

Minutes of the Meeting of 28th Expert Committee on Eco-Sensitive Zone (ESZ) held on 18^h December, 2017 in the Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, New Delhi

A meeting of the Expert Committee on ESZ was held in the Ministry on 18th December, 2017 under the Chairmanship of Additional Secretary, MoEF& CC to discuss the amendments proposed in the Bhagirathi Eco-sensitive Zone (ESZ) Notification by the State of Uttarakhand. List of participants is annexed as **Annexure-I**.

2. At the outset, the Chairman welcomed the members of the Expert Committee, Chief Secretary and other officers of Uttarakhand Government. With brief introduction, the Chairperson invited Uttarakhand officials to make presentation on their proposal.

3. The State Government during presentation mentioned that the Draft Notification of the Bhagirathi ESZ was published with an area of 40 sq kms and during final Notification the area has been enhanced to 4179.59 sq kms. It was apprised by the Adviser (ESZ) that the enhancement was based on the study carried out by the Indian Institute of Remote Sensing (IIRS) which suggested River Basin approach. In the context of the Bhagirathi ESZ Notification the State Government proposed the following in their presentation:

- I. **Land use Change:** Limited conversion of lands may be permitted to meet the local needs including civic amenities and other infrastructure development in larger public interest and national security with the prior approval of State Government.
- II. **Steep Slope:** With applicable standards and available operational guidelines, roads, highways and other infrastructure for public utility including social infrastructure and infrastructure related to national security may be permitted with proper safeguards on environment, hazards and disaster risks.
- III. **Cutting of Slopes:** Explanation clause (for steep slope) may be deleted. It is not required in view of the proposed amendment in sub clause II above.
- IV. **Tourist resorts and commercial complexes:** Tourist resorts and commercial complexes shall be located in areas with surplus water and electricity and with prior concurrence of Gram Sabha.
- V. **Carrying Capacity:** The carrying capacity study shall be carried out based on the existing infrastructure and sustainable future projections

with a vision of promoting eco-tourism and enhancing livelihood conditions of the local residence.

VI. **River Valley projects:** Setting up of Ten SHPs (below 25 MW capacity), of total 82.5 MW capacity which were allotted prior to issuance of BESZ notification dated 18.12.2012 and were under different stages of development and implementation, should be allowed as a transitional measure.

VII. **Mining of Minerals and Stone quarrying and crushing:** quarrying, crushing and hot mix plants, ready mix plants should be permitted for re-construction and strengthening and up gradation of existing infrastructure.

Excavation and picking of RBM up to a depth of 2.0 meters from the river bed should be permitted for channelization of river so as to prevent flooding and mitigate its adverse impact, as per the existing rules and regulations.

Limited mining, stone quarrying and crushing should be based on site evaluation, provided that such activities are not done on existing steep hill slopes or areas with high degree of erosion, spring lines, ground water recharge areas.

The State Government should be the authority to grant such special permission.

VIII. **Extraction of ground water:** Extraction of ground water should be permitted only for the agricultural and domestic consumption of the bona fide occupier of the plot and also for institutions of public utility.

The sale of ground water should not be permitted except with the prior approval of the State Ground Water Board.

IX. **Erection of Electric cables:** Erection of Electric cables, setting up of sub-stations, transformers and other related infrastructure and establishment of communication infrastructure shall be permitted.

X. **Infrastructure and others:** Works related to re-construction, disaster mitigation, lift irrigation, hospitals, schools, food go-downs and other social and national security infrastructures may be permitted in the eco-sensitive zone of Bhagiathi.

4. Thereafter, detailed discussions followed:

- Chief Secretary, Uttarakhand mentioned that the scientific reason for the steep slope above 20° and hydro power projects up to 2 Mega Watts seems to be arbitrary and lacks technical justification.

