Government of India
and
United Nations Development Programme

Global Environment Facility

PROJECT DOCUMENT

Mainstreaming Conservation and Sustainable Use of Medicinal Plant Diversity in Three Indian States

GEF Med Plant–00049929

February 2008

NEW DELHI

Country: India

UNDAF Outcome(s): Communities are aware of their vulnerabilities, and adequately prepared to manage (and reduce) disaster and environmental related risks

Expected Outcome(s): Progress towards meeting national commitment under multilateral environment agreements

Expected Output(s): Capacities built and pro-poor initiatives supported at national and local levels to directly address environmental issues

Implementing partner: Ministry of Environment and Forests

Responsible Parties: Foundation for Revitalization of Local Health Traditions, National Medicinal Plants Board and State Medicinal Plants Boards of Arunachal Pradesh, Chhattisgarh and Uttaranchal

Narrative

India's natural forests are home to about 8000 medicinal plants that form the primary source of health care for 60-80% of the country's population, particularly the rural poor. However, efforts aimed at equitable use of these resources are largely ineffective and harvesting remains uncontrolled.

This project aims to mainstream the long-term conservation, sustainable and equitable use of India's medicinal plant diversity into forest management policy and practice at the national, state and local level in three Indian states: Arunachal Pradesh in North-East India, Chhattisgarh in Central India and Uttaranchal in North-west India. These states provide a broad range of ecological conditions, and hence medicinal plant diversity as well as a range of institutional arrangements relating to forest management.

Programme Period: 2008-2012
Programme Component: Energy and Environment
Project Title: Mainstreaming Conservation and Sustainable Use of Medicinal Plant Diversity in Three Indian States
Project ID: 00042968 -Proj-49929
Project Duration: 5 years
Management Arrangement: National Implementation

Total Budget	:USD	11,414,121
Allocated Resources:		
• Government	:USD	6,448,121
• Regular –GEF	:USD	4,935,000
• Other	:USD	31,000
o Donor		_____
o Donor		_____
In kind contribution:		_____
Unfunded budget:		_____

Agreed by (Implementing Partner): Sudhir Mital, Jt. Secretary, GEF Operational Focal Point, Ministry of Environment and Forests
Date: 18th March 2008 Signature:

(SUDHIR MITAL)
Joint Secretary
Min of Env. & F
Paryavaran Bhawan
Lodhi Road, New Delhi

Agreed by: M. Prasad, Jt. Secretary, Department of Economic Affairs, Ministry of Finance
Date: Signature:

(एम० प्रसाद/M. PRASAD)
संयुक्त सचिव/Joint Secretary
वित्त मन्त्रालय/Min. of Finance
आर्थिक कार्य विभाग/Deptt. of Eco. Affairs
नई दिल्ली/New Delhi.

Agreed by (UNDP): Deirdre Boyd, Country Director, UNDP, India
Date: 02 APR 2008 Signature:

Deirdre Boyd
UNDP Country Director

Table of Contents

COMPONENT 1

A) PROJECT OVERVIEW:

Medicinal and aromatic plants (MAPs) are recognized as a major but increasingly threatened global resource. Vast majority of medicinal plants are harvested from the wild, particularly from the tropical and subtropical regions of the world. About 50,000 plant species are known to be used in traditional and modern systems of medicine across the world. In 1993, the Government of India (GoI) estimated that between 60-80% of India's population rely on medicinal plants for health care. Medicinal plants are particularly important to the rural poor, who are able to harvest these from the wild to meet their primary health care needs.

Ninety percent of India's medicinal plants diversity is estimated to be found in its diverse natural forest habitats. The vast majority of such forests are owned and managed by state or Union Territory (UT) governments, mainly by the respective state forest departments (SFDs), although there is increasing community participation in the management of such forests through initiatives like the Joint Forest Management (JFM) Programme. There are also forests owned by state revenue departments and, in a few areas, notably the north-east of India, there are also community-owned forests.

Despite the fact that most of India's medicinal plant stocks are found on government-owned land, harvesting is still largely uncontrolled and unmonitored. There is little systematic regulation or management of the commercial trade in MAPs by the government or self-regulation by traders and herbal medicine companies. In some parts of the country there are cooperative societies, particularly in tribal areas, which are meant to ensure a fair price to collectors amongst other things, but these are acknowledged to have been largely ineffective in meeting their stated objectives.

The commercial MAPs trade is also poorly understood. There are many links in the supply and demand chain between the collector and the end users of medicinal plant products. Thus, collectors rarely know what are the end products of the plants they collect, where these are retailed (and at what prices) or the end users. Equally herbal product retailers higher up the market chain and herbal product manufacturers rarely know the original source of their materials or the environmental impacts that their demands may be having.

This project seeks to achieve the long-term conservation and sustainable use of India's medicinal plant diversity, particularly of its globally significant species. The project will by mainstreaming conservation and sustainable use objectives into forest management policy and practice at the national, state and local level in three Indian states: Arunachal Pradesh in North-East India, Chhattisgarh in Central India and Uttaranchal in North-west India. Together, these states represent a broad complement of India's MAP diversity, including numerous globally significant species and populations.

COMPONENT 2: ANNUAL WORKPLAN AND BUDGET SHEET (FIRST YEAR):

Year 2008

EXPECTED CP OUTPUTS Enabling environment for mainstreaming conservation and sustainable use of Medicinal and Aromatic Plants (MAPs)									
Project Outputs that support CP outputs	**PLANNED ACTIVITIES**	**TIME FRAME**				**Responsible Party**	**PLANNED BUDGET**		
		1st Qrt	**2nd Qrt**	**3rd Qrt**	**4th Qrt**		**Source of Funds**	**Budget Description**	**Amount (USD)**
A national strategy for the conservation & sustainable use of MAPs	Revise national JFM guidelines towards conservation & sustainable use of MAPs	x	x	X	X	MoEF	GEF	71300 local consultant	34,202.00
	Develop legal mechanisms to protect Traditional Knowledge on harvesting, cultivation & use of MAPs	x	x	x	x	MoEF		72100 International consultant	19,659.00
	Identify MAPs suitable for cultivation & inclusion in afforestation & income generating programmes	x	x	x	X	FRLHT		71600 Travel	35,617.00
	Develop capacity of NMPB towards sustainable management and mainstreaming of MAPs	x	x	x	X	FRLHT		72100 Contractual services – companies	67,069.00
	Develop strategies and protocols developed for threat assessment and monitoring conservation status of MAPs	x	x	x	x	FRLHT		72300 Materials and Goods	10,055.00
	Develop course module on the conservation & sustainable use of MAPs developed for the Indian Forest Service curriculum		x	x	X	FRLHT		72500 Supplies	5916.00
								74200 Audio visual/ print production	9470.00
								74500 Miscellaneous expenses	36,343.00
Output 1: Sub-total									**218,331**

Revised forest management policies in three states	Develop Sustainable MAP use strategies		x	x	X	Forest Departments (FD) of three states	GEF	71300 local consultant	5,869.00
	Revise state forest policies that support sustainable use of MAPs		x	x	X	FD of three states		72100 International consultant	19,659.00
	Revise JFM orders and integrate to MAP conservation		x	x	X	FD of three states		71600 Travel	6,311.00
	Develop plans to strengthen capacities of State Medicinal Plant Boards			x	x	FD of three states		72100 Contractual services – companies	21,837.00
	Revise forest working plans to promote sustainable use and conservation of MAPs			x	X	FD of three states		72500 Supplies	2,504.00
	Develop baseline on status of medicinal plants for Monitoring and Evaluation	x	x	x		FD of three states		74200 Audio visual/ print production	3,415.00
								74500 Miscellaneous expenses	292.00
Output 2: Sub-total									**59,887**
Sustainable use of MAPs mainstreamed at local level into government and community forest management in three states	Demonstrate exsitu and insitu practices for conservation and management of MPA diversity and sustainable use		x	x	X	FD of three states		71300 local consultant	735.00
	Develop capacity of forest officials at the local level towards conservation and sustainable use of MAPs		x	x	X	FRLHT		72100 International consultant	16,634.00
	Initiate pilot sites for conservation of MAPs on community owned or managed lands		x	x	X	FD of three states		71600 Travel	1,955.00
	Strengthen the capacity of communities towards		x	x	X	FRLHT		72100 Contractual services – companies	1,555.00
								72500 Supplies	219.00

	conservation of MAPs							74500 Miscellaneous expenses	247.00
	Strengthen capacity of communities towards documenting traditional knowledge, harvesting techniques and protection of IPRs		x	x	X	FRLHT			
Output 3: Sub-total									**21,345**
Materials and methods developed for conservation and sustainable use of medicinal plants in replication states	Develop state level strategies for sustainable use of MAPs for replication states				x	NMPB		71300 local consultant 72100 International consultant	869.00 19,659.00
	Strengthen the Capacities of SMPBs in replication states				X	NMPB		71600 Travel	2,311.00
	Develop training modules				X	FRLHT		72100 Contractual services – companies	1,837.00
	Demonstrate in-situ and exsitu methods for conservation and sustainable use of MAPs through exchange visits				X	FD of replication states			
	Strengthen capacity conservation and management of state forest department officials in replication states				X	FRLHT		72500 Supplies 74500 Miscellaneous expenses	259.00 292.00
	Revise forest division working plans and guidelines for MAP conservation and management				X	FD of replication states			
Output 3: Sub-total 4									**25,227**
Total									**324,790**

