

# **Report on Assessment of Funding support for Biodiversity Conservation in India**

## **INTRODUCTION**

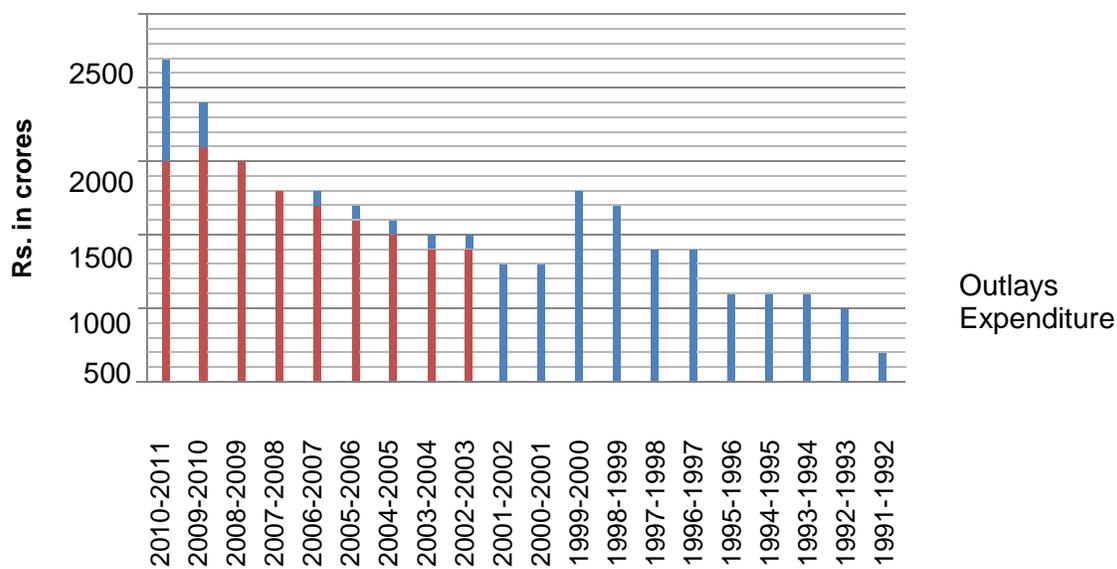
Biodiversity conservation is ingrained in Indian ethos. Strategies and plans for conservation and sustainable use of biological resources based on local knowledge systems and practices and are enshrined in the Constitution of India [Article 48A and Article 51 A(g)] in the form of environment protection. Government of India (GoI) has undertaken strong legal, policy and participatory measures including Biological Diversity Act (BDA), 2002, National Wildlife Action Plan (NWAP) (2002-2016), National Environment Policy (NEP) 2006, National Biodiversity Action Plan (NBAP), 2008 and National Action Plan on Climate Change (NAPCC), 2008. Being a signatory of the Convention on Biodiversity (CBD), India is also committed to contributing towards achieving three objectives of the Convention.

The key feature of any comprehensive environmental strategy is that the objectives require action in several areas, which typically lie in the purview of different ministries of the Central Government. The Ministry of Environment and Forests (MoEF) in India has the important role of monitoring the development process and its environmental impact in a perspective of sustainable development and to devise suitable regulatory structures to achieve the desired results. While this role is crucial, environmental objectives can only be achieved if environmental concerns are internalized in policymaking in a large number of sectors. This would require sharing of responsibility at all levels of government and across sectors with respect to monitoring of pollution, enforcement of regulations, and development of programmes for mitigation and abatement (XI<sup>th</sup> Plan, Planning Commission India, 2002).

This report provides a financial overview of schemes of MoEF from 1992 onwards. It also presents an assessment of funding for core (direct and immediate biodiversity impact), net non-core (pollution, hazardous substances management etc. which facilitate biodiversity conservation of river streams, wetlands), and net peripheral funding flows (from biodiversity relevant schemes of Ministries other than MoEF) from Government of India, alongwith core funding by the State Governments, for the year 2010-11. The concept of net non-core and net peripheral flows has been worked out on the basis of a multiplicative probability factor. Care has also been taken to remove Centrally Sponsored Schemes (CSS) of MoEF from the core budget of State Governments, in order to avoid double counting.

