

# Environmental Federalism in India: Forests and Compensatory Afforestation

In collaboration with  
Konrad-Adenauer-Stiftung, New Delhi



© The Energy and Resources Institute and Konrad-Adenauer-Stiftung, 2014

## Suggested format for citation

---

T E R I. 2014

Environmental Federalism in India: Forests and Compensatory Afforestation

New Delhi: The Energy and Resources Institute 74 pp.

[Project Report No. 2012IA03]

## Study Team

---

Tarun Gopalakrishnan

Harsha Meenawat

Bibhu Prasad Nayak

Ligia Noronha (Advisor)

Nidhi Srivastava (Principal Investigator)

Jonathan Donald Syiemlieh

*Cover photograph by Harsha Meenawat*

## For more information

---

Project Monitoring Cell

T E R I

Darbari Seth Block

IHC Complex, Lodhi Road

New Delhi – 110 003

India

**Tel.** 2468 2100 or 2468 2111

**E-mail** pmc@teri.res.in

**Fax** 2468 2144 or 2468 2145

**Web** www.teriin.org

India +91 • Delhi (0)11

## Table of Contents

<b>EXECUTIVE SUMMARY.....</b>	<b>6</b>
Environment in federal systems: Some experiences.....	6
Environmental Federalism in India .....	7
Forests and Federalism .....	8
Compensatory Afforestation and CAMPA .....	9
<b>1 INTRODUCTION .....</b>	<b>10</b>
1.1. Rationale and scope of the study.....	11
<b>2 ENVIRONMENT IN FEDERAL SYSTEMS: SOME EXPERIENCES .....</b>	<b>13</b>
2.1. Australia.....	13
2.2. Brazil.....	14
2.3. Canada .....	15
2.4. Mexico .....	15
2.5. South Africa.....	16
2.6. United States of America .....	16
<b>3 ENVIRONMENTAL FEDERALISM IN INDIA .....</b>	<b>18</b>
3.1. Federalism in India.....	18
3.2. Environment in Indian policy and polity.....	18
3.3. Environment and the Indian politics .....	20
3.3.1. The changing fabric of Indian Politics.....	21
3.4. Role of judiciary in environmental federalism.....	22
3.4.1. Towards Activism and Centralisation .....	22
3.4.2. The Supreme Court’s Role in Empowering Local Environmental Governance	24
3.4.3. Environmental Federalism within the Judiciary .....	26
<b>4 FORESTS IN INDIA .....</b>	<b>30</b>
<b>5 FORESTS AND FEDERALISM.....</b>	<b>34</b>
5.1. Constitution, law and timeline .....	34
5.1.1. Pre-Constitution .....	34
5.1.2. 1950 - 1976 .....	34
5.1.3. 1976 – 1990s.....	36
5.2. CAMPA case study .....	38
5.2.1. Evolution of compensatory afforestation and CAMPA .....	38
5.2.2. Facts and Figures, including status of APOs, release and expenditure .....	45
5.2.3. Demands and contentions around CA and CAMPA.....	50
5.2.4. Main issues around CA and CAMPA.....	55
5.2.5. Conclusion .....	59
<b>6 ANNEXURES .....</b>	<b>61</b>

6.1. Annexure 1: Summary of Proceedings of Stakeholder Workshop on ‘Forests and Federalism’ .....	61
6.1.1. Federalism and environment .....	61
6.1.2. Forest Governance .....	62
6.1.3. Compensatory Afforestation and CAMPA .....	63
6.2. Annexure 2: Detailed procedure for Forest Clearance.....	65
<b>7 BIBLIOGRAPHY .....</b>	<b>66</b>

## List of Tables

Table 4.1: India’s Forest Cover 2011 .....	30
Table 4.2: State wise Forest Cover, Density Classes and Changes from 2009 Assessment .....	31
Table 5.1: Statewise Contribution to Adhoc CAMPA Principal Fund and Release to State CAMPA.....	45
Table 5.2: Position regarding Receipt of Annual Plans of Operation from States/ UTs.....	48

## List of Figures

Figure 1.1: Study Approach.....	12
Figure 3.1: Share of regional parties (Votes and Seats).....	21
Figure 4.1: Percentage of the Geographical Area under Forest Cover-All States and UTs .....	32
Figure 4.2: State wise Forest Density Classes.....	33
Figure 4.3: Ratio of Actual Forest Cover to Recorded Forest Area .....	33
Figure 5.1: Percentage Share of State’s Contribution to Principal Fund and Release during 2009-10 to 2012-13.....	47
Figure 5.2: Percentage of Funds Released to States from the Principal Fund 2009-10 to 2012-13.....	47
Figure 5.3: Percentage of Unutilized Fund with State CAMPA 2009-12.....	49

## Abbreviations

AAP	Aam Aadmi Party
APO	Annual Plan of Operation
BJP	Bhartiya Janta Party
CA	Compensatory Afforestation
CAG	Comptroller and Auditor General
CAMPA	Compensatory Afforestation Management and Planning Authority
CBA	Cost Benefit Analysis
CEC	Centrally Empowered Committee
CSS	Central Sector Scheme
FCA	Forest Conservation Act
GB	Governing Body
INC	Indian National Congress
MoEF	Ministry of Environment and Forests
NAEB	National Afforestation Board & Eco-development Board
NCA	National Commission on Agriculture
NCAC	National CAMPA Advisory Council
NGT	National Green Tribunal
NMDC	National Mineral Development Corporation
NPV	Net Present Value
PCCF	Principal Chief Conservator of Forests
PIL	Public Interest Litigation
SC	Supreme Court
TERI	The Energy and Resources Institute

## Executive Summary

---

Environmental federalism is the study of shared role of national and subnational units of government in managing the environment and issues therein. It relates to the proper assignment of roles and responsibilities to the different tiers of government.

TERI's work on environmental federalism has observed that while federalism is a dynamic concept, it has not been able to keep pace with the rising environmental and resource issues. This has been re-iterated by stakeholder consultations under this project and otherwise. Forests have emerged as a key area in which innovative thinking is required. Besides balancing of objectives of conservation and economic development, a balance has to be struck amongst all levels of the government - Centre, State, local and the people. The project sought to understand how the recent trends in Indian federalism manifest in environmental matters through a case study of forests and compensatory afforestation. The research had three main components: (i) international experiences, (ii) domestic scenario and (iii) case study of forests.

### Environment in federal systems: Some experiences

The study reviewed how environment is treated in different federal systems and the experience in other countries in safeguarding the environment and ecology of the country. Keeping in view the different models of federalism adopted in countries across different regions of the world – i.e., North America, Latin America, Africa, Australia – both developing and developed, the federal systems studied in detail are Australia, Brazil, Canada, Mexico, South Africa and the United States of America. As shown in TERI, 2012 there are four ways in which environment has been treated within different models of federalism: (i) using residuary powers; (ii) interpreting environment and conservation as an offshoot of ownership over resources; (iii) via amendments; and (iv) clear lists in new Constitutions.

Most of the older constitutions do not have any explicit provisions with respect to environment, neither recognizing an explicit right nor laying down clear competence. The Constitution of United States of America reserved very few powers for the federal government and vested residuary powers with the states. Environment or even natural resources had no place in either the list or text of the Constitutions. Most of the earlier environmental regulation was decentralised and State level. Environment as a matter is not assigned in the Canadian Constitution but environmental matters often overlap with other areas of federal or concurrent jurisdiction. Similarly, no explicit power to legislate for environment is there in Australian Constitution. However, powers held by the Commonwealth and states can be exercised for the purpose of environmental protection.

Enshrining environmental or ecological concerns in the constitutions of countries is a more recent phenomenon, introduced in newer constitutions or through amendments in the older constitutions. Brazil is one of the earliest federations to list 'environment' as a matter of competence, mostly concurrent. The 1988 Constitution of Brazil gives common powers to the Union, the States, the Federal District and the municipalities to protect the environment and

to fight pollution; and to preserve the forests, fauna and flora. The Constitution of the Republic of South Africa, 1996 has very detailed provisions and somewhat clear demarcation on environment. Environment, disaster management, nature conservation and pollution control matters are all listed as concurrent subjects. The Constitution of Mexico, through an amendment in 1987, introduced a new power for the Congress to make laws on matters of environment and ecology.

## Environmental Federalism in India

'Environment' was least of the concerns of the Indian government either before or at the time of independence. Therefore, it does not feature in the Indian Constitution as a separate entry under the schedule demarcating legislative rights. However, environment protection is clearly provided for in the Indian Constitution as a directive principle of state policy and judicial interpretation over the years has further strengthened this mandate. Some of the most important domains of environment, such as water, waste, forests etc. are assigned to either the Centre or to the State or both (concurrent).

The distribution of subjects has not been static and has changed from time to time to reflect the changing understanding, aspirations and needs. The degree to which any level of government has utilised the space accorded to it has also not been uniform and evolved with the challenges and other dynamics, such as politics, capacity and resources.

Federalism is a dynamic concept and therefore, the real issue is whether it has kept pace with the emerging environmental and social issues. In India, especially on matters of environment, there has been a tendency to move towards centralisation, either through legislation or executive orders. The detailed case study of forests and compensatory afforestation (CA) elucidates how a range of orders from the executive and judiciary have eroded the power of States over their forests. This has been exacerbated by the emergence of new and 'independent' institutions and authorities set up for different domains of environment.

Given the multiple levels of interests and aspiration levels, there is a pressing need to move away from excessive centralization. Discussions at the TERI stakeholder workshops and conferences over 2012 and 2013 has demonstrated how the tussle between centralism and regionalism continues in the domain of the environment and natural resources with little regard for federalism. Concerns have also been raised about conflating 'National' with 'Central' resulting in over centralism in matters like management of environment and natural resources.

Environment may not be the most important or the determining issue in Indian politics but it has, over years, become an important election feature, especially in political party election manifestos. While the proposals and promises are still very weak and lack a clear vision or action, it is indicative of how environment is no longer seen as a non-issue by the political parties. The kind of issues that have been included are mostly around maintaining tree cover, improving sewage, protecting rivers of national and regional importance.

In the context of federalism, there is a clear understanding that the entire discourse of federalism is heavily influenced by political considerations. Our polity has become more federal with the locus of political power shifting to the States and even to local levels. The

2014 elections are also expected to show a similar trend where regional parties are expected to play a pivotal role in influencing the formation of government at the Centre. The politics and relations between parties ruling at the Centre and States also influence some environmental perceptions and decisions. Increased federalisation of the politics can be seen as an opportunity for democratisation of politics, paving way for state level and local issues to be included in the national agenda, especially in the context of environmental policy and implementation.

Judiciary in India has been one of the prime drivers behind the mainstreaming of environmental considerations into governance in India. By extending its involvement in forest issues, the Supreme Court has increased the country's dependence on the Supreme Court for forest management. From the perspective of the federal structure of the judiciary, three points stand out with respect to the National Green Tribunal (NGT). *First*, the National Green Tribunal has been established in five cities only – New Delhi, Kolkata, Bombay, Bhopal and Chennai; *second*, the Act prescribes that both Judicial and Expert Members shall be appointed by the Central Government; and *third*, it impinges on the jurisdiction of the existing civil courts.

## Forests and Federalism

The conflict over forests can be traced back to colonial times. The 1855 Charter of Indian Forestry declared all forests, if not privately owned, as state property. The first Indian Forest Act was legislated in 1865 asserting state monopoly over forest land, and the power to legislate on forest lands and pastures. The Madras Presidency, amongst others, vehemently opposed the 1865 Act and refused to accept the Act. Post the Montague-Chelmsford Reforms, forests came to be treated as a 'transferred' subject. With the Government of India Act of 1935, forests came clearly under the domain of provinces.

At the time of independence, 'forests' were declared a State subject in the new Schedule VII of the Constitution of India. Several States enacted State level forest legislation. With a greater focus on rights on timber and non-timber forest produce in the National and State level policies and laws, rampant denudation of forests occurred despite recognizing the need for protection and management of forests.

Between 1970 and 1976, the National Commission on Agriculture (NCA) pointed out to States 'inability to implement forest laws in the country' and the need for giving statutory recognition to Centre's role in forestry. With the forty-second amendment of the Constitution of India in 1976, the subject of forests was moved to the 'concurrent' list from the 'State' list, thereby allowing Central legislation in the domain of forests in independent India. In 1980, the Forest (Conservation) Act was enacted to put restrictions on de reservation of forests or use of forest land for non-forest purpose. It made it mandatory to seek Central government approval for using any forest land for non-forest purpose.

The National Forest Policy aims at increasing sustainability of the forest/tree cover in the country through massive afforestation and social forestry programmes, especially on all denuded, degraded and unproductive lands. It also sets forth a target of 33 per cent of the



country's land under forest cover. This target is for the entire nation, with some States contributing by having as much as 90 per cent of their territory under forest cover. Some States also contend that they bear the burden of maintaining the forest cover for the benefit of the nation while others are focusing on economic development.

## Compensatory Afforestation and CAMPA

For every forestland which is used for non-forest activity, afforestation in another piece of land has to be carried out to compensate for the loss. Under the Forest Conservation Act, 1980 and the 2003 Rules made thereunder, in order to obtain approval for use of any forestland for any non-forest activity, every project proponent has to give an undertaking to bear the cost of raising and maintenance of compensatory afforestation and/or penal compensatory afforestation (CA).

The case study in Chapter 5 of this report provides a detailed overview of the evolution of policy and institutions around CA in India. CA, and CA Management and Planning Authority (CAMPA) are illustrious of how the Legislature, Executive and the Judiciary have, at different junctures, taken over the issue and added to the Centre- State tension, rather than resolving it. The study shows how the Supreme Court (SC) has played an extremely active role in giving the policy direction for CA through a series of orders under the famous *T. N. Godavarman* case. The SC rulings, also seen as overstepping jurisdiction, has practically determined how CA is to be governed, the institutional arrangements and how the moneys collected towards CA is to be disbursed and spent.

The current mechanism for collection and disbursement of moneys for CA and net present value (NPV) of forests is heavily centralized with the Ad-hoc CAMPA, which disburses funds to the States based on the Annual Plan of Operation prepared by them. Several States have voiced their discontent over this arrangement on grounds of jurisdiction, ownership and procedural delays. Centre too has voiced its own concerns around overall management of forests, inadequate capacity of States, the need for keeping a check on misuse of funds etc. Thus, the actual implementation of the judiciary's directions has seen various impediments owing to certain conceptual issues, operational issues and the opposing demands and contentions around forests; but these issues have resulted in stakeholders missing not only the forest for the trees but the trees as well.

# 1 Introduction

---

Environmental federalism has been defined as ‘the study of the normative and positive consequences of the shared role of national and subnational units of government in controlling environmental problems’ (Shobe and Burtraw 2012). In broad terms it relates to the ‘proper assignment of various roles’ to the different tiers of government (Oates 1997). Of the expansive literature on environmental federalism, the focus has largely been on fiscal federalism or general environmental management (Farber 1997; MacKay 2004; Adler 1998; Chandiramani 2004; Bhatt and Majeed 2002; Mandal and Rao 2005; TERI 2009) and only several recent studies have considered specific environmental issues in the larger ambit of environmental federalism. Some of these issues considered are climate change (Courchene 2008; Shobe and Burtraw 2012; Selin and Vanderveer 2011; Jörgensen 2011; Sovacool 2008) environmental assessment (Hollander, Rethinking Overlap and Duplication: Federalism and Environment assessment in Australia 2010), air pollution and standards (Banzhaf and Chupp 2010), rivers (Iyer 1994), forests (Contreras-Hermosilla, Hans and White 2008) or other natural resources (Fischman 2006; Ebegbulem 2011; Noronha et al. 2009).

Within the Indian context, environmental federalism has been considered mostly from the perspective of fiscal transfers and related matters. (TERI 2009; Sankar 2009; Chhatre 2008; Gupta, 2001; Chakraborty 2006; Rao and Singh, Asymmetric Federalism in India 2004; Rao, Fiscal Decentralization in Indian Federalism 2000) et al. Interestingly, government documents have also delved into the discourse on environmental federalism in India further (Government of India 2009; Commission on Centre-State Relations 2010).

The basic principles of federalism provide some guidelines for the assignment of public responsibility to different levels of government. According to the principle of subsidiarity, services should be provided by the smallest jurisdiction that encompasses the geographical expanse of the benefits and costs associated with the service (Oates 1997). Traditional theory also lays down a set of tax-assignment principles in accordance with the respective responsibilities of different tiers of governments. Thus, local environmental management and provision of basic environmental /civic amenities such as clean drinking water, sewage and solid waste management should fall under the purview of local bodies, as indeed is the case in most countries. Experience with respect to fiscal decentralization is diverse, but in general adequate revenue assignment to local bodies remains the most conspicuous problem, especially in the developing world. Fiscal policy - including taxes, other incentives and disincentives, and program spending - of each tier of the government can have direct or indirect impacts on resource-use and the environment. These impacts may be local or inter-jurisdictional.

Environmental implications of specific fiscal measures and the application of fiscal instruments (such as taxes, charges and fees) to environmental problems have been extensively studied in the literature. Inter-governmental fiscal issues look at the allocation and scope of federal, state and local revenues and expenditures; and the nature and scope of intergovernmental fiscal transfers in the context of environmental management.

One of the often cited criticisms of environmental decentralization is the ‘race to the bottom’ thesis, though there is little empirical evidence to prove the theory in applying the principle of subsidiarity. In fact, differences in state policies may not necessarily lead to race to the bottom or exacerbate rivalry and rather result in positive spillover effects such as drawing lessons from each other – especially when applying in a variety of contexts (Jørgensen 2011). The case for decentralization for environmental management is very strong on account of greater proximity to local concerns, improved representation, legitimacy and efficiency. However, it has been established that several issues concerning the environment cannot remain local because environmental problems and the effects of environmental mismanagement cross state and national boundaries – most prominently in the case of the impacts of climate change. Environmental degradation originating at one place goes on to affect a much bigger geographical area and involves not just the local governments but requires intervention from state and central governments too.

Several environmental issues (e.g. transboundary pollution or conservation of rare species) or their solutions (e.g. knowledge and research on environmental management) are characterised by spillovers or exhibit economies of scale (e.g. solid-waste management). The national government may also be concerned about equity in the provision of basic services. These reasons justify the involvement of a higher tier of government. Inter-governmental grants are an important fiscal means used by national governments to incentivize local governments to internalize spill-over effects or larger national objectives.

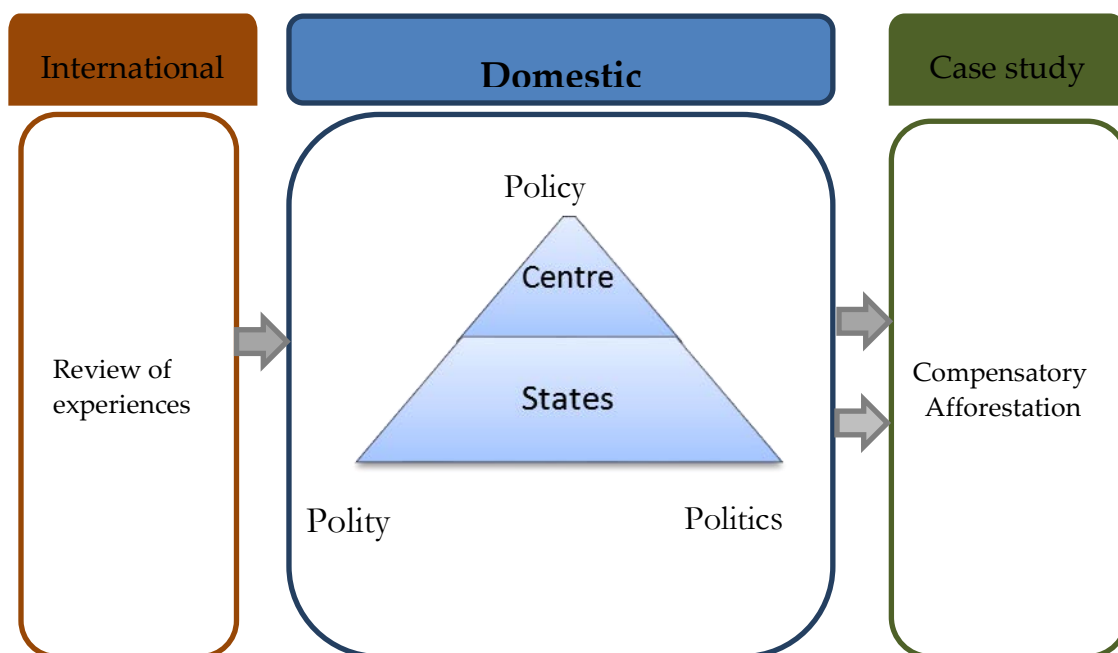
This points to the fact that the concept of environmental federalism requires an examination of the appropriate jurisdiction for the management and provision of environmental goods and services. It is crucial for federal governments to play a role with regard to the environmental regulation that requires assuming responsibility for those activities that have important environmental ‘spillover effects’ across jurisdictional boundaries. State and local governments need to engage in regulation of environmental quality and services, and design and implement programmes that meet their objectives as well as objectives that are important for sustainable development at a national and global level. Therefore, there is a need for distributed governance of the environment across multiple levels of the government, and federal systems are uniquely placed for this challenge.

## 1.1. Rationale and scope of the study

TERI’s work on environmental federalism has observed and the interaction with stakeholders has reiterated that while federalism is a dynamic concept, it has not been able to keep pace with the rising environmental and resource issues. In this context, forests have emerged as a key area in which innovative thinking is required. Effective governance of forests and progress for people requires conservation on the one hand and development on the other. Besides balancing of objectives, a balance has to be struck amongst all levels of the government - Centre, State, local and the people. Within forests, we lay special emphasis on Compensatory Afforestation. It demonstrates how tensions in the Centre-state relations end up impacting national objective of forest governance. The issue of compensatory afforestation also elucidates on how the tension between conservation and development can be exacerbated when different tiers of government compete to have control over forests and

resources: both natural and financial. The issue of Compensatory afforestation in India has undergone numerous changes and has been one of the most important examples of centre-state tussle with respect to environment.

The overall project aims at developing a framework for environmental federalism in India. In particular, year 1 of the project sought to understand how the recent trends in Indian federalism manifest in environmental matters through a case study of forests and compensatory afforestation. The research has three main interrelated components: (i) international experiences, (ii) domestic scenario, and (iii) case study.



**Figure 1.1: Study Approach**

1

different federal systems – old and new. Chapter 2 gives an overview of federalism in selected countries and how environment and natural resources have been treated therein. With that background, Chapter 3 gets into details of the Indian experience with environmental federalism. Next part of the report deals with forests as a subject of federalism and delves into details of Compensatory Afforestation (CA) and Compensatory Afforestation Management and Planning Authority (CAMPA) through the lens of federalism.

## 2 Environment in federal systems: Some experiences

Given that most federal constitutions did not demarcate environmental jurisdictions, federal and provincial legislation largely govern their approach towards the environment. However, the constitutional structure in each country determines how legislation is developed and how it is applied. Most of the older constitutions do not have any explicit provisions with respect to environment, neither recognizing an explicit right nor laying down clear competence. Enshrining environmental or ecological concerns in the constitutions of countries is a more recent phenomenon, introduced in newer constitutions or through amendments in the older constitutions.

The study reviewed how environment is treated in different federal systems and what has been the experience in other countries in removing the federal-state tensions and differences while also safeguarding the environment and ecology of the country. Keeping in view the different models of federalism adopted in countries across different regions of the world – i.e. North America, Latin America, Africa, Europe, Australia – both developing and developed, the federal systems studied in detail are Australia, Brazil, Canada, Mexico, South Africa, United States of America. Most of these countries (except Australia and South Africa) also have more than 30 per cent of total geographic area under forests.