- Dr. Dhananjai Mohan, APCCF(WL), Govt. of Uttarakhand elaborated the strategic importance of the area in terms of International (Indo-China) Border, national security and the requirements of establishing roads and other defence installations. He mentioned that various schemes of Government of India and State Government for rural development and post disaster revival eg MNREGA, PMGSY, NRDWP, Indira Awas Yojana etc would be affected due to the definition of steep hill slope as provided in the notification. He further discussed that the definition of hill slope should be as per the “Bureau of Indian Standards” in case of Bhagirathi Eco Sensitive Zone.
- Shri. Arvind Singh Hayanki, Secretary Forest, Govt. of Uttarakhand mentioned the issue related to construction of any road including untarred in the Eco Sensitive Zone, there should not be restriction of length.
- Shri. S. K. Nirmal, Secretary General, Indian Road Congress (IRC) informed the Committee that construction in Hills goes even up to the 70-80 degree slope. He mentioned that with proper design and environment safeguards road construction in steep slopes in Hill/Mountain is not a major issue. He further informed that IRC is also working to bring out a guidelines/standard on construction of roads in Hill/Mountain areas.
- On the land use change, Dr. Dhananjai Mohan mentioned that prior approval of central government for basic public utilities like community toilets, schools etc is unjust and delay the process of timely establishment of basic infrastructure for public utility.
- It was also mentioned that Scientific extraction of River Bed material is important for catering to the developmental needs of the local residents and infrastructure pertaining to the area.
- On establishing Hydro-electric Project (HEP) State Government mentioned that the latest CPCB directive dated 07.03.2016, Small Hydropower Projects (below 25 MW) along with Solar and Wind Power Projects are uniformly classified in the least impact non-polluting “White” category and Environmental Clearance is not required for such small hydropower projects (below 25 MW). Also, it has mentioned that MOEF & CC, in 2015, published the draft ESZ notification for Chail in Himachal Pradesh having similar Himalayan topography and biodiversity has allowed SHP's below 25 MW in ESZ.
- It was further elaborated that Nature of Impact of Mini (upto 2 MW) Hydro Projects and Small Hydro Projects SHP (upto 25 MW) are

almost similar in nature. The proposed SHP's are Run of River Trench Weir type and no dam/barrage or reservoir would obstruct the river flow or create impoundment. These projects are located only on the tributaries of the river Bhagirathi and having not more than 25 MW capacity in totality on any stream.

- In the design for construction of hydraulic structures, the Indian Standards & Specifications shall be followed in such a manner that stability of the hill slopes is not jeopardized and these projects would have small size civil structures, low design discharge, small surface power house. The Trench Weir type diversion would ensure longitudinal connectivity in stream and Environmental flow will be released as per the directives of MoEF&CC.
- Shri Suresh Babu, WWF mentioned that during the earlier ESZ meeting held in the Ministry on 31.08.2016, it was suggested that a scientific basis is needed for proceeding further for considering Hydro Power projects in the Bhagirathi ESZ. Accordingly, the State Government of Uttarakhand was asked to Commission a study on the 'carrying capacity' involving field experts. Based on the submission of the report of the study on carrying capacity the expert committee would take a decision. He also mentioned that the Hydro Power projects may be discussed separately.

5. Based on the presentation of the State Government, deliberation among the Members the recommendation of the committee on the proposed amendment on the Bhagirathi ESZ Notifications is as follows:

Bhagirathi ESZ (Clause)	Existing Text of the Bhagirathi ESZ Notification	Amendment Proposed by Uttarakhand Govt	Recommendation of ESZ Expert Committee
2.(12)	No change of land use from green uses such as horticulture areas, agriculture, tea gardens, parks and others like places to non' green uses shall be permitted in the Zonal Master Plan. However, to meet the residential needs of the local residents due to the natural growth of existing local population, strictly limited conversion of agricultural lands shall be permitted, with the	No change of land use from green uses such as horticulture areas, agriculture, tea gardens, parks and others like places to non green uses shall be permitted in the Zonal Master Plan, except that strictly limited conversion of such lands may be permitted to meet the local needs including civic amenities and other infrastructure development in larger public interest and	With due study of Environmental Impacts and complying with their mitigations options and subject to finalization of ZMP

Bhagirathi ESZ (Clause)	Existing Text of the Bhagirathi ESZ Notification	Amendment Proposed by Uttarakhand Govt	Recommendation of ESZ Expert Committee
	prior approval of the Central Government on the recommendation of the State Government.	national security with the prior approval of State Government.	
2(14)	There shall be no consequential reduction in Green area such as forest area, agricultural area, etc.	There shall be no consequential reduction in Green area such as forest area, agricultural area, etc. subject to the provisions contained in clause 2(12) of the notification and the Forest Conservation Act, 1980 as applicable.	Recommended
2(16)	<p>Development and protection of hill slopes:</p> <p>I. The Zonal Master Plan shall indicate areas on hill slopes where development shall not be permitted;</p> <p>II. No development shall be undertaken in areas having a steep slope or areas which fall in fault or hazard zones or areas falling on the spring lines and first order streams or slopes with a high degree of erosion as identified by the State Government on the basis of available scientific evidence;</p>	<p>Development and protection of hill slopes.</p> <p>I. The Zonal Master Plan shall indicate areas on hill slopes where development shall not be permitted.</p> <p>II. No development shall be undertaken in areas having a steep slope or areas which fall in fault or hazard zones or areas falling on the spring lines and first order steams or slopes with a high degree of erosion as identified by the State Government on the basis of available scientific evidence. However, with applicable standards and available operational guidelines roads, highways and other infrastructure for public utility including</p>	<p>No Change. However, it may be clarified that slope stabilisation works can be carried out.</p> <p>Recommended as: No development shall be undertaken in areas having a steep slope or areas which fall in fault or hazard zones or areas falling on the spring lines and first order steams or slopes with a high degree of erosion as identified by the State Government on the basis of available scientific evidence.</p>