COMPONENT 3: MANAGEMENT ARRANGEMENT

3.1 Implementation Arrangements – Institutional Mechanisms and Monitoring:

3.1.1 Implementing Partner: The project will be nationally implemented by the Ministry of Environment and Forests (MoEF), GoI who will assume the overall responsibility for the achievement of the project outcomes. The MoEF's responsibility will be one of facilitating the required level of inter-sectoral coordination with other relevant ministries and departments of GoI especially the National Medicinal Plants Board and also ensuring the required level of participation from the three state governments in which the project is to be implemented and also from the four state governments in which replication is to be done. More specifically, MoEF's project finance and management responsibilities will include: 1) ensuring that the committed co-financing is made available on a timely basis for project implementation by all concerned; 2) ensuring that funds are available for the four state governments for carrying out the replication activities; 3) coordinating the financing from UNDP and GEF with that from other sources; 4) assisting in preparing Terms of Reference for contractors and required tender documentation; and 5) chairing the Project Steering Committee (PSC). The administration of project funds will be the joint responsibility of the MoEF and the UNDP.

The MoEF will also sign a budgeted Annual Work Plan with UNDP on an annual basis, as per UNDP rules and regulations.

3.1.2 Responsible Parties:

a) National Medicinal Plants Board: The Board is under the Ministry of Health and will be working in association with other agencies to implement the project.

b) Foundation for Revitalization of Local Health Traditions: The Foundation is a non-profit organization registered as a society under the societies registration act. FRLHT has been working on the traditional health practices and mainstreaming them through state and national policies. FRLHT will be coordinating the work and provide technical advise to all states and the NMPB.

c) State Medicinal Plants Boards of Arunachal Pradesh, Chhattisgarh and Uttaranchal: State Medicinal plant boards will be implementing the project in their respective states and coordinate with the state forest Departments.

3.1.3 Project Steering Committee:
Project Steering Committee (PSC) will be responsible for ensuring the project implementation with agreed project design and consistent with national and state development policies. The PSC will meet at least once a year and will provide required oversight to this project and also ensure the overall co-ordination of the programme. The PSC will be chaired by the Additional Secretary, MoEF, GoI. Its members include the concerned Joint Secretary, MoEF, the concerned Joint Secretaries from MoRD and the Department of AYUSH, GoI, the concerned Directors from MoEF and the Ministry of Rural Development (MoRD); the Principal Secretary or the Principal Chief Conservator of Forests of the Department of Environment & Forests of the three states; the CEO or a representative of the National Medicinal Plants Board (NMPB); the Director and/or a representative of the Foundation for the Revitalisation of Local Health Traditions (FRLHT); two representatives of UNDP; and two non government representatives nominated by the government, one from the private sector and one from the field. The meetings of the PSC will be convened by the NPD.
The Project Steering Committee will carry out the following functions:

- Ensure that the project goals and objectives are achieved in a defined timeframe;
- Review the project progress and suggest implementation strategies periodically;
- Review the project expenditures against activities and outcomes; and

- Endorse Annual and Quarterly Work Plans

3.1.4 National Project Director:

The concerned Joint Secretary, MoEF, will be the National Project Director (NPD). The NPD will coordinate project execution on behalf of GoI and ensure its proper implementation.

1. Project implementation will be overseen by a **Project Steering Committee** (PSC),:

2. A **Project Management Unit** (PMU) will the administrative hub for the project located in the MoEF. The PMU with a full-time Project Manager supported by one UNDP programme officer, one project administrative assistant and one accounts officer will assist the PSC in the implementation of the project. The project manager will be in charge of overseeing the day-to-day project implementation and management of project activities, organizing and overseeing national and international consultant input, and overseeing monitoring and evaluation and ensuring that the project is on track. One of the most important responsibilities of the project manager will be working effectively with members of the PSC and State level PSCs to ensure that project-inspired activities proceed on schedule within each partner Ministry and non-governmental organization. The Project Manager is also responsible for the preparation and timely submission of the Annual Workplan (AWP) and the quarterly and annual progress and financial reports to UNDP. The Project Manager will maintain a log of the main issues (Issues Log) that may require decisions from the NPD and the PSC. The Project Manager will also maintain a log of risks (Risk Log) that may affect the project's progress towards the achievement of outcomes. The PMU will facilitate national and state level implementation of the project. The PMU will also work closely with state-level Project Coordinators and their teams in the initial stages until these are phased out. The PMU will also work closely with the Senior Technical Advisor.

3. Project activities will be implemented in the states in partnerships with state forest departments (SFDs), non government agencies, civil society and private sector. The lead agency for the implementation of this project in the three states will be the respective SFDs with technical inputs from FRLHT, the lead technical agency for the project along with inputs from other technical agencies as relevant under the overall guidance and supervision of the Project Manager. Additional technical guidance will be provided to FRLHT and Project Manager through periodic inputs from a **Senior Technical Advisor and a Technical Advisory Group** (see below). For the sites that are managed by local communities, local non government agencies will take a lead in project implementation again with technical guidance from FRLHT and other technical agencies which will play a major role in capacity development at the state and local level.

4. The successful implementation of this project requires strong technical leadership and a high level of coordination due to its inter-sectoral nature and its implementation at the national level and in the three project states and four replication states. While FRLHT is the lead technical agency, other technical agencies will be involved with project implementation. A small **Technical Advisory Group** (TAG) will also be constituted to advise the PSC, the SPSC and the PMU on the technical aspects of the project. The TAG will comprise of national members who will continue to provide their expertise even after the project is operationally closed to ensure institutionalising of TAG as an advisory body for PSC and SPSC and international members selected for a short term and on a needs basis. The selection of consultants will be carried out by the PSC in close consultation with UNDP-India. Criteria for selecting TAG members will include expertise, experience, project requirements and the ability to devote time to advise the project. Additionally, a **Senior Technical Advisor** (STA) with significant international expertise will be appointed to strengthen technical leadership and coordination by providing independent guidance to FRLHT's technical leadership. The STA will be selected by the PSC in close consultation with UNDP-India. The STA will be an independent expert, who will work intensively with the project during the first year to put in place systems and processes for effective project implementation, monitoring and evaluation, and

adaptive management. After the first year, the STA will remain closely associated with the project for the rest of the project period to provide expert guidance on a basis to be determined at the end of the first year. The Project Management Unit (PMU) will support the STA.

State level committees

5. **State-level project steering committee (SPSC)** will be established in each state with representation from all key state departments to direct and oversee project implementation and management at the state level. Each SPSC will be chaired by the Principal Chief Conservator of Forests (PCCF) and operationally headed by the designated nodal forest officer for Medicinal Plants in the state. Other members will include representatives of the relevant state departments. The Principal Chief Conservator of Forests will be responsible for effective and timely project implementation.

6. **State Project Management Unit (SPMU)** will be established in each of the three states to assist the SPSC in the implementation of the project. The SPMU will be headed by the designated nodal officer and supported by two officers. They will work closely with the SPSCs and the Local Management Groups (LMGs) in order to oversee that the project-inspired activities proceed on schedule and facilitate effective state level implementation of the project. At each of the sites, the project will be implemented by a **Local Management Group (LMG).** The structure and function of the LMG will be decided in the inception phase.

7. FRLHT along with other identified technical agencies will facilitate the technical orientation and capacity building of the implementing partners in the three states. The technical agencies will work closely with the STA, TAG, PMU and state-level project coordinators amongst other things: develop a strong M&E plan including good baselines, indicators and clear targets; develop a strategy for phased project implementation; appraise the implementation proposals received to ensure that they are in line with the objectives and operational elements of the project, and assist in the periodic evaluation of quality and pace of technical progress.

8. Draft ToRs have been developed for all project implementing structures and these will be reviewed and further developed during the Project Inception Phase. These ToRs will guide the project implementation.