### 2.1. Australia

In Australia, 'the final and most serious phase of the federation movement (in Australia) took place during the 1890s<sup>1</sup> (Saunders 2005). This culminated in the passing of the original Constitution Act 1900 by the British Parliament, establishing the Commonwealth of Australia. In 1986, Australia Act 1986<sup>2</sup> was passed making it independent of British Parliament and courts, thereby untying "the constitutional 'apron string'"<sup>3</sup>. The Australian federation emerged from a history of separate colonies acting as independent units and hence the design adopted for Australian federation ensured that 'their home colonies retained a governmental structure possessing significant legislative powers.'<sup>4</sup>

There are no explicit powers to legislate for environment in Australian Constitution.<sup>5</sup> However, powers held by the Commonwealth and states can be exercised for the purpose of environmental protection. States enjoying the power to legislate on residuary matters had environmental matters too open for their control. Initially, the performance of states vis-à-vis

---

<sup>1</sup> The terms of federation and the Constitution on which it was based were negotiated in 2 constitutional conventions 1891 and 1898.

<sup>2</sup> Long Title: An Act to bring constitutional arrangements affecting the Commonwealth and the States into conformity with the status of the Commonwealth of Australia as a sovereign, independent and federal nation. (No. 142 of 1985)

<sup>3</sup> <http://www.foundingdocs.gov.au/item.asp?sdID=103>

<sup>4</sup> <http://www.aph.gov.au/library/pubs/online/AustFederalism.htm>

<sup>5</sup> Section 51 of the Constitution of Australia on Legislative powers of the Parliament

environmental regulation was patchy (Davis 1985). By late 1970s the commonwealth government began testing its competence on matters through the channels of marine environment<sup>6</sup>, heritage sites and international obligations. The federal government can use its jurisdiction over trade and commerce, financing, and external affairs to make laws pursuant to environmental objectives (Bates 2010). In order to avoid duplication, however, environmental assessments have been delegated to the states (Bates 2010). There is no horizontal harmonisation of assessment or clearance procedures, the states seek to reduce overlap and duplication, whether through a single integrated system or a two tier regime with local government (Hollander, Rethinking Overlap and Duplication: Federalism and Environmental Assessment in Australia 2009).

## 2.2. Brazil

Brazil has had several phases of government and many Constitutions, with varying degrees of centralisation and decentralisation. The Brazilian model of federalism was centrifugal *'where republican government agreed to share powers with the local oligarchies'* (Neto, Miranda and Barbosa 2010). The Constitution of 1891 *'accorded great political autonomy to the already economically powerful state elites'* (Costa 2005). However, this was followed by phases of authoritative and centralised regimes until the 1988 Constitution, which is hailed as *'opening a new chapter'* (Hueglin and Fenna 2006) in Brazilian Constitutional history.

Divided 26 states and the federal district, Brasilia, the Federative Republic of Brazil was not based on ethnic, linguistic and religious lines but was a result of regional disputes. (Souza 2004) Through the 1988 Constitution, states and local governments received real powers giving effect to the principles of political and decentralisation without *'superimposing'* new forms of governance (Hueglin and Fenna 2006). One important feature of the Brazilian Constitution is a three tiered federalism recognizing local government as a part of the federal republic *'reflecting the tradition of municipal autonomy with little state control in municipal matters'* (Souza 2004).

The 1988 Constitution of Brazil was written post the emergence of global environmental agenda. Unlike the older Constitutions, Brazil had the advantage of incorporating provisions that balanced the economy and environment. Pursuant to everybody's right to ecologically balanced environment, government and its people are enjoined with a duty to protect and preserve the environment for present and future generations.<sup>7</sup> Brazil is also one of the earliest federations to list 'environment' as a matter of competence, mostly concurrent.

The 1988 Constitution of the Federative Republic of Brazil gives common powers to the Union, the States, the Federal District and the municipalities to protect the environment and to fight pollution; and to preserve the forests, fauna and flora.<sup>8</sup> Legislative powers on forests, fishing, fauna, and preservation of nature, protection of the environment and control of pollution are listed clearly as concurrent.<sup>9</sup> Therefore, while municipalities have power to

---

<sup>6</sup> establishment of the Great Barrier Reef Marine Park

<sup>7</sup> Art 225

<sup>8</sup> Article 23, clause VI and VII of the Constitution of the Federative Republic of Brazil

<sup>9</sup> Article 24, clause VI of the Constitution of the Federative Republic of Brazil

take action to protect environment, the legislative space is reserved for the federal and state governments.

## 2.3. Canada

Canada established itself as a federation in 1867 to accommodate '*territorial diversity with a fundamentally multilingual and multicultural society*' (Watts 1999). The British North America Act<sup>10</sup> laid the foundation of Canada as '*a centralised federation, with the key powers vested in Ottawa and a strong paternalistic oversight role assigned to Ottawa vis-à-vis provinces*' (Cameron 2005). This led to Canada becoming '*a federation of provinces: Ontario, Quebec, Nova Scotia, and New Brunswick, with a Parliamentary system modelled on that of Britain*'.<sup>11</sup>

Like most of the older constitutions, environment as a matter is not assigned in the Canadian Constitution. However, environmental matters often overlap with other areas of federal or concurrent jurisdiction. For instance, a resource development project with possible impact on aquatic habitat would entail a regulatory role for the federal Department of Fisheries and Oceans, thus requiring a sponsored environmental impact assessment (Plourde 2010). However, provincial governments have been more 'aggressive in asserting their jurisdiction' where both the levels of government have jurisdiction (Fafard 1998). In general, according to some scholars, environmental decision making in Canada is dominated by collaborative federalism despite being criticised as a model engendering race to bottom (MacKay 2004).

## 2.4. Mexico

As per the 1917 Constitution, Mexico is organized as '*a federal, democratic, representative Republic composed of free and sovereign States*'.<sup>12</sup> Powers and responsibilities are shared between the federal and State governments. Domains such as foreign affairs, defence, banking, national public services, minerals and hydrocarbons are the prerogative of the Federal government.<sup>13</sup> Anything not explicitly assigned to the federal government is for the States to legislate upon as the residuary powers vest with the States in Mexico.<sup>14</sup> Despite this, Mexican federalism is criticised to be politically and economically centralized in practice (Mizrahi 2005).

While environment was not originally an area assigned to either level of government in Mexico, natural resources were listed in the Constitution of Mexico. The federal government enjoys most powers with respect to natural resources, including those to legislate on hydrocarbons, mining, and electric power, and levy any tax on the utilization and exploitation of natural resources.<sup>15</sup> In 1987, an amendment introduced a new power for the Congress to make laws that establish agreement of the Federal Government and of the

---

<sup>10</sup> British North America Act, 1867, 30-31 Vict., c. 3, hereafter referred as Constitution of Canada

<sup>11</sup> History of the Canadian Constitution, Available at <http://www.mapleleafweb.com/features/history-canadian-constitution/>

<sup>12</sup> Art 40

<sup>13</sup> Art 73

<sup>14</sup> Art 124

<sup>15</sup> Art 73

governments of the states and municipalities, on matters of environment and ecology.<sup>16</sup> The Congress passed the General Law of Ecological and Environmental Protection in the same year. The umbrella Act was enacted for preservation and restoration of ecological balance, and protection of environment, intended to encourage sustainable development.<sup>17</sup>

## 2.5. South Africa

Deeply conscious of the need to ensure that federalism does not exacerbate the ethnic and cultural divide within the country (Murray and Simeon 2010), South Africa adopted a quasi-federalism model in its Constitution. Like in many other countries, the term ‘federalism’ does not feature in the South African Constitution but is implicit in the overall architecture.

Although divided into three “distinctive, interdependent and interrelated” spheres – national, provincial and local – there is an inherent dominance of National government. A preliminary reading of the Constitution suggests that in case of conflicting laws, provincial laws prevail. However, there are exceptions and a ‘wide variety of circumstances justifies national supremacy’ (Murray and Simeon 2010). This hierarchy is also reflected in the role of provinces in delivery of policies and programmes formulated at the national level. (*ibid*)

Under the South African constitutional scheme, environment, disaster management, nature conservation, pollution control matters are all listed as concurrent subjects.<sup>18</sup> National parks, sanctuaries and reserves are usually an extension of competence of governments on forests, wildlife, marine resources or environmental protection. However, under the Constitution of South Africa, where most environmental matters are concurrent, national parks, botanical gardens and marine resources are treated separately.<sup>19</sup> Further to concurrent powers on ‘environment’, the national government has set up a legal framework emanating from the National Environmental Management Act. The national laws on environment are administered by the provinces.

## 2.6. United States of America

In 1776 thirteen different colonies came together and formed a confederation. The confederation soon resulted in a new set of problems in the form of centrifugal forces becoming strong. Consequently, the Articles of Confederation were replaced by a Constitution which created a new model of government – neither unitary nor confederation. In the American federal model, people delegate some powers to the Centre and some to States. Federalism in the United States has undergone several phases from dual to cooperative to creative to coercive.<sup>20</sup> The federal government has power over matters such as foreign affairs, international trade, defence etc. Remaining powers vest with the States.

---

<sup>16</sup> Art XXIX-G

<sup>17</sup> General Law of Ecological Balance and Environmental Protection, Official Journal of the Federation (DOF) on January 28, 1988. It was last amended and published in DOF on June 4, 2010.

<sup>18</sup> Schedule 4, Part A, Constitution for the Republic of South Africa

<sup>19</sup> Schedule 4 Part A

<sup>20</sup> <http://www.laits.utexas.edu/gov310/CF/stagesfed/>



Since the Constitution of USA reserved very few powers for the federal government and vested residuary powers with the states, the list of separation of powers was very short as compared to the later Constitutions. Environment or even natural resources had no place in either the list or text of the Constitution drafted in the eighteenth century. Environmental regulation till the 1960s was completely decentralised in the US as the earliest regulations came in the form of ordinances from municipalities This followed by state level regulations to control air and water pollution (Esty 1996). By the 1970s, the federal government had become the site of environmental regulation through protection of endangered species, drinking water quality, forests and hazardous waste management (Vogel et al. 2010). In recent times, in the absence of concerted efforts in climate change policy making at the federal level, there has been greater experimentation on climate policy from the states, cities and some regional collaboration.

Examining the constitutions of the various federal systems, old and new, TERI (TERI 2012) identifies four main trends of how environment has come to be treated within different federal models: (i) using residuary powers; (ii) interpreting environment and conservation as an offshoot of ownership over resources; (iii) via amendments and (iv) clear lists in new Constitutions.

As in the example of Australia or USA, there are no explicit powers to legislate for environment in several Constitutions.<sup>21</sup> However, powers held by the Commonwealth and states can be exercised for the purpose of environmental protection. States enjoying the power to legislate on residuary matters also had environmental matters open for their control. Depending on the level of government that enjoys the power to legislate on residuary subjects, environmental legislation can be passed by the Centre or State governments.

Environmental matters as an extension of rights or competence over natural resources, often linked to ownership, is something that is evident in the case of Canada and in the case of India where forests as a resource are linked to the environmental objective of forest conservation.

Amendments are an important tool for introducing changes in the existing scheme of distribution of powers and responsibilities. For example, in Mexico, in 1987, an amendment introduced a new power for the Congress to make laws that establish agreement of the Federal Government and of the governments of the states and municipalities, on matters of environment and ecology.<sup>22</sup> However, amendments can be a double edged sword. On the one hand, it may be useful for some corrective measures or means to keep pace with the changing needs of the nation and society at large; and on the other hand, these amendments can sometimes exacerbate the conflict between different levels of government.

Newer constitutions, including newer versions, are usually more clear in terms of making divisions based on environmental spheres. The 1988 Constitution of the Federative Republic of Brazil gives concurrent powers to the Union, the States, the Federal District and the municipalities to protect the environment and to fight pollution; and to preserve the forests, fauna and flora.<sup>23</sup>

---

<sup>21</sup> Section 51 of the Constitution of Australia on Legislative powers of the Parliament

<sup>22</sup> Art XXIX-G

<sup>23</sup> Article 23, clause VI and VII of the Constitution of the Federative Republic of Brazil

## 3 Environmental Federalism in India

### 3.1. Federalism in India

The Montague–Chelmsford reforms of the early 1900s first introduced the form of government called the ‘dyarchy’. Based on this principle of shared power between two entities, the Government of India Act of 1919 defined the relations between Central and Provincial Legislatures and Executive and drew two lists – Central and provincial. Under dyarchy, sovereignty was shared at the provincial level and certain subjects like local government, agriculture, education, public health, medicine, public works and land tenure were transferred to Indian Ministers answerable to provincial legislatures (Rudolph and Rudolph 2010). The remaining subjects were retained by the Centre. The 1935 Act took this division of powers further and evolved three lists - Central, Provincial, and Concurrent Lists. The residuary powers were reserved by the Governor General setting the stage for a quasi-federal nature (Abbas, Kumar and Alam 2010).

After independence and at the time of drafting its own Constitution, the Constituent Assembly of India opted for a federal polity with a strong Centre, stipulating a ‘union of States’ in 1950. The constitutional drafting committee made it clear that the Indian model was not a result of an agreement of states to join in a federation and therefore, no state had a right to secede from it (Constituent Assembly Debates 1948). It was deliberately kept flexible and envisaged that ‘*the Constitution can be both unitary as well as federal according to the requirements of time and circumstances*’. (Constituent Assembly Debates 1948) What Wheare described as a quasi-federal system (Wheare 1963), has also been accused of being a federation but not committed to federalism (Verney 1995).

As in the case of the Government of India Acts, the federal system, as envisaged by the Constitution, divides matters into Union, State and Concurrent lists.<sup>24</sup> Learning from Canada’s experience with short lists, India made a more detailed list adding specifically to the concurrent ones to make sure that the competence of states emanates from a written Constitution subject to a final interpretation by the federal judiciary (M. P. Singh 2001; Srivastava, Nayak and Kapur 2012). In addition to the Union list, the Central government enjoys supremacy on matters in concurrent list.<sup>25</sup> On matters enumerated in the Concurrent list, Parliament as well as a State Legislature can make laws. However, in case of a conflict between these two laws and there is no scope for harmonious reading of the provisions, law made by the parliament prevails. Only the parliament has the residuary power to make laws on matters, which are not included in any of the three lists.

### 3.2. Environment in Indian policy and polity

As mentioned in the preceding section, the concept of Lists can be traced back to early 1900s and the Montague-Chelmsford Reforms. ‘Environment’ was least of the concerns of the government at that time, or even at the time of independence. Therefore, it does not feature

<sup>24</sup> Schedule VII read with Article 246 of Constitution of India

<sup>25</sup> Article 246, Constitution of India

in the Indian Constitution as a separate entry under the schedule demarcating legislative rights. However, environment protection is clearly provided for in the Indian Constitution as a directive principle of state policy and judicial interpretation over the years has further strengthened this mandate. Some of the most important domains of environment, such as water, waste, forests etc. are assigned to either the Centre, state or both (concurrent). These are:

Union/Centre

- Residuary powers (those not mentioned in either of the lists)
- Atomic energy, mineral resources necessary for its production
- Inter-State rivers and river valleys
- Ports
- Regulation & development of oilfields, mineral oil resources; petroleum, petroleum products; other inflammable liquids
- Regulation of mines and mineral development

State

- Public health and sanitation; hospitals; dispensaries
- Land
- Water
- Agriculture
- Fisheries
- Tax on sale and consumption of electricity

Concurrent

- Prevention of cruelty to animals
- Forests
- Protection of wild animals and birds
- Electricity

Source: TERI 2012

The above list has not been static and has changed from time to time. The context, knowledge and understanding at the time of categorising items in the Union, State and Concurrent Lists have undergone a sea change. It is observed that initially, the Lists comprised primarily physical items, not those involving relationships, abstract, or cross-cutting concepts (TERI 2013). Thus, with the changing understanding, aspirations and needs, the distribution of subjects has also changed. Besides, the degree to which any level of government has utilised the space accorded to it has also not been uniform and evolved with the challenges and other dynamics, such as politics, capacity and resources.

Federalism is a dynamic concept and therefore, the real issue is whether it has kept pace with the emerging environmental and social issues. In India, especially on matters of environment, there has been a tendency to move towards centralisation, either through legislation or executive orders. The detailed case study of forests and CA would elucidate how a range of orders from the executive and judiciary have eroded the power of States over their forests. This has been exacerbated by the emergence of new and 'independent' institutions and authorities set up for different domains of environment. There are numerous agencies within the executive that work in the domain of environment and related sectors. There are sectoral organizations specific to certain aspects: environmental

pollution, specific to components of the environment or ecosystems: the coastal and marine ecosystem, specific to levels of jurisdiction and administration – such as the state and local level authorities, specific to functions but covering greater scope of activities and sectors – such as biodiversity; and there are agencies with overarching agendas – such as environmental impact assessment authorities. Besides these agencies and organizations, environmental policy is also directed to a great extent by setting up of committees by the legislature. The Indian Parliament has the provision of forming parliamentary committees that are either standing committees – constituted of members of parliament and other nominated members and can be attached with certain ministries such as the Ministry of Environment and Forests; or Ad hoc committees – constituted to serve a specific purpose after completion of which they cease to exist.

Given the multiple levels of interests, the multiple aspiration levels, there is a pressing need to move away from excessive centralization. Discussion at the stakeholder workshops and conferences over 2012 and 2013 has demonstrated how the tussle between centralism and regionalism continues in the domain of environment and natural resources with little regard for federalism. Concerns have also been raised about conflating ‘National’ with Central resulting in over-centralism in matters like management of the environment.

### 3.3. Environment and the Indian politics

In the recent Assembly elections, most parties had concerns related to environment and ecology included in their manifestos. For instance, in the State of Delhi, manifestos of three leading parties, Aam Aadmi Party (AAP), Bhartiya Janta Party (BJP) and the Indian National Congress (INC), were examined in detail.

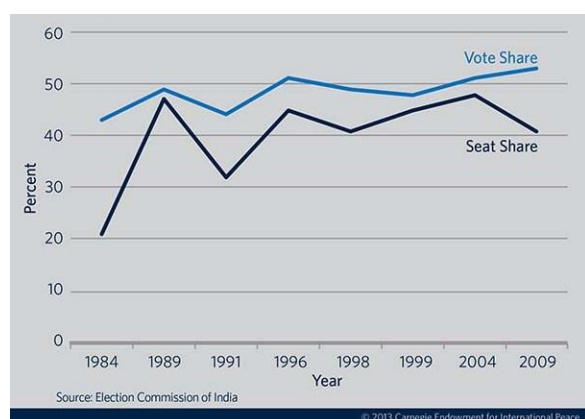
All the three parties propose measures for cleaning up and managing the river Yamuna. AAP’s manifesto proposed action towards ensuring that no untreated sewage would enter in Yamuna and no further encroachment would take place on Yamuna river bed. BJP and INC manifestos contain similar provisions and also propose a dedicated authority for River Yamuna. The manifestos of AAP and BJP also lay emphasis on maintaining the tree cover of Delhi, especially in the Ridge area. Most of the problems sought to be addressed in these manifestos were local in nature – dealing with sewage, pollution, waste management etc.

The Lok Sabha manifestos contain overarching and general environmental issues. The manifestos for the 2014 elections are being prepared and are soliciting public opinion under various heads, including environment. The last manifestos, which were released in 2009 focused on issues like forests and biodiversity. The national parties also laid emphasis on rivers and glaciers in their manifestos, going to the extent of declaring ‘the sacred Ganga as a “national river”’. Climate change also featured prominently in the manifestos of two leading national parties – BJP and Congress. The stance of both the parties in the election was same – based on the principles of co-benefit and common but differentiated responsibility. The third front, too, proposes to take ‘steps to control emission of greenhouse gases’. Parties, in this respect, seem to focus on renewable energy and energy efficient technologies. However, it is felt that the commitment shown by the leading parties towards environment and sustainability is still very low (da Costa 2014).

### 3.3.1. The changing fabric of Indian Politics

The current federal context is heavily influenced by political considerations. Our polity has become more federal with the locus of political power shifting to the States and even to local levels. Regional parties and regional leaders within these parties are becoming increasingly important. The 2014 elections are also expected to show a similar trend where regional parties are expected to play a pivotal role in influencing the formation of government at the Centre.

Literature shows how in certain spheres, the rise of regional parties and their participation in the coalition at the Centre has imposed political restraints on the central government, 'curbing the frequent central takeover of governance in the states' (Sadanandan 2012). While the role these parties have played has been important, their share of seats has not been rising very steadily. Vaishnav has plotted the performance of regional parties and concludes that the notion of rise of political parties is overstated (Vaishnav 2013).



Source: (Vaishnav 2013)

**Figure 3.1: Share of regional parties (Votes and Seats)**

The exact extent of influence can be debated but it is a phenomenon that cannot be ignored. Regional parties are stronger and more influential than what they were in the early decades of independence, reflecting an increased federalism in the politics of the country.

As regional parties raise the issue of federalism it is seen as democratisation of politics, paving way for state level and local issues to be included in national agenda (Mahapatra 2013). However, there is also a concern that while the polity has become more federal, our systems and process of governances are becoming more centralised (TERI 2013). The politics and relations between parties ruling at the Centre and States also influence some environmental perceptions and decisions. For example, the State of Odisha alleges that UPA government uses the environment ministry to deliberately delay important industrial projects in the State (Malik 2013).

There is a need to use the increasing federalization of the polity as a means of exercising more political pressure to move towards a more federal architecture, especially in the context of environmental policy and implementation (TERI 2013).

### 3.4. Role of judiciary in environmental federalism

Judiciary in India has been one of the prime drivers behind the mainstreaming of environmental considerations into governance in India. In this section, we aim to highlight some of the Court's jurisprudence to situate it in the federal structure of India.

The Court's environmental jurisprudence is a part of its broader "activist" phase, characterized by the liberal interpretation of Constitutional protections in favor of citizens and often overt criticism of the Government's failure to govern. This has been analyzed as a reaction to its poor record during the imposition of a State of Emergency in India during the late 1970s. The judgments of the Court on environmental matters are among the most evident examples of the activist tendencies of the "most powerful Court in the world".<sup>26</sup>

#### 3.4.1. Towards Activism and Centralisation

In 1980, the Court issued its judgment in **Municipal Corporation, Ratlam vs. Vardhichand**. The case originated in a complaint by the residents of Ratlam against the Municipal Corporation which had failed to construct drain pipes; the smell from the open drains and un-disposed human waste made the area un-livable. The original complaint was made to a Sub-Divisional Magistrate under the Code of Criminal Procedure. The Magistrate rejected the Municipality's contention that it lacked funds as an inadequate defence against failure to discharge a public duty. It ordered the Municipality to construct drain pipes and to draft a plan within six months for removing the nuisance. On appeal to the Supreme Court (via the High Court), the decision of the Magistrate was affirmed. It was concluded that a responsible municipal council constituted for the precise purpose of preserving public health and providing better finances cannot run away from its principal duty by pleading financial inability. The decision, though, did not disturb the federal structure, having risen through the levels of the judiciary. Moreover, the Court had still not found its favoured approach of pushing better governance through the Constitution.

In 1985, the Court decided on a case involving the closure of limestone quarries in Doon Valley which would allegedly cause soil erosion, deforestation and river silting. In **Rural Litigation and Entitlement Kendra vs. State of Uttar Pradesh**<sup>27</sup>, the Supreme Court held that the "right of people to live in a healthy environment with minimal disturbance of ecological balance" is part of the Right to Life under Article 21 of the Constitution. The mines were ordered to be closed.

In 1987, the Supreme Court applied its other significant Constitutional innovation to the adjudication of environmental disputes. In the **Oleum Gas Leak Case**<sup>28</sup>, the Court affirmed the broad interpretation of Article 32 of the Constitution. Article 32 empowers those whose Fundamental Rights (such as the Right to Life) have been violated to approach the Supreme Court directly for relief. Whereas earlier the right to seek relief under Article 32 was strictly conditioned on the petitioner proving that the injury complained of had directly affected them (also known as the *locus standi* requirement), the Supreme Court had significantly

<sup>26</sup> RAJEEV DHAVAN, JUSTICE ON TRIAL (1980).

