

Before the National Environmental Appellate Authority

Memorandum of Appeal

(Under Section 11(1) of the National Environmental Appellate Authority Act, 1997)

Appeal No.....of 2006

In the Matter of:

Affected Citizens of Teesta
Through its General Secretary
Dawa Lepcha
Lindong Village
Dzongu
North Sikkim

Appellant

versus

1. Union of India
Through the Secretary
Ministry of Environment and Forests
CGO Complex
Lodhi Road
2. Government of Sikkim
Through the Chief Secretary
State Secretariat, Gangtok
Sikkim
3. The Member Secretary
State Pollution Control Board – Sikkim,
Dept. of Forest, Env. & WL Management
Government of Sikkim
Deorali, Gangtok
East Sikkim
4. M/s Teesta Urja Limited
119, Jor Bagh,
New Delhi - 110003

Respondents

Most respectfully showeth:

1. That the present Appeal is being preferred against the order of the Respondent No. 1 in granting environmental clearance to the project Teesta stage III hydroelectric project (1200 MW), by clearance letter dated 4-8-2006. The copy of the clearance letter dated 4.08.2006 is filed herewith and annexed here as **Annexure A-1**.
2. That the subject matter of the present Appeal is the Teesta stage III hydro electric project (1200 MW), which is proposed to be undertaken by M/s Teesta Urja Limited, New Delhi, proposes to construct a 6 x 200 MW hydro electric project. The Project contemplates construction of a diversion dam across the main Teesta River located at a distance of 400m downstream on the confluence of Lachen Chu and Lachung Chu near the village Chungthang in the District North, Sikkim.

3. That the Appellant is organization “Affected Citizens of Teesta” which was formed by the people likely to be affected by the implementation of Hydro Electric Power Projects in North sikkim. The members of the Affected Citizens of Teesta are working with the people of the affected area and representing the local, dam affected people before various authorities with their grievances. This organization also participated in the Public Hearing and raised questions but it was not replied to the satisfaction.
4. That as per Schedule – IV (2) (i) of the EIA Notification dated the 27th January, 1994 it was also mandatory on the part of Respondent No. 3 to cause a Public Notice for Environment public Hearing in at least two newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned. As the majority of the population in an around the proposed project area are Lepchas the Respondent No. 3 should have prepared it in the Lepcha (vernacular language) as per Notification which was not complied and adhered to by the Respondent No. 3.
5. The Environment Impact Assessment Notification, 1994 makes it mandatory for Respondent No. 3 to make the Environment Impact Assessment Report to be produced by the Project Authority publicly available at the designated places 30 days prior to the Public Hearing. The Respondent No. 3 and other concerned Authority when approached by the concerned citizens of the State in order to obtain the same was sent back empty handed and the only explanation given was that copies had not been made available to them by Respondent No. 4. True copies of letters dated 9.05.2006 requesting to be supplied with necessary documents are filed herewith and annexed as **Annexure A-**.
6. That the Notice of the public hearing published by the respondent no.3 is not as per the requirement. The notice has not mentioned that the EIA and the Executive summary of the project are available at the designated places. If we peruse the similar notice published by the State pollution Board of Karnataka clearly mention that the copies of the EIA Report and Executive summary is available at the designated places. The copy of Notices published by the State Pollution Control Board, Sikkim is annexed as **Annexure A-** and copy of Notice published by the Karnataka State Pollution Control Board is annexed as **Annexure A-**.
7. That on 8-6-2006, the Sikkim State Pollution Control Board conducted a public hearing on the Environment Impact Assessment of the proposed Teesta Stage III Hydroelectric Project. It is respectfully submitted before this Authority that the Public Hearing dated 8-6-2006 was conducted in total violation of the provisions of the EIA Notification of 1994. The notice of the public hearing was not properly given to the affected people, neither they were provided access to the relevant documents, like Environment Impact Assessment Report and Environment Management Plan. The people and panchayat of the affected area were not properly informed about the project, necessary papers for the Public Hearing were not available at the required place. This action of the Sikkim State Pollution Control Board has curtailed the right of the project affected people to be heard and is in contravention of the Environment Impact Assessment Notification is also violative of the principles of natural justice. It is pertinent to mention here that the Hon’ble Gujarat High Court has held in Case of **Center for Social Justice Vs. Union of India** and Others reported in **AIR 2001 Guj 71** that in addition to publication the people of the project affected village should be notified about the public hearing by informing them through concerned Gram Panchayat as the members of the Gram Panchayat would bring it to the notice of local people as normally rural population in India is illiterate or semi literate and does not read news paper. Thus only publishing the notice in newspaper was not sufficient to cause notice to the affected people.
8. That the composition of the Public Hearing Panel, which conducted the public hearing on 08.06.2006 at Chungthang, was not as provided in the Environment Impact Assessment Notification, 1994. As per the requirement of the EIA Notification the composition of Public Hearing Panel may consist of the representative of State Government dealing with the