3.1.5 Project Assurance:

UNDP's primary responsibility under this partnership will be to support the Project Assurance function which provides an independent feedback (through periodic monitoring, assessment and evaluation) on how appropriate project milestones are managed and completed. Financial transactions, reporting and auditing will be carried out in compliance with national regulations and UNDP rules and procedures. The UNDP Country Office will carry out its day-to-day management and monitoring functions through an assigned Programme Officer in New Delhi, who will be also responsible for the day-to-day coordination with the project team.

3.1.6 Financial management:

The UNDP Country Office will support project implementation by being responsible for maintaining project budget and project expenditures, recruiting and contracting project personnel and consultant services, subcontracting, assisting with equipment procurement, and providing other assistance upon request of the MoEF. Project implementation arrangements will streamline and decentralize UNDP's normal service delivery procedures in the interest of cost-effective and time-efficient project management. Based on the approved Annual Work Plan, UNDP will release funds directly to the local responsible parties on a quarterly basis. Using the UNDP Financial Report format, the IAs will report expenditure on a quarterly basis together with a request for advance required for the next quarter. These will be consolidated by the Project Manager on a quarterly basis through the standard Fund Authorization and Certificate of Expenditures (FACE) Report. The funds will be released to the Responsible Parties at the signed request and approval of the NPD, also through the standard

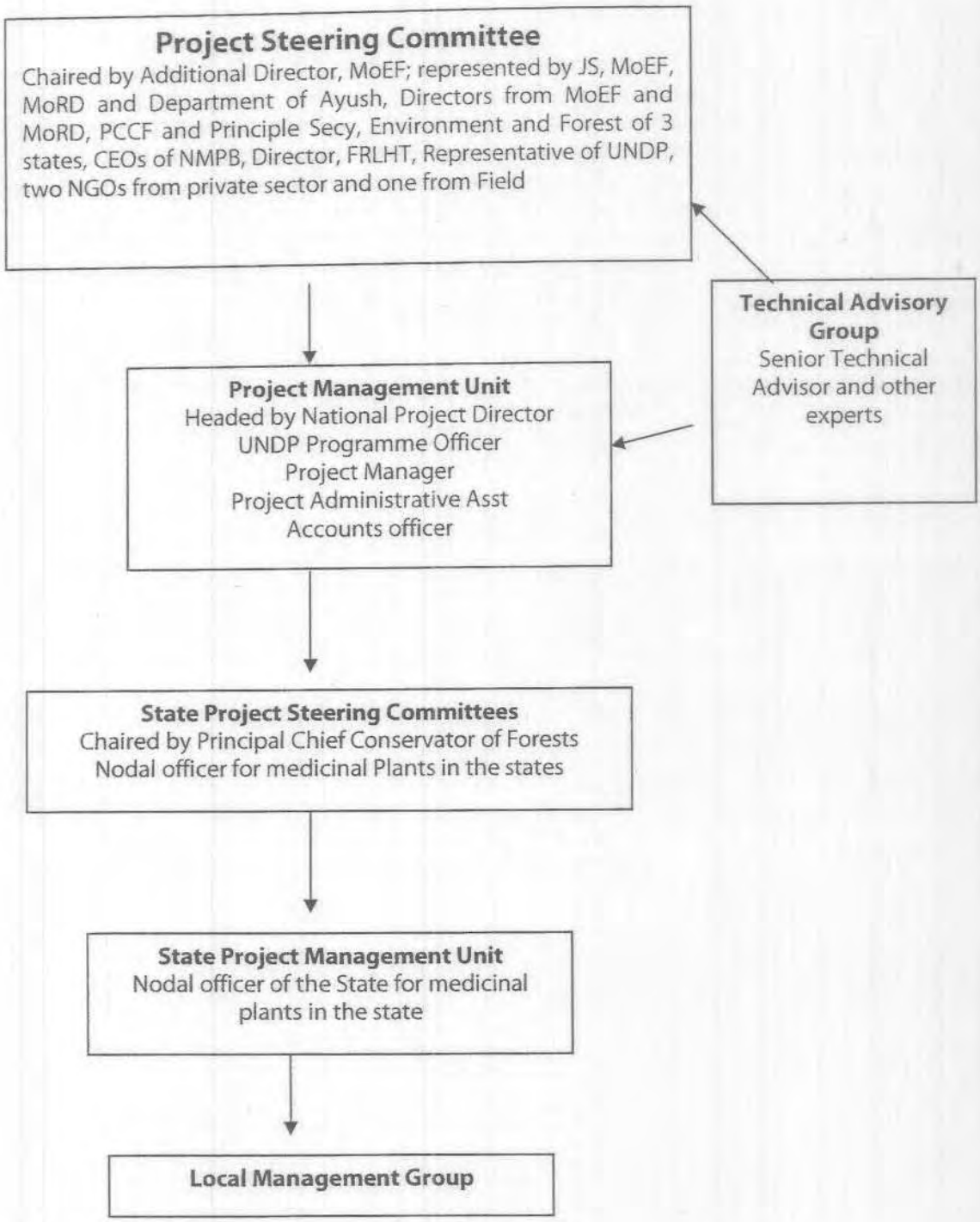
FACE format. Unspent funds from the approved AWPs will be reviewed in the early part of the last quarter of the calendar year and funds reallocated accordingly. The Combined Delivery Report prepared by UNDP on a quarterly basis as well as the annual year-end CDR will be verified and certified by the NPD. The UNDP Country Office will also monitor project implementation and achievement of the project outputs and ensure the proper use of UNDP/GEF funds.

3.1.7 Audit:

The project shall be subject to audit in accordance with UNDP procedures and as per the annual audit plan drawn up in consultation with DEA. The project shall be informed of the audit requirements by January of the following year. The audit covering annual calendar year expenditure will focus on the following parameters – (a) financial accounting, documenting and reporting; (b) monitoring, valuation and reporting; (c) use and control of non-extendable reporting; (d) UNDP Country Office support. In line with the UN Audit Board requirements for submitting the final audit reports by 30 April, the auditors will carry out field visits during February/March. Detailed instructions on audit will be circulated by UNDP separately and on signature.

Cost recovery for implementation support services by UNDP will be charged as per UNDP rules and regulations. The details of UNDP's support services will be outlined while finalizing the annual workplan and budget for each year.

3.1.8 Flow chart of management structure



COMPONENT 4: MONITORING AND EVALUATION

The key M&E activities, responsible parties, budget and timeframe are given below.

INDICATIVE MONITORING AND EVALUATION WORK PLAN AND CORRESPONDING BUDGET

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team Staff time*	Time frame
Inception Workshop	▪ Project Manager, ▪ NPD ▪ UNDP	25,000	Within first six months of project start up
Inception Report	▪ Project Team ▪ UNDP CO	None	Finalised within one month of the IW
Measurement of Means of Verification for Project Purpose Indicators	▪ Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members	To be finalized in Inception Phase and Workshop. Indicative cost 100,000	Start, mid and end of project
Measurement of Means of Verification for Project Progress and Performance (measured on an annual basis)	▪ Oversight by STA and Project Manager ▪ Measurements by regional field officers and local IAs	To be determined as part of the Annual Work Plan's preparation. Indicative cost 200,000	Annually prior to APR/PIR and to the definition of annual work plans
APR and PIR	▪ Project Team ▪ UNDP CO ▪ UNDP-GEF RCU	None	Annually
TPR and TPR report	▪ Government Counterparts ▪ UNDP CO ▪ Project team	5,000	Every year, upon receipt of APR/ PIR
Steering Committee Meetings	▪ Project Manager ▪ UNDP CO	5,000	Following Project IW and subsequently at least once a year
Periodic status reports	▪ Project team	5,000	To be determined by Project team and UNDP CO during Inception Phase and agreed at IW

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team Staff time*	Time frame
Technical reports	▪ Project team ▪ Hired consultants as needed	15,000	To be determined by Project Team and UNDP-CO
Mid-term External Evaluation	▪ Project team ▪ UNDP- CO ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e. evaluation team)	40,000	At the mid-point of project implementation.
Final External Evaluation	▪ Project team, ▪ UNDP-CO ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e. evaluation team)	50,000	At the end of project implementation
Terminal Report	▪ Project team ▪ UNDP-CO ▪ External Consultant	None	At least one month before the end of the project
Lessons learned	▪ Project team ▪ UNDP-GEF Regional Coordinating Unit (suggested formats for documenting best practices, etc)	21,000 (average 3,000 per year)	Yearly
Audit	▪ UNDP-CO ▪ Project team	7,000 (average $1000 per year)	Yearly
Visits to field sites (UNDP staff travel costs to be charged to IA fees)	▪ UNDP CO ▪ Government representatives ▪ UNDP-GEF RTA	20,000 (average one visit per year)	Yearly
TOTAL INDICATIVE COST *Excluding project team staff time and UNDP staff and travel expenses*		US$ 493,000[1]	

LOGICAL FRAMEWORK AND OBJECTIVELY VERIFIABLE IMPACT INDICATORS:

The Logical Framework Matrix provides *performance* and *impact* indicators for project implementation along with their corresponding *means of verification*. These will form the basis on which the project's Monitoring and Evaluation system will be built.

