

A ALAKNANDA HYDRO POWER CO. LTD.

v.

ANUJ JOSHI & ORS.  
(Civil Appeal No. 6736 of 2013)

B AUGUST 13, 2013

**[K.S. RADHAKRISHNAN AND DIPAK MISRA, JJ.]**

*Hydroelectric Power Project – Environmental and Forest clearance for – Granted to project developer – Writ petition filed objecting to the clearance – High Court directing the Ministry of Environment and Forest to hold public hearing – On appeal, held: The project in question is ongoing project, environmental clearance and forest clearance wherefor were granted way back in 1985 and 1987 – 95% work is already over and nearly 4,000/- crores been spent on the project – No purpose would be achieved by way of public hearing at this stage – Now the safety and security of the dam and the people is of paramount importance – Directions issued to the authorities concerned and to the project developer to give effect to recommendations made by the Technical experts.*

*Environmental Law – Mushrooming of large number of hydroelectric projects in the state of Uttarakhand and its impact on Alaknanda and Bhagirathi river basins – Cumulative impact of those project components on eco-system – Direction to Ministry of Environment and Forest to constitute expert body to make detailed study as to the effect of the projects on environmental degradation – Till then MoEF as well as State Government directed not to grant any hydroelectric power project – Disaster Management Authority of the State also directed to submit its report to the Supreme Court as to whether they had any disaster management plan for combating unprecedented tragedy in the State of Uttarakhand.*

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The Srinagar Hydro Electric Project (SHEP), which was basically run-of -the-river Scheme, was given Techno-Economic approval for 200 MW by Central Electricity Authority in 1982, subject to environmental clearance. After being segregated from other Ganga Valley Projects, a separate Environment Impact Assessment (EIA) of the Project was made in 1985. A temple (Dhari Devi Temple) which was likely to be submerged in water, it was suggested in the Assessment that the height of the same would be raised. The Ministry of Environment and Forest also granted environmental clearance for the Project. Later the capacity of the Project was enhanced to 330 MW in 1987, which was duly approved and Planning Commission also accorded investment approval. However, effective progress was not made in the Project due to paucity of funds.

Pursuant to liberalisation policy, the State invited private investment in the Project and MOU was entered into with a private company. The State Government requested Ministry of Environment and Forest to transfer the environmental clearance to the private company and the clearance was transferred for 330 MW in the year 1999. Techno-Economic clearance for implementation of the project was also issued to the private company. The Project, therefore, was transferred to the appellant-company and environmental clearance was transferred in its favour in the year 2006.

Respondent No.1 filed writ petition challenging the decision as to environmental clearance for the increased capacity of generation i.e. 330 MW. Ministry of Environment and Forest by its letter dated 3.8.2011 clarified that transfer in favour of the appellant-Company was for 330 MW. High Court disposed of the petition directing the appellant-Company to place the document before Ministry of Environment and Forest and further

A directed the Ministry to hold public hearing. Hence, the present appeals.

B Certain litigation had also been initiated before National Green Tribunal on the issue. The proceedings before the Tribunal have also been transferred to this Court.

Disposing of the appeal and transferred cases, the Court

C HELD: 1.1. Srinagar Hydro Electric Project is an ongoing project for which environmental clearance was granted as early as in the year 1985 and forest clearance in the year 1987. Further, about 95 % of the work is already over and nearly Rs.4,000 crores has been spent.  
D If public hearing is found necessary then the same should have been held before granting environmental clearance. The purpose of public hearing is to know the concerns of the affected people and to incorporate their concerns appropriately into the Environment Management Plan and it is after incorporation of the concerns and revision/modifying plan, the final Environment Management Plan would be submitted to the Ministry of Environment and Forest for granting environmental clearance. No purpose would be achieved by way of a public hearing at this stage. The various Committees' reports and the report dated 3.5.2013 that the members of the Committee had met the Dhari Devi temple trustees, priests and residents of the locality, they had not raised any objection for not holding a public hearing. Further, the State of Uttarakhand has also never canvassed for a public hearing nor any complaint was received by the temple authorities or the worshippers raised any complaint of not holding any public hearing there. Therefore, the direction given by the High Court directing the MoEF to hold a public hearing, is set aside.  
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H [Para 18] [800-H; 801-A-E]

1.2. Das Committee, Chaturvedi and Joint Team constituted on the basis of direction of this Court have, therefore, fully endorsed the views made by Indian National Trust for Art and Cultural Heritage (INTACH) on *Dhari Devi* Temple. There is no reason to differ from the views expressed by the expert committee, which was submitted hearing all the affected parties, including the Trustees of the Temple, devotees, *Pujaris* etc. Committee reports to that extent stand accepted. [Para 32] [834-E-F]

1.3. It is also not correct to say that by accepting the suggestions of all the expert committees to raise the temple as such to a higher place, would wound the religious feelings of the devotees or violate the rights guaranteed under Article 25 of the Constitution. Sacred rock on which the temple exists is still kept intact and only the height of the temple is increased so that the temple would not be submerged in the water. [Para 33] [834-G-H; 835-A]

2. Dam safety and security is a matter of paramount importance, failure of which can cause serious environmental disaster and loss of human life and property. Proper surveillance, inspection, operation and maintenance of dams is essential to ensure for safe functioning of the Dams. The Central Water Commission (CWC) is a premier technical organisation of India in the field of water resources. The Commission is also entrusted with the general responsibilities of initiating, coordinating and furthering, in consultation with the State Governments concerned, schemes for control, conservation and utilisation of water resources throughout the country for the purpose of flood control, irrigation, drinking water supply and water power development. Safety of dams is the principal concern of the State Government. The State Government has also to carry out investigation, planning, design, construction

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A and operation. The appellant-Company says, so far as  
SHEP is concerned, engineering and technical  
parameters of the dam are clearly narrated in the detailed  
project report which, in turn, are assessed by Central  
Electricity Authority (CEA) in consultation with the CEC  
B and GSI. The norms and regulations laid down by the  
concerned authorities, and whether those are strictly  
followed or not, have to be assessed and monitored by  
the Nodal Agency, CEA/Ministry of Power as well as the  
GSI. [Para 35] [835-E-H; 836-A]

C 3.1. Safety and security of the people are also of  
paramount importance when a hydro electric project is  
being set up and it is vital to have in place all safety  
standards in which public can have full confidence to  
safeguard them against risks which they fear and to avoid  
D serious long term or irreversible environmental  
consequences. The question as to whether the recent  
calamities occurred at Uttrakhand on 16.6.2013 and,  
thereafter, due to cloud burst, Chorabari Lake burst due  
to unprecedented rain and consequent flooding of  
E Alaknanda river etc. has affected the safety of SHEP has  
also to be probed by the MoEF, State of Uttarakhand and  
Dam Safety Authority etc. [Para 36] [836-B-D]

F 3.2. Construction of the project involving excavation  
of earth and rock has generated large quantum and with  
the objective to protect the disposal areas from further  
soil erosion and develop the surrounding areas in  
harmony with the environment, the muck disposal plan  
is formulated. Muck disposal plan gives quantification of  
G muck, identifies location and activities wherein muck is  
generated, during excavation and blasting operation and  
quantifies muck generated from the activities with  
relevance to disposal areas. The Das Committee visited  
the project site and submitted a status report on 29-30  
H August, 2012 which has dealt with muck disposal. Report

of the Joint Committee dated 03.05.2013 also refers to the appellant-Company's action plan regarding muck management and disposal and recommended that remaining work, particularly, of the permanent site No.8 and 9 be carried out at the earliest. The appellant-Company has given the details of the work carried out for muck disposal. Failure of removal of muck from the project site may also cost flooding of the project areas, causing destruction to the environment and to the life of property of the people. MoEF and State Government and all other statutory authorities would see that the appellant-Company takes proper action and steps for muck management and disposal. [Para 37] [836-E-H; 837-A-B]

3.3. Catchment Area Treatment (CAT) is required to be carried out by the project developer along with R & R and greenbelt activities, primarily to mitigate the adverse environmental impact created by the project construction. CAT is also resorted to reduce the inflow of silt and prevent sedimentation of reservoirs. CAT management involves steps to arrest soil erosion, rehabilitation of degraded forest areas through afforestation, controlling landslide and rockfalls through civil engineering measures and long time maintenance of afforestation areas. Silt inflows in river water not only result in reduction in storage capacity of dams, but also lead to increased wear and tear of turbines. Therefore, CAT is of crucial importance with regard to hydro electric projects. CAT plan has been prepared by the Uttarakhand Forest Department and the Project Proponent has paid the estimated amount of Rs.22.30 crores to the State Forest Department towards implementation of CAT Plan. [Para 38] [837-C-F]

3.4. Appellant-Company has deposited first year budget of Rs.203.6 lakhs to the State Forest Department for green belt rim of the reservoir in August 2012.

A Although green belt area is earmarked, the technical  
documents based on the maximum flood level in the  
reservoir, the rim of the reservoir, could only be  
determined and developed after reservoir is impounded.  
B Proper steps would be taken by the Forest Department  
of Uttarakhand to carry out the green belt development  
area in question. The MoEF, the State Government etc.  
would see that the proper steps would be taken by all the  
authorities including the appellant-Company to give effect  
to the directions given by the Joint Team. [Para 41] [838-  
C F-H]

3.5. Going through the reports of Das Committee,  
Chaturvedi Committee as well as the Joint Team and after  
perusing the affidavits filed by the parties, there is no  
reason to hold up the project which is almost nearing  
D completion. MoEF, the appellant-Company, Government  
of Uttarakhand, Forest Department would take immediate  
steps to comply with all the recommendations made by  
Joint Team in the report dated 03.05.2013 and also  
oversee whether appellant-Company is complying with  
E those directions as well. [Para 42] [839-A-B]

4.1. The Court is, however, very much concerned  
with the mushrooming of large number of hydroelectric  
projects in the State of Uttarakhand and its impact on  
F Alaknanda and Bhagirathi river basins. Various studies  
also indicate that in the upper-Ganga area, including  
Bhagirathi and Alaknanda rivers and their tributaries,  
there are large and small hydro power dams. The  
cumulative impact of those project components like  
G dams, tunnels, blasting, power-house, muck disposal,  
mining, deforestation etc. on eco-system, is yet to be  
scientifically examined. The AHEC Report has not made  
any indepth study on the cumulative impact of all project  
components like construction of dam, tunnels, blasting,  
H power-house, Muck disposal, mining, deforestation etc.

by the various projects in question and its consequences on Alaknanda as well as Bhagirathi river basins so also on Ganga which is a pristine river. [Paras 44 and 46] [839-D-F; 840-E-F] A

4.2. The above mentioned Reports would indicate the adverse impact of the various hydroelectric power projects on the ecology and environment of Alaknanda and Bhagirathi river basins. The cumulative impact of the various projects in place and which are under construction on the river basins have not been properly examined or assessed, which requires a detailed technical and scientific study. [Para 50] [844-C-D] B C

4.3. The MoEF as well as State of Uttarakhand is directed not to grant any further environmental clearance or forest clearance for any hydroelectric power project in the State of Uttarakhand, until further orders. MoEF is directed to constitute an Expert Body consisting of representatives of the State Government, WII, Central Electricity Authority, Central Water Commission and other expert bodies to make a detailed study as to whether Hydroelectric Power Projects existing and under construction have contributed to the environmental degradation, if so, to what extent and also whether it has contributed to the present tragedy occurred at Uttarakhand in the month of June 2013. MoEF is directed to examine, as noticed by WII in its report, as to whether the proposed 24 projects are causing significant impact on the biodiversity of Alaknanda and Bhagirath River basins. The Disaster Management Authority, Uttarakhand would submit a Report to this Court as to whether they had any Disaster Management Plan is in place in the State of Uttarakhand and how effective that plan was for combating the present unprecedented tragedy at Uttarakhand. [Para 51] [844-G-H; 845-A-D] D E F G

*Narmada Bachao Andolan vs. Union of India and Ors.* H

A (2000) 10 SCC 664; 2000 (4) Suppl. SCR 94 *Lafarge Umiam Mining (P) Ltd. vs. Union of India* (2011) 7 SCC 338; 2011 (7) SCR 954; *Orissa Mining Corporation vs. MoEF* (2013) 6 SCC 476 – referred to.