<sup>27</sup> AIR 1985 SC 652

<sup>28</sup> Case M.C. Mehta v. Union of India, (1987) 1 SCC 395

liberalized this requirement post-Emergency. Even more significantly, the power to grant relief or remedy under Article 32 was also significantly made more flexible –

*“It may now be taken as well settled that Article 32 does not merely confer power on this Court to issue a direction, order or writ for enforcement of the fundamental rights but it also lays a constitutional obligation on this Court to protect the fundamental rights of the people and for that purpose this Court has all incidental and ancillary powers including the power to forge new remedies and fashion new strategies designed to enforce the fundamental rights.”*

Since environmental damage often has diffuse or incremental effects which are nevertheless very detrimental, removing the requirement to prove damage at an individual level has proved especially invaluable in the sphere of environmental litigation. Simultaneously, it has made the highest court in the land the forum of first choice for the entire range of environmental litigation, making for a very top-heavy judiciary in this domain.

If the liberalization of the *locus standi* requirement is sometimes considered a mixed blessing, the Court’s use of Article 32 to ‘forge new remedies and strategies’ has provoked outrage in the political and bureaucratic class.

One of the more famous instances of the Court’s new-found appetite for resolving policy problems was in the **Taj Trapezium Case** of 1997.<sup>29</sup> The original 1984 petition warned of damage to the Taj Mahal from acid rain caused by pollutants from nearby industries, with evidence of the marble yellowing and blackening. In a series of orders, the Court created a 10,400 square kilometer judicially protected area – the Taj Trapezium – within which activities which caused air pollution were regulated through judicial orders which were then implemented by the executive. Industries were mandated to shift to eco-friendly fuel and reduce their use of diesel generators.<sup>30</sup> Tanneries, which were identified as highly polluting industries, were asked to shift out of the Trapezium altogether (some 5000 industrial units were re-located in all). The Central and State Pollution Control Boards were asked to monitor any further deterioration in the quality of air, with regular reports to the Court. Further, the Government was ordered to undertake clean-up operations on the Taj Mahal itself.

The most famous instance of the Court’s activism in the environmental sphere, however, is the **TN Godavarman Case**.<sup>31</sup> It originated with a letter by a land-owner in Tamil Nadu who was distressed by the illegal felling of trees on his estate. The letter was *converted* into a Public Interest Litigation (PIL); the first order of the Court issued in December 1996<sup>32</sup> opined that forests could not be denied protection under the Forest Conservation Act just by legally changing their status. This was done to put a stop to the practice of State Governments who would de-notify areas as forests so as to avoid seeking permission from the Central Government to use them for non-forestry purposes. As a legal determination of the scope of an environmental legislation, this was a perfectly sound approach by the Court. The next step of the Supreme Court, however, represents all the pitfalls of the ‘new remedies’ interpretation of Article 32. The Court issued a blanket ban on all tree-felling all over India.

<sup>29</sup> M.C. Mehta v. Union of India, AIR 1997 SC 734.

<sup>30</sup> Since they were using diesel generators because of the irregular power supply from the Government, the Court asked the State to improve power supply as well.

<sup>31</sup> T.N. Godavarman Thirupad v. UOI (Writ Petition (civil) no. 202 of 1995

<sup>32</sup> AIR 1997 SC 1228 (order of 12.12.96)- Justice J.S. VERMA AND B.N. KIRPAL

Without taking into account the executive's capacity for implementing such a ban, the Court ended up exacerbating the problems with corruption in forest governance and boosted the illegal timber trade in the country. Further sweeping orders designated tribals as 'encroachers' and mandated their removal within a deadline.<sup>33</sup> To date, the Court has issued close to a thousand interlocutory orders in the Godavarman case, all of them on forest issues, but most of them having very little to do with the original complaint about tree-felling in Tamil Nadu.

The most important feature of cases such as Taj Trapezium and TN Godavarman is the number of interlocutory orders issued by the Court. While the Court delivered a final judgment in the Taj case, the court is still actively seized of the Godavarman matter, with no danger of a final judgment any time soon. 'Godavarman' has evolved into an umbrella designation under which all forest related complaints can be brought to the Supreme Court. As explored later in this report, the Supreme Court has developed a whole institutional structure, somewhat uncomfortably situated between the judiciary and the executive, to deal with all the applications and petitions filed under the *Godavarman* designation. As Rosencranz et al. conclude, by extending its involvement in forest issues, the Supreme Court has increased the country's dependence on the Supreme Court for forest management.<sup>34</sup> Forest management, therefore, in this country, has been highly centralized; worse, this centralization has been achieved precisely when the political consensus seems to be shifting decisively in the direction of greater local autonomy.

### 3.4.2. The Supreme Court's Role in Empowering Local Environmental Governance

Yet, where the Supreme Court is the great centralizer in forest management, it has proven a potent force for de-centralization in an almost inextricably linked sphere – mineral rights.

Mining in India is governed by a complex network of legislation. Central legislations such as the Mines and Minerals (Development and Regulation) Act, 1956, the Environment Protection Act, 1986 and the Forest Conservation Act, 1980 create processes to ensure minimal environmental impact. Other laws such as the Panchayats (Extension to Scheduled Areas) Act, 1996 and the Forest Rights Act, 2006, attempt to redress the long-standing exclusion of marginalized, rural areas from development initiatives. Separate State Government legislation exists with respect to the Schedule Areas identified in the Constitution, particularly regulating land transfers. In addition, land acquisition laws attempt to balance the information and power asymmetries between marginal land-owners and industry.

The broad criticism of mining governance in India is that it is based on highly centralized decision-making and results in highly localized externalities. A related criticism is the disproportionate influence of the bureaucracy over mining policy and the rent-seeking behavior this engenders. Seen in this context, the significance of this year in the evolving narrative on mineral rights in this country is immense. The most important developments in

---

<sup>33</sup> Armin Rosencranz et al., *The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests*, 37 ELR 10032.

<sup>34</sup> Id.



the laws relating to mineral rights have not originated in Parliament, but in the Supreme Court. Two of the Court's decisions, in particular, have significantly advanced the cause of community participation in resource development in India.

### 3.4.2.1 The End of State Mineral Ownership

In the 2013 case of *Threesiamma vs. The Geologist, Department of Mining and Geology*, a three-judge bench of the Supreme Court clarified a crucial aspect of the State's power over mineral resources. Up until the judgment, there existed a presumption, accepted in legal and policy circles, that mineral under the land belonged to the State. The judgment found that there was no legal basis for this presumption and that mineral resources are privately owned, unless there is a legislation seizing ownership for the State. The mere fact that the State is empowered to regulate mineral rights (what the Court describes as "imperium") does not automatically lead to the conclusion that the State is, in fact, the *owner* of said mineral rights ("dominium"). Hence, the Mines and Minerals (Development & Regulation) Act, 1956 which is the comprehensive Central Government Act *regulating* mineral rights, does not allow one to presume State *ownership* of mineral rights. While the State (of Kerala in this case) claimed that it had subsequently legislated to change the nature of land ownership, the Court found that previous legislations of the same nature had never legally shifted rights in the minerals from the private owner to the Government.

Where does that leave the legal status of mineral ownership in the country? In some cases, the original pre-colonial transfer of mineral rights to the owner was made along with the transfer of land rights, in some cases it was not. In some areas, the British legislated to explicitly claim mineral rights along with land rights in certain areas, in others they did not. Post-Independence Governments have legislated to regulate mineral rights, but never to transfer pan-Indian ownership of minerals to the State. Therefore, the ownership of minerals is necessarily chequered and depends on the particulars of the historical transfer of rights in the land and minerals, either consensually or by British law-making (by the East India Company or the British Government). This does not mean that the State *cannot* own mineral rights, but simply that it must either have acquired such rights by succession, by voluntary transfer from a private owner or by explicitly legislating to take such rights away from private and into State possession.

### 3.4.2.2 Community Cultural Rights

An integrally related legal issue is that of community rights in forest land. This was also dealt with by the Supreme Court in 2013, in *Orissa Mining Corporation vs. Ministry of Environment*. The facts of the case outlined in the judgment present an extremely confused picture of the interaction between three companies, the State Government, the Central Ministry and the Supreme Court. Essentially, the companies sought Environmental and Forest Clearances to set up an alumina refinery in Lanjigarh District as well as a bauxite mine in Kalahandi. In the often inter-twined processes of seeking Government approvals and petitioning the Supreme Court to direct the Government to act expeditiously, the Environmental Clearance was partly granted and then held up because the enquiry into the conditions for the Forest Clearance was still being conducted. Eventually, the far more robust investigation conducted for the purpose of the Forest Clearance threw up damning facts which caused the Environmental Clearance to be declared 'inoperable'.

Most pertinent to mineral rights, the Court considered the question of exactly what rights were protected by the Forest Rights Act of 2006. To provide context to this question, it must be noted that since the legal identification and recording of rights to forest land was still underway, the Ministry of Tribal Affairs had specifically instructed the States to refrain from diverting any land which was still a subject of claims under the FRA or evicting any tribal individuals who had made such claims until all claims were settled.

The companies submitted that the rights under the Act pertained exclusively to individual and community property claims over forest land; since applications for all individual and community rights over the required area were already settled by the Gram Sabha and alternative land was provided, no rights under the Act were violated. However, after considering the Constitutional scheme of tribal rights and cultural/religious rights, related legislations such as the Panchayats (Extension to Scheduled Areas) Act, 1996 and its own previous jurisprudence on the question, the Court came to the conclusion that

- Tribal rights were not limited to the property rights in land but could encompass cultural and religious rights as well.
- Under the FRA 2006, the Gram Sabha was empowered to decide the question of whether such community cultural/religious rights existed with respect to a particular forest area.

In this case, the right which had failed to be considered was the right of the villagers to their religious beliefs (and related practices) which held that their deity resided in the forests of the Niyamgiri plateau. The Court thus turned over the question to the relevant Gram Sabhas for their consideration.<sup>35</sup> If the Gram Sabhas do find that community cultural rights exist with respect to the area, the Supreme Court says that “[...] that right has to be preserved and protected.” Community cultural rights, therefore, may become communities’ best protection against un-sustainable mining.

Mining cases have also often been dealt with under the *Godavarman* designation, providing evidence of the integral links between these two spheres of governance. In these two decisions, the Supreme Court has vested ownership and decision-making power over mineral rights and mining at the lowest possible level of governance. The Forest Rights Act, after all, was passed fairly recently (in 2006); this may mark a fresh ‘bottom-up’ approach to the Court’s jurisprudence on environmental management.

### 3.4.3. Environmental Federalism within the Judiciary

The liberalization of the *locus standi* requirement has placed a significant pressure on the Supreme Court’s already heavy work-load. As far back as 1986, the Supreme Court opined that environmental cases which involved the assessment of scientific data required the setting up of regional environmental courts staffed by professional judges possessing the relevant expertise.<sup>36</sup> In 1996, it re-iterated this observation with an emphasis on dealing with environmental cases in a speedy and efficient manner.<sup>37</sup> In 1995 and 1997, respectively,

---

<sup>35</sup> All of the twelve Gram Sabhas to which the question was referred rejected the mining/refinery proposal.

<sup>36</sup> M.C Mehta vs. Union of India

<sup>37</sup> Indian Council for Enviro-Legal Action vs. Union of India

Parliament enacted two Acts to establish a National Environmental Tribunal and an Appellate Tribunal. The former Act was never notified (i.e. no date was ever published for it to come into effect); no appointments were ever made to the latter authority.

In September 2003, the Law Commission of India released its 186<sup>th</sup> Report on the issue of Environmental Courts. It recommended the following:<sup>38</sup>

### 1. Need and Establishment

In view of the involvement of complex scientific and specialized issues relating to environment, there is a need to have separate 'Environment Courts' manned only by the persons having judicial or legal experience and assisted by persons having scientific qualification and experience in the field of environment. In order to achieve the objectives of accessible, quick and speedy justice, these 'Environment Courts' should be established and constituted by the Union Government in each State.

### 2. Composition

- a. The proposed Environment Court shall consist of a Chairperson and at least two other members. Chairman and other members should either be retired Judges of Supreme Court or High Court, or having at least 20 years of experience of practicing as advocates in any High Court. The term of the Chairperson and members shall be 5 years.
- b. Each Environment Court shall be assisted by at least three scientific or technical experts known as Commissioners. However, their role will be advisory only.

### 3. Method of Appointment

The method of appointment of the Judicial Members shall be by the Central Government in consultation with State Government, the Chief Justice of the State/Union Territory concerned and the Chief Justice of India. The method of appointment of the Commissioners shall be by the State Government/Union Territory concerned in consultation with the Chief Justice of the State concerned and the Chairman of the proposed Environment Court.

### 4. Jurisdiction

- a. The proposed Environment Court shall have original jurisdiction in the civil cases where a substantial question relating to 'environment' including enforcement of any legal or constitutional right relating to environment is involved.
- b. The jurisdiction of civil courts is not ousted.
- c. The proposed Environment Court shall also have appellate jurisdiction in respect of appeals under:
  - (i) The Environment (Protection) Act, 1986 and rules made thereunder;
  - (ii) The Water (Prevention and Control of Pollution) Act, 1974 and rules made thereunder:

---

<sup>38</sup> Law Commission of India, "186<sup>th</sup> Report On Proposal TO Constitute Environmental Courts" (September 2003). Available at <http://lawcommissionofindia.nic.in/reports/186th%20report.pdf>.

- (iii) The Air (Prevention and Control of Pollution) Act, 1981 and rules made thereunder;
- (iv) The Public Liability Insurance Act, 1991.
- (v) The Central and State Governments may also notify that appeal under any other environment related enactment or rules made thereunder, may also lie to the proposed Environment Court.

#### **5. Repeal**

The National Environment Tribunal Act, 1995 and The National Environmental Appellate Authority Act, 1997 may be repealed and provisions regarding functions and powers of the Tribunal and the Appellate Authority contained in those Acts be suitably transferred in the proposed enactment for establishment of the Environment Court.

#### **6. Appeal to Supreme Court**

Appeal against the orders of the proposed Environment Court, shall lie before the Supreme Court on the question of facts and law.

#### **7. High Court's Jurisdiction Unchanged**

The powers of High Courts under Articles 226 and 227 of the Constitution of India, and the powers of the Supreme Court under Art. 32 of the Constitution of India shall not be ousted.

In 2010, the Union Government passed the National Green Tribunal (NGT) Act. The NGT faced problems with staffing in its initial years; it is still well under the capacity provided for in the Act.<sup>39</sup> Nevertheless, it has made a reasonably strong start on its mission, already issuing landmark judgments and challenges to the executive.<sup>40</sup>

From the perspective of the federal structure of the judiciary, three points stand out for their departure from the Law Commission's recommendations.

First, the National Green Tribunal is to be established in five cities only – New Delhi, Kolkata, Bombay, Bhopal and Chennai (representing the usual regional division of India into North, East, West, Central and South respectively). They are to operate on a circuit basis, sitting at several cities in their region throughout the year. This is in contrast with the Law Commission's recommendation that the Tribunals be set up in each State.

Second, section 6 of the 2010 Act prescribes that both Judicial and Expert Members shall be appointed by the Central Government. This is in contrast to the Law Commission's recommendation that the Expert members ("Commissioners", in the LCI report) be appointed by the State Government and that the State Government's opinion be taken into account in appointing the Judicial Members.

---

<sup>39</sup> 4 Judicial and 10 Expert, where the Act allows for 20 of each.

<sup>40</sup> World Wide Fund, "Three Years of the NGT". Available at [http://www.wwfindia.org/about\\_wwf/enablers/cel/national\\_green\\_tribunal/article\\_by\\_cel/](http://www.wwfindia.org/about_wwf/enablers/cel/national_green_tribunal/article_by_cel/).

Third, where the LCI's report went to great lengths to avoid impinging on the jurisdiction of the existing civil courts, section 29 of the NGT Act, 2010 states that no civil court is to entertain any appeal in any matter which falls under the NGT's appellate jurisdiction.

As the Parliamentary Standing Committee on Science & Technology, Environment & Forests commented in its review of the Bill –

“[...] The National Green Tribunal, which claims itself to be a mechanism aimed at effective and expeditious disposal of civil cases relating to environmental protection and conservation of forests, does not exude much confidence given its infrastructural framework, particularly in view of the geographical vastness of our country. The Committee feels that such a limited spread of National Green Tribunal at five places only may lead to serious constraints of accessibility in the long run, especially to the poor and the tribal people who live in far flung areas of our country. This problem has to be viewed in the light of Clause 14(1), read with Clause 28 whereby the tribunal shall have the exclusive jurisdiction over all civil cases where a substantial question relating to environment is involved.”

On August 9, 2012, the Supreme Court delivered its judgment in Bhopal Gas Peedith Mahila Udyog Sangathan<sup>41</sup>, a case which related to relief and rehabilitation of Bhopal gas victims and the smooth running of Bhopal Memorial Trust Hospital. It ordered the transfer of all environment cases pending before high courts to the NGT:

“Keeping in view the provisions and scheme of the National Green Tribunal Act, 2010 (for short the 'NGT Act') particularly Sections 14, 29, 30 and 38(5), it can safely be concluded that environmental issues and matters covered under the NGT Act, Schedule 1 should be instituted and litigated before the NGT. [...] Such approach may be necessary to avoid likelihood of conflict of orders between the high courts and the NGT. Thus, in unambiguous terms, we direct that all the matters instituted after coming into force of the NGT Act and which are covered under the provisions of the NGT Act and/or in Schedule I to the NGT Act shall stand transferred and can be instituted only before the NGT. This will help in rendering expeditious and specialized justice in the field of environment to all concerned.”

The Act, thus, places appellate justice geographically further from the litigant. Since there is no provision for environmental experts at lower levels of the judiciary, the overall effect seems to sacrifice access for expertise. Of even more concern, it further concentrates environmental justice in the hands of the Union executive.

---

<sup>41</sup> WRIT PETITION (C) NO.50 OF 1998 WITH IA NOS. 62-63 OF 2011 IN CIVIL APPEAL NOS.3187 – 3188 OF 1988 (Order of 9 August, 2012).

## 4 Forests in India

India's current forest and tree cover, constituting 23.81 per cent of the geographical area of the country, is estimated to be 782,871 sq. km. (Ministry of Environment and Forests 2011). Forest cover alone amounts to 692,027 sq. km. (21.05 per cent of the geographical area), against the recorded forest area of 769,512 sq. km<sup>42</sup>. According to the India State of the Forest Report (ISFR) 2011, forest cover has declined by 367 sq. km. compared to the forest cover in the preceding ISFR (2009) (Ministry of Environment and Forests 2011). Tree cover outside forest areas is assessed to be 90,844 sq. km, and is experiencing an increase over the last few assessments, indicating a rise in green cover in non-forest land in the country.

**Table 4.1: India's Forest Cover 2011**

Land Use/Forest Cover Category	Area (in Sq. Km)	% of Geographical Area
1. Total Forest Cover*	692,027	21.05
a) Very Dense Forest	83,471	2.54
b) Moderately Dense Forest	320,736	9.76
c) Open Forest	287,820	8.75
2. Scrub	42,176	1.28
3. Non-forest	2,553,060	77.67
Total Geographical Area	3,287,263	

\*includes 4,662 sq km are under mangroves

Source: India State of the Forest Report 2011, Forest Survey of India, Ministry of Environment and Forest (2011)

The forest cover as well as the density classes vary across the states (see 2). Among the states, Haryana has the lowest (1608 sq. km.) and Madhya Pradesh has the largest (77,700 sq. km.) area under forest. In terms of the proportion of forest cover to the geographical area of the states, Mizoram has the largest (90.07 per cent) whereas Punjab has the least (3.5 per cent) (see Figure 4.1). All north eastern states except Assam and Sikkim and both the island union territories (Andaman and Nicobar Islands and Lakshadweep) have more than 2/3<sup>rd</sup> of their geographical area under forest cover. Several large states don't even have 1/3<sup>rd</sup> of their geographical area under forest cover.

ISFR 2011 has shown that many states and union territories (Punjab, Jharkhand, Tamil Nadu, Odisha, Andaman and Nicobar Island, Bihar, Haryana, Himachal Pradesh, among others) have shown an increase in their forest cover (see Table 4.2). This change is attributed to reasons such as management interventions like harvesting of short rotation crops followed by new regeneration/plantations, shelter belt plantations in tsunami affected areas, effective protection by village forest protection committees and regeneration of forest areas. On the other hand, some states (Andhra Pradesh, Manipur, Nagaland, Arunachal Pradesh,

<sup>42</sup> The term 'Forest Area' or 'Recorded Forest Area' refers to all the geographic areas recorded as forest in government records and do not necessarily mean forested land (MoEF, 2008). This is more of a legal status of the land and there are forest areas in the country without any standing forest. Forest cover is the actual forested land having a tree canopy density of more than 10% and assessed through satellite images by Forest Survey of India (FSI) every two years. FSI is publishing State of the Forest Reports since 1987 and the latest being the India State of the Forest Report 2011.

Mizoram, Meghalaya, Assam, Kerala among others) have shown a decrease in the forest cover mainly due to illicit felling, encroachments in insurgency affected areas, shortening of shifting cultivation cycle, and other biotic pressure.

**Table 4.2: State wise Forest Cover, Density Classes and Changes from 2009 Assessment**

State	Geographical Area (in Sq. Km)	2011 Assessment (Area in Sq. Km)				Change from 2009 Assessment (Area in Sq. Km)			
		Very Dense Forest	Moderately Dense Forest	Open Forest	Total Forest	Very Dense Forest	Moderately Dense Forest	Open Forest	Total Forest
Andhra Pradesh	275069	850	26242	19297	46389	0	-135	-146	-281
Arunachal Pradesh	83743	20868	31519	15023	67410	-5	-55	-14	-74
Assam	78438	1444	11404	14825	27673	-17	-154	152	-19
Bihar	94163	231	3280	3334	6845	0	32	9	41
Chhattisgarh	135191	4163	34911	16600	55674	0	0	-4	-4
Delhi	1483	7	49	120	176	0	-0.4	0	0
Goa	3702	543	585	1091	2219	0	7	0	7
Gujarat	196022	376	5231	9012	14619	0	-18	17	-1
Haryana	44212	27	457	1124	1608	0	-6	20	14
Himachal Pradesh	55673	3224	6381	5074	14679	0	-2	13	11
Jammu and Kashmir	222236	4140	8760	9639	22539	0	0	2	2
Jharkhand	79714	2590	9917	10470	22977	0	18	65	83
Karnataka	191791	1777	20179	14238	36194	0	-2	6	4
Kerala	38863	1442	9394	6464	17300	-1	-16	-7	-24
Madhya Pradesh	308245	6640	34986	36074	77700	-7	-21	28	0
Maharashtra	307713	8736	20815	21095	50646	-3	-19	18	-4
Manipur	22327	730	6151	10209	17090	29	677	-896	-190
Meghalaya	22429	433	9775	7067	17275	23	274	-343	-46
Mizoram	21081	134	6086	12897	19117	0	-63	-3	-66
Nagaland	16579	1293	4931	7094	13318	19	34	-199	-146
Odisha	155707	7060	21366	20477	48903	-13	-28	89	48
Punjab	50362	0	736	1028	1764	0	3	97	100
Rajasthan	342239	72	4448	11567	16087	0	-2	53	51

State	Geographical Area (in Sq. Km)	2011 Assessment (Area in Sq. Km)				Change from 2009 Assessment (Area in Sq. Km)			
		Very Dense Forest	Moderately Dense Forest	Open Forest	Total Forest	Very Dense Forest	Moderately Dense Forest	Open Forest	Total Forest
Sikkim	7096	500	2161	698	3359	0	0	0	0
Tamil Nadu	130058	2948	10321	10356	23625	22	-22	74	74
Tripura	10486	109	4686	3182	7977	0	-16	8	-8
Uttar Pradesh	240928	1626	4559	8153	14338	0	-4	1	-3
Uttarakhand	53483	4762	14167	5567	24496	0	2	-1	1
West Bengal	88752	2984	4646	5565	12995	-3	2	2	1
Andaman & Nicobar Island	8249	3671	2416	547	6724	-1	11	52	62
Chandigarh	114	1	10	6	17	0.35	-0.4	-0.1	-0.22
Dadra & Nagar Haveli	491	0	114	97	211	0	0	0	0
Daman & Diu	112	0	0.62	5.53	6	0	0	0.5	0.5
Lakshadweep	32	0	17.18	9.88	27	0	0.47	0.11	0.58
Pondicherry	480	0	35.37	14.69	50	0	1.27	-1.2	0.09
All India	3287263	83471	320736	287820	692027	43	498	-908	-367

Source: India State of the Forest Report 2011, Forest Survey of India (2013)

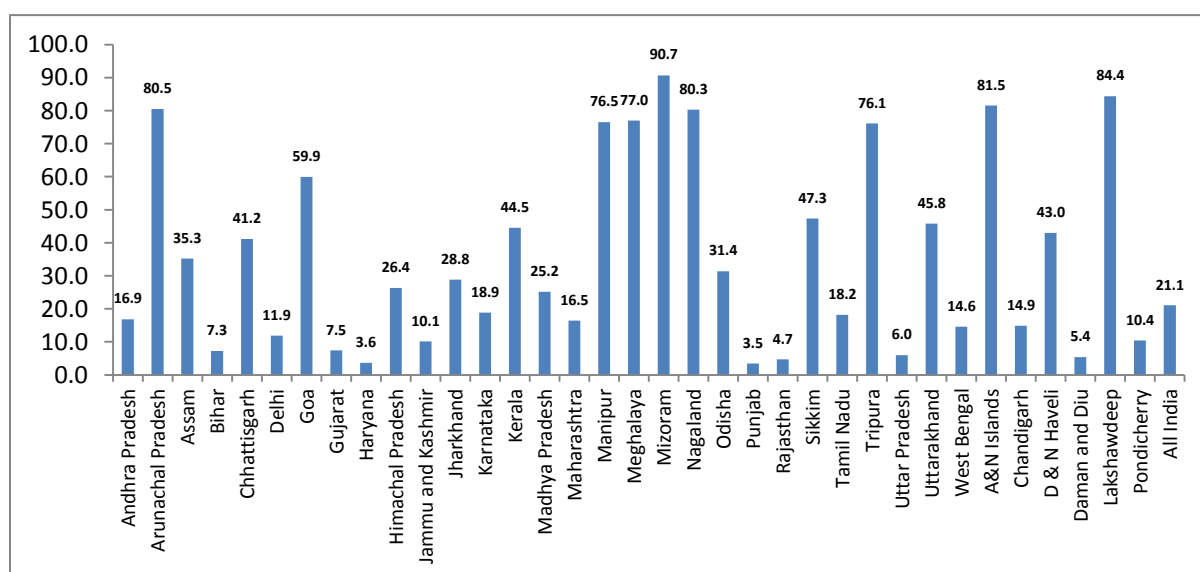


Figure 4.1: Percentage of the Geographical Area under Forest Cover-All States and UTs

Of the total forest cover in the country, 12.06 per cent is very dense forest (more than 70 per cent crown density), 46.35 per cent is moderately dense forest (40 to 70 per cent crown



density), and the remaining 41.59 per cent is open forest (10 to 40 per cent crown density). The density classes of forest vary significantly across the states (see Figure 4.2). Very few large states have more than 5 per cent of their geographical area under very dense forest. The 2011 assessment also found that both very dense forest and moderately dense forest have increased by 43 and 498 sq. km. respectively over 2009 assessment and area under open forest declined by 908 sq km during the same period (see Table 4.2).

