced. We find none of these in the evaluation. This does not show that the report is independent.

20. **No value for participation or options assessment** It is appalling that the evaluation has no assessment about participatory of the people and society in the project decision and its implementation, or recommendation to make the decisions about such projects and implementation thereafter participatory and after proper options assessment. On the contrary the report goes on to recommend that such projects should be funded in future! This clearly exposes the lack of independence of the evaluator.

21. **Total lack of public consultations** Uri project did not have any public consultation either with the local communicates or among the wider public. Nor does the evaluator even mention this. One of the most important and elaborate recommendation of the WCD has been how to gain public acceptance for a project through consultations from the earliest stage of needs assessment, options assessment, planning and decision making. Uri developers and funders did not bother to even inform the local people in their language what this project is about, what are the various costs, benefits and impact and who will pay for all these, etc. This itself is a shocking state of affairs. Evaluator's not mentioning this is even more deplorable situation.

22. **More than doubled cost of Power**

On Page 3-7: "A financial and economic evaluation of the project was carried out on behalf of Sida in 1989, as presented in the Appraisal Report of June 1989. In this appraisal it was concluded that the expected tariff of 1.14 INR/ kWh in 1995/96 would be adequate to provide NHPC with a "fairly comfortable net income", after covering its costs."

The sale rate for electricity from Uri HEP in selected years is given below from in Table 3.5 in the evaluation report. It is clear that the cost of power is more than double the figure given in the appraisal. It is strange that the evaluation gives the cost of power only for selected years. It should have given this for all the years. We would like to request evaluation to do this in the final report.

Financial Year	**Regulated Sale Price of Electricity from Uri HEP** (INR/ kWh)
1999-2000	2.46
2000-2001	2.01
2003-2004	2.4377
2005-2006	2.5091

"At these price levels NHPC has been able to sell the electricity produced to consumers on the Northern Grid. Only J&K has shown a reluctance to purchase more than its free 12% allocation, unless forced to do so by high winter demand. Hence the financial justification for the project still holds, and the project provides a significant income for NHPC."

On page 3-8: "Comparison of the Uri-II 2005-06 tariff with the tariff for other NHPC hydroelectric schemes is shown in Table 3.6.

Project Name	**Installed Capacity**	**Year of Completion**	**Tariff (INR/kWh)**
Uri-I (Stage 1)	**480 MW**	**1997**	**2.5091**
Baira Siul	198 MW	1981	0.420
Lotak	105 MW	1992	0.570
Tanakpur	120 MW	1992	1.2022
Chamera-I	540 MW	1994	2.1120
Salal-II	345 MW	1993-5	0.4156
Rangit	60 MW	1999	2.11
Parbati (forecast)	*800 MW*	*2009*	*2.47*

Source: NHPC Project Details

"The original economic justification for the project was more equivocal, although it concluded that on the basis of a least cost thermal alternative analysis, the Uri project provided an economic rate of return (EIRR) of 13.65%, and a benefit-cost ratio of 1.27 at 10% discount rate."

Few conclusions can be easily drawn from the above figures:

- The cost of power from Uri project is more than double the projected costs even over eight years after project completion.
- The cost is so high that J&K, the state in which the project lies is unable to buy this power.
- The cost is clearly higher than the cost of power from projects that have been completed before, with and after the Uri project.
- The higher cost is also not justified from the fact that Uri does not provide peaking power.

And yet there is little the evaluation has to show why this is the case. The main reason is that the capital cost of the project was much higher than comparable projects and that continues to make power from Uri project so high.

23. **Affected people are worse off**

It is stated on page 3-20: "A certain number of Project Affected Persons (PAPs) attempted to invest their compensation payments in commercial ventures, such as shops, but several of these have failed; hence these people have lost the potential for improved livelihood. It appears that some of the PAPs are worse off compared with their standard of living before they were relocated: some of them are now without assured employment and others are not able to continue their businesses due to lack of demand." And as if to rub salt into the wounds, the evaluator claims on page 3-21: "The loss of income to the local community will have been partly compensated by the money entering the local community as a result of the great Army presence in the region." This is very appalling state of affairs indeed. More shocking is the fact that even after this, the evaluator has no recommendation to offer as to how to correct this injustice. It may be remembered that Uri had relatively small number of affected population. If proper R&R of such a small number of affected could not be made possible, how can there be any justification for projects that have larger social impacts? And yet the evaluation goes on to conclude that more such projects could be funded in future.