subject. It is not clear in what capacity Mr. H. Lachungpa, Honourable Minister, Health Dept., and Chairman; Co-ordination Committee was on the panel. It is pertinent to mention here that he is the Chairman of a committee setup for speedy implementation of the Teesta basin projects. It implies a conflict of interest that he was a member of public hearing panel.

9. That Mr. H. Lachungpa, Minister, Health Department and Chairman Co-ordination Committee, one of the members in the Panel for Public Hearing had threatened to the public who raised objections on the project. He made threatening remarks to the public opposing the project. He stated that opposition was futile as demonstrated in the Sardar Sarovar case, where work is going on. References were drawn to how the people of Gujarat had boycotted Aamir Khan's film after he supposed rehabilitation in the Narmada projects. Smt. C.C. Lachungpa Chairperson, State Pollution Control Board another member in the Panel for Public Hearing had also made the statement labeling the public opposed the project as "anti-national". It is further submitted that one of the panel member for the public hearing Shri S.K. Lucksom Member Secretary SPCB stated that they are not legally bound to share EIA report with public as per EIA notification. This shows an ignorance of the law by the very agency holding the public hearing. The members in the Panel for Public Hearing should be neutral, but the statements made by the members of the Panel for Public Hearing violated the very spirit of the public hearing as envisaged in the EIA notification, 1994, and disallowed free democratic participation by the members of the public at large. The impression given was that the project is inevitable.
10. That the minutes of the public hearing recorded by the State Pollution Control Board of Sikkim is incorrect and does not give the real picture of the proceeding of the public hearing.
11. That as per Schedule – IV (1)(i) of the EIA Notification dated 27th January, 1994, the Respondent No. 4 in order to obtain environmental clearance from Respondent No. 1 is required to prepare the Executive Summary in the English language and a local language. As the majority of the population in an around the proposed project area are Lepchas the project authority should have prepared it in the Lepcha language which was not complied and adhered to by the Respondent No. 4. This has rendered most of the project-affected people ignorant of the details and impact of the project.
12. That the Respondent No. 3 being a Government Authority, the onus was more on it to fulfill its duty as the matter concerned was of utmost importance keeping in view the importance of environment and indigenous population of the area for generation to come. That without making available the Executive Summary, the Environmental Impact Assessment Report and the Detail Project Report which contain vital data and information relating to the proposed project one cannot expect the concerned citizen/organization to take part in the public hearing hence, the main objective is defeated.
13. That the Central Electricity Authority in its 2001 preliminary ranking study of the hydroelectric potential of river basins in India, identified 21 large projects in the State of Sikkim to generate 3193 MW of hydropower. Following this study a 50,000 MW hydropower initiative was launched in 2003 under which pre-feasibility reports for 10 projects in Sikkim have been prepared. Six projects have been envisioned on Teesta in Sikkim out of which Teesta I to IV will be located in North Sikkim. However the project proponent has not conducted cumulative study of the all the projects on the Teesta.
14. That the three underground desilting chambers are proposed at the beginning of the HRT to facilitate elimination of sediment particles of 0.25 mm and larger, from the water that flows through the turbines. The length of tunnel between its intake upstream of dam and the surge shaft is about 13.325km. The water is further carried down to the powerhouse through three underground vertical/ horizontal penstock of 3.8m diameters. The Powerhouse is also located underground below the ridge of the confluence of Talung chu with Teesta River.

