

Agenda-5

File No. 8-36/2014-FC

1. Government of Uttarakhand vide letter dated 15th April 2013 submitted a proposal to obtain prior approval of the Central Government, in terms of the Section-2 of the Forest (Conservation) Act, 1980 for diversion of 381.43 hecatres of forest land in favour of Water Resources Department, Government of Uttarakhand for construction of Jamrani Dam Project in District Nainital, Uttarakhand.
2. Details indicated in the proposal submitted by the Government of Uttarakhand are as below:

FACT SHEET

1.	Name of the Proposal	Diversion of 381.43 hecatres of forest land in favour of Water Resources Department, Government of Uttarakhand for construction of Jamrani Dam Project in District Nainital, Uttarakhand.
2	Location:	
	State	Uttarakhand
	District	Nainital
3.	Particular of Forests	
i	Name of Forest Division	Nainital Forest Division, Terai East Forest Division, Terai Central Forest Division and Ramnagar Forest Division
ii	Area of Forest land for Diversion	Nainital Forest Division: 351.55 Ha. Terai East Forest Division: 2.651 Ha Terai Central Forest Division: 19.78 Ha. Ramnagar Forest Division: 7.45 Ha. Total: 381.43 Hectares
iii	Legal Status of Forest land	Reserved Forest: 155.88 ha. Civil Soyam Forest land: 153.063 ha. Van Panchayat Forest land: 72.49 ha.
iv	Density of Vegetation	Nainital Forest Division 0.60

		<p>Terai East Forest Division 0.10</p> <p>Terai Central Forest Division 40 to 100 percent</p> <p>Ramnagar Forest Division 0.10</p>
v	Species-wise and diameter class wise enumeration of trees	
4.	Vulnerability of area to erosion	<p>Report of geologist is enclosed. The following has been stated in the report of the Geologist:</p> <p>(i) In the reservoir area the rise and fall of the ground water table may weaken the rocks and soil and reduce shear strength and its fluctuation produces alteration in the pore water pressure which may promote landslides along the bank of reservoir.</p> <p>(ii) (impounded) Reservoir is under faulted, fissured, jointed area and above 100 M mark may cause induced seismicity.</p> <p>(iii) The reservoir of this area may cause loss of forests, pastures, agriculture fields and may cause migration of wild life.</p>
5	Approximate distance of proposed site for diversion from boundary of forest	<p>Nainital Forest Division Within the forest boundary</p> <p>Terai East Forest Division Within the forest boundary</p> <p>Terai Central Forest Division Within the forest boundary</p> <p>Ramnagar Forest Division Within the forest boundary</p>
6.	Whether forms part of National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve, Elephant Corridor etc. (if	<p>Nainital Forest Division No.</p> <p>Terai East Forest Division Falling within the notified Shivalik Elephant Reserve</p>

	so, the details of the area the comments of the Chief Wildlife Warden to be annexed)	<p>Terai Central Forest Division Government of Uttarakhand, Forests and Environment Department vide Notification No. 1777/1/(12) Va. Gra. Vi. /2002-19 (9) /08 dated 28.10.2002 has notified the above area as Elephant Reserve.</p> <p>Ramnagar Forest Division No</p>
7.	Whether any rare/ endangered/ unique species of flora and fauna found in the area if so, details thereof	<p>Nainital Forest Division Yes. Note is enclosed.</p> <p>Terai East Forest Division No</p> <p>Terai Central Forest Division No.</p> <p>Ramnagar Forest Division No</p>
8.	Whether any protected archaeological/ heritage site/ defence establishment or any other important monument is located in the area. If so, the details thereof with NOC from competent authority, if required	<p>Nainital Forest Division Consent letter is enclosed.</p> <p>Terai East Forest Division No</p> <p>Terai Central Forest Division No</p> <p>Ramnagar Forest Division No</p>
9.	Whether the requirement of forest land as proposed by the User Agency in col.2 of Part-I is unavoidable and bare minimum for the project. If no, recommended area item-wise with details of	<p>Nainital Forest Division Copy is enclosed</p> <p>Terai East Forest Division Enclosed.</p> <p>Terai Central Forest Division Enclosed</p> <p>Ramnagar Forest Division</p>