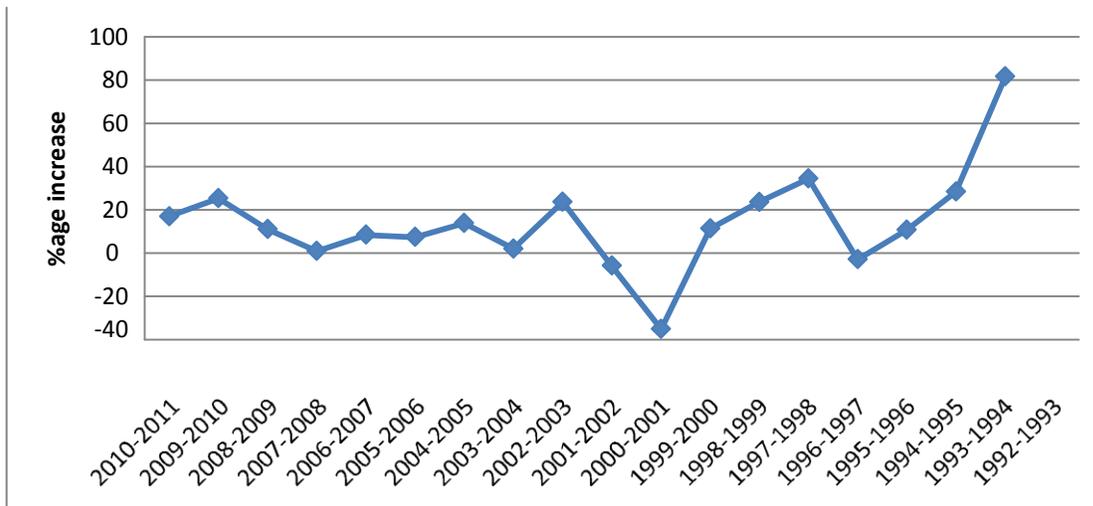
## FINANCIAL OVERVIEW OF SCHEMES OF MOEF

There has been a steady increase in the budgetary allocation of MoEF since 1992 under all major heads. From an average annual outlay of Rs. 2,800 million in 1992-1993 (96.55 million USD at April 1992 exchange rate), the outlay in the 2010-2011 budget was Rs. 22,000 million (492.17 million USD at April 2010 exchange rate). (Fig.1). The X<sup>th</sup> Plan (2002-2007) budgetary support for MoEF was Rs. 56,000 million with a projection of Rs. 100,000 million for the XI<sup>th</sup> Plan (2007-2012). This is approximately an increase of 78.57%. Estimating a conservative increase of 50% in outlays between five year Plans for MoEF, the Ministry's budget for the next 5 years under the XII<sup>th</sup> plan is projected to be Rs. 150,000 million approximately. This does not include fund flows from Compensatory Afforestation Fund Management and Planning Authority (CAMPA) which amounts to an average of Rs. 9,900 million based on 2010-2011 figures.



**Figure 1. Annual Budget Outlays of MoEF from 1991 to 2011**

The variations in annual budget outlays of the MoEF calculated as the percentage change in budget outlays in that year and the previous year is depicted in Fig. 2.



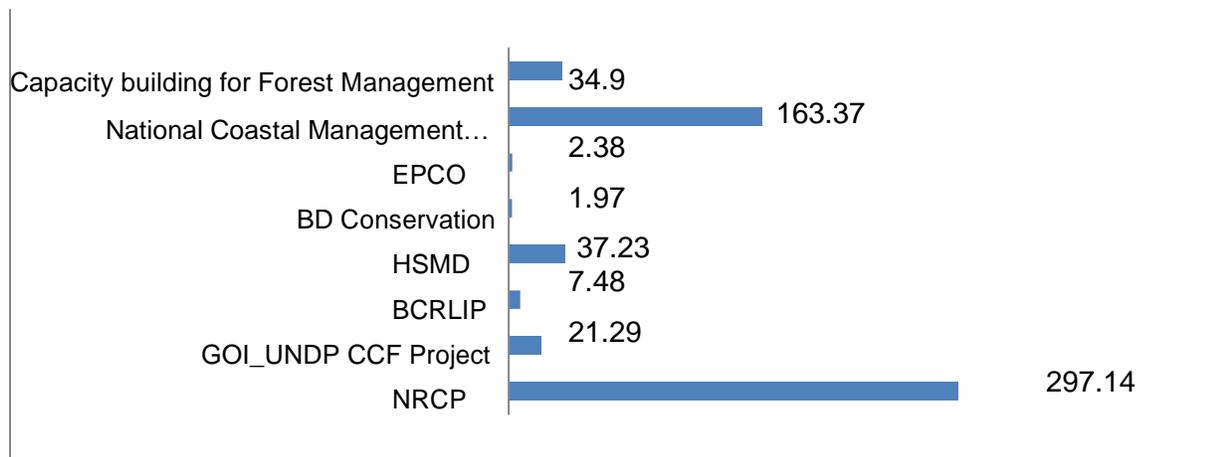
**Figure 2. Variations in annual budget outlays of Ministry of Environment and Forests**