B Case Law Reference:

2000 (4) Suppl. SCR 94 referred to Para 14

2011 (7) SCR 954 referred to Para 15

(2013) 6 SCC 476 referred to Para 26

C CIVIL APPELLATE JURISDICTION : Civil Appeal No. 6736 of 2013.

D From the Judgment & Order dated 03.11.2011 of the High Court of Uttarakhand at Nainital in WP (PIL) No. 68 of 2011.

WITH

C.A. No. 6746-6747 of 2013, T.C. Nos. 55,56 &57 of 2013.

E Himanshu Shekhar, Pukhrambam Ramesh Kumar, Petitioner-in-Person for the Appellant.

Santosh Singh, B. Krishna Prasad, Rachana Srivastava, Himanshu Shekhar for the Respondents.

F The Judgment of the Court was delivered by

**K.S. RADHAKRISHNAN, J.** 1. Leave granted.

G 2. Srinagar Hydro Electric Project (SHEP) located in Tehri / Pauri Garhwal district of Uttar Pradesh was a project envisaged by the then Uttar Pradesh State Electricity Board (UPSEB) on river Alaknanda, which was basically run-of-the-river scheme.

H 3. The Techno-Economic approval of the scheme was granted for 200 MW by the Central Electricity Authority (CEA), a competent authority exercising powers under Section 29 of

the Electricity (Supply) Act, 1948, in its meeting held on 6.11.1982, subject to the environmental clearance from the Ministry of Environment. SHEP was later segregated from twenty two other Ganga Valley projects. A separate Environment Impact Assessment (EIA) was made on the SHEP on 9.2.1985. No adverse affect had been noticed on environment in that assessment on setting up of the Project. On the contrary, it was felt that such a scheme would add to the richness of the scenic beauty by creation of beautiful lakes attracting more tourists and also meet the energy requirements of the State and could be completed within a short span of five years. *Dhari Devi* Temple, it was noticed, was likely to be submerged in water, therefore was also considered while considering the Environmental Impact Assessment (EIA). It was suggested that temple would be raised and created with a pleasing architecture suiting the surroundings.

4. The Ministry of Environment and Forest (MoEF) granted Environmental Clearance for the project to UPSEB vide its letter dated 03.05.1985 subject to certain safeguards. The project involved diversion of forest land to the extent of 338.38 hectares which was cleared by the Forest Department vide proceeding No. 8-227/86-PC dated 15th April, 1987, in accordance with Section 2 of the Forest (Conservation) Act, 1980. The Project involved construction of concrete gravity dam affording a gross storage of 8 Mcum water conductor system designed for 660 cumecs and a power house with an installation of six units of 55 MW each. UPSEB later carried out a detailed study and submitted a report stating that taking into consideration the peaking capacity, the installed capacity of the project would be increased from 200 MW to 330 MW. CEA approved and granted the Techno-economic clearance in the enhanced capacity of 330 MW vide its letter dated 18.12.1987. Planning Commission vide its letter dated 29.01.1988 accorded the investment approval. UPSEB started the work but due to the

A paucity of funds the project could not make any effective progress.

B 5. The Government of India, in the meanwhile, had liberalized the policy to encourage private participation in power development. Consequently, the UP Government following the above mentioned policy decided to invite private investment in the development of energy sector especially with regard to the Srinagar Hydro Electric Project. Consequently, the State Government had entered into a Memorandum of Understanding (MOU) with M/s Duncan Industries Ltd. on 27th August, 1994 for development of the project and in terms of the MOU, M/s Duncan Industries Ltd. had established a generating company 'Duncan North Hydro Power Co. Ltd.'. The project was an ongoing project and most of the infrastructure required for the execution of the project had already been arranged by the State Government. The Department of Energy and Government of Uttar Pradesh then wrote to the MoEF by letter dated 04.09.1997 to transfer the environmental clearance earlier granted to the UPSEB to the Duncans so that the safeguards against environmental degradation while clearing the project might be implemented by the Duncans.

F 6. M/s Duncan submitted a revised EIA report and DPR to the MoEF on 25.01.1996 and it was also conveyed that the project of the enhanced capacity of 330 MW had to be transferred to the Duncans. MoEF following the letters dated 25.01.1996 and 18.06.1998 on the subject transferred environmental clearance to Duncans for 330 MW on 27.07.1999 subject to the condition that the conditions stipulated in the environmental clearance already granted and any other conditions, if stipulated in future for protection of the environment would be fulfilled by Duncans. CEA also issued the Techno Economic clearance for implementation of the Project vide it letter dated 14.06.2000 to Duncans.

H 7. The Duncans had also given up the project after carrying

out some work and in its place came the appellant - Alaknanda Hydro Power Company Ltd. (AHPCL). Request was then made to the MoEF by AHPCL for transfer of the environmental clearance granted to 330 MW Srinagar Hydro Electric Project in its favour. Request was favourably considered by the MoEF and vide communication J-12011/6/96/ IA-I dated 27th March 2006 MoEF transferred the environmental clearance in favour of AHPCL stating that it was with the approval of the competent authority.

8. First respondent along with few others filed Writ Petition (PIL) No. 137/2009 before the High Court of Uttarakhand at Nainital to quash the above mentioned order and sought a CBI inquiry relating to the enhanced capacity of 330 MW mentioned in the letters dated 27.07.1999 and 27.03.2006. Direction was also sought for against AHPCL to stop the construction of the Hydro Power Project and also for other consequential reliefs. Writ Petition was disposed of on 19.04.2011 with a direction to AHPCL to approach the MoEF for a specific decision as to the clearance for increased capacity of generation and increased height of the dam. The MoEF was directed to take a decision within a period of three months. Court, however, noticed that the clearance had already been given by the MoEF in the year 1985 which stood transferred in favour of AHPCL for construction of the dam for generation of 200 MW of electricity and 63 metre height of the dam. The Court also ordered that the construction of dam for the said height and for generation capacity of 200 MW would not be stopped but the construction beyond that limit could be proceeded only after clearance is sought from the MoEF.

9. MoEF as directed by the High Court considered the entire matter afresh and rendered a specific decision dated 03.08.2011 clarifying that transfer letter dated 27.03.2006 in favour of AHPCL was for 330 MW. The operative portion reads as follows:-

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A "The matter has been reviewed by the Ministry and it is to  
 B clarify that while transferring the environment clearance  
 C dated 3rd May, 1985 of the Project in the name of Uttar  
 Pradesh State Electricity Board (UPSEB) to M/s. Duncans  
 North Hydro Power Company Limited vide this Ministry's  
 letter No. 12011/6/96-IA-I dated 27.7.1999 (copy  
 enclosed), the Ministry had reviewed that increased  
 capacity from 200 MW (4X50 MW) to 330 MW (5X66 MW)  
 and associated parameters like change in dam height  
 from 73m to 90m from the deepest foundation and FRL  
 from EL 604.0m to 605.5m. The Ministry also noted that  
 there was a change in the submergence from 300 ha to  
 324.074 ha, however Forest land remained the same i.e.  
 338.36 ha dated 15th April, 1987 which will be the final  
 Forest Land for the Project. Therefore, the final parameters  
 for the project are as follows:-

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- (i) Submergence area – 324.074 ha
  - (ii) Forest land for diversion – 338.86 ha
  - (iii) Capacity – 330 MW (4X82.5 MW)
  - (iv) Dam height from the deepest foundation – 90 m
  - (v) Dam height for the river bed level – 66 m
  - (vi) FRL – EL 605.5 m
  - (vii) MDDL – EL 603.0 m
  - (viii) Dam top Road level – 611.0 m

G In view of the above, I am directed to clarify that the transfer  
 of environment clearance from DHPCL to Alaknanda  
 Hydro Power Company Limited (AHPCL) vide this  
 Ministry's letter No. J-12011/6/96-IA\_I dated 27th March,  
 2006 is of 330 MW capacity with the above mentioned  
 parameters. The Ministry has further noted the change in

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the units from 6X55 MW to 4X82.5MW, as approved by CEA. A

This has approval of the Competent Authority.”

10. MoEF though clarified the position as directed by the High Court, the first respondent herein along with one Dr. Bharat Jhunjhunwala preferred Writ Petition (PIL) No. 68 of 2011 before the High Court of Uttarakhand at Nainital on 09.08.2011 challenging the order dated 03.08.2011. B

11. Writ Petition was disposed of by the High Court directing AHPCL to place the documents mentioned in Schedule IV to the Notification dated 27.01.1994 before MoEF and the Ministry was directed to take steps to hold a public hearing as envisaged in the Notification. Further, it was also ordered that the notice should mention that the public hearing would be given at *Dhari Devi* Temple premises and that the Commissioner, Pauri Garhwal to be present at the public hearing. Further, Court also noticed that the construction work had progressed to a great extent and at no stage, there was any objection to the construction of the project having a capacity of 200 MW and, therefore, did not stop the construction, however, it was made clear that the same would be subject to the decision taken by the MoEF. C D E

12. AHPCL, aggrieved by the above mentioned judgment, has preferred this appeal by raising the core issue with regard to the applicability of EIA Notification dated 27.01.1994 in a case where the project had been granted environmental clearance for 200 MW on 3.05.1985 and thereafter for 330 MW by the MoEF on 15.4.1987 and approved by CEA on 18.12.1987, followed by the sanction accorded by the Planning Commission on 29.1.1988. F G

13. Respondents 1 and 2 in Civil Appeal arising out of SLP (Civil) No. 362 of 2012 also filed SLP (Civil) Nos. 5849- H

- A 5850 of 2012 challenging the order of the High Court dated 3.11.2011 and the order dated 5.12.2011 passed on the review petition contending that the finding recorded by the High Court that they had not questioned the environmental clearance for 200 MW, was incorrect. They also wanted the stoppage of the project till the procedure laid in the EIA Notification 2006 is complied with including the holding of a public hearing.