	alternatives examined	In the absence of any other alternative, requirement of forest land is minimum																									
10.	Whether any work in violation of the Act has been carried out (Yes/No). If yes, details of the same including period of work done, action taken on erring officials. Whether work in violation is still under progress	<p>Nainital Forest Division No</p> <p>Terai East Forest Division Work has been executed before the Forest (Conservation) Act, 1980 came into force.</p> <p>Terai Central Forest Division Work has been executed before the Forest (Conservation) Act, 1980 came into force.</p> <p>Ramnagar Forest Division No.</p>																									
11.	Details of Compensatory Afforestation Scheme:	<p>Compensatory Afforestation is proposed in an area of 762.86 ha of Civil Soyam land in Nainital district but the area has not been identified. A letter has been written by Project authorities to Commissioner Kumaon for allotment of land for Compensatory Afforestation.</p> <p>Apart from this, CA is also proposed in following areas:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Name of Division</th> <th>Proposed area</th> <th>Legal Status</th> <th>Area in ha</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Tarai East</td> <td>Gola Rokhad Beat no. 6</td> <td>Res. Forest</td> <td>2.5</td> </tr> <tr> <td>2</td> <td>Tarai Central</td> <td>Haldwani range</td> <td>Res. Forest</td> <td>7.0</td> </tr> <tr> <td>3</td> <td>Ramnagar</td> <td>Fatehpur range</td> <td>Res. Forest</td> <td>7.45</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Total</td> <td>27.38</td> </tr> </tbody> </table> <p>The Suitability certificate of the DFO to certify that the land proposed for compensatory afforestation is suitable for plantation is not attached. This needs to be submitted by the respective DFO's.</p> <p>Certificates of concerned DFOs to the effect that the</p>	S. No.	Name of Division	Proposed area	Legal Status	Area in ha	1	Tarai East	Gola Rokhad Beat no. 6	Res. Forest	2.5	2	Tarai Central	Haldwani range	Res. Forest	7.0	3	Ramnagar	Fatehpur range	Res. Forest	7.45				Total	27.38
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1	Tarai East	Gola Rokhad Beat no. 6	Res. Forest	2.5																							
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		<p>land identified for compensatory afforestation is free from encroachment/ other encumbrances are not enclosed.</p> <p>It is mentioned in the proposal that in Nainital division, Rs. 524.52 lacs is the estimated cost of CA .However, the estimate submitted is for Rs 4,48,54,642. It is also mentioned in the proposal that an amount of Rs 26.92 lacs (14.49 + 12.43) is already deposited way back in 1989& 1990 (Letter of Executive Engineer Jamrani Dam to DM Nainital Annexure 2) and this would be reduced from the total amount to be deposited now, which is not reasonable. The User agency needs to deposit the full amount for Compensatory Afforestation.</p> <p>In addition to this an amount of Rs 1347579 is outlay for CA in Terai Central, Terai East and Ramnagar divisions</p>
12	Status of FRA compliance	Not enclosed
13.	Recommendation	
	DFO	<p>Nainital Forest Division Comments enclosed.</p> <p>Terai East Forest Division Recommended</p> <p>Terai Central Forest Division Recommended</p> <p>Ramnagar Forest Division For promotion of development. However, Hon'ble High Court of Nainital in Writ Petition No. 1244/2005</p>

		has directed to maintain status quo in this area.
	CF	West Kumaon Circle, Uttarakhand Forwarded for appropriate action in accordance with the comments of the concerned Divisional Forest Officers. South Kumaon Circle Agrees with the comments of the Nainital DFO
	PCCF	Countersigned
	State Govt.	Signed without any comment.

3. The forest land proposed to be diverted has been inspected by the Regional Office (Central Zone), Lucknow. Additional information provided in the site inspection report received from the Regional Office (Central Zone), Lucknow vide their letter dated 11th August 2014 are as below:

- (i) The site inspection of the proposal was carried out by Ms. Prachi Gangwar, Deputy Conservator of Forests (Central) on 25.07.2013 and 26.07.2014. The Divisional Forest Officer Nainital Division Mr. Parag Madhukar Dhakate, Mr. Melkani Executive Engineer Jamrani division, Irrigation Department Haldwani, Mr. Mukul Sharama, Range Officer Manora, Mr. Paniram, Range Officer Badhaul, along with other officers of the forest department and the user agency were present.
- (ii) Legal Status of the area proposed for diversion for construction of Dam, Cofferdam, Reservoir, Canals, Colony etc. is as follows-