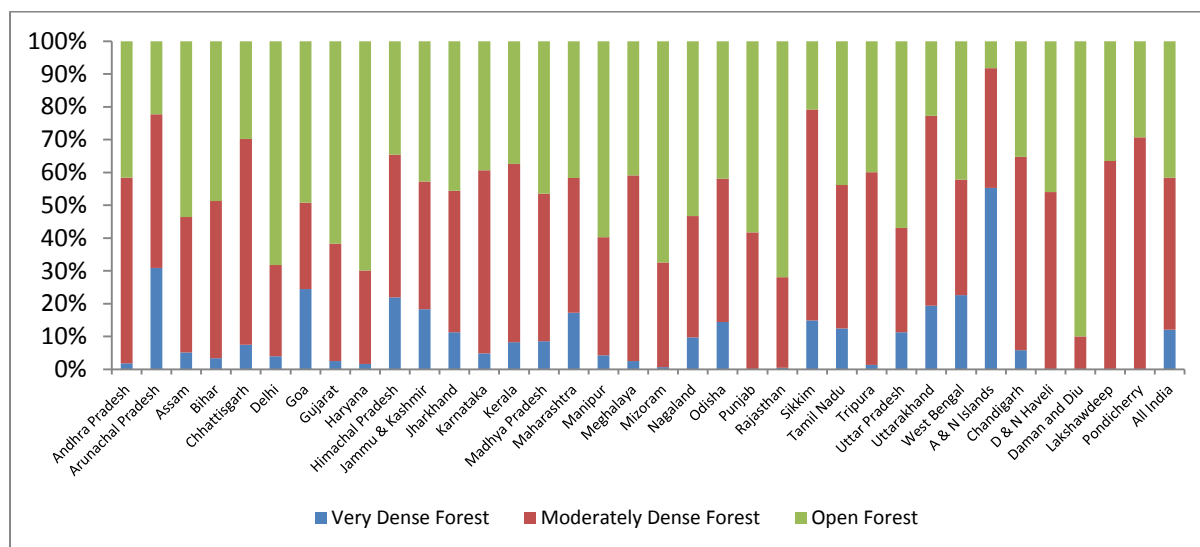


Figure 4.2: State wise Forest Density Classes

The actual forest cover is much below the recorded forest area in several states. The ratio of area under actual forest cover to recorded forest area stands to be 90 per cent for the country and varies significantly across the states (see Fig. 4.3). Apart from the degradation of forest, other institutional factors like diverse legal classification of forest land and differential property right structure over forest land across the states are factors behind such a huge variation in the ratio.

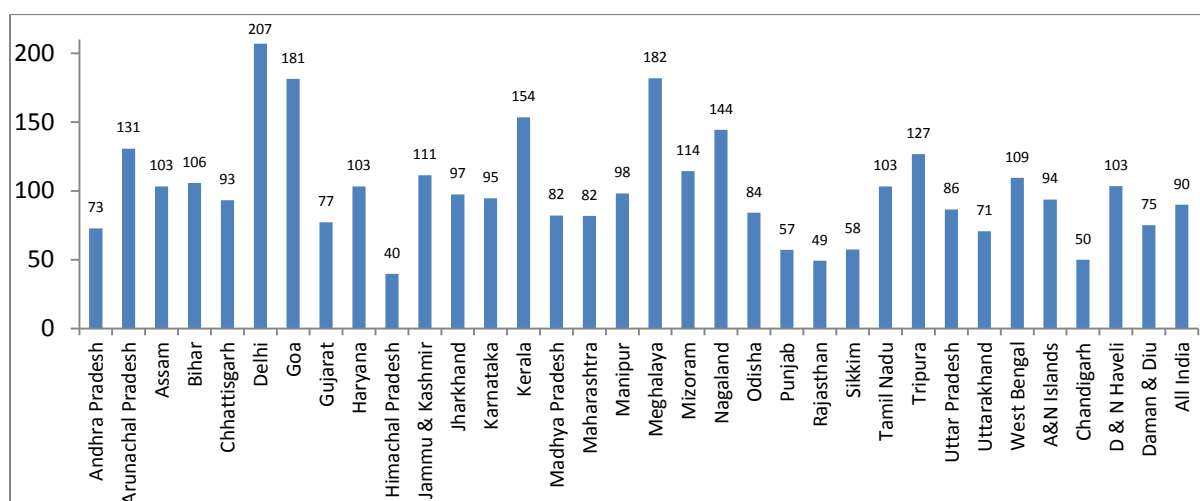


Figure 4.3: Ratio of Actual Forest Cover to Recorded Forest Area

Note: The recorded forest area as reported in ISFR 2009

## 5 Forests and Federalism

---

### 5.1. Constitution, law and timeline

#### 5.1.1. Pre-Constitution

The conflict over forests can be traced back to colonial times. The British tried to introduce several forest charters and laws, before they were finally consolidated in the form of the Indian Forests Act, 1927, which is still in force. In 1855, a Charter of Indian Forestry was issued declaring all forests and all the trees therein, if not privately owned, as state property.<sup>43</sup> It was based on the Annexationist position that any land not under cultivation belonged to the State (Gadgil and Guha 1992). Thereafter, in 1865, the first Indian Forest Act was legislated asserting state monopoly over forest land, and the power to legislate on forest lands and pastures (Negi 1994).

The Madras Presidency, amongst others, vehemently opposed the 1865 Act. They refused to accept the Act and surrender the forests on the grounds of safeguarding the customary rights of the local people over wastelands and forests. This stopped the government from declaring all forests as the exclusive property of the state (Sinha and Srivastava Forthcoming).

Problems with this Act<sup>44</sup> and the annexationist position of the colonial administrators led to a new and revised Indian Forest Act of 1878. The 1878 Act created four classes of forests: reserved, demarcated protected, non-demarcated protected and village.<sup>45</sup> However, under the new laws, the rights in village forests were extremely curtailed allowing *'only a marginal and inflexible claim on the produce of the forests'* (Guha and Gadgil, State Forestry and Social Conflict in British India 1989). As Guha notes, *'new rulers brought in technologies of extraction, conversion and transportation of forest resources that were completely unknown to India as indeed were elaborate and detailed forest codes'* (Guha 1999).

Post the Montague Chelmsford Reforms, forests came to be treated as a 'transferred' subject. With the Government of India Act of 1935, forests came clearly under the domain of provinces.

#### 5.1.2. 1950 - 1976

At the time of independence, when erstwhile provinces were either constituted or merged to create states of India, the forest administration in these provinces also got reorganized. There was large variation in terms of capacity and experience of these State level administrative bodies. States like Travancore, Mysore, Hyderabad, Jammu and Kashmir had

---

<sup>43</sup> 3 August 1855, a Memorandum of the Government of India, the 'Charter of Indian Forestry'

<sup>44</sup> Negi lists some of these problems as limited scope covering only state owned forests and absence of any provisions on rights of users.

<sup>45</sup> Davidson-Hunt Iain J., 'Negotiating The Commons: Land Use, Property Rights And Pastoralists Of The Western Indian Himalayas'(1995) Master thesis on record with Natural Resources Institute, The University of Manitoba, Winnipeg, Canada, pp. 45.

well organized departments for management of forests. Other princely states, however, had treated forests as a source of revenue and hardly taken any measures for conservation (Singh, Singh and Mohanka 2007). Thus, as in other spheres, there was a great level of diversity in the States.

Following the pre-independence list, forests were declared a State subject in the new Schedule VII of the Constitution of India. Administratively, forests were dealt with under the Ministry of Agriculture. The Centre did not have the jurisdiction to legislate on forests. It could only introduce a policy. The first National Forest Policy of independent India was formulated in 1952, and drew heavily from the colonial forest policy of 1894. It aimed at reorienting the forest policy taking note of current needs<sup>46</sup> and had a focus on sustained supply of timber and other forest produce<sup>47</sup>, it expanded the scope of state forest policy to checking denudation and erosion in forests and establishing treelands for the '*amelioration of physical and climatic conditions promoting the general well being of the people*'.<sup>48</sup>

Several States enacted State level forest legislation. Acts like the Kerala Preservation of Trees Act 1986, Madhya Pradesh Forest Produce (Trade Regulation) Act 1969, Andhra Pradesh Minor Forest Produce (Regulation of Trade) Act, 1971 etc. strengthened the government monopoly over forest resources, including minor forest produce (Saxena 1999). With a greater focus on rights on timber and non-timber forest produce in the National and State level policies and laws, rampant denudation of forests occurred despite recognizing the need for protection and management of forests. Within the first four decades of independence, tree cover in India saw a rapid decline from 70 million hectare to 35 million hectare.

The National Commission on Agriculture between 1970 and 1976 had a substantial influence on the governance of forests in the country. In its Report in 1976, it made some very strong, and controversial, observations, such as, "*Free supply of forest produce to rural population, and their rights and privileges have brought destruction to forests and so it is necessary to reverse the process.*"

The Committee also pointed out the States 'inability to implement forest laws in the country. It noted that 'the Provisions of the National Forest Policy have not been implemented by the States.... There should be uniformity in forests law', so that incompatibility of forest laws among the States could be addressed. In doing so, the Commission highlighted the need for giving statutory recognition to the Centre's role in forestry in the form of an all India Forest Act. The Commission, fully aware of the limitations posed by the then scheme of Constitution (forests being a State subject), recommended that the requisite number of States should be persuaded to authorise the Central Government to legislate on forests.

---

<sup>46</sup> Para 2, National Forest Policy 1952

<sup>47</sup> Para 3 (v), National Forest Policy 1952

<sup>48</sup> Para 3 (iii); Also see generally Singh KD, 'Rationale for prescribing the requisite forest cover in India' Report for Indian Council of Forestry Research & Education (ICFRE) 10 April 2010, available at <http://afesindia.org/pdf/Rationale%20for%20Prescribing%20the%20Requisite%20Forest%20Tree%20Cover%20in%20India.pdf>, last accessed on 6 June 2011

### 5.1.3. 1976 – 1990s

In 1976, the Union of India took note of the report prepared by National Commission on Agriculture, albeit selectively. Taking cue from the Commission's recommendations and the rampant deforestation the Centre introduced their legislative jurisdiction on forests. Consequently, with the forty-second amendment of the Constitution of India in 1976, the subject of forests was moved to the 'concurrent' list from the 'State' list, thereby opening up the doors for Central legislation in the domain of forests in independent India.

In 1980, the Forest (Conservation) Act was enacted to put restrictions on de-reservation of forests or use of forest land for non-forest purpose.<sup>49</sup> The Act explicitly provides for conservation of forests by making it mandatory to seek Central government approval for de-reservation of a reserved forest, using any forest land for non-forest purpose, and clearing of forestlands for re-forestation.<sup>50</sup> Thus, the Act does not put a blanket ban on non-forest activities but introduces checks and balances, in the nature of approvals and compensatory afforestation. The Act and the Rules made thereunder lay down the procedure for diversion of forests for non-forest use Source: **Comptroller and Auditor General of India 2013**

Figure 5.1 describes how forest diversion goes through a two-stage clearance procedure and the requirement for compensatory afforestation and associate non-forest land requirement. However, the two-stage clearance procedure has been questioned by a recent Green Tribunal Ruling.<sup>51</sup>

In 1985, Forests moved out of the domain of the Ministry of Agriculture and a Ministry of Environment and Forests was created. In 1988, the year National Forest Policy was revised, the Forest Conservation Act was amended to put further restrictions, such as prohibiting assignment of forestland to any private entities for the purpose of plantation.

In 1988, the Indian Forest policy of 1952 was replaced by 1988 Policy<sup>52</sup> which had a clear goal of ensuring 'environmental stability and maintenance of ecological balance including atmospheric equilibrium, which are vital for sustenance of all life forms, human, animal and plant.'<sup>53</sup> It went further to aver that deriving economic benefits out of forests must be subordinated to this aim.<sup>54</sup> The policy recognized protection of forests and forest lands, network of protected areas for protecting biodiversity and due recognition of dependence of

---

<sup>49</sup> Section 2 of the Forest (Conservation) Act, 1980 (69 of 1980) defines "non-forest purpose" as breaking up or clearing of any forest land or portion thereof for- (a) the cultivation of tea, coffee, spices, rubber, palms, oil-bearing plants, horticultural crops or medicinal plants; (b) any purpose other than reforestation;

<sup>50</sup> Section 2, Forest Conservation Act

<sup>51</sup> Ministry's power to grant two stage clearance has been questioned by the NGT in a recent decision.

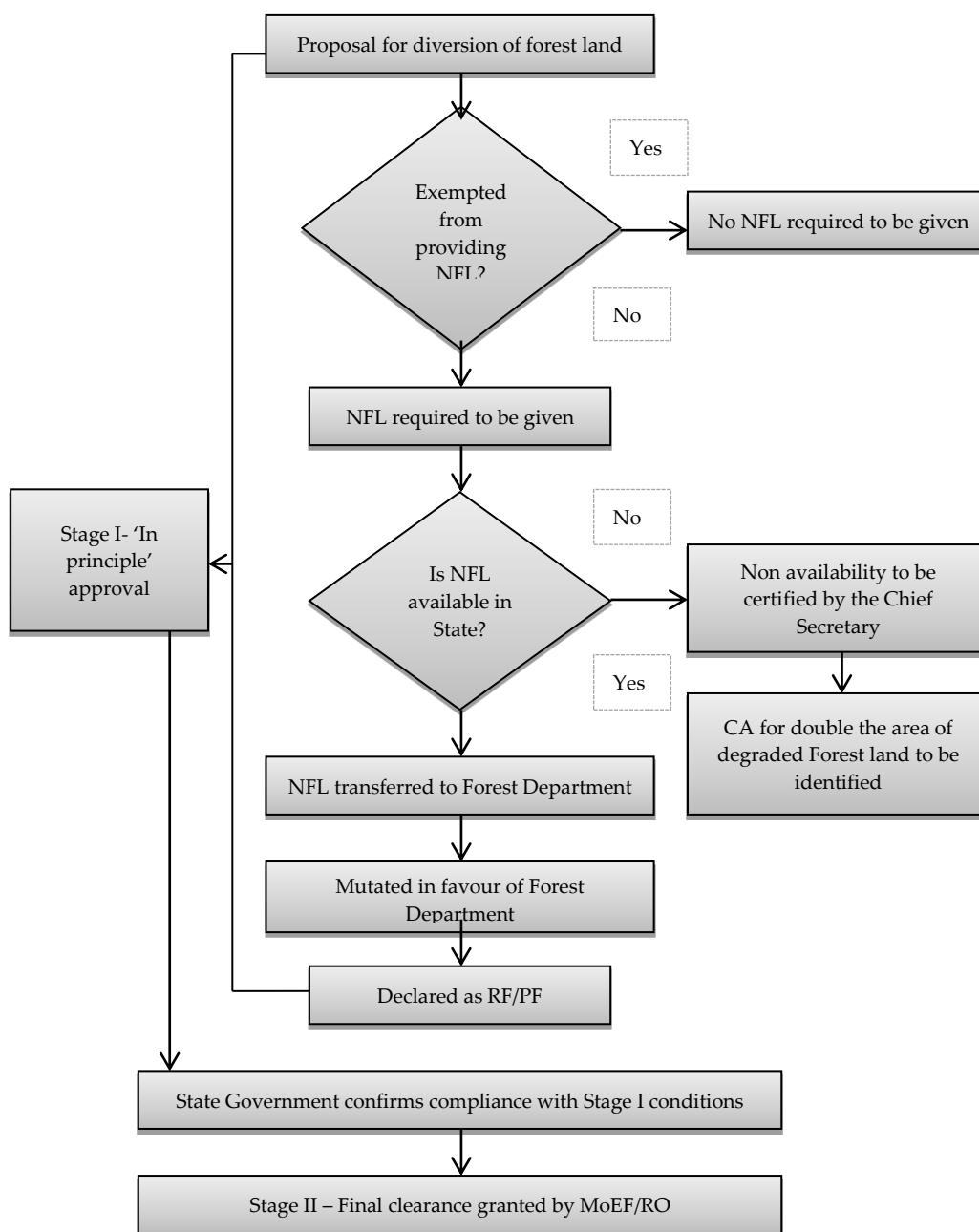
<http://www.firstpost.com/business/moefs-two-stage-forest-clearance-concept-questioned-by-ngt-1281963.html>

<sup>52</sup> National Forest Policy 1988 No.3A/86-FP, Ministry of Environment and Forests, (Department of Environment, Forests & Wildlife), Government of India

<sup>53</sup> Para 2, National Forest Policy 1988

<sup>54</sup> *ibid*

tribal population on minor forest produce for sustenance were identified as essential elements of forest management.<sup>55</sup>



Source: Comptroller and Auditor General of India 2013

Figure 5.1: Procedure for forest diversion for non-forest purpose

One of the primary objectives of the National Forest Policy of 1988 was to increase sustainability of the forest/tree cover in the country through massive afforestation and social forestry programmes, especially on all denuded, degraded and unproductive lands. It also

<sup>55</sup> Para 3.1 – 3.5, National Forest Policy 1988

set forth a target of having 33 per cent of the country's land under forest cover. This target is for the entire nation, with some States contributing by having as much as 90 per cent of their territory under forest cover. Some States also contend that they bear the burden of maintaining the forest cover for the benefit of the nation while others are focussing on economic development.

In order to achieve the target 33 per cent forest cover as envisaged by the 1988 policy, the need to carry out large-scale afforestation of wastelands and other non-forest lands was felt, in addition to conservation of existing forests. A National Afforestation Board & Eco-development Board (NAEB) was set up in 1992 with the objective of promoting afforestation, tree planting, ecological restoration and eco-development activities. The NAEB coordinated several schemes for afforestation till the end of the Ninth-Five-year-plan, when all the schemes were converged and a National Afforestation Scheme was launched as a Central Sector Scheme (CSS). Central Sector schemes are instruments of fiscal transfer. Unlike the case in centrally sponsored schemes, States receive 100 per cent assistance in central sector schemes. Therefore, it does not cause a financial burden on the States in the form of matching grants. However, CSS are not free from problems. Many of the grants and disbursements are motivated and determined by Centre-State relations.

The 1992 Policy Statement and National Conservation Strategy calls for concerted efforts for increasing the forest cover. It recognized that a mission mode is needed to ensure the 33 per cent target of forest cover for the country. In the spirit of the National Forest Policy, the Strategy lists action points for increasing forest cover and conserving the existing forests through, inter alia, massive afforestation and social forestry programmes; restriction on diversion of forest lands for non-forest uses and compensatory afforestation where such diversion cannot be avoided; land banks for undertaking compensatory afforestation; and involving local individuals and communities.

While forest laws provide for conservation, they have long been observed in the breach. Matters came to a head in 1995 when an estate owner, T N Godavarman, moved the Supreme Court about un-authorized logging on his land resulting from the Tamil Nadu Government changing the legal status of those forests. The Court converted the complaint into a Public Interest Litigation and started the process of 'judicialisation' of forest governance that continues to this day. The first order of the Court, issued in 1997, clarified that the FCA mandated State Governments to protect all forests, as defined by the dictionary description of forests, not simply those that were legally recognised by the States as such. Therefore, it almost nullified the States' discretion to decide which forests they valued and which ones they were willing to trade off against other benefits.

## 5.2. CAMPA case study

### 5.2.1. Evolution of compensatory afforestation and CAMPA

For every forestland which is used for non-forest activity, afforestation in another piece of land has to be carried out to compensate for the loss.

Under the Forest Conservation Act, 1980 and the 2003 Rules made thereunder, in order to obtain approval for use of any forestland for any non-forest activity, every project proponent

has to give details of the project, extent of deforestation, impact on adjoining and a cost - benefit analysis. The proponent has to give an undertaking to bear the cost of raising and maintenance of compensatory afforestation and/or penal compensatory afforestation.<sup>56</sup> The forest officials have to give a corresponding declaration regarding details of non-forest area/degraded forest area identified for compensatory afforestation, detailed compensatory afforestation scheme including species to be planted, implementing agency, time schedule, financial outlay and suitability of area identified for compensatory afforestation. One of the criteria on which applications for approval are assessed include whether the State Government or the other authority undertakes to 'provide at its cost for the acquisition of land of an equivalent area and afforestation thereof.'<sup>57</sup> The cost of compensatory afforestation is, therefore, recovered by the user agencies and ascertained by the State Forest departments in light of characteristics of the land and species.

While ruling on one of the interlocutory applications in **2001**, the SC noted that National Mineral Development Corporation (NMDC), the user agency concerned, had carried out only 10 per cent of the compensatory afforestation required. The Court underscored the role of the Ministry to monitor and ensure whether the conditions stipulated by them have been fulfilled or not.<sup>58</sup>

In an order dated **23<sup>rd</sup> November, 2001**, the SC noted that large sums of money had been collected by governments from agencies that received forest lands for non-forest purposes. It observed that only 63 per cent of the funds collected for compensatory afforestation was utilized, depicting a shortfall of Rs.200 crores.