14. Mr. M.L. Lahoty, learned counsel appearing for the appellant – AHPCL submitted that EIA Notification dated 27.01.1994 (as submitted upto 07.07.2004) would operate only prospectively and that too only to those projects which are either 'new' or 'expansion or modernisation' of the existing project is proposed after 1994 Notification. Learned counsel made reference to the judgment of this Court in *Narmada Bachao Andolan v. Union of India and Others* (2000) 10 SCC 664 and submitted that the Notification would operate only prospectively. Learned counsel pointed out that public hearing was expressly excluded by para 4 of the Explanatory Note to the Notification in respect of projects like Srinagar Hydro Project where neither large displacement is involved nor is there severe environment ramification. Further, it was also pointed out that the expansion of the project from 200 MW to 330 MW was granted in the year 1987 prior to the notification and even the original EIA of 1994 would not apply. Further, it was also pointed out that Amendment Act 77 of 2004 was incorporated simultaneously with the explanation along with two Entries Nos. 31 and 32 to bring within its purview the "new construction projects" and "new industrial estates". Learned counsel pointed out so far as the Hydro Projects are concerned, they are not covered by the said two newly introduced Entries as from the very inception of 1994 notification, Hydro Power Projects are covered by Rule 2 of Schedule 1 and therefore the explanation so inserted also has no application. Consequently, the concept of 'plinth level' is also not applicable as it goes with the applicability of the Explanation.

15. Learned counsel also pointed out that the environmental clearance even otherwise was issued in the light of the specific decision of MoEF dated 03.08.2011 clarifying that the transfer letter of 27.3.2006 in favour of AHPCL was for 330 MW. Learned counsel in support of his contention made reference to the judgment of this Court in *Lafarge Umiam Mining (P) Ltd. v. Union of India*, (2011) 7 SCC 338. Learned counsel also pointed out that the project in question was conceptualized more than three decades back. As on date the project stands almost completed and more than Rs.4000 cores had been invested and therefore, there is no question of holding a public hearing at this stage. Further, it was also pointed out that State Government had ascertained views of the local inhabitants, public representatives, Gram Panchayat, Shopkeepers, Temple Pujaris, Trust, devotees etc. and it was considering their views, the MoEF granted environmental clearance and also forest clearance for the project.

16. MoEF in the counter affidavit filed on 25.7.2012 stated that the project in question was granted environment clearance in the year 1985 and hence it would not come under the purview of EIA Notification of 1994 or EIA Notification of 2006 which replaced the EIA Notification of 1994. Further, it was stated that the construction of project was already in an advance stage and hence public hearing would be an empty formality, since the purpose of public hearing is to know the concerns of the affected people and to incorporate their concerns appropriately into the Environment Management Plan (EMP) for the project and it is after incorporation of the concerns and revising/modifying the EMP, the final EMP would be submitted to the MoEF for granting environmental clearance to the project. MoEF has, therefore, taken the stand that since environmental clearance to the project had already been granted in the year 1985 prior to the coming into force of the Environmental (Protection) Act, 1986 and the EIA Notification of 1994, no public hearing was necessitated.

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A 17. Shri Lahoty also pointed out that so far as the issue of  
 Dhari Devi temple is concerned, the Joint Committee had  
 endorsed and recommended that upliftment of the temple  
 adhering to the INTACH plan is the best option and has found  
 wide acceptability amongst Temple Samiti, Pujari, local  
 B inhabitants as well as local statutory authorities. Elaborate  
 arguments were also addressed by the learned counsel on  
 muck Management and submitted and that they had  
 substantially complied with the proposed directions under  
 Section 5 of the Environmental Protection Act. Arguments were  
 C also addressed on the Catchment Area Treatment Plan and  
 submitted that an amount of Rs.22.30 crores was deposited  
 with the Forest Department way back in 2007-09. Further, it was  
 also pointed out that the AHPCL had spent about 40 crores  
 D for rehabilitation and resettlement of the affected people in the  
 catchment area. For Greenbelt Development, it was pointed out  
 that an amount of Rs.2.30 crore was made available to the  
 State of Uttarakhand by AHPCL. Learned counsel, therefore,  
 submitted that the respondents are unnecessarily creating  
 E hurdle in the completion of the project and litigation is not in  
 public interest but for advancing the private interest of the  
 respondents.

F 18. We may indicate while going through the averments  
 made in the writ petition as well as the impugned judgment and  
 the pleadings of the parties, it is seen that the question that was  
 primarily raised before the High Court was with regard to the  
 necessity of a public hearing and also whether the sanction had  
 been accorded to construct the project with the capacity of 330  
 MW. This Court in *Narmada Bachao Andolan* case (supra) has  
 G held that the 1994 Notification applies only prospectively, in any  
 view so far as this case is concerned the environmental  
 clearance cannot be an issue in view of the specific stand taken  
 by MoEF and the orders dated 03.08.2011 passed by MoEF  
 which can also be considered as an *ex post facto* approval.  
 H SHEP, it may be noted, is an ongoing project for which

environmental clearance was granted as early as in the year 1985 and forest clearance in the year 1987. Further, about 95 % of the work is already over and nearly Rs.4,000 crores has been spent. If public hearing is found necessary then the same should have held before granting environmental clearance. The purpose of public hearing, it may be noted, is to know the concerns of the affected people and to incorporate their concerns appropriately into the EMP and it is after incorporation of the concerns and revision/modifying plan, the final EMP would be submitted to the MoEF for granting environmental clearance. Environmental clearance, in the instant case, had been granted in the year 1985 and the project is an ongoing project which is now nearing completion and, therefore, no purpose would be achieved by way of a public hearing at this stage. We also notice from the various 'Committees' reports and the report dated 3.5.2013 that they had met the temple trustees, priests and residents of the locality, they had not raised any objection for not holding a public hearing. Further, the State of Uttarakhand has also never canvassed for a public hearing nor any complaint was received by the temple authorities or the worshippers raised any complaint of not holding any public hearing there. We, therefore, set aside the direction given by the High Court directing the MoEF to hold a public hearing.

19. We find that a new dimension has been added to this litigation by initiating certain proceedings by group of litigants before the National Green Tribunal, New Delhi. MoEF also, on 30.06.2011, in exercise of powers conferred under Section 5 of the Environment (Protection) Act, 1986 passed a stop work order directing AHPCL to attend certain environmental issues which included (i) mounting *Dhari Devi* temple at a higher elevation as per the Plan prepared by INTACH (ii) maintain and manage muck at the various muck disposal sites by providing retention wall, slopes, compacting and terracing etc. (iii) develop greenbelt (iv) Catchment Area Treatment (v) undertaking

A Supana Query restoration (vi) maintain minimum environmental flow etc.

B 20. The second respondent and few others then approached NGT vide Appeal No. 9 of 2011 praying for some rigours orders against AHPCL. The appeal was, however, disposed of by NGT directing MoEF to take a final decision within a period of eight weeks. No decision was taken by the MoEF within the time granted by the NGT which led AHPCL filing M.A. No. 103/2012 before the NGT to revoke Section 5 directions and allow AHPCL to continue the construction work of the project.

D 21. The Tribunal (NGT) disposed of the application on 07.08.2012 expressing its anguish for not disposing of the matter within the time granted by it. The AHPCL submitted that in spite of the fact that it had complied with all the requirements stipulated in the notice dated 30.06.2011, unnecessarily the project was held up causing huge financial loss to it. AHPCL also sought a direction to transfer all the cases from NGT to this court to be heard along with the appeal. Consequently, all those related matters were transferred to this case Court and were heard along with these appeals.

F 22. We asked the Secretary, MoEF, when the matter came for hearing, as to whether the conditions stipulated in its order dated 30.06.2011 had been complied with by the project proponent. Committee headed by Dr. B.P. Das was constituted by MoEF to examine whether the project proponent had complied with the conditions stipulated in the environmental clearance granted in May 1985 as well as Order dated 30.06.2011 and the copy of the Das Committee report of August 2012 has been made available.

H 23. Reference was also made to the B.K. Chaturvedi Committee Interim Report, as well as the final report, with regard to the environmental flow of Alakhnanda, Bhagirathi and

other tributaries of Ganga which has also made some reference to this project as well. After noticing Das Committee Report and after hearing learned counsel on either side, this Court thought it appropriate to constitute a joint team consisting of officials of MoEF as well as State Government so as to conduct an on the spot inspection of the project area in question and to examine whether the project proponent had complied with all the conditions stipulated in the environmental clearance of May 1985 as well as Order dated 30.06.2011 of the MoEF, which also referred to the issue of the protection of *Dhari Devi* Temple. The joint team was directed to give an opportunity of hearing to second respondent as well. We have taken such a course to give a quietus and finality to the various issues which are long standing.

24. The Joint Team consisted of Professor R. Ramesh National Centre Coastal Zone Institute, Chennai, Mr. Gambhir Singh, Chief Conservator of Forests, Garwhal, Prof. R. Sakthivakivel, International Water Management Institute, Mr. Lalit Kapur, Director, MoEF and Dr. Arun Kumar, CSO, AHEC, IIT Roorkee as a Chairman of the Committee. This 5-members Committee visited the project site including MUCK disposal sites on May 1st and 2nd 2013 and heard the second respondent as well as the AHPCL. The Committee also visited *Dhari Devi* temple site and met trustees, priests and few residents of village *Dhari*. The Committee also visited the catchment area. The Committee examined as to whether the AHPCL had complied with the conditions stipulated in the environmental clearance of May 1985 and also the conditions stipulated in forest clearance of April, 1987. The Committee also examined whether the AHPCL had complied with the conditions communicated under Section 5 of Environment (Protection) Act 1986 vide letter dated 30.06.2011, also issues with regard to *Dhari Devi* Temple. The Committees, after considering all those aspects, submitted its report on 03.05.2013. The operative portion of the same reads as follows:

A **"2. Compliance of Conditions stipulated In Environmental Clearance of May, 1985.**

B 1. Fuel Wood should be provided to the construction stage so as to prevent indiscriminate falling of trees in the neighbouring areas. The budgeted estimate should therefore, be suitably augmented.

C The AHPCL has informed that they have made arrangements through their contractor to supply cooking gas for all the workers of the project. Nearly three to four hundred cylinders are used by the workers of all contractors for cooking requirements. In case of non-availability of gas, kerosene is used on limited occasions. No fuel wood is used for cooking or any other purpose. In case of any exigency wood is purchased from authorized Government/Forest departments by the contractor.

D 2. Critically eroded areas in the catchment should be identified for undertaking time bound soil conservation program in the first phase, concurrently with the construction works. The catchment area treatment plans be worked out expeditiously.

E Uttarakhnad Forest Department has provided a status on the CAT plan and green belt matter and is placed at Annexure – 2.

F Uttarakhnad Forest Department is executing the CAT plan through its four Divisions viz. Narendranagar, Rudraprayag, Garhwal and Civil - Soyam Pauri Forest Division. The proposed outlay of CAT plan for five year period was Rs.22.03 crores deposited by the AHPCL in three instalments (last in April 2009) to the Nodal Officer who in turn transferred this amount to the CAMPA fund with Govt. of India. In 2010, the funds were transferred to the CAMPA society of Uttarakhnad Govt. for execution of proposed works.

H

To bring uniformity and for providing directions for finalization of CAT plans in participatory mode, PCCF Uttarakhand vide letter No. 238/PA and *Kha-2023/13-2(2)* dated 25 March 2011 issued guidelines for implementation of CAT plans in participatory mode. Overall framework for reviewing CAT plans was approved by steering committee of UK CAMPA in its 3rd meeting on 16th May 2011. Further, the PCCF vide office Memo NO. 174/13-2(2) dated 03.08.2011 issued preliminary guidelines with respect to creation of a Project Management Unit (PMU) for implementation of the CAT Plan. The funds for CAT plan are being allocated as per original proposal. However, micro-plans are being prepared in participatory mode by the respective Divisions of the Forest department following the Procurement Rules, 2008.

