



Chapter – 6

*Regeneration
and
Eco-development*

National Afforestation and Eco-Development Board

Introduction

In order to promote afforestation, tree planting, ecological restoration and eco-development activities in the country, the National Afforestation and Eco-development Board (NAEB) was set up in August 1992 for promoting Special attention is also being given by the NAEB to the regeneration of degraded forest areas and lands adjoining forest areas, national parks, sanctuaries and other protected areas as well as the ecologically fragile areas like the Western Himalayas, Aravallis, Western Ghats etc.

Objectives

The detailed objectives of the NAEB are to

- Evolve mechanisms for ecological restoration of degraded forest areas and adjoining lands through systematic planning and implementation, in a cost effective manner;
- Promote through natural regeneration or appropriate intervention the forest cover in the country for ecological security and to meet the fuel wood, fodder and other needs of the rural communities.
- Restore fuel wood, fodder, timber and other forest produce on the degraded forest and adjoining lands in order to meet the demands for these items;
- Sponsor research and extension of research findings to disseminate new and proper technologies for the regeneration and development of degraded forest areas and adjoining lands;
- Create general awareness and help foster a people's movement for promoting afforestation and eco-development with the assistance of voluntary agencies, non-government organizations, Panchauati Raj institutions and others and promote participatory and sustainable management of degraded forest areas and adjoining lands;
- Coordinate and monitor the Action Plans

for tree planting, ecological restoration and ecocodevelopment; and

- Undertake all other measures necessary for promoting afforestation, tree planting, ecological restoration and eco development activities in the country.

Schemes

NAEB operates the following three major schemes:-

- National Afforestation Programme (NAP) Schemes:-
- NAEB Scheme: The major components of the Scheme are:-
 - Grants in Aid for Greening India (GIA for GI) Scheme
 - Monitoring and Evaluation (M&E)
 - Communication
 - Support to Regional Centres (RCs)
- Eco Development Forces (EDF)

National Afforestation Programme (NAP) Scheme

Introduction and Objectives

It continues to be the flagship scheme of NAEB, in so much as it provides support, both in physical and capacity building terms, to the Forest Development Agencies (FDAs) which in turn are the main organ to move forward institutionalization of Joint Forest Management. The FDA has been conceived and established as a federation of Joint Forest Management Committees (JFMCs) at the Forest Division level to undertake holistic development in the forestry sector with people's participation. This is a paradigm shift from the earlier afforestation programmes wherein funds were routed through the State Governments. This decentralized two-tier institutional structure (FDA and JFMC) allows greater participation of the community, both in planning and implementation, to improve forests and livelihoods of the people living in and around forest areas. The village is reckoned as a unit of planning and implementation and all activities under the programme are conceptualized at the village level. The two-tier approach, apart from

building capacities at the grassroots level, significantly empowers the local people to participate in the decision making process. Under Entry Point Activities, community assets are created with a 'care and share' concept. The objectives of the scheme are: -

- Protection, and conservation of natural resources through active involvement of the people.
- Checking land degradation, deforestation and loss of biodiversity
- Ecological restoration and environmental conservation and eco-development
- Evolving village level people's organization which can manage the natural resources in and around villages in a sustainable manner
- Fulfillment of the broader objectives of productivity, equity, and sustainability for the general good of the people.
- Improve quality of life and self-sustenance aspect of people living in and around forest areas
- Capability endowment and skill enhancement for improving employability of the rural people.

Progress of Activities Undertaken

- Seven hundred forty three FDAs have been operationalised so far, since the launch of the FDA mechanism in 2000-01, at a cost of Rs. 1,920.69 crores to treat a total area of 12.31 lakh ha. (as on 19.11.2007). Bamboo plantation, medicinal plants and biofuel have been given adequate focus under NAP during the Tenth Plan period. Rehabilitation of shifting cultivation lands have been given specific focus under the programme, and so far 25 jhum projects have been sanctioned in NE States and in Orissa.
- As on 19.11.2007, Rs. 193.23 crore was released to FDA's during the year 2007-08 for implementation of National Afforestation Programme. (NAP)
- Year-wise progress of National Afforestation Programme in the Tenth Five Year Plan and during the current year, is given in Table-12. The NAP Scheme is being implemented through two-tier decentralized mechanism of Forest Development Agency (FDA) at Forest Division Level and Joint Forest Management Committees (JFMCs) at the village level. Statewise status of FDA projects is given in Table-13.

