

T.N. GODAVARMAN THIRUMULPAD

v.

UNION OF INDIA & ORS.

I.A.S No. 826 etc.

IN

(Writ Petition (C) No. 202 of 1995)

MARCH 28, 2008

(K.G. BALAKRISHNAN, CJ. AND DR. ARIJIT PASAYAT
AND S.H. KAPADIA, JJ.)

Environment Protection Act, 1986:

s.3(3) – Setting up of Central Empowered Committee – Considering use of forest areas in developmental activities for non forest purposes – Recommendations by CEC for payment of Net Present Value (NPV) on the basis of classification of forest made by it for diversion of forest – Held: Recommendations accepted – It is made clear that the NPV rates so fixed would hold good for a period of three years and subject to verification after three years – The exemptions recommended are also accepted – If, in any case, exemption is required by nature of peculiar circumstances of the case, the same would be decided as and when necessary on a case to case basis.

T.N. Godavarman Thirumulpad vs. Union of India & Ors. (2008) 3 SCR 141 and T.N. Godavarman Thirumulpad vs. Union of India & Ors. (2006) 1 SCC 1 – referred to.

CIVIL APPELLATE JURISDICTION :

I.A. Nos. 826 in 566 with 955 in 566, 958, 985, 1001-1001A, 1013-14, 1016-1018, 1019, 1046, 1047, 1135-1136, 1164, 1180-1181, 1182-1183, 1196, 1208-1209, 1222-1223, 1224-1225, 1229, 1233 in 1135-1136, 1248-1249, 1253, 1301-1302, 1303-1304, 1312, 1313, 1314, 1318, 1319 in 1137, 1325, 1364, 1365-1366, 1370-1370A, 1371, 1384, 1385-1386, 1387,

- A 1434, 1435-1437, 1438, 1441 with 1634, 1475-1476, 1513, 1573, 1639 in 1135-1136 in IA 566, 1664, 1665, 1671, 1676, 1707, 1721, 1779 in 1164 in 566, 1785-1786 in I.A. No. 1441, 1980-1981, 1993, 2013, 2074-2076, 2077-2078 in 1441 & 2098 in 1233 in 1135-1136, 2145-2146, 2147-2148, 2149-2150 & 2153-2154 in I.A. 566 in W.P. (C) No. 202/1995

- B Altaf H. Naiyak. A.G., G.E., Vahanvati. S.G. Gilda, Aruneshwar Gupta AAGs. Gopal Subramaniam. Parag Tripathi and A. Suran. ASGs., Harish N. Salve, Uday U. Lalit, F.S. Nariman. L. Nageswara Rao. Arun Jaitley, Mukul Rohtagi. V.C. Mahajan, Ranjit Kumar, R.P. Bhat, Altaf Ahmed. V.A. Mohta.

- C S.B. Upadhyay, A.V. Savant. P.P. Rao, K.K. Venugopal, P.H. Parekh (for M/s. Parekh & Co.) and Kailash B., Siddhartha Chowdhury, P.K. Manohar. Vipav Sharma, Amit Kr. Chawla, Sanjay R. Hegde, Anurag Singh, Naresh Bakshi. Raj Panjwani, Purnima Bhat Kak, P. Parmeswaran, Harris Beeran, D.S. Mahra, Alka Sharma, Rachna Srivastava, Ajit Pudussery, Sunil Dogra, S.U.K. Sagar, Bina Madhavan (for M/s. Lawyer's Knit & Co.), G. Ramakrishna Prasad, Suyodhan Byrapaneni, Siddharth Patnaik. G. Arun Pratap Venugopal, Dileep Poolakkot. Sanjeev Kumar, Kumar Mihir (for M/s. Khaitan & Co.), Tara Chandra Sharma, Ajay Sharma, Tasleem Ahmadi, R.S. Jena, Manu Nair, Anuj Puri, Nidhi Minocha, Rajesh Srivastava, Sanjib Sen, Ratna Kaul, Prashant Kumar (M/s. APJ Chambers), Manjit Singh, T.V. George, Dhruv Mehta. Harshvardhan Jha, Yashraj S. Deora (for M/s K.L. Mehta & Co.), Shobha (for M/s. K.L. Mehta & Co.), Pallav Shishodia, H.D. Thanvi, Manju Mishra, D.N. Mishra, M.L. Lahoty, Bhupender Yadav, S.S. Shamsbery, P.V. Dinesh, Sindhu T.P. A.V. Rao, Prabhakar Parnam, Venkateshwara Rao Anumolu, Ajai Bhalla, Abha R. Sharma, Vikas Mahajan, D.B. Vohra, Wasim A. Qadri, Subair Ahmad Khan, B.K. Prasad, Aruna Gupta, Sumita Hazarika, P.S. Narasimha, Sridhar Potaraju. D. Julius R., S.C. Patel, Gopal Jain, R.N. Karanjawala, M. Karanjawala. Nandini Gore, Debmalya Banerjee, Sonia Nigam, Dattatray Vyas, Mahima C. Shroff, Chirag M. Shroff, H.K. Puri, S.K. Puri, Priyavri, V.M. Chauhan, J.T. Gilda, Manish