Project Strategy	**Objectively verifiable indicators**				
Goal: To conserve India's medicinal plant diversity					
Objective	**Indicator**[2]	**Baseline**	**Target**	**Sources of verification**	**Risks and Assumptions**
Objective: To mainstream conservation and sustainable use of medicinal plants including GSMP into the productive forest sector of three Indian states: Arunachal Pradesh, Chhattisgarh and Uttaranchal	Forest area actively managed for sustainable use of MAPs and maintenance of MAP diversity	0 ha. Criteria for what constitutes 'active management to favor sustainable use & maintenance of MAP diversity to be determined and agreed with key stakeholders such as State Forest Departments in Yr 1	c. 32,000 ha of forest in 21 MPCA/FGB complexes primarily managed for sustainable use & conservation of MAPs. A further 6,000,000 ha under management that favours maintenance of MAP diversity, including GSMPs	Targeted biological and management surveys. Field visits, project M&E reports, forest management records	Significant global and national benefits secured by focusing mainly on supply side of MAPs production
	Natural canopy cover as a measure of the overall ecological status of forests under active management for maintenance of MAP diversity.	Bi-annual district wise data on canopy cover status is available from Forest Survey of India	Canopy cover maintained or increased as appropriate in each project site. Exact target will be set after baselines are updated for the forests in which the 21 FGBs/MPCAs are situated.	Forest Survey of India Biennial Reports National Remotes Sensing Agency data Sample monitoring plots in different habitat types for FGBs	Continued national and state governmen commitment t achieving the projec objective, particularl within MoEF, NMPB SMPBs, SFDs.
	Population status of selected MAP species including GSMP within FGB/MPCA complexes	Qualitative population status indicators for over 50 species known. For trees and shrubs density per unit area, data are not available, and will be	Monitoring protocols with species specific plots including appropriate types of ecological indicators to be established in Yr 1.	Ecological survey reports on abundance, density, distribution, germination and regeneration rates of target species during	MAP collectors and othe forest user/owners fron local communitie continue to suppor project objectives

[2] Indicators are further specified and quantified in the 'Target' column along with timelines.

		monitored. Similarly, for herbs, areas of occurrence and qualitative assessment of population status also will be monitored.	Population stability of selected species maintained or improved over the years	Yrs 1 & 3, 5 and end of project	MAP distribution and status may be affected by events such a extreme weathe conditions or othe perturbations, such a forest fires, increase i herbivores that consum particularly species, etc.
	Population status of selected MAP including GSMP species in wider exploited forests surrounding FGB/MPCA complexes	Baseline as above.	Available generic protocols will be adapted to develop species specific protocols with appropriate types of ecological indicators for specific species established in Yr 1. Population stability of selected species maintained or improved as measured against baseline	Ecological survey reports Yrs 1 & 3, 5 and end of project	
	Number of MAP species including GSMP being harvested sustainably in demonstration sites	Sites where harvesting of GSMP populations takes place are known. Harvesting practices for some of the highly traded plants along with general impacts are broadly known, but comprehensive assessments are not available. Identification and definition of indicators of 'sustainable harvesting' & monitoring protocols to be defined in year 1	Sustainable harvesting of 5 heavily exploited GSMPs in place by end of project. Monitoring protocols developed for monitoring harvesting and being used annually	Ecological & social survey reports for baseline, mid and end of project and annual monitoring records as well as annual detailed assessment of impacts on regeneration levels, biomass levels, flowering and fruiting intensities of the 5 GSMP	
	Increase in area under different MAP species cultivated by government programmes	Isolated examples of cultivation over limited area	At least 5000 ha of cultivation under different MAP species under private, common and marginal or degraded lands owned by various Govt Depts such as Forests, and private	Government records such as agriculture, revenue, NMPB and forest departments.	

			owners.		
	Increase in number of MAP species used in afforestation / cultivation programmes	10% of species are known to be cultivated sporadically in the state.	Based on the life history strategies of each species and habit, an additional 5 – 7 highly marketed species will be brought under cultivation. These may include herbacious rhizomatous species and species amenable for asexual propagation	Government records	
Outcome 1: An enabling environment at the national level for mainstreaming the conservation and sustainable use of MAPs into forest management policies and practices	National forest policy revised to favor sustainable use & conservation of MAPs	No specific focus on MAPs in national forest policy Eg JFM Guidelines do not address sustainable use or conservation of MAPs	Revised national JFM guidelines with stronger focus on conservation of MAPs	The revised JFM guidelines	Key governmen stakeholders at nationa and state level ar committed t intersectoral dialogu and action to brin about required cross cutting changes in fores policy and practice an have full backing fo doing so at highes political levels
	Strengthened capacity within NMPB to fulfill their mandate	Limited technical and institutional capacity to fulfil key parts of its mandate such as assessing supply of MAPs, actively managing supply and demand and particularly for intersectoral national coordination	Capacity needs assessment of NMPB in inception phase. Targeted capacity development of key staff based on results of capacity assessment in Yrs 2 & 3. Mechanisms for assessing supply and demand of MAPs developed and adopted by NMPB by Yr 5. Mechanisms for intersectoral coordination developed and functioning effectively by Yr 3	Capacity assessment reports Number and content of targeted trainings Number and role of trained officers NMPB reports, project reports and records Minutes of national intersectoral meetings	Other governmen departments hav sufficient interest i working with NMPB
	Greater intersectoral cooperation at national level to achieve sustainable use and conservation of MAPs	No formal intersectoral cooperation in relation to MAPs to date. However, State and Central agencies involved with medicinal plants issues have been identified and committed themselves to provide their expertise	An intersectoral technical coordination committee established and functioning in each of the project states by end of Yr 2 A National Strategy for the Sustainable Use & Conservation of MAPs signed off by at least 3 central ministries including	Reports and minutes of Technical coordination committee meetings. Reports of different ministries/government departments The endorsed strategy	

		for coordinating project components	MoEF and MoH by Yr 4 End of project policy and sector review	is published Policy & sectoral review concluded with key revisions identified.	
	Strengthened and new legal mechanisms to protect community interests over MAPs, including IPR	Existing forest laws do not relate to medicinal plants.	Appropriate legal mechanisms and measures that build on existing mechanisms identified and developed in years 3 & 4 and adopted by end of project	New regulations or laws Amendments to existing laws & regulations	There is sufficien political will at state an national level ratify an adopt new lega mechanisms and/o changes to existin mechanisms
Outcome 2 Forest management policies in the three project states that promote and support the conservation and sustainable use of MAPs	State forest policies revised to favor sustainable use & conservation of MAPs	Limited focus on MAPs in key state forest policies, eg JFM Guidelines do not refer to MAPs & Forest Division Working Plans do not address conservation management of MAPs. Other opportunities for forest policy changes at state level to be identified by Yr 1	Revised JFM orders/circulars with stronger focus on conservation of MAPs. Nature of required revisions to be determined based on policy analysis by Yr 1 Forest Division Working Plans in project districts revised	The revised orders/circulars Revisions to other relevant policy documents published The revised Working Plans	State governments ar committed to goals o the CBD and see thei relevance with respect t MAPs sector and henc need to modify existin forest policie accordingly
	Strengthened capacity within SMPBs to fulfill their mandate	Limited to non-existent capacity. Capacity needs of each SMPB to be assessed by Yr2/Q2	Over 80% of SMPB management and technical level staff to be sufficiently trained to deliver their mandate effectively by Yr 5	Individual State SMPB baseline and end of project capacity assessment reports Project records of targeted capacity development of key SMPB staff based on capacity assessment findings Reports of the SMPBs Verification by interviewing potential SMPB clients.	SFDs, SMPBs and othe key sectors committed t intersectoral cooperatio to effect policy change that favour conservatio and sustainable use o MAPs, preservation o Traditional Knowledg and protection o community-level IPR.