	Name of Forest Division	Name of the District	Reserve Forest (in ha)	Civil Soyam Forest Land (in ha)	Van Panchayat (in ha)	Total Forest Land (in ha)
SUMERGENCE AREA						
1	Nainital	Nainital	126.0	153.063	72.49	351.55
CANALS & COLONY						

2	Ramnagar (Irrigation Colony)	Nainital	7.45	0	0	7.45
3	Tarai Central (Haripura & Paha & Development feeder Canals)	Nainital	20.31	0	0	20.31
4	Tarai East (Diversion Gaula feeder canal)	Nainital	2.12	0	0	2.12
			155.881	153.063	72.49	381.43

- (iii) Apart from this, it is mentioned in the proposal that 47.39 ha of agricultural land is required for construction of reservoir. During site inspection it was seen that the reservoir (Gaula Barrage) is already constructed and part of it appears to be in forest .However, neither the Forest Department officials nor the Irrigation department officials were able to produce any documents to substantiate it. But the status of this has to be verified.
- (iv) The entire area proposed for diversion falls in Nainital, Tarai central, Tarai East and Ramnagar Forest divisions of Nainital district The item-wise breakup of the area proposed for diversion is as follows-

1	Submergence Area	351.55
2	Gola Irrigation Colony	7.45
3	Haripura Feeder canal	17.43
4	Paha Feeder canal	2.71
5	Deval Chaur feeder canal	0.17
6	Diversion Gola feeder canal	2.12
	Total	381.43 ha

- (v) The proposal involves construction of a colony in Ramnagar division in an area of 7.45 ha. The colony is already constructed. The proposal also involves construction of a power house. Here it is pertinent to mention that as per clause 4.5(i)of Forest Conservation Act (1980) guidelines the Central Govt. will not

entertain any proposal for diversion of forest land construction of Residential Houses. Also according to 4.5 (ii), Diversion of forest land for construction of other of other buildings also will not be normally considered. However, such diversion may be allowed for construction of Schools -- etc. which are to be put up for the benefit of the people of that area, but such diversion should be strictly limited to the actually needed area and further it should not exceed 1.00 ha.in each case. Thus construction of this residential colony amounts to violation of FCA (1980)

- (vi) Total cost of project at present rates is Rs. 1537.15 cr.
- (vii) The forest area proposed for diversion is moderately conducive to wildlife at most of the places. The proposed area for construction of feeder canal in Tarai East division is part of Shiwalik Elephant Reserve. Comments of Chief Wildlife Warden are required.
- (viii) The area in Nainital division is very eco-sensitilve and many endangered faunal species are found here, According to DFO Nanital's report habitat's of many endangered species would be affected and this would increase the man animal conflicts in the area. The breeding and survival of Golden Mahaseer found in the river would be effected, NOC of Fishereies department is required specially in this context.
- (ix) The Gola Barrage is located in the area which is part of the proposed Nandhaur Wildlife Sanctuary. The Chief Wildlife Warden needs to elucidate in reference to this context.
- (x) The area in Nainital division is very rich in flora. Vegetation density is 0.6 in Nainital Division, 0.1 in Tarai East Division, 0.4-1 in Tarai Central division, and 0.1 in Ramnagar division. About 85794 trees would be affected out of which 18443 trees would be felled for construction of Dam body, Coffor dam, diversion duct etc. while 67351 trees would come in the submergence area.
- (xi) Total number of trees to be felled as enumerated in the proposal is 85794
- (xii) In the proposal number of trees to be felled are 85794, which is to the tune of 225 trees per hectare. **84891 trees are of girth below 60 cm and the remaining 903 trees are of above 60 cm girth.** The cutting/felling of existing trees will affect the eco-system of the area.
- (xiii) Important species available in the forest land proposed to be diverted are *Shorea robusta*, *Cassia fistula*, *Syzygium cuminii*, *Embelllica officinalis*, *Melia Azadirachta* , *Albizzia lebbeck*, *Dalbergia sissoo*, *Acacia catechu* etc.