In pursuance to the above mentioned facts preparatory phase for the CAT plan execution was started in 2011-12 during which identification of sites, consultations with village communities, preparation of micro-plans by PRA method and awareness campaigns were carried out. In 2012-13, nursery raising, advance soil works were carried out together with preparatory activities. Total 133 villages have been identified for the CAT plan and Division wise distribution of which is Narendranagar Forest Division – 40 villages, Rudraprayag Forest Division – 41 villages, Garhwal Forest Division – 21 villages and Civil-Soyam Pauri Forest Division – 31 villages. Out of the 133 villages micro-plans have been prepared for 76 villages and division wise status of preparation of micro-plans in Rudraprayag Forest Division – 34 villages, Garhwal Forest Division – 21 villages and Civil Soyam Pauri Forest Division – 31 villages. During the financial year 2012-13, implementation of micro plans was started in 10 villages

A and during current financial year approximately 60 villages are being taken up for this purpose.

B Nursery activities have been selected at Division level. The actual requirement of the plants is expected to be known on completion of all micro-plans. Based on estimates saplings are already being raised in nurseries as Narendranagar Forest Division – 1.5 lacs saplings, Rudraprayag Forest Division – 5.4 saplings, Garhwal Forest Division – 1.0 saplings and Civil-Soyam Pauri Forest Division – 1.3 saplings. Through these nurseries afforestation is being taken up through micro planning of the planned villages in the catchment.

C A total sum of Rs.46.22 lacs has been spent so far by the department during the financial years 2011-12 and 2012-13 under the budget provided by the project.

D Further from other sources of funding i.e. 13th Finance Commission and FDA etc. the forest department of Uttarakhand has treated 882 Ha area as well as constructed 81 check dams and 10 water ponds in the catchment of the project.

E 3. Afforestation should be undertaken on a large scale in the project area and a 50m wide green belt created around the periphery of the reservoir.

F For afforestation the response has been same as above in 2.

G Compensatory afforestation as the Indian Forest Conservation Act (1980) was completed in an area of 347 ha in district Lalitpur of Uttar Pradesh (the then combined State) after the forest clearance accorded in the year 1987.

H Based on the estimates provided by Forest department in June 2012 for a sum of Rs.652.49 lacs to be

implemented in six years, AHPCL has deposited first year budget of Rs.203.6 lacs with the state forest department for creating Green Belt around the rim of the reservoir of Srinagar HEP in August 2012. A

The state forest department is expecting the Srinagar hydropower project to be commissioned in Dec. 2013/ Jan.2014 and only after filling the reservoir, they intend to assess the requirement of site above the submerged area, the selection of species, the type of soil works etc. and creating the Green Belt accordingly. Therefore they intend to start the green belt activities only after works of water reservoir are completed and is filled. The work in the private land shall be taken up for green belt development through participatory approach with the land owners. B C

4. Geo-morphological studies be undertaken in the catchment to formulate plans for the stability of slopes on reservoir periphery through engineering and biological measures. D

Geological Survey of India (GSI) has been appointed as the agency for carrying out the Geo-morphological Studies. Total 9 villages have been identified. These are Dungerepanth, Sendri, Dhari, Kaliyasour, Gandasu, Farasu, Mehargon, Paparasuand and Maliyasu. The studies for 7 villages are completed. Recommendations received for 5 villages namely Dungerepanth, Sendri, Dhari, Kaliyasour, Gandasu and implemented by the AHPCL. As informed by AHPCL, the recommendations for the displacement of the houses in the rim area of the reservoir have been complied with. The balance reports are expected to be received from GSI soon. E F G

Measures comprises of engineering and biological aspects in green belt area are being implemented by state forest department. H

A 5. A monitoring committee should be constituted, in consultation with the Department of Environmental to oversee the effective implementation of the suggested safeguards.

B The AHPCL has been submitting the half yearly compliance reports to the Regional Office of MoEF, Lucknow. The Regional Office also visited the project site from time to time. The committees of Dr. BP Das in June 2011, Dr. J.K. Sharma in June 2012, Dr. BP Das in Aug 2012 appointed by MoEF and Shri ADN Rao in Dec.2012 appointed by NGT have visited the project site and submitted the reports.

C The committee is of the opinion that AHPCL should monitor the project during construction and post construction for various parameters of water quality, aquatic biodiversity, landslides in the rim area, inflow and outflow, impacts on water tables and springs and submit the reports to the State Government and MoEF regularly.

D There should a monitoring mechanism at the state level which should have the data for practicing adaptive management and such monitoring may be carried out in association with project affective society.

E **3. Compliance of conditions stipulated in Forest Clearance (FC) of April, 1987.**

F 1. Legal status of land will remain unchanged.

No change has been reported.

G 2. Compensatory afforestation will be raised over and equivalent non forest land.

H Compensatory afforestation as per the Indian Forest Conservation Act (1980) was completed in an area of 347 ha in district Lalitpur of Uttar Pradesh (the then combined State) after the forest clearance accorded in the year 1987.

3. The oustees will be rehabilitated as per plan submitted in the state government. A

Since there were no human oustees in the submergence area no rehabilitation plan was prepared by the State government. However, Geological Survey of India (GSI) was appointed by AHPCL for carrying out the Geomorphological Studies for 9 villages identified as Dugripanth, Sendri, Dhari, Kaliyasour, Gandasu, Farasu, Mehargon, Paparasu and Maliyasu. As informed by AHPCL, the recommendations for the displacement of the houses in the rim area of the reservoir have been complied with for the recommendation received from GSI so far. The balance reports are expected to be received from GSI soon. B C

*Dhari Devi* temple coming under the submergence area has been reported separately. D

4. The project authority will establish fuel wood depots and the fuel wood be provided to construction labor and staff free of cost, or its cost deducted from the salaries and wages to be paid to the staff and labor. E

The AHPCL has informed that they have made arrangements with the local gas supplier to supply cooking gas for all the workers of the project. Nearly three to four hundred cylinders are used by the workers of all contractors for cooking requirements. In case of non-availability of gas, kerosene is used on limited occasions. No fuel wood is used for cooking or any other purpose. In case of any exigency wood is purchased from authorized Government/Forest departments by the contractor. F G

**4. Compliance of conditions communicated under Section 5 of EP (Act) 1986 vide letter dated 30.06.2011.**

H

A        **1. To preserve the religious sanctity and character of the *Dhari Devi* Temple, a modified plan will be prepared in collaboration with INTACH, a Conservation Architect, the local Temple Samity and the representative of GSI. The Plan should, inter alia,**  
 B        **examine how part of rock on which the platform of the deity has been constructed, along with the rock that formed its backdrop, shall be mounted at a higher elevation in such a way that it maintains contact with the base rock from which it is raised.**

C        **2. Only after modified Plan as specified above has been prepared, the construction shall be resumed at *Dhari Devi* Temple.**

D        As reported by AHPCL a modified Temple Plan was prepared in collaboration with INTACH, Temple Samithi and Geological Survey of India and submitted to MoEF on 12.09.2011 and further intimated to MoEF on 09.02.2012 for continuation of works as per provisions of para 14(ii) of Section 5 notice.

E        Earlier committees which visited sites during 16-17th June, 2012 and 29-30th August, 2012 and B.K. Chaturvedi Committee report April 2013, have all recommended construction of temple works as per INTACH scheme. The committee visited the temple site and found the work of raising the platform was in advance stage of construction with certain changes made by temple priest and trustees.

F        **3. The muck slope at the edge of the river shall be adequately protected by a retaining wall of at least 1-2 m height to be 1m above HFL corresponding to a flood of 2500 to 3000m<sup>3</sup>/sec in the river.**  
 G        **4. The existing slope of the muck disposed off is around 40-45o and shall be flattened to 35o. The walls**

H        **around 40-45o and shall be flattened to 35o. The walls**

shall be constructed partially upto a maximum of 2m height and need to be completed to the top with surface protection before July 2011 when monsoon precipitation becomes intense. This is considered expedient to prevent sloughing, sliding of the critically steep much slope and to arrest flow of the muck into the river. The wall shall be constructive over a length of almost 1 km stretch at three major sites i.e. the dam, desilting basin and power house. This would lead to adequate environmental protection.

**5. Muck shall be compacted and Terraces shall be formed where so ever possible.**

As per plan approved by the State forest department there are 10 muck disposal sites in the project area out of which only sites 8 & 9 are permanent and others are temporary meant only for construction duration. A total volume of 66.1 lacs cubic meter of muck was estimated, out of which 16.79 lacs cubic meter of muck has been utilized for back filling purpose. Further 12.5 lacs cubic meter is contemplated to be utilized from muck site 6, 7 and 10 for back filling. 37.62 lacs cubic meter is planned to be left over at site 3 (2.01 lacs cubic meter), 4(4.22 lacs cubic meter), 6(4.96 lacs cubic meter), 7(2.39 lacs cubic meter), 8(8.8 lacs cubic meter), 9(12.48 lacs cubic meter) and 10(2.77 lacs cubic meter) for land shaping and grading. Total muck utilization as on date as informed by AHPCL is estimated to be about 44%.

A review of water quality parameters (Temperature, pH, Dissolved Oxygen, Biological Oxygen Demand) provided by the State Pollution Control Board, Uttarakhand for the year 2011-12 and 2012-13 measured in Alaknanda at Rudraprayag i.e. upstream of Srinagar project and in Alaknanda at Deoprayag i.e. downstream of Srinagar

A project indicates that there is negligible difference in the water quality parameters due to project construction activity.

B Slope dressing and toe walls are constructed/being repaired at temporary sites. Some construction material is stored on site No.6 and the same is planned to be removed after completion of works. Soil from site No.4 is planned to be removed before monsoon, 2013 as the batching plant has been removed now. Soil from site no.7 is being removed now. Slope dressing, Terracing, Toe walls would be completed in location nos. 8 and 9 where much disposal is going to be permanent.

C Angles of muck disposal sites 4,6,7,8 & 9 were got measured by AHPCL and are reported as follows: 4 – 21o/25o, 18o/33o, site 6 – 28o/29o, 32o/32o, site 7 – 33o/29o, 37o/36o/27o, site 8 – 31o,32o, site 9 – 35o/36o/35o/37o, 35o/32o.

D Slopes of muck disposal areas (angle of repose) are given as 45o at para 18(3) page no.16 of Report on “Muck Disposable and Management of Srinagar project” by IIT, Roorkee, November 2008. However MoEF letter has suggested flattening the slopes up to 35o. The slopes measured and reported by AHPCL appear to be in order.

E Earthen cofferdam in front of power house is planned to be removed after completion of power house for joining the water from powerhouse to river through tail water channel and soil to be utilized for back filling and landscaping. This cofferdam was synonymously referred to as Muck disposal site no. 10 at Power house location in the section 5 notice dt. 30.06.2011. Disposal Location no. 10 is well behind the power house coffer dam and has no contact with river water.