There has been a consistent increase in outlay on schemes targeting five broad areas: environment, river conservation, forestry & wildlife, afforestation and eco-development and animal welfare over the past three five year plans.

The 'Environment' segment includes all major pollution abatement initiatives, EIA and specific projects such as Taj protection etc. Ganga Action Plan I which was followed by schemes aimed at cleaning major rivers such as Yamuna and Gomti under the 'National River Conservation Directorate' (NRCD). These schemes also attracted considerable foreign aid such as 13.33 billion Yen (2003-2011) from Japan Bank of International Cooperation.

The 'Forestry and wildlife' segment includes expenditure for major conservation schemes such as Project Tiger (National Tiger Conservation Authority), Project Elephant and creation and maintenance of Biosphere Reserves and National Parks. The 'National Afforestation and Ecodevelopment' segment focussed on increasing the forest cover in the nation along with seeking opportunities for rural livelihoods in forestry sector. Animal welfare was also included as a separate focus area since 2002-2003.

The expenditure incurred on key externally aided schemes in MoEF from 2007-2011 is shown in Fig. 3



**Figure 3. Expenditure incurred in key externally aided schemes from 2007-2011 (Rs. in crores)**

Table 1 is a snapshot of the major schemes under the five MoEF budget-heads over the X<sup>th</sup> and XI<sup>th</sup> five-year plans.

Schemes/ Programs	X Plan (2002-2007)	XI Plan (2007-2012)
*International Cooperation Activities (most foreign-aid		80.0
Common Effluent Treatment Plants	19.93	32.0
Industrial Pollution Prevention	11.79	45.0
Taj Protection	0.24	0.01
Biosphere Reserves	30.95	
Mangroves, Coral Reefs & Wetland	109.34	102.39
National River Conservation Plan	1321.07	2100
National Lake Conservation Plan	164.09	440
Project Tiger	153.16	615
India Eco-development Project	52.26	250 (NAEB)
Project Elephant	61.58	81.99
Integrated Forest Protection Scheme	204.1	600 (now called Intensification of Forest Management)
Development of NPs and Sanctuaries	236.84	
National Afforestation Project	1154.91	2000
National Coastal Management Programme		10
<b>TOTAL</b>	<b>5600</b>	<b>10000 at current prices (8842 at 2006-2007 prices)</b>

**Table 1. Budgeted outlays for various projects (All figures in Rs. millions)**

Aside from these primary schemes, as mentioned earlier, *Compensatory Afforestation Fund Management and Planning Authority* (CAMPA) released Rs. 9,828.092 million in 2009-2010 and Rs. 9,987.119 million in 2010-2011 for forestry related plans to the States. CAMPA is a 'Fund' that is not a part of the Consolidated Fund of India, and its corpus base comprises of contributions made by private and public agencies to compensate for diversion of forest lands for development and infrastructure projects.

## MOEF CORE FUNDING FOR BIODIVERSITY DURING 2010-11

Out of the MoEF's aggregate budget of Rs. 22000 million (Rs. 2200 crores) for the year 2010-11, the amount of core funding for biodiversity, i.e., funding for schemes which are directly relevant to biodiversity conservation, was Rs. 10780 million (Rs. 1078 crores).

The break-up of core funding on biodiversity by the MoEF for the year 2010-11 is given in Table. 2.