Bhagirathi ESZ (Clause)	Existing Text of the Bhagirathi ESZ Notification	Amendment Proposed by Uttarakhand Govt	Recommendation of ESZ Expert Committee
		social infrastructure and infrastructure related to national security may be permitted with proper safeguards on environment, hazards and disaster risks.	However, in exceptional cases infrastructural works for the benefit of community may be undertaken with proper study of the Environmental Impacts and taking appropriate mitigation measures arising out of such development in consultation with the line Ministries of the Central Government including Public Consultation
	III. No development on existing steep hill slopes or slopes with a high degree of erosion shall be permitted.	(Note : Sub clause III to be deleted as it is already covered under sub clause III)	Agreed
	IV. Tourist resorts and commercial complexes shall be located in areas with surplus water and electricity, so as not to affect the rights of existing users without their prior consultation.	IV. Tourist resorts and commercial complexes shall be located in areas with surplus water and electricity and prior concurrence of Gram Sabha shall also be taken.	Tourist resorts and commercial complexes shall be located in areas with surplus water and electricity, in consultation with Gram Sabha and existing users and with due approval of SEIAA.
	V. The places in the Eco-sensitive Zone where cutting of hills causes ecological damage and slope instability in adjacent areas, such cuttings shall be undertaken with appropriate measures to avoid such damages.	V. The places in the Eco-sensitive Zone where cutting of hills causes ecological damage and slope instability in adjacent areas, such cuttings shall be undertaken with appropriate measures to avoid such damages.	The places in the Eco-sensitive Zone where cutting of hills causes ecological damage and slope instability in adjacent areas, such cuttings shall be undertaken with proper study

Bhagirathi ESZ (Clause)	Existing Text of the Bhagirathi ESZ Notification	Amendment Proposed by Uttarakhand Govt	Recommendation of ESZ Expert Committee
	<i>(In this notification, "steep hill slope" means a hill slope with a gradient of 20 degrees or more)</i>	(Note: Explanation clause to be deleted as it is not required in view of the proposed amendment in sub clause II above)	of the Environmental Impacts and taking appropriate mitigation measures in consultation with line Ministries of the Central Government including Public Consultation
2(18) (iv)	The Carrying capacity Study shall be carried out based on the existing infrastructure and shall not be based on future projections of any project that requires environmental or forest clearance.	The carrying capacity study shall be carried out based on the existing infrastructure and sustainable future projections with a vision of promoting eco-tourism and enhancing livelihood conditions of the local residence.	Detailed Examination Required as part of ZMPs and approval of MOEF & CC
2(19) (1)	For construction of any road including untarred in the Eco Sensitive Zone more than 5 km length (including the extension or widening of existing roads).	For construction of any road including untarred road in the Eco Sensitive Zone (including the extension or widening of existing roads).	As proposed subject to inclusion in ZMP
3(a) (i)	River Valley projects: Setting up of new hydro-electric power plants (dams, tunneling, and construction of reservoir) and expansion of existing plants on the river Bhagirathi and all its tributaries from Gaumukh to Uttarkashi except micro or mini hydel power projects, which would serve the energy needs of the local communities, subject to consent of the Gram Sabha and all	River Valley projects: Setting up of new hydro-electric power plants (dams, tunneling, and construction of reservoir) and expansion of existing plants on the river Bhagirathi and all its tributaries from Gaumukh to Uttarkashi except micro or mini hydel power projects, which would serve the energy needs of the local communities, subject to consent of	A view would be taken after approval by MoWR, RD & GR