	Greater intersectoral cooperation to achieve sustainable use and conservation of MAPs	Minimal. No dedicated policy for MAPs although growing interest, eg Chhattisgarh & Uttaranchal declared as 'Herbal States'. Baseline studies by Yr 2/Q2 to include: a) Detailed analysis to establish extent of conflict and cooperation and main requirements for effective consultation and intersectoral action; and b) A detailed review of state-level policies and key sectors to be undertaken to identify key areas for policy harmonization	State-level intersectoral & technical coordination committees established. Individual state strategies for the Sustainable Use & Conservation of MAPs signed off by at least 2 government departments in each state by Yr 6	Extent of change in intersectoral coordination and cooperation from baseline measured by numbers of meetings of state coordination committee, membership of committee, minutes and reports of committees and concrete MAP conservation measures implemented as a result of committee actions Project monitoring reports. Reports of different ministries/government departments Number of state departments that sign off on each state strategy	SFDs, SMPBs and othe key sectors committed t intersectoral cooperatio to effect policy change that favour conservatio and sustainable use o MAPs, preservation o Traditional Knowledg and protection o community-level IPR.
Outcome 3 Conservation and sustainable use of MAPs mainstreamed at the local level into government and community forest management norms and practices at demonstration sites in the three project states.	Ha of government forest actively managed for sustainable use of MAPs and maintenance of MAP diversity	0 ha. Criteria for "active management" to favor sustainable use & maintenance of MAP diversity and suitable ecological indicators to be determined in Yr 1	At least 4 MPCAs/FGBs (established in each project state by Yr 4 (3 in state forest & 1 in community forest - 12 in total covering 18,000 ha) & 7 in total per project state by Yr 6 (5 in state forest and 2 in community forest – 21 in total or c. 32,000ha). Mid-way through the project and by the end of the project, respectively, an additional 2,000,000 ha and 6,000,000 ha of forest will be under active management for sustainable use and maintenance of MAP diversity.	Government records & project M&E records	Local government & communities perceiv value in conservation o MAPs and movin towards mor sustainable harvesting o MAPs

	Numbers of SFD officers actively applying their training in conservation management of MAPs	0. Criteria for measuring this to be developed by Yr 2/Q2 at same time as when training module being developed.	To be established of Yr 2/Q3	To be determined, but to include field verification component and triangulation – eg results of ecological surveys combined with interviews with different stakeholder groups	
	Ha of community forest actively managed for sustainable use of MAPs and maintenance of MAP diversity	Minimal, Indicators to be established in Yr 1 along with criteria for what constitutes 'active management to favor sustainable use & maintenance of MAP diversity including suitable ecological indicators	Capacity gaps of communities, such as those for management and monitoring to be established by end of Yr 1 Subsequently developing monitoring protocols and management practices.	Field surveys, project M&E reports, key informant interviews	
	Number of MAP species, including GSMP, for which sustainable harvesting techniques developed.	0	5 GSMPs per year from the Yr 3 onwards.	Species harvest protocols developed and implemented in selected Forest Divisions. Project records & Forest Division records	
	Number of MAP collectors and other groups practicing sustainable harvesting	0	75% of MAP collectors and all JFM groups practice sustainable harvesting in forest divisions for which sustainable harvesting protocols have been developed for target GSMPs by Yr 6	Project sample surveys Forest Division and JFM committee records.	
	Extent of documentation of Traditional Knowledge on MAPs	Documentation is minimal	Target values for mid and end of project to be determined during Yr 1		
	Improved knowledge among MAP collectors and community forest users/managers about	Documentation minimal	Target values for mid and end of project to be determined during Yr 1	M& E reports related adoption of protocols	

	MAPs generally and about their legal rights, obligations and the requirements for maintaining MAP diversity and abundance				

Outcome 4: Materials and methods developed for replicating the successful models of conservation and sustainable use of medicinal plants across other sites in the three states, and more broadly.	Number of additional forest divisions in project states and in replication states adopting successful models. Precise criteria to be determined by mid-project. These could include policy changes, new policies, capacity development of SMPBs, SFDs, MAP collectors, community forest users/managers, increased sustainable harvesting of MAPs in state forests and community forests. Number of states developing strategies for Conservation & Sustainable Use of MAPs based on national and project state strategies. Revision of forest division working plans in at least 2 forest divisions in each of the 4 replication states. Training material and modules used and applied. Establishment of effective FGB/MPCA complex in each replication state	Baseline values where known, others to be established by end Yr 1 **Policies** No state in India has dedicated strategies for the sustainable use and conservation of MAPs **Capacity of different stakeholder groups** To be established mid-project **Forest Working Plans** Probably none that take MAPs into account but to be confirmed **Training materials & course modules** Probably none, but to be confirmed **FGBs/MPCAs** None in target replication states in either state or community forests	All targets to be determined by end of Yr 1	Government records Revised Policies Revised Working Plans Revised JFM Guidelines Records of number and nature of exchange visits between project demonstration sites and other areas involving range of stakeholders	Forest owners, manager and users are interested in conserving MAPs and harvesting them sustainably and therefore receptive to adapting lessons and experience of project to their local circumstance and have capacity to do so including sufficien funds at their disposal.

The Quarterly and Annual Progress Reports shall be submitted by the Project Manager to the PSC through Project Assurance, using the UNDP standard report format available.

An Issue Log shall be activated in Atlas and updated by the Project Manager to facilitate tracking and resolution of potential problems or requests for change.

A Risk Log shall be activated in Atlas and regularly updated every quarter by reviewing the external environment that may affect the project implementation.

A project Lessons-learned Log shall be activated and regularly updated to ensure on-going learning and adaptation within the organization, and to facilitate the preparation of the Lessons-learned Report at the end of the project.

A detailed Communication and Advocacy Plan will be prepared that describes which activities and outputs will be monitored, reviewed and evaluated, how and by whom. A detailed Communication and Advocacy Plan needs to be drawn out by the responsible parties and approved by the PSC. The Plan will articulate the types of communication and associated scheduling required during the project, as well as methods of communicating project results to stakeholders shall be activated in Atlas and updated to track key management actions/events.

To complement the above, an annual project review will be conducted during the fourth quarter of year as a basis for assessing the performance of the project. In the last year, this review will be a final assessment. This review will involve all key project stakeholders and the Implementing Partner, and focus on the extent to which progress is being made towards outputs, and that these remain aligned to appropriate outcomes. The review will be structured by a set of common standards, and will be subject to spot external quality assurance assessments. This review should update output targets and results achieved in Atlas.

Annual Work Plan (AWP) Monitoring Tool: Year 2008

CP Component: Energy and Environment
Implementing Partner: Ministry of Environment and Forest

EXPECTED CP OUTPUTS AND INDICATORS	PLANNED ACTIVITIES	EXPENDITURES	*RESULTS OF ACTIVITIES*	PROGRESS TOWARDS ACHIEVING CP OUTPUTS
A national strategy for the conservation & sustainable use of MAPs	Revise national JFM guidelines towards conservation & sustainable use of MAPs			
	Develop legal mechanisms to protect Traditional Knowledge on harvesting, cultivation & use of MAPs			
	Identify MAPs suitable for cultivation & inclusion in afforestation & income generating programmes			
	Develop capacity of NMPB towards sustainable management and mainstreaming of MAPs			
	Develop strategies and protocols developed for threat assessment and monitoring conservation status of MAPs			
	Develop course module on the conservation & sustainable use of MAPs developed for the Indian Forest Service curriculum			
Revised forest management policies in Three states	Develop Sustainable MAP use strategies			
	Revise state forest policies that support sustainable use of MAPs			
	Revise JFM orders and integrate to MAP conservation			
	Develop plans to strengthen capacities of State Medicinal Plant Boards			
	Revise forest working plans to promote sustainable use and conservation of MAPs			
Sustainable use of MAPs mainstreamed at local level into government and community forest management in three states	Demonstrate exsitu and insitu practices for conservation and management of MPA diversity and sustainable use			
	Develop capacity of forest officials at the local level towards conservation and sustainable use of MAPs			
	Initiate pilot sites for conservation of MAPs on community owned or managed lands			

	Strengthen the capacity of communities towards conservation of MAPs			
	Strengthen capacity of communities towards documenting traditional knowledge, harvesting techniques and protection of IPRs			
Materials and methods developed for conservation and sustainable use of medicinal plants in replication states.	Develop state level strategies for sustainable use of MAPs for replication states			
	Strengthen the capacities of SMPBs in replication states			
	Develop training modules			
	Demonstrate in-situ and exsitu methods for conservation and sustainable use of MAPs through exchange visits			
	Strengthen capacity for conservation and management of state forest department officials in replication states			
	Revise forest division working plans and guidelines for MAP conservation and management			

COMPONENT 5:

A) LEGAL CONTEXT

9. This Project Document shall be the instrument envisaged in the Supplemental Provisions to the Project Document attached hereto as Annex 3. The following type of revisions may be made to the document with the signature of the UNDP Country Director only, provided that he or she is assured that the signatories of the programme document have no objections to the proposed changes:

   a) Revision of, or addition to, any of the annexes to the Project Document;

   b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;

   c) Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and

   d) Inclusion of additional annexes and attachments only as set out here in this Project Document

   The implementing partners and Responsible Parties shall at all times ensure compliance with the UNDP RMG guidelines to the extent that they do not conflict with the extant rules and provisions of the Government of India.