To address this gap, the Ministry of Environment and Forests (MoEF) was asked to formulate a Scheme whereby compensatory afforestation was to be the responsibility of the user agency, which should be required to set apart a sum of money for the same. The responsibility to make sure that land is available for compensatory afforestation before diversion is the responsibility of the State Governments<sup>59</sup> (See Figure 5.1). MoEF submitted its report to the Supreme Court on 22 March 2002.

On 9 May 2002, the Supreme Court constituted a Centrally Empowered Committee (CEC) to assist and advise the Court and to monitor and ensure the compliance of the orders of the Supreme Court. CEC considered the scheme submitted by MoEF and the compensatory afforestation guidelines and observed that the focus was only on regeneration through plantations, and it did not adequately compensate the loss of natural forests (Dutta and Yadav 2005, 298). CEC submitted a report on 9 August 2002 recommending the following:

- In addition to compensatory afforestation, net present value shall be paid by the user agency
- Protecting natural standing forests are also to be seen as legitimate activities under CA rather than just planting in degraded forests or new areas (Kohli, et al. 2011)

---

<sup>56</sup> Form A, part I, Forest Conservation Rules, 2003

<sup>57</sup> Rule 7, Forest Conservation Rules, 2003

<sup>58</sup> T.N. Godavarman Thirumulpad vs Union Of India (Uoi) And Ors. Order on 3 April, 2000 in I.A. Nos. 419 and 420, (2002) 10 SCC 641

<sup>59</sup> T.N. Godavarman Thirumulpad vs Union Of India (Uoi) And Ors.; SC Order dated 23 November 2001 in I.A. No.566

- Creation of a Compensatory Afforestation Fund, rules, procedure and composition of which was to be decided by the MoEF in concurrence with CEC
- Any unspent or balance money should also be deposited in the Compensatory afforestation Fund.

The Centre did not object to the CEC report's recommendations. The States' approval was assumed. On 30 October 2002, the SC accepted the CEC report and ordered setting up of a 'Compensatory Afforestation Fund', in which all the moneys received on account of deforestation were to be deposited. The money accumulated was to be kept in an interest bearing account.

The Central government was directed to frame rules regarding setting up and managing a body to handle this fund in concurrence with the Central Empowered Committee.

*"The present value is to be recovered at the rate of Rs. 5.80 lakhs per hectare to Rs. 9.20 lakhs per hectare of forest land depending upon the quantity and density of the land in question converted for nonforest use. This will be subject to upward revision by the Ministry of Environment and Forest in consultation with Central Empowered Committee as and when necessary."*<sup>60</sup>

In **September 2003**, the Ministry of Environment and Forests issued a letter to the States asking the States to charge Net Present Value of Forests based on the quality of forest, density and the type of species in the area, ranging from Rs. 5.80 lakhs per hectare to Rs. 9.20 lakhs per hectare.

On **23<sup>rd</sup> April 2004**, in exercise of the powers conferred by Sub-section (3) of Section 3 of the Environment (Protection) Act, 1986, and in pursuance of the Supreme Court's order, the Central Government constituted the Compensatory Afforestation Fund Management and Planning Authority. The notification and authority was criticized on several grounds. No agreement could be reached, pending which, SC passed an order for an ad hoc arrangement based on recommendations from CEC.

In May 2005, the State Government of Kerala questioned the constitutional validity of the CAMPA on two grounds:

- i. That the Constitution does not permit any person or authority to hold funds collected on behalf of the Government and that therefore the funds collected should go directly to the State Government.<sup>61</sup>
- ii. That, if there was to be a central fund for compensatory afforestation, it would have to be legislated into existence through a Money Bill and could not be created by executive action.
- iii. That the CAMPA lacks Parliamentary oversight and, therefore, accountability because the 2004 Notification did not subject the fund to audit by the Comptroller and Auditor General of India.

This contention was addressed by the Supreme Court in its judgment of 26<sup>th</sup> September 2005.<sup>62</sup> It drew a distinction between Government property and "national",

---

<sup>60</sup> I.A. NO. 566 IN WP(C) NO. 202/1995

<sup>61</sup> Dutta. R and K. Kohli (eds). "Forest Case Update", Issue 11, April 2005. New Delhi cited in Kohli et al., POCKETFUL OF FORESTS.

<sup>62</sup> Available at <http://judis.nic.in/supremecourt/imgs1.aspx?filename=27201>.



“intergenerational”, “public” assets, such as forests that were simply held by the Government in trust for the public. In the Court’s opinion, while revenue from the former was Constitutionally required to be credited to Government Consolidated Funds, money collected as against usage of the latter was not constrained by a similar requirement.

In addition, there was a challenge to clause 6.2 of the 2004 Notification, which had mandated that funds received from a particular State would be utilised in the same State. The Court opined that the impacts of activities are not “limited to the place of origin” and ordered that the distribution of funds from the CAF across geographical areas be left to the CAMPA’s discretion.

Through the judgement of September 2005, we see the first lines of contention being drawn on the compensatory afforestation issue. The Supreme Court’s thought process is already evolving from its original concerns on abuse of forest resources by States. While its reasoning in this judgment started with the necessity for such a fund because of the rapid depletion of a critical national (rather than State) resource, it veers toward justifying a centralized forest governance system based on scientific rather than legal or Constitutional considerations. As we see later, while there is a strong case made by some groups for a centralized vision for forest governance, there is also a countervailing political argument at the grass-roots for more local ‘sovereignty’ over forest resources.

On 5<sup>th</sup> May 2006, SC ordered setting up of an adhoc CAMPA comprising Director General of Forests and Special Secretary MoEF, Inspector General of Forests, a representative of the Comptroller and Auditor General and a nominee of CEC as members.<sup>63</sup> The Ruling ordered all the moneys collected from 30<sup>th</sup> October 2002 by the State governments to be transferred to this adhoc CAMPA. It was also mentioned that the moneys have to be audited by officials appointed by the CAG (ELDF & WWF India 2009). The Court also sought further details of the disbursal schemes received by Ad-hoc CAMPA (Kohli, et al. 2011, 28).

In 2008, the government introduced a Bill to create a Compensatory Afforestation Fund Management and Planning Authority under Entry 17A of the Concurrent List to implement the directions of the Supreme Court to create the Compensatory Afforestation Fund, and the Compensatory Afforestation Fund Management and Planning Authority. The Bill was passed by the Lok Sabha but never voted for in the Rajya Sabha and lapsed subsequently. It proposed that a CA Fund be established under the Public Accounts of India, under the control of the Central Government and managed by the CAMPA. The money collected toward CA was to be released by the CAMPA to the concerned State/Union Territory in predetermined instalments based on the Annual Plan of Operation (APO) finalised by the concerned State/ Union Territory.

The Bill was criticized on several grounds, including federalism. The Committee observed that *“by creating a super body in the name of CAMPA, an attempt is being made to centralize control in the Central Government which is not supported by the federal character of our Constitution.”* States, as well as the Committee, expressed concern that the scheme proposed by the Bill will lead to Central Government exercising hegemony through the financial power vested under the proposed Act and encroach upon the powers of the State governments. The Committee also opined that in doing so the Central government may bypass the duly

---

<sup>63</sup> order dated 05.05.06 I.A. No. 1337

elected State Governments and the various state bodies and undermine federalism (Parliamentary Standing Committee 2008). It must be noted that despite the Standing Committee's report against the Bill, it was introduced nevertheless and passed in the Lok Sabha. It could not be passed in Rajya Sabha.

The Bill was criticized on the grounds that it had a very centralist approach and ignored any role played by the local bodies such as panchayats and Gram Sabhas in the process of compensatory afforestation and management of funds received for Net present value of forests lost (Campaign for Survival and Dignity 2009). The Parliamentary Committee observed that *Tribal forest dwelling communities have not been consulted, informed or compensated and the effects on their lands and livelihoods have been ignored in favour of the upsides to industry in the process of compensatory afforestation*. This is a lacuna that continues even in the present system of CAMPA and disbursal of the money to States.

By 2008, the amount lying with the ad hoc CAMPA account had swollen to Rs. 5600 crores. The legislative having failed, the Government decided to go ahead and set up the ad hoc CAMPA through Executive Action. The MoEF issued the State CAMPA Guidelines on 2. July 2009 which laid out the roles and functions of the State CAMPA and the National CAMPA Advisory Council.

The Ad-hoc CAMPA held its first meeting on 3. July 2009. The revised guidelines for the implementation of the CAMPA were considered and approved. The Centre's role in planning and monitoring was expanded; the States were to work out the operational details.

In an order dated **10<sup>th</sup> July 2009**, the Supreme Court accepted the CAMPA scheme proposed by the MOEF and ordered the release of all the funds lying with ad-hoc CAMPA on an annual basis. While ordering this release of funds contributed by States back to the States, the Court put a cap of Rupees 1000 crore, in proportion of 10 per cent of the principal amount contributed by the respective States. The Court's justification in putting this cap was that 'substantial amount of funds have been received by the Ad-hoc CAMPA and sudden release and utilization of this large sum all at one time may not be appropriate and may lead to its improper use without any effective control on expenditure'.<sup>64</sup> On the one hand it can be called cautious, on the other hand it is seen as patronizing, interfering and centralist.<sup>65</sup> The funds, as per the order, were to be released after an Annual Plan of Operation was approved by the Steering Committee. The conditions based on which the Fund is to be released to the States are as follows:

- i. the details of the bank account opened by the State Executive Committee (in Nationalized Bank) are intimated to the Ad-hoc CAMPA;
- ii. the amount towards the Net Present Value (NPV) and the protected area may be released after the schemes have been reviewed by the State Level Executive committee and the Annual Plan of Operation is approved by the Steering Committee;
- iii. the amount towards the CA, Additional CA and the Catchment Area Treatment Plan may be released in the respective bank accounts of the States/Union Territories immediately for taking up site specific works already approved by the MoEF while granting prior approval under the Forest (Conservation) Act, 1980.

<sup>64</sup> Order dated 10 July 2009 in I.A.No. 2143 in W.P.(C)NO.202/1995

<sup>65</sup> Individual consultations and stakeholder workshop

- iv. Up to five per cent of the amount released to State can be used by the National CAMPA for monitoring and evaluation.
- v. Audit of the expenditure will be carried out by the State Accountant General on annual basis.
- vi. The interest received by the State CAMPA on the amounts placed with them may be used by it for administrative expenditure.<sup>66</sup>

Based on CEC's inputs, the Court went on to direct that all the moneys collected towards CA, NPV and Protected Areas (National Parks, Wildlife Sanctuaries) will continue to be deposited in the Ad-hoc CAMPA. The court saw the disbursement mechanism as a 'time being' arrangement. MoEF, in a written communication, reiterated the need for a permanent arrangement instead of an ad hoc CAMPA. It said that the Ad-Hoc CAMPA is a temporary arrangement and will liquidate itself soon. It also showed a great deal of optimism in assuming that *'with the Centre and states working together, the Ad-Hoc CAMPA will wind up within the next six to twelve months and State CAMPAs will take over completely.'*<sup>67</sup> However, till date the ad-hoc CAMPA continues to exist and manages the Fund. States apply to this agency for release of Funds as per the procedure laid down and guidelines prepared by the Centre.

Soon after the SC order, MoEF issued guidelines and asked the States to establish State level CAMPA comprising a Governing Body, a Steering Committee and the Executive Committee.<sup>68</sup> As per the MoEF guidelines, State CAMPA fund will receive money from the following sources:

- Amount transferred to it by the ad-hoc CAMPA;
- Receipt of all moneys from user agencies towards compensatory afforestation, additional compensatory afforestation, penal compensatory afforestation, Net Present Value (NPV), Catchment Area Treatment Plan;

### **Procedure for accessing the funds lying with ad-hoc CAMPA**

State governments have been collecting moneys received towards CA, NPV and other payments and depositing it with the ad-hoc CAMPA. The money is released to the States annually based on an Annual Plan of Operations developed by the States which detail the activities to be carried out, their location, budget, time line etc. In short, the following procedure is followed:

- A. States prepare an Annual Plan of Operations based on the Guidelines of MoEF and show the anticipated expenses for the annual plan under the following broad heads:
  - Project Specific Activities
    - Compensatory Afforestation
    - Site specific activities
  - Activities for utilization of NPV amount
    - Conservation and regeneration of forests

---

<sup>66</sup> SC order of 10 July 2009

<sup>67</sup> [http://envfor.nic.in/sites/default/files/Campa\\_order\\_meaning\\_2.pdf](http://envfor.nic.in/sites/default/files/Campa_order_meaning_2.pdf)

<sup>68</sup> MOEF 1-58/09-MOS(1/c) E-F dated 15-07-2009

- Protection of forests
  - Wildlife protection and management
  - Infrastructure development
  - Research and training
  - Monitoring and evaluation
- B. As per the MoEF guidelines, an Executive Committee of a State CAMPA prepares the APO and the State Steering Committee approves it
- C. This APO is submitted to the ad-hoc CAMPA
- D. The Ad-hoc CAMPA releases the funds sought under APOs, provided they are in compliance with the MoEF Guidelines and the SC order. This amount does not exceed 10 per cent of the principal amount contributed by the State concerned
- E. On receipt of the funds, the state machinery disburses the funds to the respective forest department's field officers in predetermined instalments for the envisaged activities under the APO.

### Composition and functions of CAMPA and its committees

On 2<sup>nd</sup> July 2009, the MoEF published Guidelines on the State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA). Every State level CAMPA is to consist of -

- i. Governing Body (GB), comprising 10 members with the Chief Minister as the Chairman. This body is to frame the broad policy for functioning of the State level CAMPAs and review the work periodically.
- ii. Steering Committee, with the Chief Secretary as the Chairman. It also has two eminent NGOs as members nominated by the State Government. The functions include the framing of rules and procedures for the functioning of the SC and EC in accordance with the core principles and objectives of the State CAMPAs. It is to approve the Annual Plan of Operation (APO) prepared by the EC, monitor the utilization of funds released by the State CAMPA and approve annual reports and the audited statement of the State CAMPA.
- iii. Executive Committee, consisting of 6 members with the Principal Chief Conservator of Forests (PCCF) as the Chairperson. It is to prepare the APO and submit it to the SC for approval and supervise the work to be carried out with the funds released from State CAMPAs. The Committee also has the task of reporting to the SC, conduct audits and prepare annual reports.

The funds with the State CAMPAs are to be used towards development, maintenance and protection of forests and wildlife management. Salaries and allowances payable to officers and other employees are payable from the interest generated on the funds invested by the State CAMPA but not the funds generated from the diversion of land in Protected Areas. Disbursements to such other projects related to forest conservation is permissible. Two per cent of the total fund spent in a year can be utilized for monitoring and evaluation.

At the National Level, the National CAMPA Advisory Council was set up by the MoEF (pursuant to the SC order) on 13. August 2009. It has 11 members and is chaired by the Minister of Environment and Forests. The other members include the PCCFs of six States,

the Director General of Forests, the Special Secretary (MoEF) and 2 NGOs members. The MoEF is the Member Secretary of the NCAC.

The function of the Advisory Council is to lay down the broad guidelines of the State CAMPA and also undertake monitoring of the State CAMPAs and give recommendations on projects to be undertaken by them. It is to also provide technical and scientific assistance to the State CAMPAs as required and evolve mechanisms to help the State CAMPAs address inter-state and Centre-State issues.

It approves, monitors and evaluates schemes using CAMPA funds implemented in the States or the Union Territories such as setting up of institutes, societies, centres of excellence in the field of forest and wildlife, pilot schemes and standardization of codes/guidelines for the sector. By the order of the SC, it receives 5 per cent of the amount released to the State CAMPA for monitoring and evaluation purposes.

### 5.2.2. Facts and Figures, including status of APOs, release and expenditure

The principal funds with adhoc CAMPA as on 31<sup>st</sup> March 2013 amounts to Rs. 21,228 crore. The details of the contributions made by 33 states and Union Territories to this principal fund have been presented in Table 5.1. The forest and mineral rich states like Odisha, Chhattisgarh, Jharkhand, Andhra Pradesh, and Madhya Pradesh together contributes more than 54 per cent of the total fund with Odisha contributing the largest share (17.12 per cent), followed by Chhattisgarh (10.51 per cent).

**Table 5.1: Statewise Contribution to Adhoc CAMPA Principal Fund and Release to State CAMPA**

SI. No.	Name of State/ UT	State's Contribution to the Principal Fund as on 31.03.2013 ( In Indian Rupees)	Total Funds Released to the State during 2009-10 to 2012-13 ( In Indian Rupees)	Funds to be Released in the year 2013-14 ( In Indian Rupees)
1	Andaman & Nicobar	105,894,172.00	24,638,000.00	5,000,000.00
2	Andhra Pradesh	18,576,432,255.48	4,487,015,000.00	920,000,000.00
3	Arunachal Pradesh	9,597,217,047.74	871,071,000.00	475,000,000.00
4	Assam	2,651,408,641.84	322,253,100.00	130,000,000.00
5	Bihar	2,230,060,533.57	329,024,000.00	110,000,000.00
6	Chandigarh	17,678,781.00	4,061,000.00	850,000.00
7	Chhattisgarh	22,304,481,054.39	4,712,440,000.00	1,100,000,000.00
8	Dadra & Nagar Haveli	51,036,831.00	3,218,000.00	2,550,000.00
9	Daman & Diu	7,110,100.00	0.00	350,000.00
10	Delhi	313,786,238.00	42,562,000.00	15,000,000.00
11	Goa	1,302,375,656.58	223,665,000.00	65,000,000.00
12	Gujarat	5,655,804,299.00	1,128,332,000.00	280,000,000.00
13	Haryana	3,988,984,011.60	704,550,000.00	195,000,000.00

SI. No.	Name of State/ UT	State's Contribution to the Principal Fund as on 31.03.2013 ( In Indian Rupees)	Total Funds Released to the State during 2009-10 to 2012-13 ( In Indian Rupees)	Funds to be Released in the year 2013-14 ( In Indian Rupees)
14	Himachal Pradesh	10,752,330,961.00	1,883,689,400.00	535,000,000.00
15	Jammu & Kashmir	1,901,299,997.28	237,835,000.00	95,000,000.00
16	Jharkhand	19,591,400,244.87	3,566,239,300.00	975,000,000.00
17	Karnataka	6,999,987,288.00	1,947,633,000.00	345,000,000.00
18	Kerala	238,067,591.58	31,161,000.00	15,000,000.00
19	Madhya Pradesh	17,943,359,138.00	2,190,347,000.00	895,000,000.00
20	Maharashtra	15,637,583,167.50	3,356,865,000.00	780,000,000.00
21	Manipur	941,960,156.00	39,940,000.00	45,000,000.00
22	Meghalaya	1,040,110,822.00	967,000.00	50,000,000.00
23	Mizoram	655,303,719.00	10,738,000.00	30,000,000.00
24	Nagaland	14,622.00	0.00	0.00
25	Odisha	36,352,260,892.00	6,439,125,050.00	1,800,000,000.00
26	Punjab	4,374,774,479.15	1,009,663,872.00	215,000,000.00
27	Rajasthan	6,989,435,407.85	1,439,817,000.00	345,000,000.00
28	Sikkim	1,916,832,862.00	272,826,000.00	95,000,000.00
29	Tamil Nadu	444,646,943.00	62,029,000.00	20,000,000.00
30	Tripura	757,155,616.00	84,036,300.00	35,000,000.00
31	Uttar Pradesh	5,774,709,489.86	1,129,267,000.00	285,000,000.00
32	Uttarakhand	12,370,420,569.65	2,931,790,000.00	615,000,000.00
33	West Bengal	795,236,473.00	164,153,000.00	30,000,000.00
	<b>Total</b>	<b>21227,91,60,061.94</b>	<b>3965,09,51,022.00</b>	<b>1049,87,50,000.00</b>

Source: Ministry of Environment and Forest, Government of India

<http://envfor.nic.in/sites/default/files/fellowships/Allocation%202013-14.pdf> accessed on 18 Jan. 2014

Release of money to the state CAMPA depends upon the claim by the state and union territories through Annual Plan of Operations (APOs). A total of Rs. 3965 crores (19 per cent of the principal fund) have been released to different contributing states and union territories (henceforth states) during 2009-10 to 2012-13 and another Rs. 1050 crores are earmarked for the year 2013-14 (see last two columns in table 1). The volume of release to different states is more or less proportional to their contribution to the total fund (see Figure 5). However, the percentage share of funds released to the total fund varies across the states, i.e. less than 1 per cent for Meghalaya to 28 per cent for Karnataka (see Figure 5.1). No money has been released to Nagaland and Daman and Diu.

States that have made a substantial contribution to the CAMPA corpus are the ones that have expressed greatest discontent over the CAMPA scheme and the manner in which funds are disbursed. Contentions raised by the States have been discussed later in the chapter.