F All the toe walls which got damaged at the muck disposal

sites during monsoon, should be repaired by AHPCL especially for those sites where muck is being stored permanently. A

The photographs of all muck disposal sites of different time along with approved muck disposal plan by AHPCL is placed at Annexure – 3. B

**6. Appropriate protection by plantation and gabions should be put only after slopes are flattened to 35o, protected by retaining walls of desired height. Thereafter, appropriate soil cover of 1m shall be provided to raise plantation for slope protection.** C

**7. Muck disposal site wise restoration plan with the targets shall be submitted immediately to the MoEF.** D

In view of the ongoing removal of the muck from sites and construction activity the plantation is expected to be taken up thereafter.

**8. Green Belt development to be undertaken simultaneously along with project construction.** E

Based on the estimates provided by Forest department in June 2012 for a sum of Rs.652.49 lacs for implementation in six years, AHPCL has deposited first year budget of Rs. 203.6 lacs with the state forest department for creating Green Belt around the rim of the reservoir of Srinagar HEP in August 2012. F

The state forest department is expecting the Srinagar hydropower project to be commissioned in Dec 2013/Jan 2014 and only after filling the reservoir, the forest department intend to assess the requirement of sites above the submerged area, the selection of species, the type of soil words etc. and creating the Green belt accordingly. Therefore they intend to start the green belt H

A activities only after works of water reservoir are completed and is filled. The private land shall also be taken up for green belt development through participatory approach with the land owners.

B **9. For expediting Geo-morphological studies by Geological Survey of India (GSI) and implementation of recommendations before Dam gets operational. AHPCL shall pursue with GSI and take up the mitigation measures immediately.**

C Geological Survey of India (GSI) has been appointed as the agency for carrying out the Geo-morphological Studies. Total 9 villages have been identified. These are  
 D Dungripanth, Sendri, Dhari, Kaliyasour, Gandasu, Farasu, Mehargon, Paparasu and Maliyasu. The studies for 7  
 E villages are completed. Recommendations received for 5 villages namely Dungripanth, Sendri, Dhari Kaliyasour, Gandasu and implemented by the AHPCL. As informed by AHPCL, the recommendations for the relocation of the houses in the rim area of the reservoir have been complied with. The balance reports are expected to be received from GSI soon.

Village: Dungripanth

F Recommendation of GSI with status

House of Sri Hari Sankar Singh is to be relocated – *Complied.*

G The area falling between +605.90 and 611.00 both Dungripanth and Dikholi villages may be monitored from safety view point immediately after impounding of reservoir – *Shall be monitored accordingly*

H House of C.S. Bahuguna needs to be relocated to a safe place – *Complied.*

Village : Sendri

A

Recommendation of GSI with status 4 houses located close to the outer edge of the ridge need to be relocated to a safer place – *Complied*

Village – *Dhari*

B

Houses and land upto EL +616.00 shall have to be displaced/acquired – *Complied*

Village: Kaliyasour

C

There would not be major threat from the reservoir to the stability of slopes where main settlement is located – *No action is to be taken*

Village Gandasu

D

Suitable remedial measures for slopes at specific locations are being recommended –

Action may be initiated after receipt of recommendations

E

Village: Farasu

Studies conducted, report yet to be submitted.

Village Mehargon

F

Studies conducted, report yet to be submitted.

**10. The Restoration work for Supana Quarry shall be undertaken simultaneously, leaving the part which is being used for storage of building material.**

G

Committee observed from the site visit that storage of the building material has been almost removed and vacated site is being filled with muck.

H

A **11. AHPCL shall maintain a minimum environmental flow as will be decided by the Ministry on the basis of Study of IIT Roorkee on the Cumulative Impact Assessment on Alaknanda and Bhagirathi Basin.**

B As per the approved Environmental Management Plan of the project, AHPCL is required to release a minimum of 5 cumecs of water from the Dam through out the year in the river section of water.

C Ministry of Environment and Forest constituted an Inter-Ministerial Group (IMG) headed by Shri B.K. Chaturvedi to consider the issue related to hydropower projects and environmental flows in June 2012. The committee has submitted its report in April 2013 after considering the report from IIT Roorkee, Wildlife Institute of India and others as available.

D The MoEF is expected to take a decision on this and convey to the project proponent at appropriate time for compliance.

E **12. Requisite clearances shall be sought by AHPCL for Alaknanda River Front Development Scheme before proceeding further on this scheme.**

F **13. AHPCL shall submit a detailed Action Plan on the above mentioned directions with time targets along with a Bank Guarantee of Rs.1 crore in favour of the State Pollution Control Board, Uttarakhand. The Bank Guarantee shall be forfeited in case of non compliance by AHPCL.**

G AHPCL informed that the proposed scheme is not a part of approved EMP/EC of the project. This was an additional proposal from AHPCL. However, neither proposal nor word has been taken up so far.

H

A Bank Guarantee of Rs.1 core was submitted through Uttarakhand on July, 2011. A

5. TOR II: The Committee will also submit a full and complete picture of the project at present.

AHPCL has provided the statement of physical and financial progress of various work of the Srinagar project as on March 31, 2013 and is given at Annexure 4. The summary of the same is as below: B

*Civil Works:* diversion tunnel, coffer dams, dam and spillway, head race tunnel, forebay tank and bypass channel, bridges on the channel, penstock, power house building, switchyard are 100% completed. The cross drainage works of Munjh Kot nallah are 93% completed. C

*Hydro mechanical works:* dam and spillway, head race tunnel, forebay and bypass and draft tube are 100% completed. D

*Electro-mechanical works:* 3 units are 100% completed whereas unit 4 is under progress. E

**6.TORIII: In the context of Dhari Devi Temple, which is coming under submergence of the reservoir, the Committee will suggest best possible option regarding how to protect the Dhari Devi Temple without disturbance at its present location.** F

In the recent time there have been several committees who have gone through the issue of the submergence of Dhari Devi temple and a numbers of alternative to prevent the submergence of the Dhari Devi Temple were studied. These are as follows: G

- (a) Architectural Heritage Division of Indian National Trust for Art and Cultural Heritage (INTACH) has H

- A prepared a plan in consultation with *Dhari Devi* Temple Trust, Geological survey of India and AHPCL in Sept 2011.
- B (b) Dr. B.P. Das Committee Aug 2012 recommended that "In view of the compelling Technical, Social, Religious and Sentimental Reasons narrated in para 4.2, the feasibility of constructing a dry well structure to protect the rock mound in situ and "*Maa Dhari Devi* Idol" in its existing position is not feasible. The team therefore recommends for continuation of works of restoration of the temple as per INTACH proposal".
- C (c) B.K. Chaturvedi Inter Ministerial Group (IMG) appointed sequel to the third meeting of National Ganga River Basin Authority (NGRBA) in April 2012 submitted its report in Sept 2012 where the IMG has recommended that best solution for saving the temple appears to be accepting the recommendation of two member committee comprising of Chairman Central Water Commission and Chairman Central Electricity Authority represented by its Member (Hydro). The two member committee examined the following option:
- D
- E
- F (i) Construction of an enclosure bund around temple and surrounding ghat and access road upto the level of 611m on the banks.
- G (ii) Construction of an concrete well of about 30 meter diameter and 18 meter height around the temple.
- (iii) Relocation of the temple to a safe location on the left bank of the river.
- H (iv) Raising the temple above the highest flood level at

its current location and to install the idol at higher elevation at the same spot with access to the temple through a pedestrian bridge from the left bank.

A

- (v) Construction of 30km long power channel and diversion dam in the upstream of existing dam.

B

Keeping in view the limitations and infeasibility of implementing the first three options the committee recommended the fourth option i.e. "Raising the temple above the highest flood level at its current location and to install the idol at higher elevation at the same spot with access to the temple through a pedestrian bridge from the left bank."

C

This committee visited the *Dhari Devi* temple on May 02, 2012 and interacted with trustees, priests of the *Dhari Devi* temple and few residents of village *Dhari* who were in favour of raising the temple above the highest water level. In fact the committee observed that the elevated platform of temple is in advance stage of construction and the preparations are under way for shifting the deities to the elevated location. The trustee, priests and resident who the committee interacted are of the opinion of early completion of the temple at the elevated location.

D

E

Dr. B. Jhunjhunwala expressed apprehensions against moving the *Dhari Devi* temple to a higher elevation, as it is against the "Rights of Worship". He proposed the option of Construction of 30 km long power channel and diversion dam in the upstream of existing dam.

F

G

**7. TOR IV: The committee will gather evidence through photography/videography**

The photographs taken during site visit are available at annexure – 5

H

A **8. TOR V: The Committee will give personal hearing to Shri Bharat Jhunjunwala accompanied by his wife & representatives of the project proponent i.e. AHPCL who will place their views and records if any, before the said Committee.**

B The committee gave personal hearing to Shri Bharat Jhunjunwala accompanied by his wife as well as project proponent (AHEC) on May 01, 2013 and heard patiently. The points raised by Shri Bharat Jhunjunwala are addressed as below:

C a. Sale of power outside the area

D The project clearances were accorded in the year 1985 and 1987 during the period of undivided Uttar Pradesh. The power purchase agreement of the project is with Uttar Pradesh Govt. utility and free power @ 12% of power generated shall be available to Uttarakhand Government and is in line with the Uttar Pradesh state re-organization Act 2000.

E b. Conditions attached to Environmental Clearance 1985

F Not in the purview of the committee. He may request to the MoEF for the safe.

G c. CAT Plan

The status on the CAT plan has been given above under the EC and FC clearance.

H d. Compensatory afforestation

The status on the afforestation has been given above under the FC clearance.

e. Green Belt

The status on the green belt has been given above under the EC and FC clearance. A

f. Geo morphological studies

The status on these studies and resettlement of the likely to be affected persons has been given above. B

g. Dhari Devi Temple

The response is given under TOR 3

h. Muck Disposal C

The status of muck disposal sites is elaborated above along with annexure 3 of photographs of all 10 locations.

i. Stop work order D

As informed by AHPCL that in view of NGT order of M.A. No. 103/2012 in Appeal No. 9 of 2011 dated Aug 07, 2012 they are continuing the construction of work. E

Committee also heard AHPCL through a power point presentation. The AHPCL requested the committee that their project may be allowed to be commissioned as earliest as possible. F

**9. RECOMMENDATIONS:**

The committee after verifying the conditions and progress of the work at site and hearing of Dr. B. Jhunjhunwala along with his wife and project proponent AHPCL and interaction with others in the project area recommends following: G

1. The muck disposal restoration may be done at the earliest. The necessary covering with top soil, H

- A plantation and toe wall for the permanent disposable site no. 8 & 9 be carried out at the earliest.
- B 2. The catchment area treatment plan and green belt plan being executed by State Forest department be expedited.
- C 3. An effective monitoring mechanism at the state level which should have the data for practicing adaptive management be created and such monitoring may be carried out in association with project affective society.
- D 4. As the project is in close proximity to habitations having several national and state institutions/ organization, the ongoing construction activities may be completed at the earliest."