15. That the powerhouse is to be equipped with 6 units of 200 MW each run by vertical pelton type turbines to have a total installed capacity of 1200 MW. The turbines would run under a net head of around 778m. The water released from the turbines is carried through a TRT of size 8.00 m x 8.00 m diameter to join the river Teesta, at about 800 m upstream of its confluence with the Talung Chu River.
16. That as per information received, the Resolutions passed on 04.05.2006 by the Coordination Committee of the hydro Power Projects in North Sikkim and the media report, it was revealed that Respondent No. 4 had not completed the Project Reports, we can rightly assume that the same had not been filed with Respondent No. 2 till 04.05.2006. Thus in these circumstances the whole process of conducting the public hearing was futile and cannot be said to have been done in the right spirit. Copies of the said media report dated 6.05.2006 are filed herewith and annexed as **Annexure A-**.
17. That on 18.05.2005 Appellant came to know through media that the geological investigation for the proposed Power House started only from 07.05.2006 and further that the geological investigation of the dam started only on 12.05.2006 these media reports were confirmed when we later visited the said site and the persons working at the site told us that the investigation would be completed only after three months. The project authorities have not denied these media reports so far. The important and vital question that arises is, how Respondent No. 4 without completing the geological investigations completed and submitted the Detailed Project Report (D. P. R.), if this is true then it is clear fraud played by Respondent No. 4 and if it is not then the whole process of conducting the Public hearing is Void-ab-initio, thus result of which should be scrapping of the clearance obtained from Respondent No. 1. the copy of the news article is filed herewith and annexed as Annexure-A.
18. That the EIA study conducted in the year 2006 by WAPCOS Centre for Environment Water & Power Consultancy Services (I) Ltd.. is grossly inadequate and it ignores important facts. The following issues emerge after studying the EIA.
 - A. That the site clearance letter granted on 3.08.2005 by Ministry of Environment and Forest at sub para (i) para 2 states that comprehensive EIA based on one year data should be submitted to the MoEF. But the application for environmental clearance (including the EIA report) was received by the MoEF on 19/6/2006, before the completion of one year. Further public hearing was conducted on 8.06.2006 and at that time the EIA report has to be available for the public. However in the present case the public hearing was conducted even before one year time completed after the site clearance granted i.e. 3.08.2005. It clearly establishes that the EIA report was prepared without taking the one year data as mentioned in the site clearance letter. Hence the EIA is improper, inadequate and against the condition imposed by the site clearance letter.
 - B. It is further submitted that the project proponent has not complied with the conditions of site clearance letter which has stated unambiguously that a comprehensive EIA report based on one year data (after grant of site clearance) is to be submitted. A perusal of the EIA report reveals that the EIA consultant, WAPCOS, claims to have conducted field studies prior to the grant of site clearance. For example, in the section on ecological survey, they state that the winter and summer sampling were done in February 2005 and May 2005 respectively. It is therefore submitted that the EIA report is prepared in violation of the condition stipulated in Site Clearance Letter dated 3.08.2005 and has to be rejected.
 - C. That the EIA report at Pg 1-4: Section 1.3 (Need for the Project) says; “..the implementation of projects in Teesta basin therefore needs to be taken up on top priority.” The EIA report is supposed to be an objective analysis of the environmental

and social impacts of project and is not supposed to advocate the necessity of the project on non- environmental grounds. Such language at the beginning of the report itself indicates the inherent bias in favour of the project even before the impacts of the project are laid out. The environmental decision making process can clear or reject the project based on environmental and social merits. Therefore, stating or indicating that the project is inevitable is misleading.