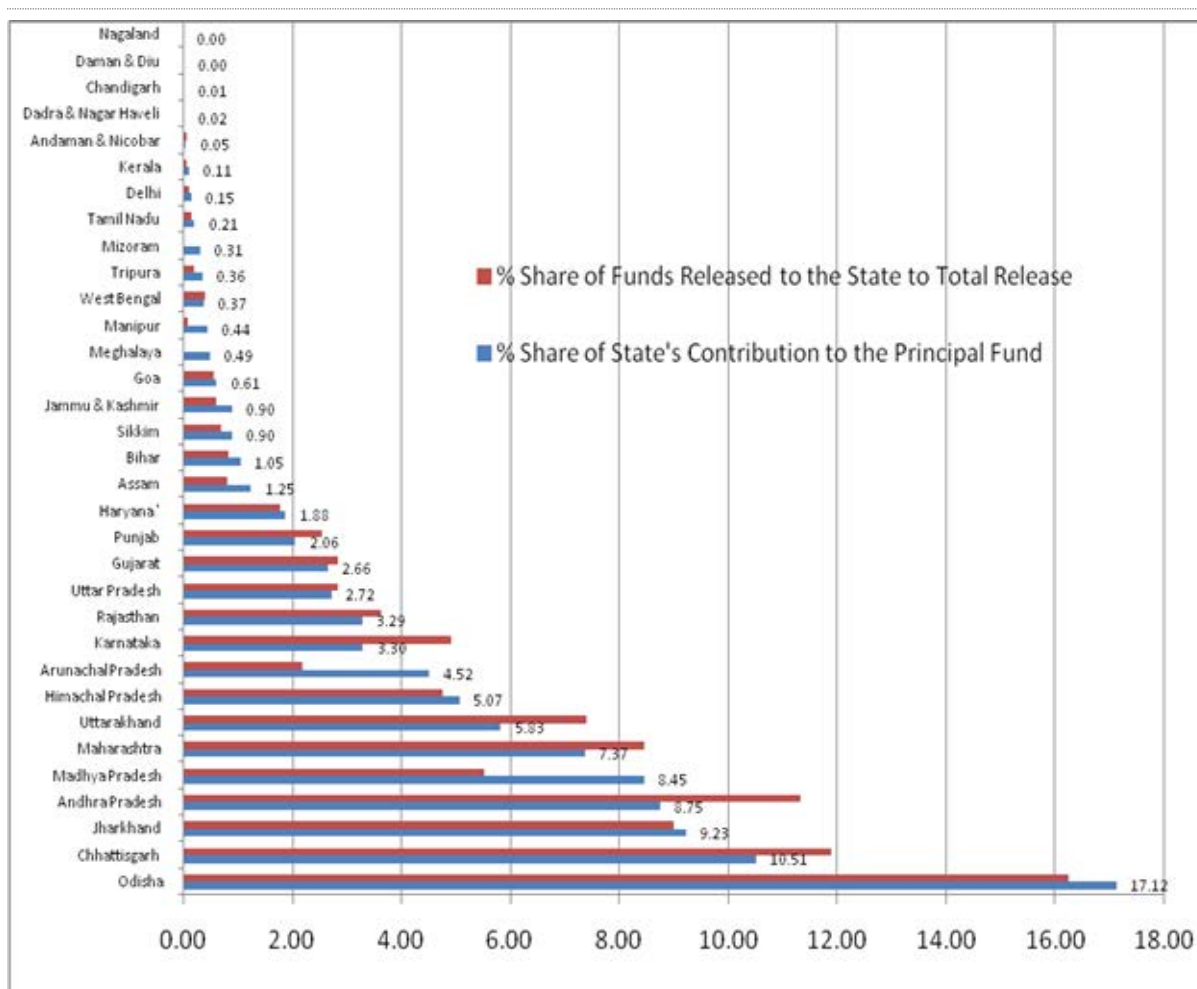


Figure 5.1: Percentage Share of State’s Contribution to Principal Fund and Release during 2009-10 to 2012-13

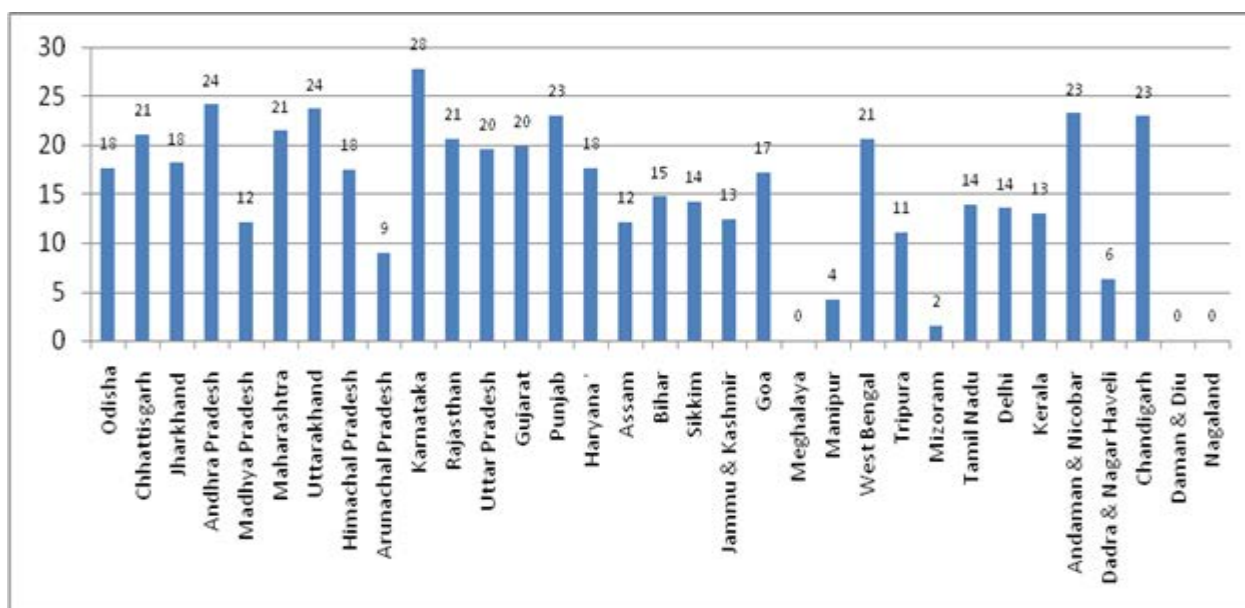


Figure 5.2: Percentage of Funds Released to States from the Principal Fund 2009-10 to 2012-13

One of the major reasons for non-release or partial release of funds to the contributing states is the non-submission or partial or delayed submission of APOs by the respective states. The details of the position regarding APOs for the year 2013-14 is presented in Table 5.2. As the table indicates, several state have not submitted the APOs to the Adhoc CAMPA and for several states the APOs for earlier years were recently sanctioned. States often submit APOs which don't comply with the guidelines. As the components wise release of funds is concerned, Net Present Value (NPV) has the largest share followed by Compensatory Afforestation (CA).

**Table 5.2: Position regarding Receipt of Annual Plans of Operation from States/ UTs**

SI No	Name of State/ UT	Position regarding APO for 2013-14
1	Andaman & Nicobar	Not received yet [APO for 2012-13 pending
2	Arunachal Pradesh	Not received yet [APO for 2012-13 sanctioned partly pending receipt of GPS coordinates]
3	Assam	Received alongwith with APO for 2012-13; being discussed with State
4	Andhra Pradesh	Received. Funds sanctioned.
5	Bihar	APO awaited.
6	Chandigarh	Not received yet [APO for 2011-12 recently sanctioned]
7	Chhattisgarh	Received. 50% funds sanctioned. QPR 30.06.2013 awaited.
8	Dadra & Nagar Haveli	Not received
9	Daman & Diu	As in SI No 8 above.
10	Delhi	Not received yet [APO for 2011-12 recently sanctioned]
11	Goa	Not received yet [APO for 2012-13 under consideration]
12	Gujarat	Not yet received.
13	Haryana	Not received yet [APO for 2012-13 recently sanctioned]
14	Himachal Pradesh	Not yet received.
15	Jammu & Kashmir	Not yet received.
16	Jharkhand	Not received yet [APO for 2012-13 recently sanctioned]
17	Karnataka	Not yet received
18	Kerala	Not received yet [APO for 2010-11 recently sanctioned]
19	Lakshadweep	Does not participate in CAMPA
20	Madhya Pradesh	Not received yet [APO for 2012-13 recently sanctioned]
21	Maharashtra	Received. Funds sanctioned.
22	Manipur	Received together with APO for 2012-13; under consideration.
23	Meghalaya	Not yet received [funds sanctioned in 2010 still unspent]
24	Mizoram	Not yet received [APO for 2009-10 recently sanctioned]



SI No	Name of State/ UT	Position regarding APO for 2013-14
25	Nagaland	Does not participate in CAMPA
26	Odisha	Not yet received.
27	Punjab	Received. Funds sanctioned.
28	Pondicherry	Does not participate in CAMPA
29	Rajasthan	Not yet received.
30	Sikkim	Not yet received.
31	Tamil Nadu	Not yet received.
32	Tripura	Received. QPR for 30.06.2013 awaited.
33	Uttar Pradesh	Not yet received [APO for 2011-12 recently sanctioned]
34	Uttarakhand	Received. Funds released.
35	West Bengal	Not received [APO for 2012-13 also not received].

Source: Ministry of Environment and Forest, Government of India

As the trend of utilization of CAMPA fund released to the state is concerned, it varies across the states. The 2013 audit by CAG found that a total of 39 per cent of the money released to the state CAMPA during 2009-12 remained unutilized. Such trends of un-utilization vary across the states significantly (see Figure 5.2) from 100 per cent (Meghalaya) to -2 per cent (Sikkim). Even states receiving huge sums also lag behind in utilizing the release funds i.e. 51 per cent of 447 crore released to Odisha and 67 per cent of 358 crores released to Chhattisgarh remain unutilized.

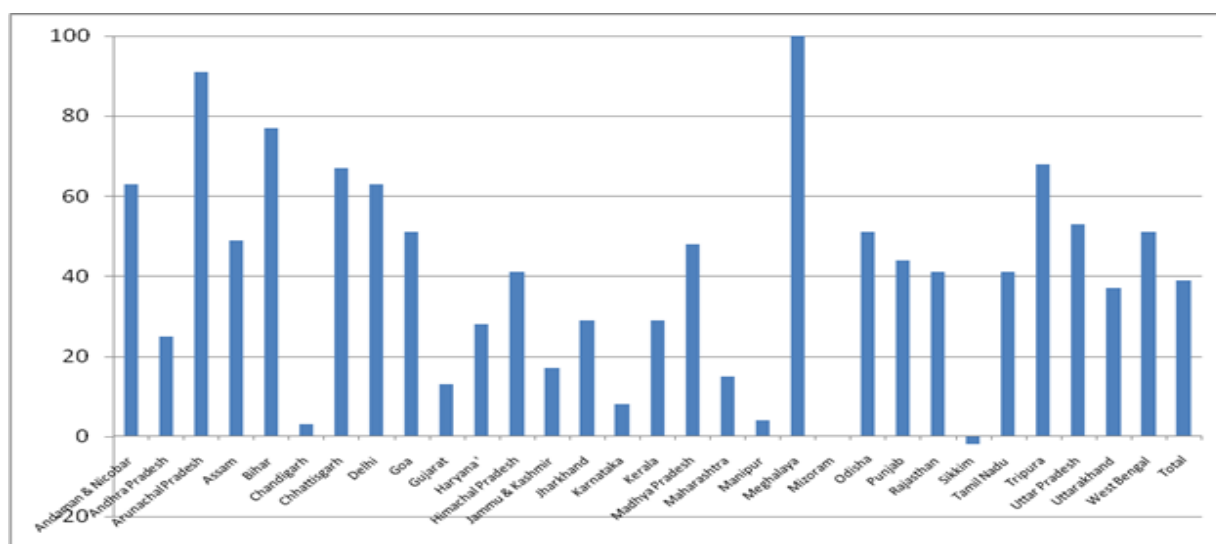


Figure 5.3: Percentage of Unutilized Fund with State CAMPA 2009-12

A recent report by the Comptroller and Auditor General (CAG) focused on the activities of CAMPA highlighted numerous shortcomings on the operationalization of compensatory afforestation and unauthorized diversion of forest land which is a violation of the environmental regime. Some of these are shortcomings summarized below;

- Only 27 per cent of non-forest land was received by the government for compensatory afforestation and only 7 per cent of land was actually under compensatory afforestation.
- 48 per cent of the non-forest land received for the purpose of CA was actually transferred to Forest departments and only 14 per cent of this land received was declared as Reserve forest.
- The CAG noted that there is poor data collection and maintenance by regional offices of MoEF and the state forest departments. There is an absence of Management Information System (MIS) and consolidated databases for monitoring of activities.
- The report particularly mentions that there has been unauthorized renewal of mining leases in Rajasthan and Odisha without approval from central government. There has been arbitrariness in forestry clearances, unauthorized renewal of leases, cases of illegal mining, projects operating without environmental clearances and an unauthorized change in the status of forest lands. In terms of action, only 3 instances have been noted that too to the extent of show cause notice.
- The CAG noted a significant non-recovery and under-assessment of NPV and CA (penal or additional) in states of Odisha, Jammu & Kashmir, Madhya Pradesh, Tripura, Assam, Uttarakhand, Gujarat, Jharkhand, Manipur and Chattisgarh.
- Adhoc CAMPA was ineffective in ensuring complete and timely transfer of money collected by states and UTs.
- Only 61 per cent of the funds released for CA have been utilized due to delay in APO preparation and delay in release of funds.
- Expenditures incurred by Adhoc CAMPA and state CAMPA have been without legislature authorization and there have been no reports of incomes and outgoing expenditures (Comptroller and Auditor General of India 2013).

### 5.2.3. Demands and contentions around CA and CAMPA

Different stakeholder groups have voiced different concerns with the concept and operation of CA and CAMPA. We have classified the various viewpoints in the following categories:

- States
- Centre
- Conservationists
- Community rights advocates
- Government officials

#### 5.2.3.1. States

The problems that States have with the current functioning of the CAMPA is three-fold:

- it undermines States' rights and is based on flawed logic,
- the conditions set on spending of these funds are too constrictive and

- disbursement is constantly delayed.

In discussions with State level officials, the ultimate criticism of the CAMPA was that it was based on an unreasonable distrust of state's priorities in forest management or under-estimation of their capacities. They consistently assert that there exists no perverse incentive for States to divert forests for non-forest uses and that a more secure sense of ownership of forests by States would improve forest management at the State level. Moreover, most officials pointed to the multiple levels of audit of State funds and contrasted it with the limited accountability offered by the current centralized financial management of CAMPA funds. It was acknowledged in certain states, on the other hand, that they were still transitioning to the accounting standards (double-entry book-keeping) required by the Supreme Court.

It must be noted, however, that a majority of these discussions were with officials of the Indian Forest Service who, as noted earlier, are appointed by the Union Government and deputed to the States. This led to subtle differentiations in position from the more straightforward 'sovereignty' arguments often asserted by States. For example, one official noted that the Supreme Court judgment, with all its connotations of judicial governance, was still a significant improvement for forest governance because it has 'scared' the political class (as distinct from the bureaucracy) into taking conservation and sustainable development seriously.

Secondly, State level officials consistently assert a broader view of what constitutes justified expenditure under CAMPA funds. At their most productive, these opinions reflect a desire to integrate socio-economic concerns into forest management. For example, officials willingly show support for schemes which employ local youth around forest areas and provide them some remuneration, basic equipment etc. They see this as a solution to both the chronic under-staffing of the Forest Department at the field level as well as the high risk of radicalization faced by communities around forest areas.

On the issue of plantations, the justifications are less convincing. Plantations schemes are initially defended as an (easy) opportunity to integrate socio-economic concerns and 'forestry'. Officials admit, however, that they do not make sense ecologically and that a more scientific approach to forest management is required. Yet, some officials and even non-IFS individuals involved with State-level forest management offered examples of failed experiments based on more ecologically wholesome approaches, suggesting that successful implementation would require a substantial increase in capacity.

On the issue of infrastructure spending associated with afforestation activities, officials claimed that the withholding of CAMPA funds from spending on items such as jeeps, official buildings, staff quarters and so on was unfair. They were, however, unable to tie these expenditures directly to afforestation activities, as opposed to general spending on the Forest Department (which receives a budget allocation out of the State's Consolidated Fund). There are suggestions, however, that States adjust their budget allocation towards the Forest Department based on their expected CAMPA 'revenue', thus potentially straining Forestry budgets. It would be useful to gather more empirical information to verify whether such practices actually exist.

Finally, the ever-present problem of delayed disbursements to States continues. This ranges from crediting of funds to the wrong budget<sup>69</sup> to an inability to keep track of funds across diffuse bank accounts<sup>70</sup> or simply failures to respond despite multiple pleas from the State.<sup>71</sup> In addition, the States have filed an Interlocutory Application before the Supreme Court contesting the Rs. 1000 crore cap on total annual disbursement to the States. The hard cap on annual disbursement is slowly eroding the effect of the rule on States receiving 10 per cent of their contribution. One state official showed us how, despite the increase in forest land diverted and the budget applied for each year, the disbursement as a figure of the State's share in CAMPA has been continually dropping for three successive years.

Apart from these points of contention, our discussions with State officials also produced some observations on issues with CA policy at the State level. One state official insisted that individual forestry officers were not legally equipped to handle the increased budgets resulting from CA disbursements, thus creating hold-ups in utilization and even large amounts of CA money left un-utilised. Another state official highlighted the lack of differentiation of funds (based on NPV, CA etc.) in approved APOs. Thus, the practice is to use whatever money was disbursed (inevitably less than what was asked for) as if it were all NPV money (i.e. spend it on plantations) and, only if any was left over, to turn to other priorities.

#### **5.2.3.2. Central Government**

On the issue of the location of the funds, the Centre does not seem to have a strong objection to devolving the money to the States. From our discussions, the current thought process in the Ministry is that the money should be sent to the State CAMPA to be utilized for the purpose for which it is meant. But the money will not go into Ways and Means or general revenue; it will remain as a Public Account (which, conceptually, is somewhere between a Special Purpose Vehicle and the Consolidated Fund). There also seems to be a consensus that there is no need for transfers to a Central authority and then back to the States; money from proponents should be transferred directly into this account. It was emphasised, however, that CAG audits of the funds in these State accounts would continue.

On the issue of uses to which the funds are put, the National CAMPA Advisory Council (NCAC) has indicated that there will be a central authority to issue facilitative guidelines for and monitoring of compensatory afforestation. This proposal has to be approved at the Cabinet level before going to the SC for its final opinion. In addition, bureaucrats at the Centre are of the view that there is a need for the Forest Department to be more forthcoming in declaring information about the uses of the funds. The combined effect of these measures will likely see an intensification of the politicization of afforestation at the State level since States will simultaneously gain discretion while being subject to greater scrutiny.

On the issue of de-fragmentation of forests (through re-settlement), the Minister for Environment of Forests reportedly emphasises that it is not possible because of the proliferation of land scams; even with the new Act, it is considered that there is too much

---

<sup>69</sup> <http://news.realhimachal.com/forest-minister-demands-release-of-rs-325-crore-from-campa-fund.html>

<sup>70</sup> <http://archive.indianexpress.com/news/himachal-sitting-over-rs-816cr-green-fund/830734/0>

<sup>71</sup> <http://deshgujarat.com/2011/07/02/gujarat-govt-demands-rs-482-crore-of-campa-fund-from-center/>

scope for abuse of discretion. In their view, it would be a violation of guidelines to use CAMPA money for land acquisition.

### 5.2.3.3. Conservationists

From our discussions with them, the communities of researchers who focus on forest conservation interact with the issue of federalism and environmental policy in two ways. Firstly, they are concerned about the sacrifice of forests at the altar of development; secondly, they are concerned about the insufficient role that scientific expertise plays in forest management.

The fundamental criticism that conservationists have of the current CA paradigm is that it treats forests simply as numbers and categories, without taking an 'ecosystem' or 'landscape' approach. They strongly emphasise the need for forest de-fragmentation or consolidation – growing around existing forests, linking forests by working on the un-forested strips between them – and so forth. The destruction of large swathes of forest while planting trees in patches is seen as an exercise in futility. The conservationist's view is that the best scientific knowledge in landscape ecology indicates that fragmentation of habitat is the most serious threat to biodiversity and forest conservation. From the climate change perspective, natural old-grown forests have the best capacity to sequester carbon. Yet, the forest conservation process and the Guidelines do not have fragmentation as an issue to look into. Conservationists see the CA Fund as an accumulated, aggregated sovereign fund which should be spent based on a long-term vision for forests. While acknowledging that there is limited evidence of such vision at the Central level, they are nonetheless more comfortable with a centralized operation of the fund, with money being directed wherever the needs of forests and wildlife are the greatest, not based on the notion of State 'ownership' of forests. They are thus in favour of restricting the discretion available to States to utilize the funds, with some suggesting a list of items to be prohibited from being budgeted to CA expenditure.

The conservationists' vision for forest consolidation, however, is controversial insofar as it involves spending CA funds on the resettlement, through land acquisition, of people living between forest areas. While they stress that this proposed resettlement will only go through with the assent of the populations in question and that it will, in fact, bring alienated populations closer to urban centres and amenities, the politics of resettlement and land acquisition in India cause both bureaucrats and forest rights activists to intuitively push back on such a proposal.

In addition, conservationists criticize the granting of private rights over forest-land, a process that they see as a highly politicized land grab at the expense of forests and wildlife. Therefore, it is not prudent to localize decision-making too much. The strongest evidence that they offer of this is the extent of forest diversion before and after 1980 (when the Forest Conservation Act was introduced).

Conservationists note that there is no independent scrutiny of APOs. They also highlight the change in the nature of the IFS after 1967 (which is when it changed from a State to an All-India Service). They note that Forestry is necessarily a land-based area of knowledge, unlike the Administrative Services where the officer is needed to operate in a more objective, isolated manner. According to them, when the IFS was a State Service, there was a higher level of empirical knowledge; today, IFS officers are somewhat short of a necessary

understanding of local populations and politics (such as local languages, for example). Ideally, therefore, the Forestry Services should be Central appointments but assigned based on State of origin.

#### **5.2.3.4. Communities/Forest Rights Activists**

For local communities, forests represent a source of livelihood and day-to-day sustenance, apart from the cultural and religious meanings assigned to forests. However, the Indian state has a history of deliberately overlooking historical rights in forests, focusing narrowly on a relatively young legal tradition of documented rights. The disparity between the actual relationship between people and forests and legal recognition of them was sought to be addressed through the Forest Rights Act, which provided for verification and documentation of various rights in forests (not merely property).

Communities question how planting exotic saplings can ever make up for the biodiversity and the ecological balance that is lost with the submergence of a forest.<sup>72</sup> In addition, afforestation is often carried out shoddily, without any understanding of local conditions. As one author notes:

“[In Maharashtra], forest departments ordered the planting of seeds instead of saplings, ordered planting in the wrong season, neglected to protect or maintain the trees once planted, or even failed to plant at all, dumping the saplings into ditches. The participation of villagers in planning local afforestation programmes on land traditionally used and shared by adivasis was never sought. Villagers were not consulted about species of trees to be planted or on which land. It comes as no surprise then that in Jalsindi (MP), and Anjanwara (MP), the villagers resisted and prevented any afforestation.”<sup>73</sup>

In our discussions, forest rights activists highlighted the abuse of the compensatory afforestation process to deprive communities of their traditional agricultural land. In Orissa, the dongar zameen (traditional shifting cultivation land) was notified as “wasteland” available for allocation toward compensatory afforestation; the community was summarily removed.

In addition, they termed the application of CA funds toward resettlement (which Conservationists advocate) as a gross misuse of the funds for a purpose which has nothing to do with afforestation.

#### **5.2.3.5. Government officials**

The network of forestry officers who move often between Central, State and quasi-judicial positions are key drivers of the forest management process across the three branches of Government. They operate across institutions that are seen as having competing interests (Centre/State, Government/Judiciary) but self-identify as a fraternity. One officer joked that, because of their independent views, they are neither trusted by the Centre nor by the States. While the bureaucratic perspective pervades all decision-making agencies, there are a few uniquely bureaucratic criticisms of compensatory afforestation governance.

---

<sup>72</sup> <http://www.jstor.org/stable/pdfplus/4409880.pdf?acceptTC=true&acceptTC=true&jpdConfirm=true>

<sup>73</sup> Ibid.

Firstly, both the Central Empowered Committee and the ad hoc CAMPA are under-staffed in the opinion of bureaucrats. With respect to the CEC, the staffing was supposed to be done by the Central Government, but the members of the CEC don't approach the MoEF because they believe that, eventually, it will lead to a conflict of interest. With respect to the ad hoc CAMPA, it currently comprises the Director General of the Forest Service, one member from the CEC, one member from the CAGs office, and, most worryingly, no financial advisors. All the extra staff that was promised by the Central Government to run the fund has actually not been provided.

Secondly, according to bureaucrats, the lack of long term vision for forest management is the result of the maximum Forestry Service deployment in one State/position being fixed at 3 years. Some States are, however, developing Forest Afforestation Manuals and Handbooks on Afforestation Technique to improve continuity.

Finally, the emerging understanding of bureaucrats is that the 'third tier' of governance in India – i.e. the Panchayati Raj system – has so far not been taken seriously enough. Particularly in light of the Supreme Court's 2013 judgment in *Threesiamma*, it is felt that involving communities in afforestation initiatives is a far better path forward.

## 5.2.4. Main issues around CA and CAMPA

### 5.2.4.1. Conceptual

With the enactment of the FCA, the decision making power on diversion of forests for non-forests purposes was taken away from the states and given to the central government. The Ministry of Environment and Forests through a Forest Advisory Committee became the final authority for granting permission on the use of forest land for non-forestry purposes. The committee was directed to give regard to the nature of the forest and the nature of the activity for which the forest was to be diverted and add conditions on the diversion. The state department still remains responsible for providing information on the forest area that is up for diversion, identifying areas for compensatory afforestation and implementing the CA plan paid for by the user agency. The law stipulated CA to be done over an equivalent non-forest area which if not available, would be done to the extent of double the diverted area over degraded forest. The state forest department would also value the land demarcated for CA and include the costs in its plans. This process in essence makes the actual valuation and estimation of costs of diversion the task of state forest department while the estimation of benefits of the diversion, on the other hand, is a more dispersed process purely based on economic benefits of a certain project or activity.

The procedure of diversion of forests to non-forest uses has been defined under the Forest Conservation Act (FCA) 1980 which stipulates the requirement of an approval from MoEF to change the land use to non-forest purposes. The FCA also makes directions for compensatory afforestation for diversion of forests and de-reservation and the forest department is identified as the agency that proposes diversion on behalf of the user agency. The feature of NPV stipulates that the 'new user' of the forest land must bear the cost of the losses due to forest diversion and is meant as payment towards protection of environment and not in relation to a proprietary right. The calculations for NPV range between Rs. 5.80 lakh per hectare to Rs. 9.20 lakh per hectare depending on density and quality of forests. The Kanchan Chopra Committee defined 11 steps for valuation of NPV of forest which includes products and services to be valued such as timber, carbon storage, eco-tourism and NTFP.