Pitale, C.S. Ashri. Nikhil Nayyar, Ankit Singhal, T.V.S. A
Raghavendra Sreyas, G. Prakash. R.R. Dubey, Santosh Mishra,
Sharmila Upadhyay, Bhavanishankar V. Gadnis, Sunita Rao,
B.S. Banthia, Vikas Upadhyay, A.P. Mayee, Umapathy, N.M.
Popli, Asha G. Nair. M.P. Singh, Dr. Vipin Gupta, A. Subhashini,
Savitri Pandey, Mohd. Fuzail Khan, Anil Kr. Jha, Amit Kr. Chawla, B
Arul Varma, Vikrant Yadav, Kh. Nobin Singh, David Rao, Tarun
Jamwal, S. Biswajit Meitei, Vijay Prakash, Naveen Kr. Singh,
Shashwat Gupta, Kuldip Singh. R.K. Pandey, H.S. Sandhu, Anil
Karnwal, Dr. Sushil Balwada, E.C. Agrawala, Mahesh Agarwal,
Rishi Agrawala, Ashutosh Garg, Neha Aggarwal, Gourav Goyal, C
Momta Oinam (for Ms. Corporate Law Group), K.N.
Madhusoodhanan. R. Sathish. Anil Shrivastav, Ritu Raj, Pratap
Venugopal, Surekha Raman Dileep P. (for M/s. K.J. John & Co.),
Raj Kumar Mehta, Mrāgank, Nalini Pal, Vishnu, B. Saharya (for
M/s. Saharya & Co.), Suchitra A. Chitale, P.V. Yogeswaran, Ejaz
Maqbool, V. Balachandran, Vinay Kumar, K.R. Sasiprabhu, D
Sangeeta Kumar, Rajesh, Alok Rai, S. Sukumar, B.P. Singh,
Sanjeev Kumar, Sarla Chandra, Mukesh K. Giri, Gopal Singh
Anukul Raj, Ajit Kr. Sinha, Himinder Lal, Anis Suhrawardy,
Mehedi Imam, Ashwani Garg, Hemantika Wahi, Pinky, Jesal, E
V.B. Joshi, Sanjib Sen, Ratna Kaul, Prashant Kumar, Sanjiv Sen,
Praveen Swarup, S. Akbar Abbas Abdi, Archana Singh and
Savitri Pandey for the Appearing parties.

The following Order of the Court was delivered:

It is an undisputed fact that the forest in this country is an F
important and vital component to sustain the life support system
on this planet. For various reasons, our forest is being slowly
depleted. At the same time, as part of our developmental
activities, some areas of the forest have to be used for non- G
forest purposes. The economic development shall not be at the
cost of complete degradation of the forest or the environment
and eco-system provided by the green area of the forest.
Therefore, it was considered whether the user agency of such
land which is required for developmental activities to
compensate for the diversion of the forest and on the H

A recommendations of the Central Empowered Committee (hereinafter being referred to as "CEC"), it was decided by this Court that the user agency shall be required to make payment of net present value(NPV) of such diverted land so as to utilize this for getting back in the long run which are lost by such diversion. A scheme was submitted by Ministry of Environment and Forests(MOEF) alongwith an affidavit dated 22.3.2002. The CEC considered all relevant aspects including the scheme submitted by MOEF and filed a report on 9.8.2002. These reports were accepted by this Court. This Court in *T.N. Godavarman Thirumulpad Vs. Union of India* 2006(1) SCC 1 finally directed that the question as to what amount of NPV is required to be paid and to achieve these objectives, it was directed that the question is to be examined by experts. A Committee comprising of three experts including Mrs. Kanchan Chopra was appointed and this Court gave the following directions:-

- (i) to identify and define parameters (scientific, biometric and social) on the basis of which each of the categories of values of forest land should be estimated.
- (ii) To formulate a practical methodology applicable to different biogeographical zones of India for estimation of the values in monetary terms in respect of each of the above categories of forest values.
- (iii) To illustratively apply this methodology to obtain actual numerical values for different forest types for each biogeographical zone in the country.
- (iv) To determine on the basis of established principles of public finance, who should pay the costs of restoration and/or compensation with respect to each category of values of forests.
- (v) Which projects deserve to be exempted from payment of NPV.