Schemes	Outlay
Forestry and Wildlife	793.24
Survey (Botanical Survey of India + Zoological Survey of India)	46.69
Conservation Programme	29.2
Research and Ecological Regeneration	48.6
Taxonomy Capacity Building Project	2.75
Biodiversity Conservation: Programme Component	6.79
National Coastal Management Programme	151
<b>Total</b>	<b>1078.27</b>

Source: Notes on Demands for Grants (Ministry of Environment and Forests), 2011-12

**Table. 2. Core funding for biodiversity for 2010-11**

## MOEF'S NON-CORE FUNDING FOR BIODIVERSITY DURING 2010-11

Out of the MoEF's total budget of Rs. 22000 million (Rs. 2200 crores) for 2010-11, after excluding the funds for schemes directly relevant to biodiversity, the remaining amount i.e., Rs. 11217 million (Rs. 1121.7 crores) was for schemes such as pollution control, hazardous substance management, impact assessment etc. As these programmes contribute to biodiversity conservation only indirectly, a multiplier approach has been applied, wherein 30% of the allocation under these schemes i.e., Rs. 3365.1 million (Rs. 336.51 crores) have been considered to be attributable to biodiversity at this stage. It is expected that in our attempt to further mainstream biodiversity, the leveragable non-core funding for biodiversity from these schemes would gradually increase.

## **OUTLAYS AT THE STATE LEVEL**

Apart from MoEF, each State and Union Territory (UT) in India also allocates part of its budget for expenditure on environment. On an average, this budget allocation varies from 1 to 13.5% of the aggregate budget of the State, as per the Budget Document of States 2011-12.

The outlay for ecology and environment for States and UTs for the VIII<sup>th</sup> Plan (1992-1997) was Rs. 2,495.856 million. The outlay for forestry of different States for the same plan period was Rs. 731.852 million. Thus, the total funding for biodiversity related activities by States for this plan period was Rs. 3,227.708 million. For the IX<sup>th</sup> Plan period (1997-2002), the outlay for States' Environment and Forest sector was Rs. 73,505 million. The X<sup>th</sup> Plan (2002-2007) outlay of States for Environment & Forests sector was Rs. 94,975.437 million. Under the X<sup>th</sup> Plan, the agreed outlay for States and UTs was Rs. 88,930 million for Forestry & Wildlife. The Five-year Plan budget for States has increased by 102.19% in the XI<sup>th</sup> Plan over the X<sup>th</sup> and 29.21% in X<sup>th</sup> Plan over the IX<sup>th</sup> Plan.

The outlay of the State Governments during 2010-11 was Rs. 87640.5 million (Rs. 8764.05 crores). In order to avoid double counting, the component of Centrally Sponsored Schemes (CSS) worth Rs. 10078 million (Rs. 1007.8 crores) funded and administered by MoEF for the year 2010-11 was excluded, to get the core funding at State level, that works out to Rs. 85936.4 million (Rs. 8593.64 crores).

Aggregating the States and MoEF budgets, the total core outlay is thus estimated to be Rs. 96719.7 million or 9671.97 crores (Rs. 1078.27 crores from MoEF and Rs. 8593.64 crores of State funds after deducting CSS) for the year 2010-11.

## **PERIPHERAL FUNDING: BIODIVERSITY RELATED PROGRAMMES OF ALLIED MINISTRIES**

Several Ministries/Departments of the Central Government, other than MoEF fund and implement biodiversity related programmes. These Ministries and Departments include: Ministry of Rural Development (in particular its Mahatma Gandhi National Rural Employment Guarantee Act scheme (MGNREGA)), Ministry of Urban Development, Ministry of Earth Sciences, and Department of Agriculture, Department of Animal Husbandry, Department of Agricultural Research, Department of Ayurveda Yoga, Unani, Siddha and Homeopathy (AYUSH).

As in the case of non-core funding for biodiversity under MoEF's schemes, a multiplier approach has been applied to assess the biodiversity component of leveragable peripheral funding of these schemes implemented by other Ministries, since the entire amount allocated to them cannot be attributed to biodiversity. Accordingly, depending on the potential ability of a scheme to contribute to biodiversity, an amount of

5-10% of the allocations have been considered to be attributable to biodiversity at this stage.

Using this calculation, an amount of Rs. 10687.1 million (Rs. 1068.71 crores) can be considered as net leveragable peripheral funding on biodiversity during 2010-11 under relevant schemes of Ministries/Departments of Government of India other than MoEF.

It is expected that as in the case of non-core funding, in our attempt to further mainstream biodiversity, the leveragable peripheral funding for biodiversity under these schemes would gradually increase.

Table 3. depicts the peripheral funding on biodiversity from relevant programmes of other Ministries/Departments of the Government of India for the year 2010-11.