While the feature of CAMPA including NPV is in place now to ensure that the loss of forests because of diversion is compensated, it is obvious that once prime forests are diverted, it is almost impossible to restore the same level of species diversity, canopy cover, carbon sequestration potential, wildlife habitats and watershed capacities among other characteristics that are unique to a forest area. In some cases, the contrast between diverted forests and the compensatory afforestation areas is stark, especially when the diverted forest was dense forest and the new afforestation includes plantations that may not even be appropriate for those watersheds and climatic zones (i.e. Eucalyptus plantations by NCL in Madhya Pradesh). Moreover, there is a lack of assessment of the biodiversity created and ecosystem services generated in the afforested areas.

#### *5.2.4.2. Approaches to compensatory afforestation*

##### *Cost benefit analysis*

Cost benefit analysis (CBA) is an analytical approach for calculating and comparing the costs and benefits of undertaking an activity. Most commonly undertaken by private enterprises, CBA, when used for public policy analysis, simulates a basic function of markets – setting of economic standards for products and services – and assist in measuring the future success of an intervention. This implies converting the advantages and disadvantages of an action to numbers and assigning a monetary value so as to be able to compare to each other. After assigning monetary values, the exercise compares the present value of future benefits to the costs incurred.

This method has been employed in various sectors including environment and has been seen as an efficient way of decision making which is also transparent and accountable. The comparison of alternatives on the basis of costs and benefits implies the most efficient allocation of resources. Despite these advantages of the method, there are certain differences in applying CBA for private businesses and public undertakings. Private businesses only offer products or services for which there is a willingness to pay and can create profits for the enterprise. Governments and public oriented projects on the other hand do not act with the intention of maximizing profits and often provide services for which the willingness to pay is difficult to measure – for instance the conservation of forests. The most common approach to valuation is asking individuals about their attitudes towards conserving an area or avoiding a certain environmental problem. This approach is based on the responses of individuals acting as consumers and their willingness to pay for a certain activity and not as a collective decision to take an action as citizens in a democracy (Ackerman and Heinzerling 2002).

The standard economic approaches for valuation are questionable when it comes to valuing conserving ecosystems, preventing extinction of species and keeping an area of forests for the various benefits it provides to the community at large. While the price of land under the forests and the price of timber and other forest products can be estimated on the basis of market rates; the value of ecosystem services provided is difficult to estimate. If decisions are based on willingness to pay for avoiding a certain intervention (such as a mine area development), wealthy communities would be willing to pay more for moving it away from their backyard as compared to poor communities – which justifies the impositions of



environmental burdens on communities with least resources <sup>74</sup> (Ackerman and Heinzerling 2002).

### ***Valuation and monetization***

*“All attempts at valuation of the environment begin with a problem: the goal is to assign monetary prices to things that have no prices because they are not for sale”* (Ackerman and Heinzerling 2002).

Valuation of ecosystem services has been seen as one of the ways of getting investment for conservation and a way of justifying diversion of resources on the basis of alternatives considered for analyzing the costs and benefits. While proving to be a popular tool in making policy decisions, valuation has also been considered as a double edged sword as it increases the tendency to monetize priceless components of ecosystems and create access rights for transactions. If we accept that our knowledge of ecosystems is very limited, there are going to be inevitable gaps in terms of ascertaining the intrinsic value of ecosystems in the light of irreversible change and valuing alternatives that are mutually exclusive. Valuation also requires an enormous amount of information to be collated and updated every time a change takes place in the valuation – which when unavailable promotes the use of proxies to estimate costs and benefits leading to faulty valuations.<sup>75</sup>

Nevertheless, valuation and monetization can help to set minimum levels for consideration when creating compensation packages for those who lose access to ecosystem services. The current problem is that there are only a limited number of alternatives considered when comparing the valuation and more often than not the social benefits of alternatives are ignored along with the benefits accrued from the interaction between society and ecology. Since private benefits are easier to calculate in monetary terms, it ends up taking precedence than the larger public benefit. The exercise runs the risk of being subjective based on who is conducting the exercise and the benefits accrued by different stakeholders. Furthermore, changing cultures and practices within communities may also change the value of ecosystems with time.

Cost benefit analysis also involves discounting future benefits to make them comparable to current costs. In environmental decisions, the ‘future’ may span across a long period of time, for which it would be difficult to estimate that conditions will worsen or become better because of current actions. Discounting assumes that costs of inaction and benefits of action will accrue at a stable pace and a constant rate of discounting is appropriate (Ackerman and Heinzerling 2002).

Thus the key question with compensatory afforestation is whether it can really compensate the loss which has been caused on account of diversion of forest lands. Besides, stakeholders feel that the manner in which CA is being carried out and the institution of CAMPA is being managed, may result in losing sight of the ultimate goal of conservation and management of forests.

---

<sup>74</sup> Even though communities are not actually supposed to pay for avoiding harmful activity in their area, their willingness to pay is intrinsically linked with their ability to pay.

<sup>75</sup> From the discussions at the Dialogue on Environmental Governance for Sustainable Development: The case of Plateaus and Hills. Bangalore, October 2013.

### 5.2.4.3. Institutional issues

One of the most debated institutional issues around CAMPA is vis-à-vis jurisdiction. Who should have the jurisdiction to collect moneys towards CA and NPV, who should be able to spend it, who should be accountable for it and who should monitor it, and most importantly, who should take all these decisions? The jurisdictional conflict can be observed at two levels in the case of CAMPA – (i) between the Centre and the States; and (ii) between the Executive and the judiciary.

As elucidated in the previous sections on the history of CAMPA and contentions around it, States contend that the monies collected towards CA and NPV rightfully belongs to States as it is a compensation for the loss borne by the States and ultimately that money has to be spent by the States. Thus a key question is: At which level should the final authority be located and money accumulated? The other jurisdictional issue comes in the form of - what is often called - judicial over-reach. The fact that the judiciary has almost driven and determined the creation and operation of the compensatory afforestation Fund raises questions about the Court overstepping its jurisdiction or filling in the void left by the executive in undertaking compensatory afforestation.

Another issue raised by stakeholders is that of the composition of ad-hoc CAMPA. The deficiency of forestry experts in the CAMPA structure, contrasting it with the NBWL, the FAC and the State Wildlife Boards which have significant NGO representation has been highlighted. The State CAMPAs suffer from similar problems in their Executive and Steering Committees.

Another issue with CAMPA is that it has not been set up either by law or an executive order. It has been set up at the behest of the Supreme Court. The Authority and the Fund deal with a large sum of money in thousands of crores but was not a result of a legislative process. Stakeholders at the TERI Workshop in December expressed concern that the entire administrative structure has been artificially created with neither legislative sanction, or a proper auditing mechanism or mechanisms to ensure people's participation. The current administrative mechanism for such an enormous corpus is not sustainable or optimal (See Annex).

### 5.2.4.4. Operational issues

One of the biggest operation challenges with CAMPA is that it still is an ad-hoc institution and the money is still routed through an ad hoc body in New Delhi. It has been several years since the ad hoc body was set up and the money is being released, but still the control of the ad-hoc body continues to remain over moneys collected for CA and NPV. States continue to express their unhappiness over this arrangement.

The second most important challenge with respect to CAMPA and the CA money is with respect to disbursement and utilization of the Fund. After years of being locked into the fund, when the CA and NPV money started being released, the tussle between Centre and States has continued, often at the cost of afforestation and conservation itself. The current procedure of preparing an Annual Plan of Operations and getting it approved from the ad-hoc CAMPA at the Centre to access the money that has been contributed by the States has been a displeasure to the States. States have often questioned the 10 per cent cap put by the Supreme Court on the money that is to be released. The amount of money received annually was seen as insufficient, especially in the initial years. They alleged that in some States, even

the interest earned on the NPV does not commensurate the amount required for taking up compensatory afforestation in the State.

It is also alleged that the delay in receipt of funds leads to inordinate interruption in carrying out afforestation and associated activities. However, there are several other factors that lead to suboptimal afforestation and conservation and regeneration activities. The kind of activities that are funded out of CA money can be questionable. Several Annual Plans of Operations show that CA money is being spent on Van Bhavans, on DFO quarters, on sprucing up guest houses. Even where the money is being used for plantation, it is leading to a pit-and-plant approach and scattered plantations which can lead to fragmentation. There is a need to move away from this, but no State is coming forward with innovative ways of compensating the loss of forests. Non-expenditure is another issue. As the CAG report has highlighted, several States have not been able to spend the funds received by them either fully or partially. This can be attributed to a number of factors, including inadequate capacity, unavailability of land and lack of political will. Land is an important issue in compensatory afforestation. It is often observed that the area diverted does not always match with the area mutated. A lot of land is being given away for CA as wastelands. Concerns have been raised about handing over land free to the user agencies which can actually be used for community development or some other community benefit. Also land that is taken up for compensatory afforestation is often common land, taken from people without prior consent or compensation. This land is then transferred to the Forest Department, becomes protected forest once afforested, alienating people from their use.

The CAMPA arrangement suffers from other issues like those around monitoring and accountability. APOs are not subjected to independent scrutiny to keep a check on ecologically unjustified proposals. Monitoring of activities undertaken and money spent is not adequate and regular. The MoEF and the ad-hoc CAMPA have not taken up the role of monitoring and review seriously.

### 5.2.5. Conclusion

On the governance of limited natural resources, the often unanswered questions are which is the ideal institutional arrangement for efficient management; who sets the agenda for resource utilization; and who has the powers and means to regulate activities in this regard. On a larger canvas, compensatory afforestation illustrates the increasing tussles between states and central government – the sharing of powers to legislate, manage, utilize and govern some of the most important resources in the country - and on deeper consideration it illustrates a creeping centralization in the decision making processes. The progression of CA in the country's development paradigm has seen a change of guard in the agenda setting processes – with a major role being played by the Judiciary through its directions to set up the Compensatory Afforestation Management and Planning Authority.

The evolution of CAMPA as an institution has not only highlighted the role of the judiciary in policy making, but along with that it has also highlighted the different considerations of stakeholders for common natural resources. The actual implementation of the judiciary's directions has seen various impediments, owing to certain conceptual issues, operational issues and the opposing demands and contentions around forests; but these issues have resulted in stakeholders missing not only the forest for the trees, but the trees as well.

The concept of compensatory afforestation was introduced to create a deterrent for states proposing forest diversions and instil the objectives of maintaining and increasing the country's green cover. However, the concept of CA as implemented through CAMPA is lacking the precautionary principle and instead creating monetized values for the country's forests which the states feel they have a right to. The case of CAMPA shows that compensatory afforestation in India still has a long path ahead towards forest conservation.

## 6 Annexures

---

### 6.1. Annexure 1: Summary of Proceedings of Stakeholder Workshop on 'Forests and Federalism'

The Energy and Resources Institute (TERI) organized a Stakeholder Workshop on 'Forests and Federalism' on 6th December 2013. With participants from across the public, private and non-profit sectors, the workshop sought to explore the links between issues in forest governance and the distribution of power, authority and responsibility between different levels of Government. The event was organized as part of an ongoing research project, supported by the Konrad-Adenauer-Foundation, titled 'Environmental Federalism in India: Engaging with Emerging Issues'.

Participants at the workshop deliberated on the issues in forest management from the vantage point of Indian federalism. The focus was on emerging trends in environmental federalism; complexities in conservation and management of forests; and centralism in compensatory afforestation. Following is a summary of the main issues discussed at the workshop.

#### 6.1.1. Federalism and environment

Federalism is a dynamic concept. While Constitution is often seen as a starting point, the concept of Lists can be traced back to early 1900s and the Montague-Chelmsford Reforms. The situation and understanding at the time of putting items in the Union, State and Concurrent Lists have undergone a lot of change. Lists comprise primarily physical items, not those involving relationships, abstract, or cross-cutting concepts. Today there are stresses and strains because cross-cutting items are manifesting in the form of a subject and there is a feeling that legislation is needed for such cross cutting issues. There are some reservations on segmenting federalism into compartments, like environmental, fiscal, law and order etc. since these are not autonomous spheres and must account for their inter-relatedness and inter-dependence.

The current federal context is heavily weighed by political considerations. The normal principle of subsidiarity is not yet fully operational. Our polity has become more federal with the locus of political power shifting to the States and even to local levels. Regional parties and regional leaders within these parties are becoming increasingly important. But while the polity becomes more federal, our systems and process of governances seem to become more and more unitary. There is a need to use the increasing federalization of the polity as a means of exercising more political pressure to move toward a more federal architecture.

Centre-State relations are not keeping pace with the emerging environmental and resources issues. It is extremely important to put the environmental federalism debate in the context of the larger federalism debate. Given the multiple levels of interests, the multiple aspiration levels, there is a pressing need to move away from excessive centralization. In India, there is either centralism or regionalisation with little regard for federalism. The way central and

state governments interact on issues in the Concurrent List is indicative of our approach to federalism.

A national level approach is argued for transboundary issues like management of environment and natural resources. However, concerns have been raised about conflating 'National' with Central resulting in concentration of power in the Centre. All problems are simultaneously, global, national, regional, provincial and local; and impact differently at these levels. Therefore, the approach cannot be one that creates an institutional structure which is centralized and imposes uniformity of processes.

There is a need to unbundle federalism to take on board local people and communities and also look at the issue of popular sovereignty in the context of federalism. Federalism has to be a means of moving away from the sovereignty of the State to the sovereignty of the people, to restore the management of environment and natural resources to the people. There seems to be no local governments, only local authorities which are not the units of decision-making but units for implementation of schemes designed at the Centre. So far, we have not taken the third tier seriously.

Inter-governmental transfers have to be used effectively to encourage and incentivise states to conserve forests. They have to be compensated for the task they undertake and the mineral resources they forego. Inter-governmental transfers have to be looked at beyond fiscal transfers and include knowledge transfers from Centre to States, States to Centre, local to States, States to local. Such knowledge sharing is central to any kind of governmental co-existence.

### 6.1.2. Forest Governance

Forestry in the context of federalism presents four different but inter-related layers of tensions and conflicts – (i) Central control versus the State autonomy, (ii) judicial activism versus the governance of the country, (iii) conservation versus economic development and (iv) forest rights versus conservation.

Forests at the time of independence were in the State list but moved to the concurrent list in 1976. This led to centralization of forest legislation, further centralised by the court cases on forests. One view is that States are, more or less, at the receiving end in the implementation of forest legislation. It is also opined that forests should have been treated the way minerals have been – where the subject is in the State List but Parliament by law could also regulate it. Thus, Centre's jurisdiction would apply only to the extent that the Central law would prevail, on all other matters, states' jurisdiction would remain.

There should be a multi-dimensional approach to forestry, not only as forest resources, but also in the context of land resources, hydrological resources, mineral resources, settlement patterns, forest rights. There is a need to change to a knowledge-driven ecosystem approach and preserve natural forested landscapes wherever they exist. Valuation for forests can be done and sums paid, but unless we start looking at the whole issue as an ecosystem, this whole investment will be wasted. There is a need for a paradigm shift from *afforestation* to *forest rehabilitation*. The entire ecosystem gets disturbed so it should be rehabilitated rather than just creating plantations.

Quality of forests is an issue. Several States have been receiving funding from international aid agencies for forestry projects. Since the 1990s, when the funding first started, the

country has lost very dense and moderately dense forest, whereas Open Forests have increased. There is a need to get into details and look at whether these investments in forestry projects are yielding any result.

Monitoring is the weakest link in forest governance. Currently, it is done on the basis of density classification but there is a lot of variation therein. To ensure better and informed monitoring, there is a need for survey of the forest resources, taking advantage of the scientific and technological advancement, the GIS technology, remote sensing technology etc. These maps should adopt a participatory approach and take into account the people inhabiting these regions and using the resources. It is felt that forest policy is not based on sound science and available technology. This leads to a gap between the ecological facts/figures and legal recognition. There is also a strong case for participatory monitoring. There is a need to look at how to strengthen state and local governance to improve landscape planning.

Tensions between forest rights and conservation have been a major issue in governance. The Forests Act of 1927 empowered the Forest Settlement Officer to look into the existing forest rights, to hear out the communities and then take a decision. But unfortunately, State Governments, in their forest management plans, did not significantly pursue those provisions. The famous Godavarman case has resulted in a large number of sweeping orders most of which impact forest dwellers and livelihoods. There has also been very selective reading of these orders. This resulted in discontent amongst forest dwelling communities and a mass movement for recognition their forest rights. This was attempted to be addressed through the Forest Rights Act of 2006 that conferred rights on Scheduled Tribes and other traditional forest-dwellers. The Act sought to re-assert the legitimate status of communities designated as 'encroachers'; and re-designation of National Forests as Community Forests.

### 6.1.3. Compensatory Afforestation and CAMPA

With the Compensatory afforestation scheme, the country is focusing too much on the means, and losing sight of the end. CAMPA and compensatory afforestation (CA) may green India, but the country is going to lose natural forests in the process. Therefore, the real question around compensatory afforestation is whether the money collected for CA is serving the purpose for which it is collected.

For several years, the money collected for compensatory afforestation was lying unutilised in an adhoc fund with States having no access to it. Even when States started receiving this money, a cap was put on the amount by the Supreme Court. It was observed that in some States, even the interest earned on the NPV does not commensurate the amount required for taking up compensatory afforestation in the State. There is an issue with the kind of activities that are being funded out of this money. CAMPA funds are utilised for afforestation of double of the land area diverted, assisted natural regeneration, conservation, protected area and forest and wildlife protection. However, several Annual Plans of Operations show that CA money is being spent on Van Bhavans, on DFO quarters, on sprucing up guest houses. While capacity to utilise funds is an issue, it is also linked to political will and political pressure.

CAG observations on CAMPA show that, in many cases, there are irregularities in the management of funds. Some of the irregularities can be attributed to the absence of any process in place to report the collection or expenditure of this large fund to either Parliament

or the State. CAMPA is not a Society, but a Special Purpose Vehicle, which means that it should be audited by the State mechanism. The tussle between the Centre and States over CAMPA money continues. The Centre contends that it lacks the resources to monitor projects and States allege that it is their money and should not be monitored (and interfered with) by the Centre.

Even when the CAMPA money goes back to the State, it is not actually compensating the loss which is being incurred on account of forest diversion. The whole ecosystem is diverted but compensation is paid only for plantation activity and wildlife conservation. It has emerged that CA funds are leading to a pit-and-plant approach and scattered plantations. There is a need to move away from this but no State is coming forward with innovative ways of compensating the loss of forests. Such an approach can also lead to fragmentation of forests. Land is another issue in compensatory afforestation. It is often observed that the area diverted does not always match with the area mutated. A lot of land is being given away for CA as wastelands. Concerns have been raised about handing over land free to the user agencies which can actually be used for community development or some other community benefit.

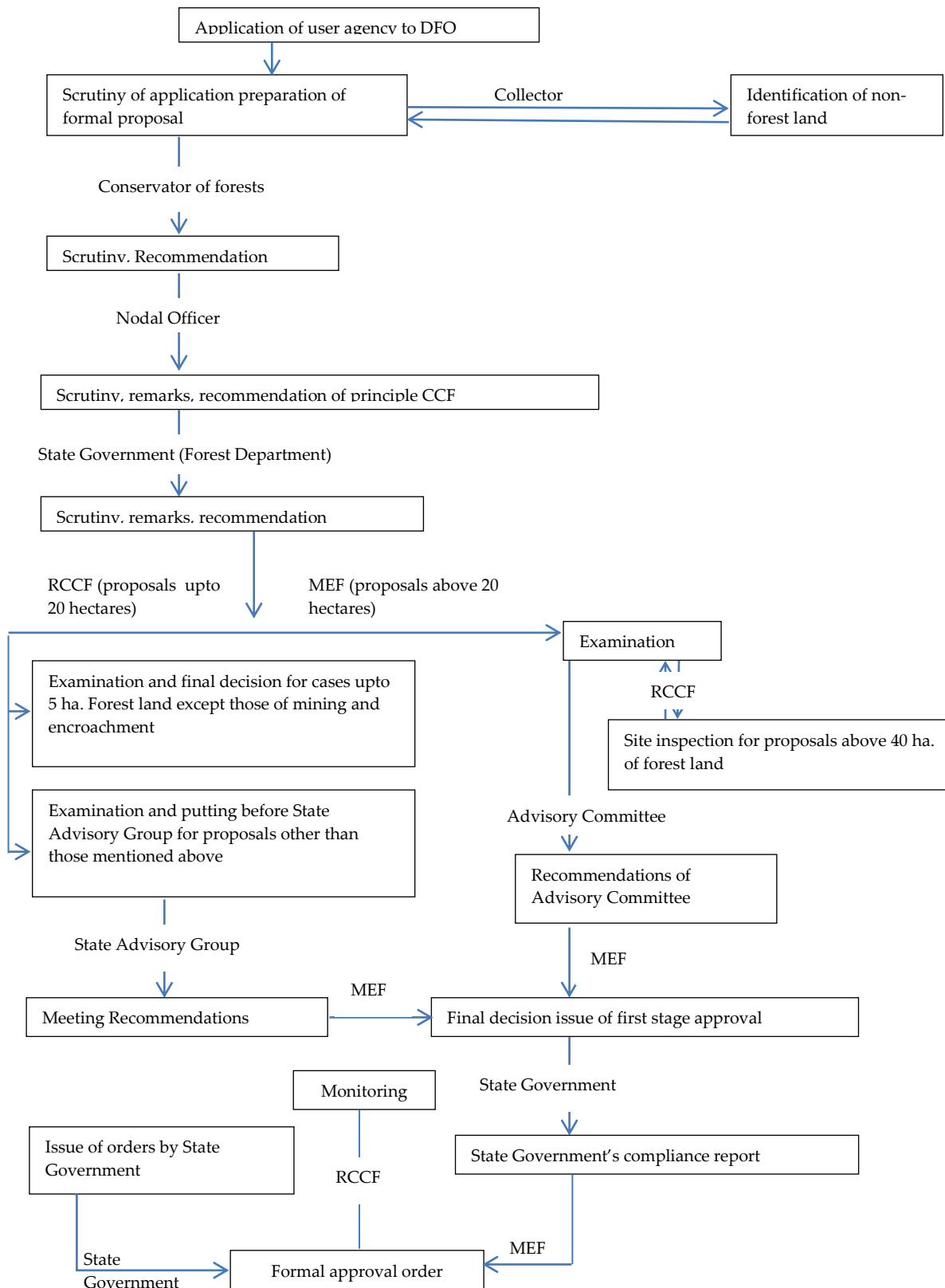
CAMPA suffers from several structural complexities. This entire administrative structure has been artificially created with neither legislative sanction, or a proper auditing mechanism or mechanisms to ensure people's participation. The current administrative mechanism for such an enormous corpus is not sustainable or optimal. The role of the Supreme Court has been criticised in this respect. To give it a legislative sanction, a bill on CAMPA was passed by the Lok Sabha but it could not be passed in the Rajya Sabha. The Parliamentary Committee that examined the Bill averred that a 'centralized system of forest fund management is against the federal system of India. It takes away financial powers vested in the States and is a blow for Federalism'.

CAMPA, unlike the National Board of Wildlife, the Forest Advisory Committee, the State Wildlife Boards, has a very minuscule representation of ecologists and sector experts. In this context, it can be questioned whether two or three people in the Ministry can manage such a huge fund. In the CAMPA scheme, supervision at Gram Sabha or the community level is missing.



## 6.2. Annexure 2: Detailed procedure for Forest Clearance

<http://moef.gov.in/citizen/specinfo/forflow.html>



## 7 Bibliography

---

Abbas, Hoveyda, Ranjay Kumar, and Mohammed Aftab Alam . *Indian Government and Politics*. Pearson, 2010.

Ackerman, Frank, and Lisa Heinzerling. "Pricing the Priceless: Cost Benefit Analysis of Environmental Protection." *University of Pennsylvania Law Review*, 2002: 1553-1584.

Adler, Jonathan H. "A New Environmental Federalism." *Forum of Applied Research and Public Policy* 13 (1998).

Agranoff, R., 2001. Managing within the Matrix: Do Collaborative Intergovernmental Relations Exist? *Publius*, 31(5), 31-56.

Arora, B., 2007. India's Experience with Federalism: Lessons Learnt and Unlearnt. Kathmandu: paper at international seminar on "Constitutionalism and Diversity in Nepal".