- D. That the state of Sikkim is located on the flanks of the Eastern Himalayas and was a ruled by a monarchy till 1975. It shares its borders with Nepal in the West, Bhutan in the Southeast and China in the North. The State is a land of dramatic contours with rugged mountains, deep valleys and dense forests consorting with glaciers, raging rivers and lakes and biodiversity hotspot.
- E. That there is no environmental risk assessment included in the EIA report. The project area lies in the Eastern Himalayas which is prone to several environmental risks which can not only pose risks to people but also affect the long-term viability of the project, including considerable economic implications. These risks include flash floods; climate change related risks including glacial recession and glacial lake outburst floods (GLOFs), increased run-off and sedimentation. The dam break analysis and disaster management plan have also not been included in the documents made available. Detailed study of the environmental risks and their economic implications before granting clearance to the project is extremely important, particularly for the state government of Sikkim which is going ahead with these projects to gain economic benefits for the state at a great ecological and social cost to its people.
- F. That the EIA report, has not dealt with the impacts of seismicity adequately. The report only speaks of seismicity with respect to the dam structure and does not talk of other environmental risks associated with hydroelectric projects vis seismicity. Recent scientific evidence points to the fact that neotectonism in the Eastern Himalayas has pronounced effects on flooding, sediment transport and depositional characteristics of rivers and their tributaries. Thus the basic parameters based on which hydroelectric projects are planned in the Eastern Himalayas can change due to neotectonism. The EIA report on page 4-42 states that a concrete faced rock fill dam (CFRD) has the highest degree of conservatism against earthquake shaking, and the same design has generally been used in regions of moderate seismicity as in non-seismic areas.” Further the Executive Summary on Pg 6 states that “Necessary studies are being carried out by DEQ, IIT Rourkee to determine and evaluate suitable seismic coefficient. The same will be incorporated in the design of major project structures”. If this is so, then it means that the seismicity related studies for the project are yet not complete. It is therefore submitted that the EIA report submitted by the project proponent is inadequate and does not contain the important study.
- G. That all the rainfall in the entire catchment is drained through the Teesta river. The area is also susceptible to cloud bursts. The monsoon in the region is vigourous and resulting in a minimum of 1700-1800 cumecs. It can go upto 15,000-20,000 cumecs during floods. During the 1968 floods which damaged the 80 ft high Anderson bridge, a record of 15000+ cumecs was recorded, says Dr Jeta Sankritayana of North Bengal University. Some scientists suspect that GLOFs may have been the cause of these floods. The presence of a hydrological installation in such a river can pose serious danger to downstream areas and the current risk assessment procedures are absent or inadequate. It is not enough to later say that a ‘natural disaster’ hit the project. Comprehensive risk assessment needs to be done at the planning stage and made public.
- H. That the EIA report only states the area and percentage of land in the study area under agriculture but does not give any details whatsoever of the kind of agriculture and the

impacts on the same due to the project. On page 4-2 the report states that : “The reduction in flow or drying of the river in the intervening stretch is not likely to have any adverse impact on the downstream users.” While direct water users of the river in the bypassed portion of the river (18 km. length) may be few as indicated, there is no study whatsoever on the impacts of the reduced flow on agricultural and horticultural lands on both flanks of the river. Crops such as cardamom which form a significant share of the cash crops of the region require high moisture. There is no information on the impact of reduced flow on crops such as this.