E 25. Report is now being questioned by the MoEF, in spite of the fact, that they constituted the joint team which included the Director, MoEF as its representative. MoEF, in their written submission, raised an objection with regard to the proposal to shift *Dhari Devi* temple to a higher place which according to the MoEF would wound the religious feeling of large sections of Hindus. The MoEF felt that the project proponents plan to lift the temple up on column and preserve it under guidance of INTACH which could not possibly be a viable solution in view of the recent judgment of this Court in *Orissa Mining Corporation v. MoEF* [(2013) 6 SCC 476] which says that the religious faith, customs and practices of tribals have to be preserved and protected. MoEF in its affidavit dated 6.5.2013 also took that position. The Principal Secretary and State of Uttarakhand filed their response on 10.05.2013 with respect to the affidavit filed by the MoEF on 06.05.2013 and the Report submitted by the Joint Team. Forest Department of Uttarakhand also filed their note indicating their stand. Detailed written

H

submission has also been filed by the second respondent on 10.05.2013 with regard to the non-compliance of various directions given by the MoEF in its notice dated 30.06.2011 by AHPCL. A

26. Dr. B. Jhunjhunwala - party in person submitted that the High Court was right in directing a public hearing following the 1994 Notification, the necessity of the same, according to him, has been highlighted by this Court in *G. Sundarrajan v. Union of India and Others*, the judgment of which is reported in (2013) 6 SCC 620. Dr. Jhunjhunwala has also highlighted the necessity of keeping *Dhari Devi* temple on the spot at its present location. Dr. Jhunjhunwala further submitted that Right to Worship stands at a higher pedestal than Right to Life under Article 21 and any disturbance of the temple would violate the Right to Worship at *Dhari Devi* temple without any hindrance as guaranteed under Article 25 of the Constitution of India. Dr. Jhunjhunwala also suggested that the temple could be saved by making a canal instead of reservoir at the impugned project and the sacred rock in situ by constructing a dry well of sufficient height and diameter around it and providing pilgrim access to it by building an approach road. B  
C  
D  
E

27. We have gone through the affidavits filed by the State of Uttarakhand and we find they have wholeheartedly accepted the B.P. Das Committee Report and the report dated 3.5.2013 submitted by the Joint Team and also the B.K. Chaturvedi interim report dated September 2012. When this Court constituted the Committee on 25.4.2013, this Court directed the inclusion of the State Government representative as well, so that the State Government can express its views on various issues including the issue relating to *Dhari Devi* temple. State Government in their affidavit, it may be noted, have not questioned the suggestions made by the Committee in its report dated 3.5.2013. Consequently, we have to take it that the State Government has no objection whatsoever with regard to the suggestion made by the joint Committee in its report F  
G  
H

A dated 03.05.2013 i.e. raising the temple above the highest flood level at its current location and to install the idol at higher elevation at the same spot with access to the temple through a pedestrian bridge from the left bank. The Committee specifically stated in the report that they had visited *Dhari Devi*  
 B temple site and met trustees, priests of the temple and few residents of village *Dhari* and no objection was raised either by the trustees or priests of the temple on the suggestion made by the joint team in the report dated 03.05.2013.

C **INTACH Report:**

28. We also find that the Architectural Heritage Division of Indian National Trust for Art and Cultural Heritage (INTACH) has prepared a plan in consultation with *Dhari Devi* temple trust, Geological Survey of India and AHPCL and which was  
 D submitted to the MoEF on 12.9.2011, which has been accepted by all the subsequent Committees appointed.

**Dr. B.P. Das Committee Report**

E 29. MoEF in compliance with the order passed by this Court in SLP 362 and 5849 of 2012 in Writ Petition No. 68 of 2008 dated 27.07.2012 constituted B.P. Das Committee vide his Order dated 17.08.2012 to verify whether AHPCL has  
 F complied with the conditions of the environmental clearance granted in May 1985 and directions of the order issued under Section 5 of Environmental (Protection) Act, 1986 dated 30.06.2011 and to examine the feasibility of well option of *Dhari Devi* Temple.

G 30. We have already referred to in detail the steps taken by AHPCL to comply with the environmental clearance granted in 1985 and the conditions stipulated in the MoEF Order dated 30.06.2011, which has also been noted by the Joint Team constituted on the basis of the directions of this Court. B.P. Das  
 H Committee has elaborately examined the issue regarding restoration of Dhari Devi Temple in Paras 4.0, 4.1, 4.2, 5.2.1,

6.0 of its report of August 2012 and ultimately came to the conclusion that the proposal made by INTACH be accepted. The paragraphs mentioned above are extracted hereunder for easy reference:

**“4.0 Restoration of *Dhari Devi* Temple**

The Team visited the temple premises and surroundings on 29th August 2012. Discussions were held with the officials of AHPCL, office bearer of Aadhyashakti Maa Dhari Pujari Nyas, Shri V.P. Pandey, President along with Shri Vivek Pandey, Secretary and a Pujari namely Shri Manish Pandey. A number of local people and people representing different organizations/groups were present during the discussions. The following emerged as a result of discussions and interactions.

**4.1 Upliftment scheme for *Dhari Devi* temple prepared in collaboration with INTACH**

In accordance with the directions issued by MoEF vide dated 30.06.2011; the project proponent had got a restoration plan for *Dhari Devi* Temple prepared by INTACH. The construction, as per this plan, had already begun. Fourteen pillars out of eighteen have been erected upto 10-15 meters of heights. No Temple work was in progress on the day of site visit.

In addition to main Deity ie Maa *Dhari Devi*, the Plan contains provision for installation of other deities namely; Hanuman, Shiva, Havan Room, Prayer Hall, Mother rooms (2nos), office room and adequate space for passage and congregation of devotees. A total plan area of 544 sq. Mtr. Has been envisaged in the design of the temple at 611 meter Elevation and at 614 meter Elevation, as per the scheme formulated by INTACH.

- A     •     The Group explained to the Temple Samity about the concept and design of Kudala Sangam Temple in Karnataka where a well structure has been built to house a Samadhi. There was vehement opposition from the Temple Samiti and the people gathered in an around the temple to this concept.
- B     •     All the assembled people expressed that confinement of deity in a well is totally unacceptable to them. The Temple Samiti explained that Maa *Dhari Devi* is presently facing a village called *Dhari* Village and offering its blessing to the villagers and thus, protecting them from the perils and penury of different sorts. Under no circumstances the deity should be hidden and kept in the well which will cause obstruction to Maa *Dhari Devi* from viewing *Dhari* village. It was explained by them that the top of the sanctum sanctorium shall have to be kept open to sky and therefore, a well structure will pose many a problems.
- C     •     It was learnt from the Temple Samiti that Maa *Dhari Devi* is not part of the base rock. It is placed on a marble/tiled platform on the rock. The President of Temple Samiti also informed that about 20-22 years back, the deity had once lifted from its earlier position.
- D     •     The Temple Samiti expressed their anguish and resentment at the prolonged delay in completing the temple in its new form as per the INTACH design. They, along with the local people also informed that they might execute the remaining work through *Kar Seva* if an early decision in their favour is not forthcoming. They stated that they were fed up in facing Committees after Committees on this issue.
- E     •     The Temple Samiti as well as local people
- F     •
- G     •
- H     •

expressed the view that in case of Kudala Sangam in Karnataka State, a Samadhi has been housed in the well. They opined that there is no parity of reasoning and therefore, these two are not comparable. Thus, the concept of well structure of Kudala Sangam is not for a temple and the same cannot be considered appropriate for adoption in case of *Dhari Devi* Temple. They further informed that the temple rehabilitation plan prepared by INTACH is in conformity with temple architecture prevalent in Northern Part of India. They further informed that the temple plan was approved by the State Govt. Of Uttarakhand during year 2009.

The people also raised security, safety issues and difficulty in movement of devotees as the congregation would be much more in case of *Maa Dhari Devi* temple than Kudala Sangam. The entry and exit access for a well structure would be through spiral stairs along the stening wall which are disadvantageous and accident prone.

**4.2. On the feasibility of "Protecting the sacred rock in situ by constructing a dry-well of sufficient height and diameter around it and providing pilgrims access to it by building an approach way and a stair case on the inner wall of the dry-well."**

The team considered the following two alternative options:

(i) To protect the "*Maa Dhari Devi* idol" along with the sacred rock mound (Shila) by constructing a bigger diameter dry well.

(ii) To protect the rock mound (Shila) by constructing a smaller diameter dry-well in conjunction with the "*Maa Dhari Devi* Idol" upliftment scheme prepared in collaboration with the INTACH.

A For the reasons and constraints mentioned below the team is of the view that both the proposals are not feasible.

B · A plan area of 544 sq. Meter has been worked out and provisioned for the temple complex. For a circular structure such as dry well, this will entail a Bigger diameter (exceeding 50 meter) in order to accommodate staircases, space for deities and other associated facilities. This has been examined by Tata Consulting Engineers also, on behalf of the AHPCL. In view of very large diameter, the dry well structure would encroach into the river where its width is already narrow. The construction of dry-well structure will therefore, need temporary diversion of river water requiring structures like cofferdam etc. Fresh EIA study and EC for river diversion arrangements may be required and thereby delaying the temple construction/ rehabilitation work and impounding of the reservoir.

C · The concept of a "Small Dry-well" of around 15m in diameter is not feasible as four columns (out of eighteen) enclosing an area of 10mX15m around the deity planned from structural consideration that emerges out of INTACH restoration plan, will be fully interfering with the 15m well. This dry well from consideration of structural safety to resist uplift of 17m (anticipated HFL of 609.5 at the temple due to backwater rise minus base level of 593 m) will need a solid reinforced concrete (RC) raft of 20 to 22m diameter, which would mean shattering and removing the entire rock mound below the deity by the action of Drilling and Blasting. Even an annular raft will interfere with the central four columns and shatter the sacred rock during blasting operations. This will defeat the very purpose of protecting it.

D · During field visit, neither the puja samiti / the head priest nor the large number of devotees gathered there expressed their desire to go down to the lower level of the rock mound, once Maa *Dhari Devi* is installed at EL

614.00 and all other deities will be installed to complete the religious paraphernalia. The Puja Samity and the people at large expressed that they would feel hurt and anguished if the lower rock is encircled by a large well barring an open exposure. A

· The size and nature of sub-structure and its foundation of the well will depend on the geological strata and formation of river bed which will govern the actual quantum of work for erecting the structure. Detailed sub-soil study will be necessary for this. B

· Safety arrangements covering a number of aspects have to be provided such as for emergency evacuation, fire hazards etc. in case a well option is thought of. It will also impede future expansion of the temple premises which may be essential to cater for the increasing number of devotees visiting the temple. C D

· As the top of the well would have to be kept open, the well will be subjected to heavy rain and occasional cloud burst that may endanger the safety of deity and devotees. In addition, poor ventilation and stampede like situation cannot be ruled out. In the net, the well structure will hinder smooth "darshan" and movement of devotees. E

· Structurally, the well will be subjected to huge uplift pressure making the well unsafe and unstable. This will also entail huge thickness of wall and heavy founding rafts and thus, making construction complicated as drilling, blasting and grouting of rocks will be a necessity. F

· The devotees strongly object to any concept of well and expressed that confinement of Deity Maa *Dhari Devi* in a well is totally unacceptable to them. The devotees strongly felt that under no circumstances the Deity Maa *Dhari Devi* should be hidden and kept in a well. They desire that Maa *Dhari Devi* should continue to face the *Dhari* village and H

A offer blessings to the villagers and thus protect them from perils and penury of all sorts.

· The well structure will go against the local aesthetic and cultural heritage as prevalent in the region.