24. **Supply of obsolete equipments**

As noted by review (page 3-23-24), some equipment (e.g. RALZB protection relay and PLC [power line carrier communications system] equipment) supplied under the contract for the project were obsolete equipments for which test kits or spares are not available. This is serious flaw of the Swedish suppliers and the SIDA, but the review suggests no remedy. It could have suggested that the supplier should be made to replace these with the latest equipments and also pay the penalty for the problems created so far due to the supply of obsolete equipments.

25. **Fishpass has failed?**

Following quotes are revealing about the performance of fish pass provided on Uri HEP.

- Page 3-43: "However, a number of factors indicate the overall use of the Uri fish pass is at times, perhaps most of the time, poor in relation to the numbers of fish attempting to move upstream."
- Page 3-45: "Every fish pass design manual emphasises the importance of creating good approach conditions to fish passes. Although a fish pass itself may be excellent once fish have entered it, it can be useless or almost useless if most fish cannot find and enter it. Because the approach conditions at Uri barrage appear poor in high flows, Professor Yousuf has advocated creation of pool type conditions, similar to conditions observed at Lower Jhelum (NHPC Research Project, 1999). From the above observations, and for illustrative purposes, we might tentatively conclude that when Jhelum flows are greater than 400 m3/s (when spillway flows are typically about 180 m3/s, after diversions of flows to the Uri headrace tunnel) do not provide conducive approach conditions to the Uri fish pass and that flows less than this are more favourable – though not as favourable as they might be with pool conditions at the toe of the barrage. Examination of the 270 10-day periods in April, May and June in the 30-year record (Annex E) indicates that 400 m3/s is exceeded for three quarters of the time in these months." **That means for 75% of the time during periods when fish pass is most relevant, conditions are Uri fish pass are not favorable for fish approach. A clear indication of overwhelming failure of the fish pass.**
- Page 3-48: "The opportunity for creating optimum approach conditions at the toe of the fish pass and barrage structure (similar to Lower Jhelum) appears not to have been foreseen at the time of design and construction". This is clearly a failure of the contractors, NHPC and the SIDA.

Incomplete Assessment The evaluation accepts (p 3-49) that they could not assess if fish moving downwards along Jhelum are getting killed by the movement through the turbines.

The evaluation accepts that the fish catch from Jhelum seems to have declined by a factor of 5 to 15 (p 3-49) after the Uri and Lower Jhelum project being commissioned, even though both have fish passes. **What is most appalling is that the evaluation has no assessment as to how many people are affected due to this and what has been done to compensate the losses.**

The evaluation repeatedly says that (e.g. say page 4-6) there is no attempt to assess the effectiveness of the fish passes at Uri, Jehlum or Buniyar Nala (see below). This is a serious lacunae and shows how incomplete was SIDA's and NHPC's appraisal of the environmental issues and mitigation thereof.

26. **Biniyar Nala Fish pass absent for ten years: The case of neglect by SADA and NHPC** As the evaluation says on page 3-52-53, the contractors made a significant change during the construction of the project when in place of constructing siphon where the Biniyar Nala crosses the URI tunnel about a km downstream from diversion, they constructed a culvert. Both the contractors and the NHPC did not realize that this would create a barrier for the fish moving upstream on the Buniyar Nala. "In the event, no mitigation was carried out for ten years. A fish pass was finally constructed by NHPC during the second half of 2004" (Page 3-52).

NHPC's callousness is further exposed when the evaluation says (page 3-53): "Staff of Fisheries Department at Baramulla visited the new fish pass for the first time in October 2005. They are concerned that there is no known management plan for its protection (against poaching) and maintenance (removal of gravel, trash, repairs) so far as the Fisheries Department is concerned."