Table-12. Year-wise progress of National Afforestation Programme in the Tenth Five Year Plan and during the year

Year-wise progress of National Afforestation Programme (2002-03 till date)				
Year	No. of new FDA projects approved	No. of JFMCs involved**	Project Area approved(ha.) *	Release (Rs. crores)
2002-03	237	8197	404799	151.26
2003-04	231	7902	282536	207.98
2004-05	105	3404	106743	233.00
2005-06	94	2382	54432	248.12
2006-07	15	494	6617	292.75
2007-08 (as on 19.11.07)	14	431	305344	193.23

* Revised area

** Revised Number of JFMCs

Table-13. State-wise Status of FDA Projects (as on 19.11.2007)

Sl.No.	Name of State/Union Territory	No. of FDA Projects/ Proposals sanctioned**	Total project cost (in Rs. crores)	Area (in ha.)
1	Andhra Pradesh	33	90.64	50466
2	Chhattisgarh	32	123.31	74141
3	Gujarat	21	99.63	57260
4	Haryana	18	64.65	26590
5	Himachal Pradesh	30	60.04	39270
6	Jammu & Kashmir	31	85.57	49649
7	Karnataka	45	133.62	84300
8	Madhya Pradesh	51	127.45	93872
9	Maharashtra	45	125.28	77175
10	Orissa	41	87.22	78326
11	Punjab	14	24.56	10585
12	Rajasthan	33	40.51	28990
13	Tamil Nadu	32	97.43	52267
14	Uttar Pradesh	58	131.05	92356
15	Uttarakhand	38	70.83	55087
16	Goa	3	2.39	1250
17	Jharkhand	32	87.39	65925
18	Bihar	10	27.37	21530
19	Kerala	24	53.79	22392
20	West Bengal	20	49.03	29141
	Total (Other States)	611	1581.76	1010572
21	Arunachal Pradesh	22	30.81	23522
22	Assam	30	45.51	38485
23	Manipur	14	46.66	30724
24	Nagaland	18	46.97	32968
25	Sikkim	7	45.11	20138
26	Tripura	13	29.16	25855
27	Mizoram	21	77.74	37120
28	Meghalaya	7	16.97	12155
	Total (NE States)	132	338.92	220967
	GRAND TOTAL	743	1920.69	1231539

** For the purpose of calculation, the new project of Eleventh Plan in an FDA has been treated as continuation of the Tenth Plan project in that area, not as a new and additional project.

New Initiatives

A number of initiatives have been taken by the Ministry to expedite the implementation of the scheme as well to improve the qualitative aspects of implementation. These include

- Electronic transfer of funds from Government of India to the FDAs to cut-down the delays
- Stepping-up monitoring and evaluation of the FDA projects by activation of State-

level Coordination Committees for NAP, increased field visit by officers, and expeditious commissioning by the States of first independent concurrent evaluation of FDA projects

- Increased number of training programmes for the frontline staff and JFM committee members
- Organising district-level inter departmental linkage workshops for promoting linkage of NAP with other developmental programmes for enhancing the sustainability of JFM
- Initiating seven pilot projects for establishing forest-based microenterprises, which will provide experiential learning for scaling-up such activity with a view to consolidate the JFM during the Eleventh Plan.
- Comprehensive amendment in Guidelines of NAP scheme are proposed to promote further decentralization by delegating more responsibilities to State Forest Departments with respect to processing of the FDA project proposals, greater organic linkage of JFMCs with Gram Panchayats, increased security of the elected members of JFMCs through longer tenure of JFMC presidency, capacity building of particular frontline staff of Forest Department and JFMC members especially with regard to local management and administrative responsibilities.

National Afforestation and Eco-development Board (NAEB) Scheme

Introduction and Objectives

- Increasing forest and tree cover (FTC) of the country to one-third of its geographical area, as envisaged in the National Forest Policy 1998, is essential for economic and ecological security of the country. Achieving the target of one-third of forest and tree cover, however,

stipulates fourfold increase in current annual tree planting mostly on lands outside recorded forest area. Tree plantation on lands outside Reference Forest Area (RFA), however, may be encouraged if returns to the growers are increased. This is largely attributed to the low volume and poor quality yield of tree product, mainly for the reason that the tree growers do not have easy access to quality planting material (QPM) due to both paucity of QPM production facilities in the rural areas of the country and low awareness about gains of using QPM.