Banzhaf, Spencer , and Andrew Chupp. *HETEROGENEOUS HARM VS. SPATIAL SPILLOVERS: ENVIRONMENTAL FEDERALISM AND US AIR POLLUTION*. Cambridge, MA, USA: NATIONAL BUREAU OF ECONOMIC RESEARCH Working Paper 15666, 2010.

Bates, Gerry. *Environmental Law in Australia*. Lexis Nexis Butterworths, 2010.

Behre, C., 2003. Mexican environmental law: enforcement and public participation since the signing of NAFTA's environmental cooperation agreement. *Journal of Transnational Law and Policy*, Volume 12 Issue 2, 327 – 343

Bhatt, S, and Akhtar Majeed. *Management and Federalism: The Federal Experience* . New Delhi: Uppal Publishing House, 2002.

Bryner Nicholas S, 2012. 'Brazil's Green Court: Environmental Law in the Superior Tribunal de Justiça (High Court of Brazil), 29 *Pace Environmental Law Review* 470

Burgess, M., 2006. *Comparative Federalism: Theory and Practice*, US and Canada: Routledge.

Cameron, David R. "Canada." In *Handbook of Federal Countries*, by Ann Lynn Griffiths and Karl Nerenberg , 108 – 109. Canada: McGill-Queen's University Press, 2005.

Campaign for Survival and Dignity. *Problems With the Compensatory Afforestation Fund Bill, 2008*. Campaign for Survival and Dignity, 2009.

Carlson Ann E, 2011. 'California Motor Vehicle Standards and Federalism: Lessons for the EU' in David Vogel and Johan Swinnen [Eds] 'Transatlantic Regulatory Cooperation: The Shifting Roles of the EU, the US and California', Edward Elgar: 2011.

Central Empowered Committee, Supplementary report in IA no. 826 in IA no. 566 regarding calculation of net present value (NPV) payable on use of forest land of different types for non-forest purposes.  
<http://164.100.194.5:8080/newforest/htmls/CECReport/ReportofCEC.htm>

Chakraborty I., 2006. Determining Environmental Quality in a Federal Setting: An Empirical Analysis of Subnational Governments in India. Munich: MPRA Paper No. 7605.

Chakraborty, lekha. *Determining Environmental Quality in a Federal Setting: An Empirical Analysis of Subnational Governments in India*. Munich: MPRA Paper No. 7605, 2006.

Chandiramani, Nilima. "Environmental Federalism: An Indian Viewpoint ." *ICFAI Journal of Environmental Law* 3, no. 2 (2004).

Chhatre, Ashwini. "Political Articulation and Accountability in Decentralisation: Theory and Evidence from India." *Conservation and Society* 6, no. 1 (2008): 12-23.

Commission on Centre-State Relations. *Report of the Commission on Centre-State Relations: Taskforce on ENVIRONMENT, NATURAL RESOURCES AND INFRASTRUCTURE*. New Delhi: Government of India, 2010.

Comptroller and Auditor General of India. "Report of the Comptroller and Auditor General of India on Compensatory Afforestation in India (Report no. 21)." 2013.

Constituent Assembly Debates. *Constituent Assembly Debates*. Book 1 Volume 6(27th January 1948). Vol. 6. New Delhi: Lok Sabha Secretariat, 1948.

Contreras-Hermosilla, Arnoldo , Gregersen Hans, and Andy White. *Forest Governance in Countries with Federal Systems of Government*. Center for International Forestry Research, 2008.

Costa, Valeriano M F. "Brazil." In *Handbook of Federal Countries*, by Ann L Griffith, 91- 105. McGill-Queen's University Press, 2005.

Costa, Valeriano Mendes Ferreira, 2005. 'Federative Republic of Brazil', in Ann Griffiths and Karl Nerenberg [Eds] *Handbook of Federal Countries*, McGill-Queen's Press

Courchene, Thomas J. "CLIMATE CHANGE, COMPETITIVENESS AND ENVIRONMENTAL FEDERALISM:THE CASE FOR A CARBON TAX." Ottawa, 2008.

da Costa , Anna. *OPINION: Will India's Elections Sway Climate Policy?* 2014. <http://www.worldwatch.org/node/6072> (accessed January 20, 2014).

Davis, Bruce W. "Federalism and environmental politics: An Australian overview." In *Federalism and the environment*, by R L Mathews. Canberra: Centre for Research on Federal Financial relations, ANU, 1985.

Desposato Scott W., 2011. 'The Mechanisms and Impact of Federalism on Brazilian Parties' in *Institutional Theories, Societal Realities, and Party Politics in Brazil*, (University of California:Los Angeles)

*Down to Earth*, 'Afforestation wages in cash', Sep 15, 2011; Available at url <http://www.downtoearth.org.in/content/afforestation-wages-cash>

Dutta, Ritwick, and Bhupender Yadav. *Supreme Court on Forest Conservation*. Delhi: Universal Law Publishing Co, 2005.

Ebegbulem, Joseph C. "FEDERALISM AND THE POLITICS OF RESOURCE CONTROL IN NIGERIA." *International Journal of Humanities and Social Science* 1, no. 12 (2011): 218 - 229.

Ebrahim Hassen, 2011. 'The South African Constitution: Birth Certificate of a Nation', Paper presented at the Constitution making Forum: A Government of Sudan Consultation, held in May 2011 in Khartoum, Sudan

ELDF & WWF India. *Protection of Forests in India - The Godavarma Story*. New Delhi: WWF India, 2009.

Environmental Law Institute, 2010. *Best practices analysis of environmental protection authorities in federal states*; Available at URL [www.eli.org/pdf/india2030.pdf](http://www.eli.org/pdf/india2030.pdf)

Esty, Daniel C. "Revitalizing Environmental Federalism." *Faculty Scholarship Series Paper* 450 (1996).

Fafard, Patrick. "Green Harmonisation: The success and failure of recent environmental intergovernmental relations." In *Canada: The State of the Federation 1997: Non-Constitutional Renewal*, by Harvey Lazar, 203 - 228. Institute of Intergovernmental relations, 1998.

Farber, Daniel A. "Environmental Federalism in a Global Economy." *Virginia Law Review* 83, no. 7 (1997): 1283-1319.

Fischman, Robert. *COOPERATIVE FEDERALISM AND NATURAL RESOURCES LAW*. BLOOMINGTON: Indiana University Legal Research Paper Number 32, 2006.

Gadgil, Madhav, and Ramachandra Guha. *This Fissured Land: An Ecological History of India*. New Delhi: Oxford University Press, 1992.

Gibson, D., 1973. Constitutional Jurisdiction over Environmental Management in Canada. *University of Toronto Law Journal*, Vol. 23, No. 1, 54-87.

Gonzalez-Oropeza Manuel, 2004. 'Federalism and subnational Constitutions: Design and Reform in Mexico' paper presented at the Conference on 'Subnational Constitutions and Federalism: Design & Reform' held on March 22-27, 2004 in Bellagio, Italy

Government of Maharashtra (2009 – 2010, 2010 – 2011), Annual Plan of Operations (APO) for state CAMPA

Government of Andhra Pradesh, (2009 – 2010, 2010 – 2011), Annual Plan of Operations (APO) for state CAMPA

Government of Chhattisgarh (2009 – 2010, 2010 – 2011), Annual Plan of Operations (APO) for state CAMPA

Government of India, 2009. Report of the Thirteenth Finance Commission. New Delhi: Finance Commission of India.

Government of India. *Report of the Thirteenth Finance Commission*. New Delhi: Finance Commission of India, 2009.

Government of Uttarakhand (2009 – 2010, 2010 – 2011), Annual Plan of Operations (APO) for state CAMPA

Guha, Ramachandra, and Madhav Gadgil . "State Forestry and Social Conflict in British India." *Past and Present*, no. 123 (May 1989): 141 - 177.

Guha, Ramachandra. *The unquiet woods: ecological change and peasant resistance in the Himalaya*. New Delhi: Oxford University Press, 1999.

*Herald*, 'Non-availability of degraded land baffles Forest Dept', July 16, 2012; Available at url <http://www.heraldgoa.in/News/Local%20News/Non-availability-of-degraded-land-baffles-Forest-Dept/61815.html>

Hollander, R. "Rethinking Overlap and Duplication: Federalism and Environment assessment in Australia." *Publius* 40, no. 1 (2010): 136-170.

Hollander, R., 2010. Rethinking Overlap and Duplication: Federalism and Environmental Assessment in Australia. *Publius: The Journal of Federalism* volume 40 number 1, 136-170.

Hueglin, Thomas, and Alan Fenna . *Comparative Federalism: A Systematic Inquiry*. Canada: Broadview Press, 2006.

Iyer, R R. "Federalism and Water Resources." *Economic and Political Weekly*, Vol - XXIX No. 13, 1994.

Jørgensen, K. "Climate Initiatives at the Subnational Level of the Indian States and their Interplay with Federal Policies." Montreal: Paper presented at the 2011 ISA Annual Convention, 16–19 March 2011, 2011.

Kohli, K and Menon M., 2011. *Banking on Forests: Assets for a Climate Cure?*, Kalpavriksh and Heinrich Böll Foundation, New Delhi.

Kohli, K, M Menon, V Samdariya, and S Guptabha. *Pocketful of Forests: Legal debates on valuating and compensating forest loss in India*. New Delhi: Kalpavriksh & WWF-India, 2011.

Kohli, K., M. Menon, V. Samdariya, and S. Guptabhaya, 2011. *Pocketful of Forests: Legal debates on valuating and compensating forest loss in India*. Kalpavriksh & WWF-India, New Delhi.

Koller Arnold, 2007. 'The Renaissance of Federalism?' in Ralf Thomas Baus, Raoul Blindernbacher, Ulrich Karpen edited 'Competition versus cooperation : German federalism in need of reform : a comparative perspective', Baden-Baden : Nomos, 2007

MacKay , William R. "Canadian Federalism and the Environment: The Literature ." *Georgetown International Environmental Law Review* XVII, no. 1 (2004).

Mahapatra, Richard. "Have regional parties delivered? ." *Down to Earth*, July 15, 2013.

Malik, Ashok. "More federalism, please." *The Times of India*, June 20, 2013.

Mandal, Subrata, and M Govinda Rao. *Overlapping Fiscal Domains and Effectiveness of Environmental Policy in India*. New Delhi: National Institute of Public Finance and Policy: Working paper No:25, 2005.

Martin, Thomas R, Neel Smith, and Jennifer F Stuart. *Democracy in the Politics of Aristotle*. July 26, 2003. [http://www.stoa.org/projects/demos/article\\_aristotle\\_democracy?page=7](http://www.stoa.org/projects/demos/article_aristotle_democracy?page=7) (accessed January 24, 2014).

McAllister Lesley K., 2012. 'Co-Regulation in Mexican Environmental Law', *Utah Environmental Law Review*, Volume 32, No 2

Menon Manju, 2011. 'Can environment damage be mitigated? An analysis of schemes to compensate for the loss of forests in India', Ritimo; Available at url <http://www.ritimo.org/article942.html>

Miller Jeffery G., 1996. 'United States Pollution Control Laws' *Pace Environmental Law Review*, Volume 13 Issue 2 Spring Symposium Edition, 513- 518

Ministry of Environment and Forests (2004) Handbook of Forest (Conservation) Act, 1980 (With Amendments made in 1988), Forest (Conservation) Rules, 2003 (with amendments made in 2004), Guidelines & Clarifications (Up to June, 2004). Government of India

Ministry of Environment and Forests (2009 – 2012), Minutes of meetings of National CAMPA Advisory Council

Ministry of Environment and Forests (2009) MoEF Guidelines on State Compensatory Afforestation Fund Management and Planning Authority (State CAMPA)

Ministry of Environment and Forests (2011) Report on disbursements to states under CAMPA

Ministry of Environment and Forests (2013) Statement showing proposed allocations of CAMPA funds to States/ UTs against Annual Plans of Operation for the year 2013-14.

Ministry of Environment and Forests . *India State of the Forest Report 2009*.  
[http://www.fsi.nic.in/india\\_sfr\\_2009/india\\_sfr\\_2009.pdf](http://www.fsi.nic.in/india_sfr_2009/india_sfr_2009.pdf) , Forest Survey of India, 2009.

Ministry of Environment and Forests. *State of the Forest Report 2005*.  
<http://www.fsi.nic.in/sfr2005/SFR2005.pdf>, Forest Survey of India, 2008.

Ministry of Environment and Forests. *State of the Forest Report 2011*.  
[http://www.fsi.org.in/final\\_2011.pdf](http://www.fsi.org.in/final_2011.pdf), New Delhi: Forest Survey of India, 2011.

Mizrahi Yemile, 2005. 'United Mexican States', in Ann Griffiths and Karl Nerenberg [Eds] *Handbook of Federal Countries*, McGill-Queen's Press

Mizrahi, Yemile. "Mexico." In *Handbook of Federal Countries*, by Ann Lynn Griffiths and Karl Nerenberg, 202. Canada: McGill-Queen's University Press, 2005.

Moura, Alexandrina. 'The National Environment Council in Brazil and the Environmental Federalism', Paper presented at the annual meeting of the The Law and Society Association, TBA, Berlin, Germany, July 24, 2007

Murray, C., & Simeon, R. (2010). 'Promises Unmet – Multi-level Government in South Africa'. In R. Saxena [Ed.], *Varieties of Federal Governance*. Cambridge University Press.

Murray, C., 2006. Republic of South Africa. In K. L. Roy, & C. Saunders, *Legislative, executive, and judicial governance in federal countries* (pp. 258-288). McGill-Queen's University Press.

Murray, Christina, and Richard Simeon. "Promises Unmet – Multi-level Government in South Africa." In *Varieties of Federal Governance*, by Rekha Saxena. Cambridge University Press, 2010.

Negi, S. *Indian Forestry through Ages*. New Delhi: Indus Publishing House, 1994.

Neto, Jose M W G, Raquel Mendes Miranda, and Leon Barbosa. "Federalism and judicial review: the role of Brazilian States Courts." *VIIIth World Congress of Constitutional Law*. Mexico, 2010.

Noronha, Ligia, Nidhi Srivastava, Divya Datt, and P V Sridharan. "Resource Federalism in India: The Case of Minerals." *Economic and Political Weekly*, XLIV.8, 2009: 51-59.

Oates, Wallace E. "On Environmental Federalism." *Virginia Law Review* 83, no. 7 (1997): 1321-1329.

Parliamentary Standing Committee. *Report on Compensatory Afforestation Fund Bill, 2008*. 194th Report of the Department Related Parliamentary Standing Committee on Science & Technology, Environment & Forests, New Delhi: Rajya Sabha , 2008.

Patriota, Antonio De Aguiar, 2009. 'An Introduction to Brazilian Environmental Law', *George Washington International Law Review*, Vol. 40 No. 3, 611 – 617.

Piancastelli, M., 2006. Republic of Brazil. In A. Majeed, R. L. Watts, & D. M. Brown, *Distribution of Powers and Responsibilities in Federal Countries* (pp. 67-91). McGill-Queen's University Press.

---

Plater et al. *undated*, *A short historical sketch of the evolution of U.S. environmental law*, available on url [http://www.aspenlawschool.com/books/plater\\_environmentallaw/updates/2\\_History\\_Enviro\\_Law.doc](http://www.aspenlawschool.com/books/plater_environmentallaw/updates/2_History_Enviro_Law.doc).

Plourde, Andre. *Oil and Gas in Canadian Federation*. Working paper 10-001 Buffet Centre of International and Comparative Studies, 2010.

Rajaraman I., 2007. The Political Economy of the Indian Fiscal Federation . India Policy Forum Volume 4, 1-35.

Rajya Sabha, 2008 Unstarred Question No 656 Answered on 23.10.2008 Compensatory Afforestation Scheme .

Rajya Sabha, 2008 Unstarred Question No 26 Answered on 26.07.2010 Compensatory Afforestation Fund Management and Planning Authority

Rao, M G, and N Singh. *Asymmetric Federalism in India*. SantaCruz: Santa Cruz International Economics [Working Paper No. 04-08], 2004.

Rao, M G. *Fiscal Decentralization in Indian Federalism* . Bangalore: Institute for Social and Economic Change, 2000.

Rudolph, Lloyd I, and Susanne Hoeber Rudolph. "Federalism as State Formation in India: A Theory of Shared and Negotiated Sovereignty." *International Political Science Review* 31, no. 5 (2010): 1–21.

Sadanandan , Anoop. "Bridling Central Tyranny in India: How Regional Parties Restrain the Federal Government." *Asian Survey* 52, no. 2 (2012): 247–269.

Sankar, U. *Ecology, Environment and Sustainable Development in Indian Fiscal Federalism*. Chennai: Madras School of Economics WORKING PAPER 47/2009, 2009.

Saunders, Cheryl. "Australia." In *Handbook of Federal Countries*, by Ann L Griffiths, 32-33. Canada: McGill-Queen University Press, 2005.

Saxena, N C. *NTFP Policy and the poor in India*. 1999: Submission made to the Plannign Commission, 1999.

Selin, Henerich, and Stacy Vanderveer. "Federalism, Multilevel Governance and Climate Change Politics across the Atlantic." Boston: Presented at the EUSA Twelfth Biennial International Conference, 2011.

Sharma, Mukul, (2012) *Green and Saffron*, Ranikhet: Permanent Black.300p.

Shobe, William , and Dallas Burtraw. *Rethinking Environmental Federalism in a Warming World*. Washington: Resources for the Future - RFF DP 12-04, 2012.

Simeon Richard, 1998. *Considerations on the Design of Federations*, Kingston, Ont. : Institute of Intergovernmental Relations, Queen's University, 1998, 23p.

Singh, M P, J K Singh, and Reena Mohanka . *Forest Environment and Biodiversity*. Daya Publishing House, 2007.

Singh, Mahendra P. "Towards a more Federalised Parliamentary System in India: Explaining Functional Change." *Pacific Affairs* 74, no. 4 (2001).

Sinha, G N, and N Srivastava. "Legal Framework for Multiple Values Sustainable Management of Forests in India." In *Sustainable Management of Forests in India*, by Forest Research Institute. Dehradun: FRI, Forthcoming.

Slocombe D. S., 2008. Forty Years of Institutional Change and Canadian Protected Areas, or, Are things getting better or just more complicated? Retrieved October 20, 2012, from <http://dspace.ucalgary.ca/bitstream/1880/46879/1/Slocombe.pdf>

Souza, Celina. "Subnational constitutionalism in Brazil." *Federalism and Subnational Constitutions: Designs and Reforms*. Bellagio, 2004.

Sovacool, Benjamin. "The Best of Both Worlds: Environmental Federalism and the Need for Federal Action on Renewable Energy and Climate Change." *Stanford Environmental Law Journal* 27 (2008): 397 - 476.

Srivastava N, Datt D, 'Comparative environmental federalism: experiences and issues in select countries', Background paper for International Conference on Strengthening Green Federalism, held on October 29 – 30, 2012, IHC, New Delhi

Srivastava, Nidhi, Bibhu P Nayak, and Shilpi Kapur. *Greening the Indian Federal System*. Discussion Paper, New Delhi: TERI, 2012.

Standing Committee of Parliament on Science & Technology, Environment & Forests on The Compensatory Afforestation Fund Bill, 2008, New Delhi: Government of India.

TERI. "Stakeholder Workshop on Forests and Federalism." *Workshop held on 6th December 2013 at TERI, New Delhi*. New Delhi: TERI, 2013.

TERI. *Integrating environment, ecology and climate change concerns in the Indian fiscal federalism framework*. New Delhi: TERI report to the Finance Commission [No. 2007EM04], 2009.

TERI. *Strengthening Green Federalism in India*. 2012IA01, New Delhi: TERI, 2012.

*The Arunachal Pioneer*, 'HEPs' dilemma over compensatory afforestation in Arunachal Pradesh and their tactics to lure', January 13, 2013; available at url <http://www.thearunachalpioneer.in/editorial-posts/2013/01/13/heps-dilemma-over-compensatory-afforestation-in-arunachal-pradesh-and-their-tactics-to-lure/>

The Energy and Resources Institute, 2009. Integrating environment, ecology and climate change concerns in the Indian fiscal federalism framework. New Delhi: TERI report to the Finance Commission [No. 2007EM04].

The Energy and Resources Institute, 2012. Summary of the proceedings of the Workshop on Greening the Indian Federal System: Views from the Centre and the states. New Delhi: 6th July 2012: TERI.

The Energy and Resources Institute, 2012. Summary of the proceedings of International Conference on 'Strengthening Green Federalism: Sharing international practices' on 29th and 30th October 2012 at India Habitat Centre, New Delhi..

The Hindu, 'CAG's case buttressed by lapses in southern States', September 10, 2013; Available at url <http://www.thehindu.com/todays-paper/tp-national/cags-case-buttressed-by-lapses-in-southern-states/article5110933.ece>

The Indian Express, 'MoEF eyes SC-held fund for green mission', June 09, 2013; Available on url <http://www.indianexpress.com/news/moef-eyes-scheld-fund-for-green-mission/1126896/>



The Indian Express, 'MoEF seeks more funds to improve green cover', Feb 04 2013; Available at url <http://www.indianexpress.com/news/moef-seeks-more-funds-to-improve-green-cover/1068889/0>

*The Times of India*, 'Levy charged for using forestland set to go up', Apr 3, 2013; Available at url [http://articles.timesofindia.indiatimes.com/2013-04-03/flora-fauna/38247981\\_1\\_afforestation-green-india-mission-forest-management](http://articles.timesofindia.indiatimes.com/2013-04-03/flora-fauna/38247981_1_afforestation-green-india-mission-forest-management)

*The Times of India*, 'Officials want afforestation funds to be diverted to set up institutes', May 14, 2012; Available at url [http://articles.timesofindia.indiatimes.com/2012-05-14/india/31700474\\_1\\_campa-afforestation-forest-lands](http://articles.timesofindia.indiatimes.com/2012-05-14/india/31700474_1_campa-afforestation-forest-lands)

*The Times of India*, 'SC ties Centre's hand in using Rs 9,000-cr afforestation fund', Feb 26, 2009, [http://articles.timesofindia.indiatimes.com/2009-02-26/india/28009177\\_1\\_campa-forest-land-apex-court](http://articles.timesofindia.indiatimes.com/2009-02-26/india/28009177_1_campa-forest-land-apex-court)

*The Times of India*, 'State urges Centre to release Rs 325crore compensatory afforestation fund management and planning authority fund', Oct 31, 2012; Available at url [http://articles.timesofindia.indiatimes.com/2012-10-31/bhubaneswar/34836792\\_1\\_naveen-patnaik-compensatory-afforestation-fund-management-state-government](http://articles.timesofindia.indiatimes.com/2012-10-31/bhubaneswar/34836792_1_naveen-patnaik-compensatory-afforestation-fund-management-state-government)

*The Tribune*, 'CM lays emphasis on afforestation in state: Says government will urge Centre to release Rs 227 cr', April 30, 2013; Available at url <http://www.tribuneindia.com/2013/20130501/himachal.htm#8>

Unknown, 2012. 'Ruralistas prevail in Brazil's Forest Code battle', *Eco Americas*, Volume 14, Number 12

Vaishnav, Milan. "The Complicated Rise of India's Regional Parties." *Carnegie Endowment for International Peace*, November 13, 2013.

Verney, Douglas. "Are all federations federal?" In *Multiple identities in a single state*, edited by Balveer Arora and D Verney, 47. New delhi: Konark Publishers, 1995.

Vogel, D, M Toffel, D Post, and N Aragon . *Environmental Federalism in the European Union and the United States*. Massachussets: Harvard Business School Working Paper 10-085., 2010.

Watts, Ronald L. *Comparing Federal Systems*. Kingston: Queen's university, 1999.

Westhuizen, Janis Van Der, 2005. 'Republic of South Africa', in Ann Griffiths and Karl Nerenberg [Eds] *Handbook of Federal Countries*, McGill-Queen's Press

Wheare, K C. *Federal Government*. 1963.



The Energy and Resources Institute

[www.teriin.org](http://www.teriin.org)