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	other requisite clearances;	the gram sabha and all other requisite clearances; Provided that setting up of Ten SHPs (below 25 MW capacity), of total 82.5 MW capacity which were allotted prior to issuance of BESZ notification dt. 18.12.2012 and were under different stage of development and implementation, shall be allowed as a transitional measure.	
3(a)(iii)	Mining of Minerals and stone quarrying and crushing: all types of mining (minor and major minerals), stone quarrying and crushing except, for the domestic needs of <i>bona fide local residents</i> . The limited mining, stone quarrying and crushing shall be based on site evaluation, provided that such activities are not done on existing steep hill slopes or areas with high degree of erosion, spring lines, ground water recharge areas. The Monitoring Committee shall be the authority to grant such special permission.	Mining of Minerals and Stone quarrying and crushing: all types of mining (minor and major minerals), stone quarrying and crushing except for the domestic needs of bona fide local residents . Apart from this quarrying, crushing and hot mix plants, ready mix plants shall be permitted for re-construction and strengthening and up gradation of existing infrastructure. Excavation and picking of RBM up to a depth of 2.0 meters from the river bed shall be permitted for training of channelization of river so as to prevent flooding and mitigate its adverse impact, as per the existing rules and regulations. The limited mining, stone quarrying and	Views of MoWR, RD to be obtained first

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		crushing shall be based on site evaluation, provided that such activities are not done on existing steep hill slopes or areas with high degree of erosion, spring lines, ground water recharge areas. The State Government shall be the authority to grant such special permission.	
3(a)(v)	Setting up of saw mills.	Setting up of new saw mills.	Recommended
3(b) (i)	Water.-(l) the extraction of ground water shall be permitted only for the agricultural and domestic consumption of the bona fide occupier of the plot and the sale of ground water shall not be permitted except with the prior approval of the State Ground Water Board;	Water - (1) The extraction of ground water shall be permitted only for the agricultural and domestic consumption of the bona fide occupier of the plot and also for institutions of public utility. The sale of ground water shall not be permitted except with the prior approval of the State Ground Water Board ;	Recommended
3(b) (vii)	Erection of Electric cables	Erection of Electric cables, setting up of sub-stations, transformers and other related infrastructure and establishment of communication infrastructure.	Erection of Electric cables, setting up of sub-stations, transformers and other related infrastructure and establishment of communication infrastructure with due study of Environmental Impacts and complying with their mitigation options.

Bhagirathi ESZ (Clause)	Existing Text of the Bhagirathi ESZ Notification	Amendment Proposed by Uttarakhand Govt	Recommendation of ESZ Expert Committee
3(c)(viii)	Clause to be added	Works related to re-construction, disaster mitigation, lift irrigation, hospitals, schools, food go-downs and other social and national security infrastructures.	With due study of Environmental Impacts and complying with their mitigations options.
4(2)	<p>The Monitoring Committee shall consist of (a) not more than ten members. (b) the Chairperson of the Monitoring Committee shall be an eminent person with proven managerial or administrative experience and understanding of local issues and the other members shall be:-</p> <p>(i) a representative of the Ministry of Environment and Forests, Government of India;</p> <p>(ii) two representatives of Non-Governmental Organizations working in the field of environment (including heritage conservation) to be nominated by the Government of India;</p> <p>(iii) Member Secretary, Environment Protection and Pollution Control</p>	<p>Monitoring Committee- The Central Government hereby constitutes the monitoring committee for effective monitoring of the eco-sensitive zone, which shall comprise of the following :-</p> <p>(i) Divisional Commissioner, Garhwal – Chairman</p> <p>(ii) An expert in the area of ecology and environment to be nominated by the Government of Uttarakhand for a period of three years – Member</p> <p>(iii) One representative of None-Governmental Organization, working in the field of Environment including heritage Conservation) to be nominated by the Government of Uttarakhand for a period of three years- Member</p> <p>(iv) Member</p>	To be dealt separately by the Ministry.

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	<p>Board, Uttarakhand;</p> <p>(iv) (iv) Senior Town Planner of the area;</p> <p>(v) (v) The Chief Conservator of Forests; Garhwal;</p> <p>(vi) (vi) The representative of State Irrigation Department;</p> <p>(vii) (vii) one subject expert in the field of environment and ecology);</p> <p>(viii) (viii) the District Magistrate, Uttarkashi - Member Secretary.</p>	<p>Secretary, Uttarakhand State Biodiversity Board or his representative- Member</p> <p>(v) Member Secretary, Environment Protection & Pollution Control Board, Uttarakhand or his representative- Member</p> <p>(vi) The Chief Conservator of Forest, Garhwal;- Member</p> <p>(vii) Representative of the Chief Town Planner, Uttarakhand;- Member</p> <p>(viii) Zonal Chief Engineer of State Irrigation Department; - Member</p> <p>(ix) Zonal Chief Engineer, Public Works Department, Uttarakhand; Member</p> <p>(x) The District Magistrate, Uttarkashi- Member</p> <p>(xi) The Divisional Forest Officer, Uttarkashi Forest Division (Nodal), Uttarkashi -Member Secretary</p>	