- Recognizing these constraints, it was decided to restructure the existing Grants-in-Aid Scheme, providing assistance to voluntary agencies for tree planting, by incorporating the additional restructured Scheme named "Grants in aid for Greening India" broadly focuses on three aspects of the tree planting. These are:-
 - Raising mass awareness about QPM and tree planting
 - Enhancing the capacity for QPM production
 - Tree planting with people's participation

Progress of Activities Undertaken

- Financial assistance to the tune of Rs 2.58 crores was released during the current financial year 2007-08 (upto 27.12.2007) to 58 implementing agencies out of which 56 are voluntary agencies for tree plantation and two State Forest Departments for setting up of High Tech Nursery.
- Number of projects for tree planting supported under the previous Grants-in-aid to Voluntary Agencies scheme and the present Grants in-aid for Greening India Scheme during 2007-08 (upto 27.12.07) are as follows

Year	No. of tree planting projects supported*	Expenditure(Rs. Cr.)**
2002-03	141	4.00
2003-04	251	8.49
2004-05	266	8.97
2005-06	157	10.49
2006-07	55	2.13
2007-08	58	2.58

* Includes continuing projects, sanctioned in previous years also.

** Includes expenditure on grants given for Awareness Generation, Hi-Tech Nursery and Plantation Programme components of the Grants-in-Aid for Greening India Scheme.

– State-wise Status of the Scheme is given in Table-14.

Table-14. Progress of the Grants-In-Aid for Greening India Scheme during the year 2007-08				
Sl. No.	State	No. of tree planting projects supported*	No. of High Tech Central Nurseries supported/Awareness Generation Programme	Amount (Rs. lakhs)**
Tree Plantation				
1	Andhra Pradesh	2		5.01
2	Gujarat	2		16.93
3	Himachal Pradesh	2		2.5
4	Jammu & Kashmir	1		6.9
5	Kerala	3		7.98
6	Madhya Pradesh	3		12.61
7	Orissa	9		55.07
8	Rajasthan	2		9.41
9	Uttar Pradesh	6		29.39
10	Uttarakhand	8		33.33
11	West Bengal	2		8.52
	Sub Total	40		187.65
High-Tech & Awareness				
1	Gujarat		1	8
2	Karnataka		1	8
	Sub Total		2	16
	Grand Total (ROI)			203.65
North-East				
Tree Plantation				
1	Arunachal Pradesh	1		3.13
2	Assam	1		3.13
3	Manipur	11		39.55
4	Nagaland	3		9.4
	Sub Total (NE)	16		55.21
	Grand Total (NE)	16		55.21

* Includes continuing projects, sanctioned in previous years also.

** Includes expenditure on grants given for Awareness Generation, Nursery and Tree Planting components of the Grants in Aid for Greening India Scheme

Implementing organizations

The scheme is being implemented by Government Departments, Urban Local Bodies, Panchayati Raj Institutions, Public Sector Undertakings, Autonomous Bodies, Registered Societies, Non-Profit Organizations, Cooperatives, Charitable Trusts, Voluntary Agencies, Registered Schools, Colleges, Universities and State Forest Departments.

Eco-Development Forces (EDF) Scheme

Introduction and Objectives

- Eco-Development Forces was established in 1980s as a scheme being implemented through Ministry of Defence (MOD) for ecological restoration of terrains, rendered difficult either due to severe degradation or remote location or difficult law and order situation. The scheme of Eco-Development Force is based on twin objectives of ecological regeneration in difficult areas, and promotion of meaningful employment to ex-servicemen.
- Under this scheme, the establishment and operational expenditure on the Eco Task Force (ETF) Battalions raised by Ministry of Defence is reimbursed by Ministry of Environment and Forests while the inputs like sapling, fencing, etc. as also the professional and managerial guidance is provided by the State Forest Departments. In ETF battalions, the MOD deploys its ex-servicemen, preferably from within the area of operation, whereas the nuclear core of the force is constituted of regular servicemen. Some of the ETF Battalions have undertaken successful eco-

restoration of highly degraded sites, for example the limestone mining areas in the Mussoorie Hills.

Progress of Activities Undertaken

- Four ETF Battalions are being supported under the EDF Scheme. These battalions are located at Pithoragarh, Samba, Bikaner, and Dehradun. Two new battalions have been approved in Assam.
- The progress of ETF Battalions during the year is given in Table-15.

Table-15. The progress of ETF Battalions

Battalion	Location	New Plantation during the year	Maintenance of old Plantation
127	Uttarakhand	400	1200
128	Rajasthan	600	900
129	J&K	50	160
130	Uttarakhand	500	571

- All ETF Battalions have undertaken works like raising nursery, and plantation and protection measures to protect the plantation area. They have also constructed stone dams as also other soil and moisture conservation works. Besides, the battalions also take up maintenance of old plantations.
- Closer monitoring of physical progress and coordination between the Ministry, Territorial Army and State Governments has witnessed for timely availability of land and other resources for planting, redeployment/ disembodiment of surplus ETF personnel in order to cut down costs, and further improvement in the quality of work.

