

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

Original Application No. 147/2014

(With additional affidavit dated 09.09.2020 on behalf of the MoEF)

Legal Aid Committee, NGT Bar Association

Applicant(s)

Versus

MoEF & Ors.

Respondent(s)

Date of hearing: 14.09.2020

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE S. P. WANGDI, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Applicant(s): Mr. Raj Panjwani, Sr. Advocate and Mr. Rahul Choudhary,  
Advocate

Respondent(s): Mr. K.K. Singh, Advocate for MoEF&CC  
Mr. Raj Kumar, Advocate for CPCB  
Mr. Rahul Khurana, Advocate for State of Haryana

**ORDER**

1. The issue for consideration is safeguarding of land use falling under Natural Conservation Zone (NCZ) in terms of regional plan prepared by National Capital Region Planning Board (NCRPB) under the provision of National Capital Region Planning Board Act, 1985.

2. On 20.11.2019, the Tribunal considered the matter as follows:

“5. *There is no doubt about the legal position that sub-regional plans have to be consistent with the NCZ. The plea of the concerned States is that ground truthing has yet to be done. Such exercise cannot be unending. Vide order dated 07.08.2018, the Tribunal directed that States to furnish their final sub regional plans based on which the regional plan may be finalized. The Tribunal directed constitution of a Committee*

for such finalization headed by the Secretary, MoEF&CC as follows:

1. Secretary, Ministry of Environment, Forest and Climate Change, Govt. of India;
2. Secretary, Housing & Urban Affairs, Government of India;
3. Chairman, Central Pollution Control Board;
4. National Remote Sensing Centre (NRSC), Indian Space Research Organisation (ISRO), Govt. of India.
5. Secretary, Urban Development, States of Uttar Pradesh, Rajasthan, Haryana and NCT, Delhi;
6. We have considered report filed by MoEF&CC on 19.11.2019.
7. The report refers to Table – I mentioning the extent of shrinkage as follows:-

“In the year 2012, based on estimation of area under NCZ in the sub regions, NCRPB issued notices to constituent states; where explanation for shrinkage was sought. The details of shrinkage are provided below:

Table – I  
(areas in Hectares)

Sl. No.	Components of NCR	2005 (ha)	2012 (ha)	Difference in Ha	Diff. in percentage
1.	Haryana Sub-region	122113.30	90402.42	31710.88	25.97
2.	Uttar Pradesh Sub-region	85739.36	48118.45	37620.91	43.88
3.	Rajasthan Sub-region	265321.74	235654.94	29666.8	11.18
4.	NCT of Delhi Sub-region	15437.06	13054.63	2382.43	15.43”

8. For the State of Haryana Table – II has been mentioned as follows:

District	As per Estimated Land Use (ELU)	As per Estimated Land Use (ELU)	As per ground truthing
Faridabad	15,401.55	11,400.68	12,517.84
Gurugram	19,417.29	19,215.61	15,083.06
Jhajjar	12,661.88	7,214.07	2,226.32

<i>Mewat</i>	<i>21,657.47</i>	<i>17,942.62</i>	<i>17,441.56</i>
<i>Palwal</i>	<i>8,180.98</i>	<i>5,177.64</i>	<i>3,257.03</i>
<i>Panipat</i>	<i>8,762.69</i>	<i>6,511.46</i>	<i>1,763.13</i>
<i>Rewari</i>	<i>9,898.89</i>	<i>9,299.99</i>	<i>8,732.21</i>
<i>Rohtak</i>	<i>10,294.85</i>	<i>5,064.61</i>	<i>794.85</i>
<i>Sonipat</i>	<i>15,837.70</i>	<i>8,575.74</i>	<i>2,568.66</i>
<i>Total</i>	<i>1,22,113.30</i>	<i>90,402.42</i>	<i>64,384.66</i> ”

9. *Explanation of the States for difference in areas is that NCZ was prepared based only on satellite imagery without actual survey. The Committee has made following recommendations:*

*“8. Recommendations of the Committee: The Committee based on detailed deliberations in the meeting, discussions with representatives of constituent States and referring available records, recommended as follows.*

*8.1 To examine whether the Sub-regional plans (SRPs), prepared by the constituent states are consistent with the Regional Plan (RP-21), statutorily prepared by the National Capital Region Planning Board*

*NCT of Delhi has not prepared its sub-regional plan. However, regarding other three SRPs, after their thorough examination and review vis-à-vis RP-21, it was noted that: as far as area under NCZ is concerned, there is no state-wise figure of area under NCZ mentioned in the RP-21. Hence, in this regard there is no perceptible difference between RP-21 and SRPs of the three states.*

*The area under NCZ in different sub-regions have been estimated by NRSC based on interpretation of satellite imageries of 1999 and 2012 with very limited ground truthing. These exercises revealed a shrinkage in NCZ areas in every sub region and were based on land use data reported by NRSC. The states have furnished their respective explanations over which Committee has made its observations in the previous pares.*

*8.2 To suggest appropriate steps in case of any inconsistency between Sub-Regional Plan of any state and the RP-21 of NCRPB*

*Although there is no perceptible inconsistency, Committee noted the difference in figures of NCZ delineated areas with respect to estimation pertaining to the years 1999 and 2012. It suggested that:*