- I. That the EIA and executive summary state that the total land required by the project is 177.4 ha. However the Site clearance letter has put the total land requirement as 240 ha. and the environmental clearance letter mention the total land requirement as 190.967 ha. It is necessary that the project proponent and their consultant give an exact picture of the status of land proposed to be acquired by the project, whether forest or private. The reports also state that 156 families will lose their lands partially but the landuse in this portion is given vaguely. Specific family-wise landuse, details of agriculture need to be provided. The rate of compensation and the families that are to be compensated is not mentioned in the executive summary which is the only document available in one of the local languages, Nepali.
- J. That the issue of muck disposal has not been dealt with properly in the EIA report. As per the map showing project components in the Executive Summary (figure 2), there is no muck disposal site from the dam site till adit 3 (from Chungthang till Shipgyer). This is a matter of great concern as indiscriminate muck disposal is one of the most serious impacts of hydel projects in the Himalayas in general and Sikkim in particular.
- K. That the impacts of quarrying mentioned in the report are of a very general nature (pg 4-26) and do not explain these impacts in relation to the specificity of the quarry sites. For example, the Quarry Site – 1 seems to be located in close proximity to the Khangchendzonga National Park and Biosphere Reserve.
- L. That the EIA report has failed to address the issues involved during the construction phase. On page 4-27 the sites of major activities during the construction phase of the project are mentioned. These include the dam site, adits 1 to 5, surge shaft and power house. The impacts that these sites are likely to face have been explained very poorly, for eg, there is no mention of the impacts of tunneling in the adits on areas located above and below these tunnels, including drying up of water sources, impacts of blasting on agricultural fields, subsidence of land etc. The same applies for the headrace tunnel which passes through a distance of 13.325 km. It is astonishing that the impacts of tunneling for all the project components such as the adits, head race tunnel, tail race tunnel and surge shaft have been treated so poorly. This is especially shocking since the citizens of Sikkim are already aware and facing the serious consequences of large scale tunneling in Teesta stage V project. While the section on geology (page 3-48) does mention the geological risks at specific locations, this information is not interpreted in terms of what specific impacts will be faced at the specific locations during the construction phase. It is pertinent to mention here that there have been serious impacts of the tunneling work for dam in the other part of the country. The tunneling led to cracks in the house, drying up of the water from agricultural land, land slides. And these issues need to be addressed in the EIA report.
- M. That the EIA report has failed and has not addressed the question of aquatic ecology properly. It is submitted here that the aquatic ecology of the river will undergo a drastic change due to this intervention on the river system. The documents of the project unrealistically deny this by stating “the streams outfalling between dam site and tail race discharge outfall are expected to sustain aquatic ecology” (pg 21 of executive summary)

The entire 18 km stretch between the dam and the power house will have reduced flows and this has been justified by the project proponents stating that there are no users of the river in this stretch. However, the river is a living entity by itself supporting several species of flora and fauna. The reduced flows will surely affect these unless the minimum flows are calculated on the basis of these users of the river along with the people who may be using this stretch of the river. The EIA report states that the minimum flow maintained in this stretch will be **3 cumecs**. However it has failed to state that on what basis this been calculated and which users have been kept in mind while calculating this. ? While the water diverted for the project will be 175 cumecs, the minimum flow mentioned is only 3 cumecs.

- N. That the EIA report admits that fish migration will be affected due to the dam construction. On page 4-42 it states that: “To prevent such impact suitable passages are provided in form of fish ladders”. The EMP on page 25 states: “By providing fish ladders, the migratory path of the fishes could be restored during construction phase.” But the EMP has no mention of fish ladders and only mentions the provision of a hatchery to introduce fingerlings in the upstream and downstream areas of the dam. It is not clear at all what exactly is the management measure with respect to the impact on fish migration. Will fish ladders be provided at all? During construction phase or also after commissioning? It is indeed a cause of worry that such an important matter as fisheries has been dealt with so casually.
 - O. The variety in elevation gives Sikkim a rich botanical wealth and the World’s highest National Park (Khangchendzonga National Park) is located in the region where proposed project is to come up. The impact on the National Park is not studied in the report of the EIA in the project area.
 - P. That the area in and around the proposed project (North Sikkim) have over 4000 species of plants and luxuriant forests and home to variety of animals, some of which are today threatened with extinction due to change in eco system mainly caused due to these sort of Industrial developments taking place.
 - Q. That the majority of the inhabitants of these regions are the Lepchas who call themselves the Rong-pa and were the early inhabitants of Sikkim. Their culture, customs and traditions are inextricably linked to their deep bond with nature but changing times and modern developments have already started disturbing the delicate eco-system with which they have lived so closely over centuries.
19. That the Environmental Impact Assessment (EIA) for Teesta-III (1200) hydro electric project at chapter-5 page 23 states that there are no monuments of cultural/religious/historical/archaeological importance in the project as well as the study area which is a blatant lie, if the authorities had really conducted its research then it would been clear to the authorities that a sacred site, “Ledho” at Chungthang is near the dam site and a few years ago it was converted to Gurudwara by the defence personal. Due to strong public resentment it has been handed over to the local public recently and another sacred place at Shipger is in the project area. Further more the Kabi Longchok at Kabi, which is of immense important to the History of Sikkim, is in the study area.
20. That the EIA was initially completely silent about the presence of the Khangchendzonga Bio-sphere Reserve within which the Khangchendzonga (High Altitude) National Park falls, which has already been disturbed to some extent by road construction & other activities. Further it had stated that there is no Wild life in the project area. The dam site of the proposed Project is in the Buffer Zone –II of the Khangchendzonga Biosphere Reserve. From Theng and Toong to Pakel and Rahi Chu is one of the main corridors and the wild life present there migrate from the said Buffer Zone right down to the right bank of the Teesta