COMPONENT 6:

ANNEXES

A) Terms of Reference for key project staff:

TOR of Project Manager and Programme Officer

B) Annex to Legal Context

C) Total Budget and work plan

D) Acronyms

E) Endorsement letter from Ministry of Environment and Forests

F) Approved Proposal by GEF (Project document attached with GEF's approval letter dated January 10, 2008)

ANNEX A: TERMS OF REFERENCES FOR KEY PROJECT STAFF

10. The broad terms of reference of key project committees and positions are provided below. These are indicative and will be reviewed and finalized during the early part of the project Inception Phase with inputs from the key stakeholders.

1. Project Management Unit:

11. A Project Management Unit (PMU) with a full-time project manager supported by one programme officer, one administrative assistant and one accounts officer will assist the PSC in the implementation of this project. The PMU will be located in the MoEF. The PMU will facilitate national and state level implementation of the project and work closely with state-level Project Coordinators and their teams in the initial stages until these are phased out. The PMU will also work closely with the Senior Technical Advisor and report to the NPD.

12. The key responsibilities for the PMU will include:

- Coordinating project implementation with all the implementing partners, concerned state government and central government agencies and UNDP-GEF.
- Providing the required support related to technical reporting to the implementing partners.
- Providing the required support related to financial matters including financial reporting to the implementing partners.
- Coordinating with all the implementing partners to ensure that all the required technical and financial reports are submitted in a timely manner to GoI as well as UNDP-GEF.
- Organising the recruitment of national and international consultants to the project,
- Organising the project evaluations.
- Ensuring that there is adequate documentation by all the implementing partners at all stages of implementation and in collating this documentation.
- Facilitating the publication of project outputs.

a) Project Manager:

13. The project manager (PM) will be in charge of overseeing the day-to-day project implementation and management of project activities, organizing and overseeing national and international consultant input, and overseeing monitoring and evaluation and ensuring that the project is on track. One of the most important responsibilities of the project manager will be working effectively with members of the PSC and ISGs to ensure that project activities proceed on schedule within each partner Ministry and non-governmental organization. The PM will be part of the PMU and work closely with the Senior Technical Advisor and FRLHT and other relevant technical agencies. The PM will report to the NPD and concerned senior official at UNDP.

14. Key responsibilities will include:

- Provide leadership to the PMU to enable it to function efficiently and fulfill its mandate.
- Coordinate the planning, management and implementation of project activities as set out in the project document and as guided by the PSC and the PSC.
- Work in close collaboration with NPD and Senior Technical Advisor to ensure coherence between all the project components and partners.
- Ensure the sharing and flow of information in a transparent manner among all the project stakeholders as appropriate.

- Coordinate the preparation of detailed annual work plans consistent with the envisaged outputs and objectives of the Project Document that incorporates the work plans prepared by all the implementing partners.
- Manage the project budget in collaboration with the designated Programme Officer in UNDP and ensure that timely financial reports are submitted by all implementing partners.
- Participate in the recruitment of project personnel, subcontractors and consultants and assist the NPD, STA in their supervision of project personnel to enable strong quality control.
- Supervise the procurement and maintenance of project equipment.
- Supervise the timely preparation and submission of quarterly and annual progress reports, work plans, budgets, and financial reports by all the implementing partners.
- Ensure regular liaison with the UNDP Country Office, government agencies, and all project partners.
- Undertake monitoring of the project, facilitate internal and external evaluations and promote information dissemination and sharing of lessons learnt through the implementation of this project.
- Support the NPD and STA in their resource mobilization efforts and development of partnerships.

b) Programme Officer

15. The programme officer (PO) is responsible for the day-to-day guidance and operational management of the project and support activities. The PO will support, initiate, monitor and manage the project. The PO will report to the project manager and help liaise with the government departments.

16. Key responsibilities will include:

- Consult with key partner institutions on a frequent basis and co-ordinate all actions with these partner institutions and on going programs.
- Provide overall technical assistance to the development and delivery of project activities.
- Select, recruit and supervise project professional staff and administrative support staff.
- work closely with partner institutions and project manager and other to manage project, prepare and revise workplans
- organize and implement project activities according to work plans
- prepare and submit financial reports, quarterly progress reports and other technical reports for effective project implementation

ANNEX B: SUPPLEMENTAL PROVISIONS TO THE PROJECT DOCUMENT: THE LEGAL CONTEXT

General responsibilities of the Government, UNDP and the executing agency

1. All phase and aspects of UNDP assistance to this project shall be governed by and carried out in accordance with the relevant and applicable resolutions and decisions of the competent United Nations organs and in accordance with UNDP policies and procedures for such projects, and subject to the requirements under UNDP Monitoring, Evaluation and Reporting System.
2. The Government shall remain responsible for this UNDP-assisted development project and the realisation of its objectives as described in this Project Document.
3. Assistance under this project document being provided for the benefit of the Government and the people of (the particular country or territory), the Government shall bear all risks of operations in respect of this project.
4. The Government shall provide to the project the national counterpart personnel training facilities, land, buildings, equipment and other required services and facilities. It shall designate the Government Co-operating Agency named in the cover page of this document (hereinafter referred to as the "Co-operations Agency"), which shall be directly responsible for the implementation of the Government contribution to the project.
5. The UNDP undertakes to complement and supplement the Government participation and will provide through the Executing Agency the required expert services, training, equipment and other services within the funds available to the project.
6. Upon commencement of the project the Executing Agency shall assume the responsibility for project execution and shall have the status of an independent contractor for this purpose. However, that primary responsibility shall be exercised in consultation with UNDP and in agreement with the Co-operating Agency Arrangements to this effect shall be stipulated in the Project Document as well as for the transfer of this responsibility to the Government or to an entity designated by the Government during the execution of the project.
7. Part of the Government's participation may take the form of cash contribution to UNDP. In such cases, the Executing Agency will provide the related services and facilities and will account annually to the UNDP and to the Government for expenditure incurred.

(a) **Participation of the Government**

8. The Government shall provide to the project the services, equipment and facilities in the quantities and at the time specified in the Project Document. Budgetary provision, either in kind or in cash, for the Government's participation so specified shall be set forth in the Project Budgets.
9. The Co-Operating Agency shall, as appropriate and in consultation with the Executing Agency, assign a director for the project on a full-time basis. He shall carry out such responsibilities in the project as are assigned to him by the Co-operating Agency.
10. The estimated cost of items included in the Government contribution, as detailed in the Project Budget, shall be based on the best information available at the time of drafting the project proposal. It is understood that price fluctuations during the period of execution of the project may necessitate an adjustment of said contribution in monetary terms; the latter shall at all times be determined by the value of the services, equipment and facilities required for the proper execution of the project.
11. Within the given number of man-months of personnel services described in the project document, minor adjustments of individual assignments of project personnel provided by the Government, may be made in

consultation with the Executive Agency, if this is found to be in the best interest of the project. UNDP shall be so informed in all instances where such minor adjustments involve financial implications.

12. The Government shall continue to pay the local salaries and appropriate allowances of national counterpart personnel during the period of their absence from the project while on UNDP fellowships.

13. The Government shall defray any customs duties and other charges related to the clearance of project equipment, its transportation, handling, storage and related expenses within the country. It shall be responsible for its installation and maintenance, insurance and replacement, if necessary, after delivery to the project site.

14. The Government shall make available to the project - subject to existing security provisions - any published and unpublished reports, maps, records and other data, which are considered necessary to the implementation of the project.

15. Patent rights, copyrights and other similar rights to any discoveries or work resulting from UNDP assistance in respect of this project shall belong to the UNDP. Unless otherwise agreed by the parties in each case, however, the Government shall have the right to use any such discoveries or work within the country free of royalty and any charge of similar nature.

16. The Government shall assist all project personnel in finding suitable housing accommodation at reasonable rents.

17. The services and facilities specified in the Project Document which are to be provided to the project by the Government by means of a contribution in cash shall be set forth in the project Budget. Payment of this amount shall be made to the UNDP in accordance with the Schedule of Payments by the Government.

18. Payment of the above mentioned contribution to the UNDP on or before the dates specified in the Schedule of Payments by the Government is a prerequisite to the commencement or continuation of project operations.