On the basis of the directions issued by this Court, a Committee consisting of Mrs. Kanchan Chopra gave a report and the same was examined by the CEC. A

The report contains detailed study of the relevant factors. The Forest Survey of India, has since last two decades, been undertaking forest cover mapping of the country using satellite data obtained by the NRSA, Hyderabad. The methodology of mapping involves the geo-rectification of the satellite imagery using the Survey of India toposheets followed by the digital interpretation of the same and extensive ground truthing. It was found that the forest cover maps depicts mainly three tree canopy density classes, viz., very dense, moderately dense and open. There were other classifications in the Forest of India and "Champion and Seth" have classified the forests of India into 16 major groups. The major basis of classification included the climate, the soil and the past treatment as these factors determine the vegetation type of a given locality. CEC has classified the forest taking in view the ecological role and value of the forests and for the purpose of the report, 16 major forest types have been further grouped into 6 ecological classes depending upon their ecological functions. B
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Eco-Class I - Consisting of Tropical Wet Evergreen Forests, Tropical Semi Evergreen Forests and Tropical Moist Deciduous Forests

Eco-Class II - Consisting of Littoral and Swamp Forests F

Eco-Class III - Consisting of Tropical Dry Deciduous Forests

Eco-Class IV - Consisting of Tropical Thorn Forests and Tropical Dry Evergreen Forests G

Eco-Class V - Consisting of Sub-tropical Broad Leaved Hill Forests, Sub-Tropical Pine Forests and Sub Tropical Dry Evergreen Forests

Eco-Class VI - Consisting of Montane Wet Temperate H

A Forests, Himalayan Moist Temperate
Forests, Himalayan Dry Temperate
Forests, Sub Alpine Forest, Moist Alpine
Scrub and Dry Alpine Scrub

B Based on the ecological importance of forest falling in
different eco-value and canopy density classes, relative
weightage factors have also been taken into consideration. By
using these relative weightage factors, the equalized forest area
in eco-value Class I and very dense forest corresponding to
forest falling in different eco-value and density classes have
C been compiled. For example, 17,997 sq. km. of open forest of
Eco-Class IV has been calculated to be equivalent to 7,558 sq.
km. of very dense forest of Eco-Value Class I. Accordingly, the
entire forest area of the country has been calculated and found
to be equivalent to 5.2 lakh sq. km. forest area having highest
D ecological significance as that of forest falling in eco-value Class
I with density above 70%.

E The net present value per hectare of forest has been fixed
based on this data. For calculating the average net present value
per hectare of forest in India, the following monetary value of
goods and services provided by the forest have been
considered:-

- F (i) Value of timber and fuel wood
(ii) Value of Non Timber Forest Products (NTFP)
(iii) Value of fodder
(iv) Value of Eco-tourism
(v) Value of bio-prospecting
G (vi) Value of Ecological services of forest
(vii) Value of Flagship Species
(viii) Carbon Sequestration Value

H Based on this, the NPV was fixed and the following

recommendations have been made:-

- (i) for non-forestry use/diversion of forest land, the NPV may be directed to be deposited in the Compensatory Afforestation Fund as per the rates given below:-

(in Rs.)

Eco-Value class	Very Dense Forest	Dense Forest	Open Forest
Class I	10,43,000	9,39,000	7,30,000
Class II	10,43,000	9,39,000	7,30,000
Class III	8,87,000	8,03,000	6,26,000
Class IV	6,26,000	5,63,000	4,38,000
Class V	9,39,000	8,45,000	6,57,000
Class VI	9,91,000	8,97,000	6,99,000