river in winter when there is heavy snow fall in the Core and Buffer Zones. The above stated migratory corridors have already been disrupted to some extent by the construction of a diversion road by the Border Roads Organization (BRO) and Four Adits of the Head Race Tunnel of the proposed hydro project are within this migratory corridor The said project will certainly destroy the same and the Respondent N. 2 being the Guardian of the said National Park, it is the Duty of the Respondent No. 2 to make sure that the Power Project is not implemented.

21. That the Project proposed falls within the area where the Indigenous Tribal of North District, Sikkim are residing at present and if the Project is undertaken it will not only unsettle the tribal from their natural Habitat but also cause political, social and ethnic repercussions which cannot be compensated in terms of money.
22. That despite the above facts and circumstances the Respondent No. 1 granted the Environment Clearance for the said project vides Notification dated 4-8-2006.
23. That the Appellant raises following grounds against the Clearance granted to the Teesta Stage III project
 - A. Because the Public Hearing conducted by the Respondent No.3 is totally illegal, as without adequate information it cannot be expected that there will be meaningful participation of the effected people in the hearing.
 - B. Because the Hon'ble Gujarat High Court has held in Case of Center for Social Justice Vs. Union of India and Others reported in AIR 2001 Guj 71 that in addition to publication the people of the project affected village should be notified about the public hearing by informing them through concerned Gram Panchayat as the members of the Gram Panchayat would bring it to the notice of local people as normally rural population in India is illiterate and does not read news paper.
 - C. Because the Executive Summary of the project was not available in the local language i.e. Lepcha.
 - D. Because the Respondent deliberately tried to conceal vital information about the impact of the project including the GSI report. According to Section 4 of the EIA notification concealment of data will lead to the rejection of the project. The said provision reads;
"Concealing factual data or submission of false, misleading data/reports, decisions or recommendations would lead to the project being rejected. Approval, if granted earlier on the basis of false data, would also be revoked. Misleading and wrong information will cover the following:
 - False information
 - False data
 - Engineered reports
 - Concealing of factual data
 - False recommendations or decisions"
 - E. Because all the affected people and families were not included in the EIA study done of the area.
 - F. Because EIA has not done complete study before the Public Hearing.

24. That in order to file the Appeal within 30 days the Appellant is raising the limited facts and grounds against the clearance granted. The Appellant reserve his right to file additional objection alongwith relevant document at latter stage of the Appeal.

Prayer

In view of the above facts and circumstances it is most respectfully prayed that this Hon'ble Authority may be pleased to:

- A. Pass an order thereby staying the clearance granted to the project by respondent no. 1.
- B. Pass an order directing that a proper EIA be done taking into account the all factors so that complete information is provided about the Geological investigation of the project and the complete project report.
- C. Pass an order directing that the Public hearing conducted on 8th June 2006 be declared null and void and a proper public hearing be conducted after following all the prescribed procedures and specifically directing that all required information and documents be made available in local language.
- D. Pass any such order, as the Hon'ble Authority be deem fit and proper in the facts and circumstances of the case.

Appellants through

Ritwick Dutta and Rahul Choudhary
Advocates for the Appellant
C-106, Sector 40, Golf Links
Noida, 201301