(b) **Participation of the UNDP and the executing agency**

19. The UNDP shall provide to the project through the Executing Agency the services, equipment and facilities described in the Project Document. Budgetary provision for the UNDP contribution as specified shall be set forth in the Project Budget.

20. The Executing Agency shall consult with the Government and UNDP on the candidature of the Project Manager[3] who, under the direction of the Executing Agency, will be responsible in the country for the Executing Agency's participation in the project. The Project Manager shall supervise the experts and other agency personnel assigned to the project, and the on-the-job training of national counterpart personnel. He shall be responsible for the management and efficient utilisation of all UNDP-financed inputs, including equipment provided to the project.

21. The Executing Agency, in consultation with the Government and UNDP, shall assign international staff and other personnel to the project6 as specified in the project Document, select candidates for fellowships and determine standards for the training of national counterpart personnel.

22. Fellowships shall be administered in accordance with the fellowship regulations of the Executing Agency.

23. The Executing Agency may, in agreement with the Government and UNDP, execute part or all of the project by subcontract. The selection of subcontractors shall be made, after consultation with the Government and UNDP, in accordance with the Executing Agency's procedures.

24. All material, equipment and supplies which are purchased from UNDP resources will be used exclusively for the execution of the project, and will remain the property of the UNDP in whose name it will be held by the

[3] May also be designated Project Co-ordinator or Chief Technical Adviser, as appropriate

Executing Agency. Equipment supplied by the UNDP shall be marked with the insignia of the UNDP and of the Executing Agency.

25. Arrangements may be made, if necessary, for a temporary transfer of custody of equipment to local authorities during the life of the project, without prejudice to the final transfer.

26. Prior to completion of UNDP assistance to the project, the Government, the UNDP and the Executing Agency shall consult as to the disposition of all project equipment provided by the UNDP. Title to such equipment shall normally be transferred to the Government, or to an entity nominated by the Government, when it is required for continued operation of the project or for activities following directly therefrom. The UNDP may, however, at its discretion, retain title to part or all of such equipment.

27. At an agreed time after the completion of UNDP assistance to the project, the Government and the UNDP, and if necessary the Executing Agency, shall review the activities continuing from or consequent upon the project with a view to evaluating its results.

28. UNDP may release information relating to any investment oriented project o potential investors, unless and until the Government has requested the UNDP in writing to restrict the release of information relating to such project.

(c) **Rights, Facilities, Privileges and Immunities**

29. In accordance with the Agreement concluded by the United Nations (UNDP) and the Government concerning the provision of assistance by UNDP, the personnel of UNDP and other United Nations Organisation associated with the project shall be accorded rights, facilities, privileges and immunities specified in said Agreement.

30. The Government shall grant UN volunteers, if such services are requested by the Government, the same rights, facilities, privileges and immunities as are granted to the personnel of UNDP.

31. The Executing Agency's contractors and their personnel (except nationals of the host country employed locally) shall:

    (a) Be immune from legal process in respect of all acts performed by them in their official capacity in the execution of the project;

    (b) Be immune from national service obligations;

    (c) Be immune together with their spouses and relatives dependent on them from immigration restrictions;

    (d) Be accorded the privileges of bringing into the country reasonable amounts of foreign currency for the purposes of the project or for personal use of such personnel, and of withdrawing any such amounts brought into the country, or in accordance with the relevant foreign exchange regulations, such amounts as may be earned therein by such personnel in the execution of the project; and

    (e) Be accord together with their spouses and relatives dependent on them the same repatriation facilities in the event of international crisis as diplomatic envoys.

32. All personnel of the Executing Agency's contractors shall enjoy inviolability for all papers a documents relating to the project.

33. The Government shall either exempt from or bear the cost of any taxes, duties, fees or levies which it may impose on any firm or organisation which may be retained by the Executing Agency and on the personnel of any such firm or organisation, except for nationals of the host country employed locally, in respect of:

    (a) The salaries or wages earned by such personnel in the execution of the project;

    (b) Any equipment of the project or which, after having been brought into the country, may be subsequently withdrawn therefrom;

(c) Any substantial quantities of equipment, materials and supplies obtained locally for the execution of the project, such as, for example, petrol and spare parts for the operation and maintenance of equipment mentioned under (b), above, with the provision that the types and approximate quantities to be exempted and relevant procedures to be followed shall be agreed upon with the Government and, as appropriate, recorded in the Project Document; and

(d) As in the case of concessions currently granted to UNDP and Executing Agency's personnel, any property brought, including one privately owned automobile per employee, by the firm or organisation or its personnel for their personal use or consumption or which after having been brought into the country, may subsequently be withdrawn therefrom upon departure of such personnel.

34. The Government shall ensure

(a) Prompt clearance of experts and other persons performing services in respect of this project; and

(b) The prompt release from customs of:

(i) Equipment, materials and supplies required in connection with this project; and

(ii) Property belonging to and intended for the personal use or consumption of the personnel of the UNDP, its Executing Agencies, or other persons performing services on their behalf in respect of this project, except for locally recruited personnel.

35. The privileges and immunities referred to in the paragraph above, to which firm or organisation and its personnel may be entitled, may be waived by the Executing agency where, in its opinion or in the opinion of the UNDP, the immunity would impede the course of justice and can be waived without prejudice to the successful completion of the project or to the interest of the UNDP or the Executing Agency.

36. The Executing Agency shall provide the Government through the Resident Representative with the list of the personnel to whom the privileges and immunities enumerated above shall apply.

37. Nothing in this Project Document or Annex shall be construed to limit the rights, facilities, privileges or immunities conferred in any other instrument upon any person, natural or juridical, referred to hereunder.

(d) Suspension or termination of assistance

(a) The UNDP may be written notice to the Government and to the Executing Agency concerned to suspend its assistance to any project if in the judgement of the UNDP any circumstance arises which interferes with or threatens to integration of the successful completion of the project or the accomplishment of its purpose UNDP may, in the same or subsequent written notice, indicate the under which it is prepared to resume its assistance to the project. Any such suspension shall continue until such time as such conditions are accepted by the Government and as the UNDP shall give written notice to the Government and the Executing Agency that is prepared to resume its assistance.

(b) If any situation referred to in paragraph 1, above, shall continue for a period of fourteen days after notice thereof and of suspension shall have been given by the UNDP to the Government and the Executing Agency, then at any time thereafter during the continuance thereof, the UNDP may be written notice to the Government and the Executing Agency terminate the project.

(c) The provisions of this paragraph shall be without prejudice to any other rights or remedies the UNDP may have in the circumstances, whether under general principles of law or otherwise.

ANNEX C: TOTAL BUDGET AND WORKPLAN

Award ID:	00049929
Award Title:	PIMS 1024 BD FSP India Medicinal Plants
Business Unit:	IND10
Project Title:	PIMS 1024 BD FSP India Medicinal Plants
Implementing Partner (Executing Agency)	Ministry of Environment & Forests, Government of India

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agency	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Year 1 (USD)	Year 2 (USD)	Year 3 (USD)	Year 4 (USD)	Year 5 (USD	Year 6 (USD)	Year 7 (USD)	Total (USD)
OUTCOME 1: Enabling environment for mainstreaming conservation and sustainable use of MAPs	**MoEF/NMPB/FRLHT**		**GEF**	71300	Local Consultant	34,202	52,152	19,082	1,478	1,478	1,478	1,044	**110,914**
				71200	International consultant	19,659	8,811	8,811	8,811	8,812	1,778	6,584	**63,266**
				71600	Travel	35,617	52,960	28,188	12,944	3,929	3,930	2,773	**140,340**
				72100	Contractual Services Companies	67,069	66,463	27,893	12,939	3,123	3,128	2,231	**182,846**
				72300	Materials & Goods	10,055	15,092	9,536	4,205				**38,888**
				72500	Supplies	5,916	8,001	5,919	4,321	864	1,382	2,419	**28,822**
				74200	Audio visual/Print Prod cost	9,470	13,136	6,109	1,834				**30,549**
				74500	Misc. expenses	36,343	40,349	22,659	4,442	470	496	350	**105,108**
		62000			**Total Outcome 1**	**218,330**	**256,964**	**128,196**	**50,974**	**18,675**	**12,192**	**15,400**	**700,732**
				71300	Local Consultant	5,869	27,708	35,081	25,255	23,145	14,812	1,044	**132,914**
				71200	International consultant	19,659	8,811	8,811	8,811	8,812	1,778	6,584	**63,266**
				71600	Travel	6,311	38,772	43,466	30,595	30,595	30,599	2,773	**183,110**