B In view of the compelling Technical, social, religious, and sentimental reasons, the scheme of constructing a big/small dry well structure to protect "*Dhari Devi* Idol" and the surrounding sacred rock mound in its existing position is not feasible.

C **5.2.1 *Dhari Devi* Temple Rehabilitation Scheme (submission of modified plan for construction commencement)**

D There has been adequate compliance by the Project Proponent and they have proceeded as per advice / directions given vide MoEF letter dated 30.06.2011. The project proponent has also informed the MoEF in February, 2012 about their program to resume the works as per modified temple restoration plan that has been prepared in collaboration with INTACH, a Conservation Architect, involving local Temple Samity and a representative of GSI. The AHPCL informed the MoEF about resumption of works on the Temple restoration accordingly.

F **6.0 Conclusion on *Dhari Devi* Temple Restoration Proposal.**

G The group is of the view that the architecture of temple in southern part of India and in Northern part of India is altogether different. The INTACH proposal takes care of the people's acceptability of the temple in terms of design, plan, facade and overall architecture of the temple.

H The project proponent has gone ahead with the

construction of the uplifting proposal of the temple in compliance with the directions given under Section 5 of EP (Act), 1986 on 30.06.2011. They have followed the directions/ advice given under relevant paras of the order of the MoEF.

In addition to the engineering and construction related impediments in building a well structure which will encroach into the main course of the river where it is narrow. There has been tangible progress in the construction of the temple as per restoration plan prepared by INTACH and which has got the acceptance of the Temple Samiti and the local citizen.

The Group does not consider it appropriate to thrust an option against the faith, belief, expectation of the local people/stakeholders and which is contrary to cultural heritage of the region. It merits mention that they are totally opposed and appeared contemptuous to the very concept of a well structure for housing the deity.

A portion of the base rock is planned to be cut and placed at new location to form the Deity's backdrop. The Group noted that the Temple Samiti and others are in accordance with the overall plan of restoration of *Dhari Devi* Temple as suggested by INTACH.

The Group also apprehends public unrest, agitation leading to law and order problem in the event of thrusting upon them the option of well structure and other action causing prolonged delay in putting the temple restoration issue, in accordance with INTACH plan in rest."

**B.K. Chaturvedi Committee Report**

31. MoEF constituted an inter-ministerial group (IMG) under the Chairmanship of Shri B.K. Chaturvedi, Member, Planning Commission on 15th June, 2012 to review and consider certain

A issues related to environmental flows, environmental impact of the hydro-power projects in the upper reaches of river Ganga and its tributaries such as Bhagirathi and Alaknanda. MoEF also vide its office memorandum dated 20.7.2012 requested the Chaturvedi Committee to review the cumulative impact on  
 B flow of river as also the social impacts of the relocation of *Dhari Devi* Temple situated upstream of the project. A two-Member Committee consisting of Chairman, Central Electricity Authority and Chairman, Central Water Commission, both of them are members of the IMG, was constituted to consider the issue with  
 C regard to *Dhari Devi* Temple and to make suggestions. The interim report dated 07.09.2012 (Volume II) of the two-Member Committee on *Dhari Devi* Temple reads as follows:

**12.3 Construction of *Dhari Devi* Temple on raised platform**

D · The proposed structure of *Dhari Devi* temple on a raised platform on concrete columns above HFL (at El. +614 m) has been designed by IIT Roorkee and has got necessary clearance / permission of the State Government.

E · During the visit, discussions were held with several local people and priest of the temple. All the people met with the Committee were found very positive towards the construction of *Dhari Devi* temple on a raised platform.  
 F There was no objection on raising the temple at higher elevation and so the project works can go on, it was felt by them.

G · The construction of *Dhari Devi* temple on raised platform would cost to the Developer of Rs.9.0 crore only.

H · It has been reported by the local residents that this temple has submerged earlier at several times during high floods. Even on 3rd August, 2012 the water level reached up to the floor level of the temple (+593 m) and lower part of the temple was filled with silt and floating debris, as it may

seen in the following photograph taken during visit.

A

- Even if, the dam would not have been constructed, there is always a possibility of submergence of the temple during high flash floods.

### **13. Recommendations of the Two Member Committee**

B

Based on above findings, the recommendations of the TMC are as under:

- Considering the significant progress of the project, the Section 5 may be withdrawn by MoEF at the earliest so that the project works are resumed at site keeping in view the national interest of hydro power sector, benefits of local people, project specific local area development, feelings/views of project affected people, etc. otherwise it would be an end to hydro power development in Uttarakhand as well as in the country.

C

D

- Since an expenditure of over three thousand crore rupees have already been incurred on the project, any delay in commissioning would add to heavy burden of interest during the construction (IDC) and escalate the cost of the project and would make the tariff chargeable to consumers completely unviable.

E

- During the discussion with villagers, it was observed that barring few individuals, everyone is anxious to see completion of the project as early as possible. They are in favour of construction of *Dhari Devi* temple on raised platform above HFL at the earliest.

F

- Discussions were held with the officers of UJVNL and they were also keen in completion of this project in view of the power shortages in Uttarakhand. The Government of Uttarakhand would get 12% free power from the project on its commissioning.

G

H

A **14. Conclusion**

B · The idea of construction of a 30km power channel in lieu of existing dam cannot be accepted at this stage on account of (i) geological and geotechnical investigations not done, (ii) enormous cost of the power channel and new diversion dam, (iii) issue of forest clearance and land acquisition, (iv) minimum 5 years of construction time, (v) very high tariff to be paid by the purchaser.

C · The *Dhari Devi* temple is not included in the protected monuments of Archaeological Survey of India and it is a local temple to be worshipped by nearby villagers only. All the local villagers and the priest of the temple are in agreement with the project authorities to raise the temple on RCC structure above HFL.

D · Option of providing a well surrounding the temple is neither practical nor acceptable to locals.

E 32. Final Report was submitted by B.K. Chaturvedi Committee on April 2013 (Vol 1) before MoEF, *inter alia*, reiterating its interim report on *Dhari Devi* Temple. Das Committee, Chaturvedi and Joint Team constituted on the basis of direction of this Court have, therefore, fully endorsed the views made by INTACH on *Dhari Devi* Temple. We find no reason to differ from the views expressed by the expert committee, which was submitted hearing all the affected parties, including the Trustees of the Temple, devotees, *Pujaris* etc. Committee reports to that extent stand accepted.

F  
G 33. We are also not impressed by the argument that by accepting the suggestions of all the expert committees to raise the temple as such to a higher place, would wound the religious feelings of the devotees or violate the rights guaranteed under Article 25 of the Constitution. Sacred rock on which the temple exists is still kept intact and only the height of the temple  
H increased so that the temple would not be submerged in the

water. In *Orissa Mining Corporation v. MoEF*, this Court was examining the rights of Schedule Tribes and the Traditional Forest Dwellers under the Forest Rights Act, 2006 in the light of Articles 25 and 26 of the Constitution. This Court held that those articles guarantee the right to practice and proposals not only in matters of faith or beliefs, but all rituals and observation. We are of the view that none of the rights of the devotees of *Dhari Devi Temple* has been affected by raising the level of the temple, which remains attached to the Sacred Rock.

34. MoEF proceedings dated 30.06.2011, Report of the Das Committee as well as the Joint Team dated 3.5.2013 refer to the issue of muck management and disposal, catchment treatment area plan and green belt and also the safety of the Dam.

**Safety of the Dam**

35. Dam safety and security is a matter of paramount importance, failure of which can cause serious environmental disaster and loss of human life and property. Proper surveillance, inspection, operation and maintenance of dams is essential to ensure for safe functioning of the Dams. The Central Water Commission (CWC) is a premier technical organisation of India in the field of water resources. The Commission is also entrusted with the general responsibilities of initiating, coordinating and furthering, in consultation with the State Governments concerned, schemes for control, conservation and utilisation of water resources throughout the country for the purpose of flood control, irrigation, drinking water supply and water power development. Safety of dams, in our country, is the principal concern of the State Government. The State Government has also to carry out investigation, planning, design, construction and operation. AHPCL says, so far as SHEP is concerned, engineering and technical parameters of the dam are clearly narrated in the detailed project report which, in turn, are assessed by CEA in consultation with the CEC and

A GSI. The norms and regulations laid down by the concerned authorities, and whether those are strictly followed or not, have to be assessed and monitored by the Nodal Agency, CEA/ Ministry of Power as well as the GSI.

B **Safety and security of the people**

36. Safety and security of the people are of paramount importance when a hydro electric project is being set up and it is vital to have in place all safety standards in which public can have full confidence to safeguard them against risks which they fear and to avoid serious long term or irreversible environmental consequences. The question as to whether the recent calamities occurred at Uttrakhand on 16.6.2013 and, thereafter, due to cloud burst, Chorabari Lake burst due to unprecedented rain and consequent flooding of Alaknanda river etc. has affected the safety of SHEP has also to be probed by the MoEF, State of Uttarakhand and Dam Safety Authority etc.

**Muck Management and Disposal**

E 37. Construction of SHEP involving excavation of earth and rock has generated large quantum and with the objective to protect the disposal areas from further soil erosion and develop the surrounding areas in harmony with the environment, the muck disposal plan is formulated. Muck disposal plan gives quantification of muck, identifies location and activities wherein muck is generated, during excavation and blasting operation and quantifies muck generated from the activities with relevance to disposal areas. The Das Committee visited the project site and submitted a status report on 29-30 August, 2012 which has dealt with muck disposal, details of which have already been dealt with in the earlier part of the Judgment. Report of the Joint Committee dated 03.05.2013 also refers to the AHPCL's action plan regarding muck management and disposal and recommended that remaining work, particularly, of the permanent site No.8 and 9 be carried out at the earliest.

H

AHPCL has given the details of the work carried out for muck disposal. Failure of removal of muck from the project site may also cost flooding of the project areas, causing destruction to the environment and to the life of property of the people. MoEF and State Government and all other statutory authorities would see AHPCL takes proper action and steps for muck management and disposal.

**Catchment Area Treatment (CAT)**

38. CAT is required to be carried out by the project developer along with R & R and greenbelt activities, primarily to mitigate the adverse environmental impact created by the project construction. CAT is also resorted to reduce the inflow of silt and prevent sedimentation of reservoirs. CAT management involves steps to arrest soil erosion, rehabilitation of degraded forest areas through afforestation, controlling landslide and rockfalls through civil engineering measures and long time maintenance of afforestation areas. Silt inflows in river water not only result in reduction in storage capacity of dams, but also lead to increased wear and tear of turbines. Therefore, CAT is of crucial importance with regard to hydro electric projects. CAT plan has been prepared by the Utrkhand Forest Department and the Project Proponent has paid the estimated amount of Rs.22.30 crores to the State Forest Department towards implementation of CAT Plan.