Even after this state of affairs, the evaluation has not recommendation to make to correct this situation.

27. **Grossly wrong claims**

- **Factually incorrect** Page 3-3: "Hydro-development in India currently constitutes about 30% of the total power generation from thermal (coal, lignite, gas), hydro (storage and run-of –river) schemes." **This is a factually incorrect statement.** In 2004-5, for example, according to CEA (Central Electricity Authority, the statutory body of govt of India, www.cea.nic.in) figures, total generation in India from thermal stations was 486 075.48 GWhrs and from Hydro station was 84 495.30 GWhrs, thus hydro generation constituting 14.8% of the total of the two.

- **False claims on behalf of NHPC** Page 3-16: It is strange to find the evaluator claiming that all the improvements in the NHPC performance between 1997-8 and 2005 is due to URI, without mentioning as to which other projects have been added in the same period and what has been the contribution from those. It is also strange that the evaluator has made this claim without looking at the social, environmental, human rights, economic or financial track record of NHPC. It is indeed very dangerous on the part of SIDA and the evaluator to make such claims as then it would mean that SIDA is responsible for the track record of the NHPC as it helped NHPC reached this stage as claimed by SIDA report.

- **Unwarranted certificate to NHPC** The general certificate given by the evaluators to NHPC at several places (e.g. page 3-40: "It reflects well on NHPC's commitment to protect the environment which is proclaimed on various notice boards at Gingle and elsewhere.") is totally unwarranted, unfounded and contrary to generally well known deplorable track record of NHPC on social and environmental aspects. This is shows rather irresponsible kind of evaluation and it is not clear why the evaluators made such a statement. How can notice boards be sufficient to ascertain commitment to protect the environment?

When it comes to looking critically at NHPC's performance, the evaluation is rather diplomatic (page 3-52), "In a NHPC summary of post-construction environmental impact assessment, the statement is made that there is "no impact on water quality of the river and as such no adverse impact on fish species and bottom fauna" (Bhatt and Khan, 2003). No statement is made about reduced flows and wetted perimeters and their impacts on fish and bottom fauna, implying that reductions in biological productivity, including benthic fauna, are acceptable to NHPC. Thus, without any formal prescription of a minimum acceptable downstream flow release, the Uri project is somewhat unusual for a recently constructed project."

Lip service to WCD report The report does mention WCD recommendations, but the treatment seems to fall in the line of lip service as it does not mention most of the recommendations of WCD while evaluating URI. One example in this line is the issue of total lack of public consultations in case of URI project, see below.

- **Contradictions** On page 3-17 the evaluator claims that J&K gets 15% of the generation from URI as royalties. On page 3-5, 3-7 and 3-14 this figure is 12%, which is the correct figure. Such contradictions show the poor quality of the report.

28. **Few references** The review gives few references for the figure it gives, which makes it difficult to cross check what is written. Also it does not refer to the baseline documents at most places, nor does it say which of its observations are based on inspection on ground. All these make it difficult to ascertain the veracity of what is written.

29. **Incomplete, inadequate, biased Recommendations** After all this, one expected that the evaluator will make strong recommendations for the future of this project and for such future funding by SIDA. Strangely, the evaluation makes very incomplete weak and inadequate set of recommendations. Very strangely and contradicting what all was said about the experience from URI, evaluator's recommendation about future SIDA funding for such projects worth repeating:

8	Support for Hydroelectric Project	Sida to consider, in the case of supporting hydroelectric and water resources schemes in future, adopting similar approaches to financing or co-financing projects as occurred for Uri. This can occur without the tied-aid model which is no-longer appropriate..

This, in addition to various other instances shown above, shows that the in spite of some instances of critical comments, on the whole the evaluator has not been able to hide its bias in favour of such projects and in favour of continued SIDA involvement in such projects and in favour of contractors and developer (NHPC) of this project. The least one would have expected the evaluator to say about future such projects is to recommend that such project must follow the WCD recommendations in letter and spirit.

South Asia Network on Dams, Rivers & People (SANDRP)
New Delhi, India, cwaterp@vsnl.com, ht.sandrp@gmail.com