- (ii) the use of forest land falling in National Parks / Wildlife Sanctuaries will be permissible only in totally unavoidable circumstances for public interest projects and after obtaining permission from the Hon'ble Court. Such permissions may be considered on payment of an amount equal to ten times in the case of National Parks and five times in the case of Sanctuaries respectively of the NPV payable for such areas. The use of non-forest land falling within the National Parks and Wildlife Sanctuaries may be permitted on payment of an amount equal to the NPV payable for the adjoining forest area. In respect of non-forest land falling within marine National Parks / Wildlife Sanctuaries, the amount may be fixed at five times the NPV payable for the adjoining forest area;

- (iii) these NPV rates may be made applicable with

A prospective effect except in specific cases such as Lower Subhanshri Project, mining leases of SECL, Field Firing Ranges, wherein pursuant to the orders passed by this Hon'ble Court, the approvals have been accorded on lump-sum payment / no payment towards the NPV; and

B (iv) for preparation and supply of district level maps and GPS equipments to the concerned State / UT Forest Departments and the regional offices of the MoEF, the Ad-hoc CAMPA may be asked to provide an amount of Rs.1.0 crore to the Forest Survey of India out of the interest received by it.

C Ministry of Environment and Forests also has filed its response and has accepted the recommendations made by D CEC. Various user agencies have filed its objections. We heard the learned senior Counsel Mr. Nariman and other learned senior Counsel who appeared before us. The main contention raised is that the NPV value was fixed on the basis of the net flow accruing over 20 years at a 5% social discount rate. This, according to the applicants, is too low. It has been contended E that the Economic and Research Department of the Asian Development Bank is of the view that a survey of the social discount rate policies of individual countries show significant variations and the developing countries apply higher social discount rate. The paper published by Asian Development Bank F shows that India should have a social discount rate of 12%. It may be noted that the Expert Committee under the leadership of Mrs. Kanchan Chopra recommended 5% social discount rate but the CEC has reduced further and accepted 4% social discount rate. It may be noted that the CEC had made G consultation with eminent economists and it was of the view that the social discount rate should be around 2% in India. We do not find much force in the contention advanced by the learned Counsel who appeared for the user agents. The 10% suggested H by them cannot be applied to the present case because 10% is the rate linked to assumptions about the opportunity cost of

capital. One cannot apply that rate for social time preference in evaluating the benefits from an environmental resource such as forests. In project evaluation, the horizon is compatible with the life of the project whereas in forest matters, the horizon spans over several generations. Therefore, the rate of 10%, as suggested by the user agency cannot be accepted. A
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Another contention raised by the applicant(FIMI) is that the NPV is not fixed on site specific and, therefore, the fixation of the rate is based on surmises and conjectures and the same rate cannot be applied to the large extent of area covered by the forests. This question was elaborately considered by the CEC. Considering the large extent of this country and the forest being spread over in various parts of the State, it is difficult to fix the NPV based on the specific area. It is not feasible to fix NPV in each and every individual case. The entire forest area in each of the State/UT is calculated by considering the monetary value of the services provided by it. The average NPV per hectare of the forest area in the State has also been calculated. If NPV is to be calculated on the specific area, the process would be time consuming and in most of the cases, it may be beyond the capability of the Range Forest Officers or other officials posted at the grassroot level. Moreover, the NPV is linked with the type of the forest and no useful purpose would be served by carrying out NPV calculations in each case involving the diversion of forest areas. C
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We are of the view that the NPV now fixed is more scientific and is based on all available data. We accept the recommendations and we make it clear that the NPV rate now fixed would hold good for a period of three years and subject to variation after three years. The following exemptions have been recommended:- F
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- (i) public works such as schools, hospitals, children play grounds of non-commercial nature and the public welfare projects such as community centres in rural areas which require forest land upto 2 ha;

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- A (ii) rural infrastructure and basic services such as the construction of the overhead tanks, village roads, etc.
- B (iii) the minor irrigation projects upto 10 ha. of storage area, municipal water supply projects, drinking water supply pipelines;
- (iv) activities necessary for the ecological management, relocation of the villages from the sactruaries and the national parks, regularization of pre-1980 eligible encroachers;
- C (v) housing for the rehabilitation of tribals; laying of the underground optical fibre cables;
- (vi) laying of the pipelines for the underground gas transportation;
- D (vii) the district and rural roads;
- (viii) shifting cultivation;
- (ix) roads constructed by Defence in border areas;
- E (x) construction of the transmission lines.

The above recommendations for exemptions are accepted. If, in any case, exemption is required by nature of the peculiar circumstances of the case, the same would be decided as and when necessary on a case to case basis.

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R.P.

I. As disposed of