- (xiv) The proposal is for diversion of 381.43 ha of forest land for construction of Jamrani dam, Irrigation colony and feeder canals. The proposed dam site is located near Jamrani village at a distance of around 10 km from Gala barrage which is located at Kathgodam (Nainital), Uttarakhand. Geographically the area is located between E29°16'15" latitude and N.79° 36' 36" longitude. The crest length of the proposed dam is 480 m and the maximum height above the deepest foundation level is 150.6 m. A Power house is also proposed to be constructed with an installed capacity of 4*3.5 MW.
- (xv) The feeder canals and the irrigation colony have already been constructed. Thus there is violation of Forest (Conservation) Act, 1980. Also the Gola Barrage has been constructed part of which appears to be in forest area. This has to be verified further and if the area is found to be in forest, this would attract penal provisions of Forest (Conservation) Act, 1980.
- (xvi) The proposal for construction of Jamrani Dam was earlier rejected by Forest Advisory Committee in 1994. Now a fresh proposal has been submitted.
- (xvii) The proposal involves violation of Forest Conservation Act (1980), since the feeder canals, and the Colony have been constructed earlier without proper approval. The proposal for diversion of forest land for feeder canals and the Colony is included now, along with this proposal of diversion of forest land for construction of dam.
- (xviii) Also part of Gala Barrage seems to be in forest so this also would amount to violation of Forest Conservation Act (1980).
- (xix) The proposal involves rehabilitation of around 782 people (as per 2008 survey) of 6 villages which are coming in the submergence area. But the Rehabilitation and Resettlement plan has not been prepared by the user agency. The proposed diversion also involve resettlement of Haidakhan Ashram & Temple.
- (xx) Reclamation Plan has not been submitted. Certain amount should be earmarked for soil conservation works and river training programme. Hence accordingly a reclamation plan of the area should be prepared and amount earmarked should be used for strengthening of catchment area.
- (xxi) The catchment area of Jamrani Dam project constitutes of a smaller hydrological unit or 2B4 Catchment of Ganga Basin encompassing an area of 55053 ha. It is spread 29 km towards in the north south direction. And 18 km towards east west direction. The catchment area is located between the altitudes 1200-2400m from mean sea level. The entire catchment of Jamrani Dam comprising the sub basins

of Kalsa in north west of Luger Gad, in south-west and mains of Gola and its tributaries extended over the outer Himalaya as well as lesser Himalayas.

- (xxii) The total CCA of Bhabhar Terai and Gangetic region is 12541 ha, 20290 ha and 117471 ha respectively thus the total CCA of Jamrani command comes out to be 150302 ha. Water stored at Jamrani Dam and intervening discharge of Gola river shall be distributed from Gala barrage to provide total irrigation of 139386 ha In the command area of Bhabhar, Terai and Gangetics
- (xxiii) Cost benefit ratio is not worked out, however it IS stated in the proposal that economic benefits or around 170.97 crore would be accrued.
- (xxiv) The proposal has been recommended by respective DFO's, CF South Kumaon and the Principal Secretary Forest.
- (xxv) Project is envisaged to improve the drinking water supply in Nainital district. It will increase the irrigation facility in the region thus increasing the productivity of the area. The proposed dam would also have a power house to generate electricity of around 14 MW.
- (xxvi) Details regarding number of Scheduled Caste/Scheduled Tribes to be benefited by the project have not been furnished in the proposal No information on this could be provided at the time of site inspection as well.
- (xxvii) It has been mentioned in the proposal that the area proposed for diversion is effecting Haidakhan temple and Ashram This temple is having high religious significance in the region. Two other temples arc also existing in the submergence area.
- (xxviii) No information to the effect that any sacred grove or very old growth trees/forests exist in the areas proposed for diversion is available in the proposal. However, DFO Nainital in his site inspection report has stated that the area is rich in Sal and very good regeneration of Sal is found in the region.
- (xxix) No information to the effect that the land under diversion forms part of any unique eco-system is available in the proposal.
- (xxx) The area proposed is not part or any Wildlife sanctuary or National Park. However, the proposed area for construction of feeder canal in Tarai East division is part of Shivalik Elephant Reserve Comments of Chief Wildlife Warden are required, The comments or NOC of Chief Wild Life Warden with respect to the impact on elephant movement in the area are not attached. The Gala Barrage is located close to the area which is part of the proposed Nandhaur Wildlife

Sanctuary. The Chief Wildlife Warden needs to elucidate in reference to this context.