- i. *Future mapping or delineation should be done preferably with 1:4,000 scale but not less 1: 10,000 scale of physical maps. Since local level mapping and planning requires high level accuracy, satellite data having resolution of less than 0.6 meters, such as Quickbird, Geoeye, Worldview etc. should be used. This should be uniformly applied to all sub regions.*
  - ii. *Although in the matter of interpretation of imageries and delineation of any category of land use, the capability of NRSC cannot be questioned, for better and more acceptable results, the following may be ensured:*
    - a. *The sample size of ground truthing should not be less than 75%*
    - b. *During such table-top or field exercise, it is always advisable to involve third- party / independent authorities, to enhance credibility of the information that is generated*
    - iii. *Once accepted, the delineated NCZ areas should be clearly demarcated revenue maps, so that these are readily identifiable on ground.”*
10. *Learned counsel for the applicant has referred to the stand of the Board quoted in para 3 above that the NCZ was prepared not merely based on satellite imagery but actual survey.*
11. *In view of above, without expressing final view at this stage and by way of precaution, we consider is necessary to constitute following Committee to give a final report to this Tribunal on the subject:*
- 1. *Representative of National Remote Sensing Centre, Hyderabad.*
  - 2. *Representative of Forest Survey of India, Dehradun.*
  - 3. *Revenue Secretaries and PCCF (HoFF)/PCCF of Haryana, U.P., NCT of Delhi and Rajasthan with reference to the area falling in the respective States.*
  - 4. *Representative of MoEF&CC.*
12. *The nodal agency will be the MoEF&CC. The exercise be conducted with reference to data base of 1999. Report may be furnished within three months by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).*
13. *By way of precaution, we direct that no land marked to be part of NCZ by the NCRPB may be diverted for any other purpose without permission of NCRPB till the next date.”*

3. Thereafter, the matter was taken up on 20.03.2020 and adjourned as the Committee had not completed the exercise. Following direction was issued:

- “4. *Let the same be completed expeditiously and report filed before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).*
5. *We make it clear that as directed earlier, the base year may be taken to be 1999 and not 2005. The Committee may also opt an independent person in its deliberations.”*

4. Accordingly, the MoEF&CC has filed an additional affidavit on 09.09.2020 *inter-alia* as follows:

“

9. *In the meeting dated 13.02.2020 it was decided that a fresh mapping exercise of NCR Region will be carried out by NRSC using Very High Resolution satellite data. However, in the meeting dated 02.03.2020 the member from NRSC explained that the use of very high resolution satellite data for the change analysis of historical imageries of VHR satellite data will not be available for the year 1999 and citing non availability of data, they expressed their inability to undertake the fresh exercise.*
10. *The Hon'ble NGT in its order dated 20.03.2020 has directed that the base year for the comparison should be 1999 only, not 2005. The years of comparison are therefore decided as 1999 and 2019.*
11. *In view of the non availability of higher resolution LISS IV data in the year 1999 as mentioned by the Outstanding Scientist and Deputy Director, NRSC. It is therefore proposed that NRSC may be asked to do land use land cover mapping using LISS III data (resolution 23.5 m) on 1:50,000 scale for the two periods i.e. 1999 and 2019. The classification scheme of the mapping should be selected in a manner that Natural Conservation Areas are explicitly mapped. Due emphasis should be placed on ground truthing before the final output of the exercise is finalised. If required, NRSC may obtain thematic spatial data relevant for identifying natural conservation zones in NCRPB from the concerned organizations. The two comparable output data sets resulting from the same satellite data (sensor), scale and methodology would lead to a realistic assessment of status of Natural Conservation Zone i.e. how it has changed over the two time periods. The above proposal takes care of all the points mentioned by NRSC in their comments on the draft affidavit dated 24th July, 2020.*

12. *The area under NCRPB has gone change over a period of time in all the constituent states as more and more districts have been added to it. For the sake of uniformity, the committee is of the view that the present boundary defining NCRPB should be used for both the years i.e. 1999 and 2019.*
13. *Further, committee is of the view that Land Use Land Cover Mapping on 1:50,000 scale as proposed in the SI.No. (11) above, will serve the purpose of comparison of change in NCZ between 1999 and 2019 based on the identical set of outputs. However, to facilitate appropriate planning and regulations by the concerned State Governments, it would be desirable to have another Land Use Land Cover mapping of the area under NCRPB done on 1:10,000 scale for the year 2019 using high resolution satellite data of LISS-IV, CARTOSAT or other satellite/sensor which NRSC feels appropriate for the purpose.*
14. *The above two mapping exercises may be taken up simultaneously as the two separate series of mapping by NRSC. The NRSC may be asked to submit a detailed proposal for the same.”*

5. Minutes of the meetings dated 13.02.2020 and 02.03.2020 have been annexed to the affidavit.

6. Learned Counsel for the applicant has submitted that the scale of the map should be 1:4000 and not 1:10,000 so that all relevant details can be captured. It is also suggested that apart from the satellite mapping, physical ground truthing should also be undertaken.

7. In view of above, let the MoEF&CC now furnish its report by 31.01.2021 by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The Natural Remote Sensing Centre (NRSC) may provide its assistance to the MoEF&CC for complying with the above direction.

List again on 12.02.2021.

A copy of this order be sent to the MoEF&CC and the NRSC by e-mail for compliance.

Adarsh Kumar Goel, CP

S. P. Wangdi, JM

Dr. Nagin Nanda, EM

September 14, 2020  
Original Application No. 147/2014  
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