Implementing Organisation

Directorate of Territorial Army, Ministry of Defence, New Delhi.

New Initiatives

Based on the request of the Government of Assam, the Standing Finance Committee of the Ministry has approved the proposal to

raise two new ETF battalions in the State. The TA Directorate, Ministry of Defence and the Ministry of Environment and Forests have also jointly drafted guidelines for enhancing cost-effectiveness and people's participation in ETFs. As mentioned above, initiatives have also been taken to enhance interaction between the State Forest Departments and the TA Battalions to ensure timely earmarking and transfer of adequate lands and funds for tree plantation by State Governments to ETF Battalions.

List of autonomous, attached and regional offices of NAEB

Introduction and Objective

The Board has seven Regional Centres (Annexure-II B) located in various universities/national level institutions.

These Centres help NAEB in promoting extension of replicable technologies and for dissemination of research findings. They provide technical and extension support to the State Forest Departments in effective implementation of regeneration of degraded forests and adjoining lands with people's participation and also act as a forum for the exchange of ideas and experiences amongst the States of the region as well as across the regions. In addition, these Centres carry out problem-specific studies as well as evaluation of NAEB's programmes in the field and organize training programmes and workshops focusing on priorities set out by NAEB.

New initiatives of Regional Centres

The work programmes of the Regional Centres are being formulated to address the emerging needs of promoting sustainability of Joint Forest Management beyond the NAP scheme funding. The new areas include training for forest-based micro-enterprises, development of Joint Forest Management Committees- Self Help Groups, district-level inter-departmental linkage workshops for synergy of JFM with

other schemes of Government, and studies on improved silvicultural practices for management of non-timber forest products. Seven pilot projects on capacity building for forest based micro-enterprise have been initiated by the Regional Centres across the country. It is expected that based on the experience of these pilot projects, the forest-based microenterprise could be scaled-up as a means of promoting sustainable livelihoods of the forest-fringe communities.


UN Convention to Combat Desertification (UNCCD)

Introduction and Objective

The objective of the UN Convention to Combat Desertification (UNCCD) is to combat desertification, and to mitigate the effects of draught in countries experiencing the same, through effective actions at all levels. The Ministry of Environment and Forests is the nodal Ministry for coordinating action under the Convention. The Global Environment Facility (GEF) has been identified as a financial mechanism of the UNCCD.

Progress of Activities Undertaken

- A pilot project was taken up to finalise the indicators of desertification and also to evolve and standardize national level classification and methodology for desertification land Degradation Status Map (DSM) for the entire country has been prepared using Indian Remote Sensing (IRS) AWIFS images on 1:500,000 scale. This map is useful in planning for activities to reverse and arrest land degradation, and also for periodic monitoring. The map may be used as a base line for monitoring the impacts of various anthropogenic and natural climatic factors, including due to climate change, on land degradation, as well as the progress made in reversing land deradation and combating desertification.
- India participated in the 5th Meeting of



the Committee to Review Implementation of the Convention (CRIC) of UNCCD held at Buenos Aires, Argentina from 12-21 March, 2007. The main focus of the review was the implementation of the UNCCD in affected Country Parties in regions other than Africa. The meeting also reviewed the progress of celebration of International Year of Deserts and Desertification and the draft for Ten Year Strategic Plan for the UNCCD.

- India participated in the 8th Meeting of Conference of Parties (COP) to UNCCD from 3-14 September, 2007 at Madrid, Spain. The COP approved the Ten Year Strategic Plan (2008-2018) of UNCCD. The new Plan restructures the working of the Committee on Science & Technology (CST), the Committee for the Review of Implementation of the Convention (CRIC) and the Global Mechanism in terms of priorities and reporting procedures.
- In preparation for the 16th Session of Commission on Sustainable Development (CSD), which focuses on drought, desertification, agriculture and rural development, India participated in the Regional Implementation Mechanism meeting for Asia-Pacific region for CSD on 26-28 November, 2007 at Jakarta, Indonesia. A common strategy for Asia Pacific Region relating to the progress on the thematic issues and challenges therein were deliberated in the meeting.
- The Global Environmental Facility Council in its November 2007 meeting, approved the umbrella Project Information Document (PIF) for Sustainable Land Management Project in India totalling USD 30 million under RAF-4.