Ministry	Programme and Multiplicative factor (in parentheses)	Total Allocation of Fund	Probable Biodiversity component
<b>Ministry of Rural Development- MGNREGA scheme</b>	Flood Control and Protection (0.05)	5990.19	299.50
	Water Conservation and Water Harvesting (0.05)	4590.95	229.54
	Drought Proofing (0.05)	1290.08	64.50
	Land Development (0.05)	1585.92	79.29
	<b>Total</b>	<b>13457.13</b>	<b>672.83</b>
<b>Ministry of Rural Development- Other schemes</b>	Integrated Wastelands Development Programme (0.10)	328.70	32.87
	Drought Prone Areas Programme (0.10)	296.34	29.63
	Desert Development Programme (0.10)	224.33	22.43
	Integrated Watershed Management Programme (0.10)	390.50	39.05
	<b>Total</b>	<b>1239.87</b>	<b>123.98</b>
<b>Ministry of Urban Development</b>	Solid Waste Management (0.05)	151.55	7.57
	Preservation of water body (0.05)	15.16	0.75
	Prevention of soil erosion/ Soil Conservation (0.05)	1.51	0.075
	<b>Total</b>	<b>168.22</b>	<b>8.39</b>
<b>Ministry of Earth Sciences</b>	Integrated Coastal & Marine Area Management (0.10)	4.00	0.4
	Rainfed area development Programmes (0.10)	10.00	1.0
	Natural Resource Management (0.10)	80.00	8.0

<b>Department of Agriculture</b>	Plant Protection(0.10)	34.50	3.45
	Soil/Water Conservation (0.10)	136.00	13.6
	National Programme for Organic Production (0.10)	195.00	19.5
	<b>Total</b>	<b>455.50</b>	<b>45.55</b>
<b>Department of Animal Husbandry</b>	Development of inland fisheries and Aquaculture (0.10)	43.50	4.3
<b>Department of Agricultural Research</b>	Crop Sciences (0.10)	328.82	33.88
	Horticulture (0.10)	121	12.1
	Animal Sciences (0.10)	108	10.8
	Natural Resources Management (0.10)	123	12.3
	Fisheries (0.10)	550	55
	Agril. Engg. (0.05)	520	26
	Eco. Statistics & Management (0.05)	3	0.15
	Agril. Education (0.05)	465.5	23.27
	NAIP (0.05)	293.97	14.69
	Agricultural Extension (0.05)	400	20
	<b>Total</b>	<b>2913.29</b>	<b>212.49</b>
<b>Department of Ayurveda Yoga, naturopathy, Unani, Siddha and Homeopathy (AYUSH)</b>	National Mission on Medicinal Plants (0.10)	7.70	0.77
<b>Grand Total</b>			<b>1068.71</b>

**Table 3: Peripheral Funding by Government of India on Biodiversity Conservation (during 2010-11) (Rs. in crores)**

The multiplicative probability factor for State Governments peripheral funding has not been assessed, as information about the components of the peripheral schemes administered by State Governments could not be gathered.

### **TOTAL ESTIMATED FUNDING FOR BIODIVERSITY DURING 2010-11**

As per this study, for the year 2010-2011, the core funding for biodiversity (on MoEF's biodiversity related programmes) is Rs. 10782.7 million (Rs. 1078.27 crores); the net leveragable non-core funding (on MoEF's other schemes) is Rs. 3365.1 million (Rs. 336.51 crores). The core funding by State Governments (after deducting centrally sponsored schemes to avoid double counting) is Rs. 85936.4 million (Rs. 8593.64 crores) taking the combined core and non-core funding by MoEF and States to Rs. 100084.2 million (Rs. 10008.42 crores). The peripheral funding on biodiversity (on schemes of other Ministries/Departments relevant to biodiversity by working out percentage of leveragable peripheral fund flows that may be attributed to biodiversity) is Rs. 10687.1 million (Rs. 1068.71 crores); thereby taking the core + non-core + net

peripheral funding on biodiversity during 2010-11 to Rs. 110771.3 million (Rs. 11077.13 crores).

Table 4. depicts the broad break-up of core, non-core and peripheral funding for biodiversity for the year 2010-11.

Governments	Core and Noncore Funding	Net Peripheral Funding	Total
Central Government	2200	1068.71	3268.71
State Governments	8593.64	Cannot be estimated	8593.64
<b>Total</b>	<b>10793.64</b>	<b>1068.71</b>	<b>11862.35</b>

Source: Notes on Demands for Grants (Ministry of Environment and Forests), Annual Reports and Budget Document of States, 2011-12.

**Table 4: Funding for Biodiversity for the year 2010-11 (Rs. in crores)**

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