39. We may, in this connection, refer to the brief note submitted by the AHPCL wherein they have referred to landslide which occurred in the catchment area of dam Manari Bhali Stage-I in August 1978 blockading the Bhagirathi River with a dam of muck, about 40 KM upstream of dam. This dam of muck breached on its over after 12 hours and the monsoon water accumulated during this period gushed out in form of a wall of water about 20 meter high. The flood receded after a few hours, but the dam did not suffer any damage. It was pointed that during this flash flood period boulders up to 250

A tonnes in weight had hit and rolled over the dam. The discharge  
in the river had risen to 4500 Cum per sec. Further it was also  
pointed out that in August 2012, partly constructed Srinagar  
Dam also faced similar type of flood. This time due to cloud  
bursts and breaching of coffer dams in the project upstreams,  
B the water level at the Dam rose by 17 meters, but after the flood  
receded, no damage to the dam was noticed. The discharge  
in the river had risen to 6500 Cum per sec. AHPCL, therefore,  
maintains the stand that the structure of the dam is strong  
enough to bear the pressure not less than 6500 Cum per sec  
C of water discharge.

40. The Principal Secretary of Forest Department,  
Government of Uttarakhand submitted in a short affidavit dated  
10.05.2013, explaining the steps they have taken. The primary  
D responsibility is on the Forest Department to carry out  
effectively the CAT Plan. Proper steps would be taken by the  
concerned authorities, if not already taken. MoEF, State  
Government and all other authorities will see the same is fully  
implemented at the earliest, so also the recommendations  
E made by the Joint Team with regard to CAT.

### Green Belt Development

41. AHPCL, it is seen, has deposited first year budget of  
Rs.203.6 lakhs to the State Forest Department for green belt  
F rim of the reservoir in August 2012. Although green belt area  
is earmarked the technical documents based on the maximum  
flood level in the reservoir, the rim of the reservoir, could only  
be determined and developed after reservoir is impounded.  
Proper steps would be taken by the Forest Department of  
G Uttarakhand to carry out the green belt development area in  
question. The MoEF, the State Government etc. would see that  
the proper steps would be taken by all the authorities including  
the AHPCL to give effect to the directions given by the Joint  
Team.

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42. Going through the reports of Das Committee, Chaturvedi Committee as well as the Joint Team and after perusing the affidavits filed by the parties, we find no reason to hold up the project which is almost nearing completion. MoEF, AHPCL, Government of Uttarakhand, Forest Department would take immediate steps to comply with all the recommendations made by Joint Team in the report dated 03.05.2013 and also oversee whether AHPCL is complying with those directions as well.

43. Under such circumstances, the Appeal in SLP (C) No. 362/2012 would stand allowed and the judgment of the High Court stands set aside. Consequently the SLP (C) Nos. 5849-5850 of 2012 would stand dismissed. All the Transferred matters from NGT are also disposed of as above.

**Court's concern**

44. We are, however, very much concerned with the mushrooming of large number of hydroelectric projects in the State of Uttarakhand and its impact on Alaknanda and Bhagirathi river basins. Various studies also indicate that in the upper-Ganga area, including Bhagirathi and Alaknanda rivers and their tributaries, there are large and small hydro power dams. The cumulative impact of those project components like dams, tunnels, blasting, power-house, muck disposal, mining, deforestation etc. on eco-system, is yet to be scientifically examined. MoEF undertook two studies in the recent past:

- (i) Assessment of Cumulative Impact of Hydropower Projects in Alaknanda and Bhagirathi Basins which was entrusted by National River Conservation Directorate (NRCD) of MoEF to the Alternate Hydro Energy Centre (AHEC), IIT Roorkee vide proceedings dated July 14, 2010.
- (ii) MoEF also vide their proceedings dated 23rd July, 2010 authorized Wild Life Institute of India (WII),

A Dehradun to make an assessment on cumulative impacts of “Hydroelectric Projects on Aquatic and Terrestrial Biodiversity in Alaknanda and Bhagirathi Basins, Uttarakhand.

B 45. AHEC submitted their report to MoEF in December 2011 and WII finalized its report in December 2012. AHEC made some recommendations on Geology, seismology, soil erosion, sedimentation etc. Some of the major recommendations of the study covered the aquatic biodiversity profile, critically important fish habitats including recommendation on Fish Conservation Reserve at Nayar River and Bal-Ganga, Tehri Reservoir Complex. WII made recommendations on impact on aquatic biodiversity and their habitats, terrestrial component of biodiversity and details about these in the river basins. Recommendations were also made covering environmental flows, conservation, reserve, strategic option of regulating impact of hydropower projects of different categories and impact on aquatic biodiversity and terrestrial biodiversity in the above mentioned basins.

E 46. We have gone through the Reports and, *prima facie*, we are of the view that the AHEC Report has not made any indepth study on the cumulative impact of all project components like construction of dam, tunnels, blasting, power-house, Muck disposal, mining, deforestation etc. by the various projects in question and its consequences on Alaknanda as well as Bhagirathi river basins so also on Ganga which is a pristine river. WII in its Report in Chapter VIII states as follows:

**“Para 8.3.2 Present and future scenario**

G The scenario building for assessing impacts on biodiversity values portrays very distinctively the present and futuristic trends of the impact significance of hydropower developments in all the sub-basins in the larger

H

landscape represented by the Alaknanda and Bhagirathi basins. A

It becomes apparent that because of the fact that many of the projects are already in stage of operation and construction, the reversibility in significance of impacts on terrestrial biodiversity is not possible in sub-basins. Decline in biodiversity values of Bhagirathi II sub-basin have significantly been compounded by Tehri dam. B

The scenarios provide adequate understanding to make decisions with respect to applying exclusion approach across the two basins for securing key biodiversity sites (such as critically important habitats) and prevent adverse impacts on designated protected areas. C

Based on five different scenarios that have been presented the most acceptable option suggests that the decision with respect to 24 proposed Hydro Electric Projects may be reviewed." D

47. Will report also states that out of total 39 proposed projects, 24 projects have been found to be significantly impacting biodiversity in the two sub-basins and the combined footprint of all 24 projects have been considered for their potential to impact areas with biodiversity values, both aquatic and terrestrial, critically important habitat of rare, endangered and threatened species of flora and fauna and IWPA projected species. E F

48. B.K. Chaturvedi Committee, after referring to both the Reports, in Chapter III (Volume I, April 2013) stated as follows: G

"3.66 The River Ganga has over a period of years suffered environmental degradation due to various factors. It will be important to maintain pristine river in some river segments of Alaknanda and Bhagirathi. It accordingly recommends that six rivers, including Nayar, Bal Ganga, Rishi Ganga, H

A Assi Ganga, Dhaul Ganga (upper reaches), Birahi Ganga and Bhyunder Ganga, should be kept in pristine form and developments along with measures for environment up gradation should be taken up. Specifically, it is proposed that (a) Nayar River and the Ganges stretch between  
B Devprayag and Rishikesh and (b) Balganga – Tehri Reservoir complex may be declared as Fish Conservation Reserve as these two stretches are comparatively less  
C disturbed and have critically important habitats for long-term survival of Himalayan fishes basin. Further, no new power projects should be taken up in the above six river basins. In the IMG's assessment, this will mean about 400 MW of Power being not available to the State.

D 3.67 Pending a longer term perspective on the Ganga Basin Management Plan, following policy needs to be followed to implement the hydro power projects on the River Ganga on Bhagirathi and Alaknanda basins:

- (i) No new hydropower projects be taken up beyond 69 projects already identified (Annex-VIA-VID).
- E (ii) New hydropower projects may be permitted to be constructed with limitations as in Paras 3.52-3.54 above and giving priority to those projects already under construction.
- F (iii) New hydropower projects which are still under investigation or under development are not being proposed for implementation. However, two such projects can be considered and a view taken after technical assessment by the CEA.

G Based on the above, projects at Annex-VID may need a review and decision till after long term Ganga basin study by IIT Consortium.

H 3.70 The River Ganga has been a pristine River.

Over a period of years, it has been used for irrigation, drinking water and other purposes. The efforts to keep it in the pristine form have been minimal. The IMG felt that it will be necessary to take measures for ensuring that several parts of it which have so far not been impacted continue to be in the pristine form. Secondly, it consider necessary to take measures on pollution, particularly in the upper reaches and the two basins of Bhagirathi and Alaknanda. The IMG, therefore, recommends that six rivers, including Nayar, Bal Ganga River, Rishi Ganga, Assi Ganga, Dhauli Ganga (upper reaches), Birahi Ganga and Bhyunder Ganga rivers should be kept in pristine form no further hydropower developments should take place in this region. Further, environment upgradation should be taken up in these sub-basins extensively.”

49. In the Executive Summary of Chaturvedi Report, on the question of ‘Environmental Impact of Projects’, reads as follows:

4.17 Development of new hydropower projects has impact on environment, ecology, biodiversity, both terrestrial & aquatic and economic and social life. 69 hydropower projects with a capacity of 9,020.30 MW are proposed in Bhagirathi and Alaknanda basins. This includes 17 projects which are operational with a capacity of 2,295.2 MW. In addition, 26 projects with a capacity of 3,261.3 MW (including 600 MW Lohari Nagpala hydropower project, work on which has been suspended by Government decision) which were under construction, 11 projects with a capacity of 2,350 MW CEA/TEC clearances and 16 projects with a capacity of 1,673.8 MW under development.

4.18 The implementation of the above 69

A hydropower projects has extensive implications for other needs of this society and the river itself. It is noticed that the implementation of all the above projects will lead to 81% of River Bhagirathi and 65% of River Alaknanda getting affected. Also there are a large number of projects which have very small distances between them leaving little space for river to regenerate and revive.

50. The above mentioned Reports would indicate the adverse impact of the various hydroelectric power projects on the ecology and environment of Alaknanda and Bhagirathi river basins. The cumulative impact of the various projects in place and which are under construction on the river basins have not been properly examined or assessed, which requires a detailed technical and scientific study.

51. We are also deeply concerned with the recent tragedy, which has affected the Char Dham area of Uttarakhand. Wadia Institute of Himalayan Geology (WIG) recorded 350mm of rain on June 15-16, 2013. Snowfall ahead of the cloudburst also has contributed to the floods resulting in the burst on the banks of Chorabari lake near Kedarnath, leading to large scale calamity leading to loss of human lives and property. The adverse effect of the existing projects, projects under construction and proposed, on the environment and ecology calls for a detailed scientific study. Proper Disaster Management Plan, it is seen, is also not in place, resulting in loss of lives and property. In view of the above mentioned circumstances, we are inclined to give following directions:

(1) We direct the MoEF as well as State of Uttarakhand not to grant any further environmental clearance or forest clearance for any hydroelectric power project in the State of Uttarakhand, until further orders.

(2) MoEF is directed to constitute an Expert Body

consisting of representatives of the State Government, WII, Central Electricity Authority, Central Water Commission and other expert bodies to make a detailed study as to whether Hydroelectric Power Projects existing and under construction have contributed to the environmental degradation, if so, to what extent and also whether it has contributed to the present tragedy occurred at Uttarakhand in the month of June 2013.

(3) MoEF is directed to examine, as noticed by WII in its report, as to whether the proposed 24 projects are causing significant impact on the biodiversity of Alaknanda and Bhagirath River basins.

(4) The Disaster Management Authority, Uttarakhand would submit a Report to this Court as to whether they had any Disaster Management Plan in place in the State of Uttarakhand and how effective that plan was for combating the present unprecedented tragedy at Uttarakhand.

52. Reports would be submitted within a period of three months. Communicate the order to the Central and State Disaster Management Authority, Uttarakhand.

53. In view of above, civil appeals and transferred cases are disposed of.

K.K.T. Appeals & Transferred Cases disposed of.