- (xxxix) It is mentioned in the proposal that 47.39 ha of agricultural land is required for construction of Reservoir. During site inspection it was seen that the reservoir (Gaula Barrage) is already constructed and part of it appears to be in forest. However, neither the Forest Department official nor the Irrigation department officials were able to produce necessary documents to substantiate or rebut it. Later, letters were written to Nodal Officer for furnishing the required documents which are not received till date. But the status of this land has to be verified.
- (xxxvii) It was informed by the User agency that the Gola barrage, will be receiving supplemental flow from the proposed Jamrani Dam to irrigate an expanded command area of 1,39,386 ha. This involves an additional area of 55,607 ha in Tarai and Gangetic regions, which therefore implies that the Gola barrage is already irrigating an area of 83779 ha. It was also informed that the irrigation water would be shared as 52% for Uttar Pradesh and 48% for Uttarakhand, Thus construction of such a huge dam for irrigating an additional area of 55607 ha only does not seem to be reasonable.
- (xxxviii) Muck Disposal scheme is not proper. Proper calculation of muck has to be done and accordingly disposal sites have to be worked out.
- (xxxix) Cost benefit analysis is not in prescribed format.
- (xl) CAT plan has not been made properly. An elaborate Catchment Area Treatment plan needs to be prepared. Also Rehabilitation and Resettlement Plan needs to be prepared and approved by the State Government.
- (xli) The approval of Central Water Commission is not attached. The proposal was earlier rejected by the Ministry of Environment and Forests.
- (xlii) Non forest Land needs to be provided for Compensatory Afforestation. Certificate of DFO is required certifying that land proposed for Compensatory Afforestation is suitable for plantation and management purposes.
- (xliiii) FRA certificate in prescribed format has to be submitted.
- (xliiii) As area in Tarai East division is a part of Shiwalik Elephant reserve, hence consent of Chief Wildlife Warden has to be taken and canals need to be covered for facilitating movement of elephants. The Gola Barrage is located close to the area which is part of the proposed Nandl1aut' Wildlife Sanctuary. The Chief

Wildlife Warden needs to elucidate in reference to this context.

- (xl) Since this is a case of violation of Forest Conservation Act (1980) hence scheme and map or Penal Compensatory Afforestation needs to be provided.
- (xli) Recommendations of Geologists and task force clearly indicate that the proposed darn is not feasible to be constructed in this area.
- (xlii) The proposal involves rehabilitation of around 782 people (as per 2008 survey) of 6 villages which are naming in the submergence area (Annexure 3) But the Rehabilitation and Resettlement plan has not been prepared by the user agency. The proposed diversion also involves resettlement of Haidakhan Ashram & Temple which may affect religious sentiments of people.
- (xliii) Barrage is generally constructed in the second phase after construction of dam so as to increase the head of river for diverting it into canals. But in this case the barrage and the feeder canals are already constructed and now construction of dam is proposed. The height of the proposed dam is too much. it is environmentally and ecologically not sustainable to construct such a big dam in such a fragile area, Moreover construction of tunnels etc. can be Try devastating, Project has very high ecological, environmental and social cost of the diversion which will outweigh the benefits likely to accrue from the project.
- (xliv) A study needs to be conducted to assess the cumulative impact of this reservoir and its upstream and downstream impacts including the impacts on flora and fauna especially avifauna habitat of Golden Mahaseer found in the river may be affected The consent of Fisheries department needs to be taken The ecological, environmental and social costs of diversion of such a vast tract of forestland needs to be worked out.
- (xlv) The project was earlier rejected by MoEF in 1994 (letter of MoEF dated 11.08.1994) .Since this project involves diversion of huge forest land, it has to be 'environmentally sustainable. In view of the recent calamity in Uttarakhand, Honourable Supreme Court has directed not to grant further clearances for hydroelectric power projects. The apex court even asked the government to examine if construction of hydro projects was responsible for the recent .Uttarakhand tragedy. The court also directed MoEF to constitute an expert body to make a detailed study. as to whether hydroelectric power projects existing and under construction have contributed to the environmental degradation and if so, then to what extent. The committee has already submitted its report to the ministry. The State Govt. needs to relook into the proposal. its feasibility and environmental impacts.

(xlvi) Thus the proposal in its present form is not fit for consideration.

(xlvii) There is no mention in the proposal about any alternative examine

4. Specific recommendation of Regional APCCF along with detailed reasons as given in the said Site Inspection Report is as below:

Since the proposal is not complete , it cannot be considered in the present form, Based on the decision of the report of the committee constituted by Hon'ble Supreme Court of India and the fact that the proposal already been rejected by the Ministry and Violation by the User Agency, the Ministry may decide as deemed fit.

5. The proposal along with the site inspection report received from the Regional office (Eastern Zone) Bhubaneswar is placed before the Forest Advisory Committee for their examination and appropriate recommendations.