6. Meeting ended with vote of thanks to and from the Chair.

28th Expert Committee Meeting on ESZ held on 18th December, 2017

List of Participants

Members of Expert Committee

1. Shri A. K. Mehta, Additional Secretary, **Chairman**.
2. Shri. Lalit Kapur, Adviser, MoEF&CC.
3. Shri S. P. Vashista, DIG (WL), MoEF & CC.
4. Shri. S. Sathya Kumar, Scientist 'G', WII, Dehradun, Uttarakhand.
5. Shri. Paramjit Singh, Director, Botanical Survey of India, Kolkata
6. Dr. Kailash Chandra, Director, Z.S.I, Kolkatta
7. Shri Suresh Babu, Director, WWF, New Delhi.
8. Shri G. E. S. Negi, Scientist 'F', GB Pant Institute of Himalayan Environment & Development, Almora.
9. Dr. Hitendra Pandaya, Scientist, IIRS, dehradun, Uttarakhand.
10. Shri V R S Rawat, ADG (Climate Change), ICFRE, Dehradun.
11. Shri. Sanjay K. Agarwal, Assistant Director, Forest Survey of India, Dehradun.
12. Dr. Sandeep Kumar Rant, Associate TCP, Town & Country Planning Organisation, Govt. of India.
13. Dr. Mahendriran, Scientist, Sálim Ali Centre for Ornithology and Natural History (SACON).
14. Shri. Ajay Aggarawal, AD, Central Pollution Control Board, Delhi.
15. Dr. Subrata Bose, Director (SC-'F'), MoEF & CC- **Member Secretary**,

Special Invitee:

16. Shri. S. K. Nirmal, Secretary General, Indian Road Congress, New Delhi;
17. Shri. O. P. Shrivastava, Chief Engineer, Ministry of Road Transport and Highways, Govt. of India

Officials of Government of Uttarakhand

18. Shri. Utpal Kumar Singh, Chief Secretary, Govt. of Uttarakhand.
19. Shri. Ranbir Singh, Additional Chief Secretary, Govt. of Uttarakhand.
20. Shri. Arvind Singh Hayanki, Secretary Forest, Govt. of Uttarakhand.
21. Shri. Sandeep Kumar, DFO Uttarkashi, Govt. of Uttarakhand.
22. Shri. Ashish Chauhan, DM Uttarkashi, Govt. of Uttarakhand.
23. Dr. Dhananjai Mohan, APCCF(WL), Govt. of Uttarakhand.
24. Shri. Sunil Srivastava, Commander 36 BRTF, Border Roads Organisation, Ministry of Defence.
25. Shri. Purshottam, Director (Infrastructure), Uttarakhand Tourism.

26. Shri. S. S. Samant, Senior Research Officer, Uttarakhand Tourism.
27. Shri. D V S Khant, PCCF Uttarakhand, Govt. of Uttarakhand.
28. Shri. Shashi Prakash Jaiswal, Assistant Engineer, Irrigation Dept. Uttarakashi.
- Shri. Taqdir Singh, Junior Engineer, PWD Bhatwari, Govt. of Uttarakhand.
29. Shri. Vinod Kumar Pant, Chief Engineer, Uttarakhand Irrigation Dept.
30. Shri. A K Dinkar, E-W-C, Uttarakhand Irrigation Deptt.
31. Shri. S. N. Verma, MD UJVNL, Dehradun.
32. Shri. P. S. Panwar, S. E., Irrigation Dept. Uttarakhand.
33. Shri. R. S. Khatri, Executive Engineer, P. D. PWD, Bhatwari, Uttarakhand
34. Shri. G. S. Panqti, C. E. , P. W. D., Tihari Zone, Uttarakhand
35. Shri. S. L. Patrick, Additional Director, Mining, Geology & Mining, Dept. of Uttarakhand.
36. Shri. B C K Mishra, MD, UPCL, Dehradun.
37. Dr. Harish Bahuguna, DGM, UJVNL.

Ministry of Environment, Forest and Climate Change, Govt. of India

39. Shri Pankaj Verma, Joint Director (SC-'D'), MoEF & CC, New Delhi