states for conservation and sustainable use of MAPs	EF/FRLHT			72100	Contractual Services Companies	21,837	57,611	64,964	75,402	70,680	9,816	2,201	**302,511**
				72300	Materials & Goods		14,166	16,388	17,057	20,166			**67,777**
				72500	Supplies	2,504	6,331	6,508	6,504	5,854	4,018	2,419	**34,137**
				74200	Audio visual/Print Prod cost	3,415	4,736	5,041	4,431	4,330	3,214		**25,167**
				74500	Misc. expenses	292	38,126	41,265	40,514	10,087	1,153	350	**131,785**
					Total Outcome 2	**59,887**	**196,261**	**221,523**	**208,569**	**173,668**	**65,390**	**15,370**	**940,668**
OUTCOME 3: Mainstreaming conservation of MAPs at local level	SFDs of the three project states/ NMPB/Mo EF/FRLHT			71300	Local Consultant	735	883	34,435	34,582	34,585	1,250	884	**107,355**
				71200	International consultant	16,634	7,456	7,456	7,456	7,456	11,044	8,261	65,764
				71600	Travel	1,955	57,902	88,117	88,508	88,509	47,771	2,347	**375,109**
				72100	Contractual Services Companies	1,555	218,523	254,226	275,313	285,307	34,315	1,862	**1,071,101**
				72500	Supplies	219	950	1,170	1,023	731	1,170	2,047	**7,310**
				72300	Materials & Goods		35,334	39,037	39,037	39,039	35,335		**187,782**
		62000	**GEF**	74500	Misc. expenses	247	2,518	2,592	2,642	2,642	2,643	296	**13,580**
					Total Outcome 3	**21,345**	**323,566**	**427,033**	**448,561**	**458,270**	**133,528**	**15,697**	**1,828,000**
OUTCOME 4: Development of materials and methods for replication	SFDs of the three project states/ NMPB/Mo EF/FRLHT	**62000**	**GEF**	71300	Local Consultant	869	1,043	11,304	31,910	68,303	67,737	20,860	**202,026**
				71200	International consultant	19,659	8,811	8,811	8,811	8,812	1,778	6,584	**63,266**
				71600	Travel	2,311	2,773	8,467	9,062	32,631	32,500	8,700	**96,443**
				72100	Contractual Services Companies	1,837	2,205	27,756	72,999	87,752	87,757	30,850	**311,156**

				72500	Supplies	259	1,123	26,449	27,475	30,838	31,150	31,945	**149,239**
				74200	Audio visual/Print Prod cost			12,200	17,341	15,800	15,600	15,400	**76,341**
				74500	Misc. expenses	292	350	1,136	13,273	45,456	10,536	11,088	**82,129**
					Total Outcome 4	**25,227**		**96,122**	**180,871**	**289,591**	**247,058**	**125,426**	**980,600**
Project management unit	SFDs of the three project states/ NMPB/MoEF/FRLHT	**62000**	**GEF**	71300	Local consultant	26,656	31,987	39,984	45,315	45,315	45,315	31,988	**266,560**
				72200	Equipment	3,669	15,902	19,572	17,126	12,236	19,572	34,252	**122,329**
				71600	Travel	5,168	3,876	9,691	5,814	9,691	9,690	20,681	**64,611**
				74500	Miscellaneous	2,205	1,575	4,410	2,520	4,412	4,430	11,948	**31,500**
					Total Management	**37,998**	**53,340**	**73,657**	**70,775**	**71,654**	**79,007**	**98,869**	**485,000**
				PROJECT TOTAL		**362,488**	**846,436**	**946,531**	**959,751**	**1,011,858**	**537,174**	**270,763**	**4,935,000**

ANNEX D: LIST OF ABBREVIATIONS

CBD	Convention on Biological Diversity
CBO	Community based organisation
CCF	Country Cooperation Framework
CCRAS	Centre for Clinical Research in Ayurvedic Science
CIMAP	Central Institute of Medicinal & Aromatic Plants
CITES	Convention on the International Trade in Endangered Species
CO	(UNDP) Country Office
DANIDA	Danish International Development Agency
DBT	Department of Biotechnology
DFO	District Forest Officer
DST	Department of Science and Technology
FAO	Food and Agriculture Organisation of the United Nations
FPC	Forest Protection Committee
FGB	Forest Gene Bank
FRLHT	Foundation for the Revitalization of Local Health Traditions
FSI	Forest Survey of India
GoI	Government of India
GEF	Global Environment Facility
GSMP	Globally Significant Medicinal Plants
Ha	Hectares
HAPPRC	High Altitude Plant Physiology Research Centre
HRDI	Herbal Research and Development Institute
ICFRE	Indian Council for Forestry Research and Education
ICIMOD	International Centre for Integrated Mountain Development
IDRC	International Development Research Centre
IFA	Indian Forest Act of 1927
IPR	Intellectual Property Rights
ISM & H	Indian Systems of Medicine and Homeopathy
IUCN	The World Conservation Union
ITA	Information Transfer Agreements
IW	Inception Workshop
ISG	Implementation Steering Group
JFM	Joint Forest Management
JFMC	Joint Forest Management Committees
LMG	Local Management Group
MAPPA	Medicinal and Aromatic Plants Program in Asia
MAPs	Medicinal and Aromatic Plants
MDG	Millennium Development Goals
MFP	Minor Forest Produce
MoEF	Ministry of Environment and Forests
MoF	Ministry of Finance
MoHFW	Ministry of Health & Family Welfare
MoRD	Ministry of Rural Development
MP	Medicinal Plants
MPB	Medicinal Plant Board
MPCA	Medicinal Plant Conservation Area
MTA	Material Transfer Agreements
NAPRALERT	Natural Products ALERT
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-governmental organization

NMPB	National Medicinal Plants Board
NPD	National Project Director
PSC	National Steering Committee
NTFP	Non-Timber Forest Products
PCCF	Principal Chief Conservator of Forests
PF	Protected Forest
PSC	Project Implementation Steering Group
PPA	People's Protected Area
PMU	Project Management Unit
PRI	Panchayati Raj Institution
RCU	Regional Coordination Unit
RF	Reserved Forest
RRL	Regional Research Laboratory
SFD	State Forest Department
SFRI	State Forest Research Institute
SHER	Society for Himalayan Environmental Research
SMPB	State Medicinal Plants Board
SPMU	State-level Project Management Unit
STA	Senior Technical Advisor
TAG	Technical Advisory Group
TCM	Traditional Chinese Medicine
TFRI	Tropical Forest Research Institute
TK	Traditional Knowledge
TM	Traditional Medicine
UNDP	United Nations Development Programme
UNDAF	United Nations Development Assistance Framework
UT	Union Territory
VFC	Village Forest Committee
WHO	World Health Organization

GEF

Global Environment Facility

1818 H Street, NW
Washington, DC 20433 USA
Tel: 202.473-0508
Fax: 202.522.3240/3245
Internet: www.theGEF.org

January 10, 2008

Mr. Yannick Glemarec
GEF Executive Coordinator
United Nations Development Programme
One United Nations Plaza
New York, NY 10017

Dear Mr. Glemarec:

I am pleased to inform you that I am endorsing the project proposal entitled ***India: Mainstreaming Conservation and Sustainable Use of Medicinal Plant Diversity in Three Indian States***, for $ 4,935,000 in financing from the GEF Trust Fund. I understand that this project proposal will be submitted for approval in accordance with UNDP's procedures. I note that a project preparation grant of $345,000 was previously approved for preparation of this project and that a report on the use of those funds has been submitted to the Secretariat. Taking into account the project preparation funds, total GEF grant for the project is $5,280,000.

I am endorsing this project on the understanding that the project will meet the following milestones:

(i) the grant agreement will be signed no later than March 2008;
(ii) a report on the status of the project at mid-term will be submitted to the Secretariat no later than December 2011; and
(iii) the closing date of the project grant will be no later than December 2015, and a terminal evaluation/project completion report will be submitted to the Secretariat within 6 months of such closing date.

You are requested to ensure that the GEF Secretariat is informed when each of these milestones is met. If any milestone is not achieved, and after consultations with your Agency, I may agree to revised milestones or recommend cancellation, termination, or suspension of the project, and I will communicate to the beneficiary country and your Agency the basis for such a recommendation.

Please ensure that your grant agreements continue to fully reflect this understanding.

I am attaching a copy of the project tracking sheet for your records.

Sincerely,

c/ William Hillers

Monique Barbut
Chief Executive Officer and Chairperson

Attachments: GEF Tracking Sheet, Review Sheet

cc: Country Operational Focal Point, GEF Agencies, STAP, Trustee

GEF

Global Environment Facility

1818 H Street, NW
Washington, DC 20433 USA
Tel: 202.473-0508
Fax: 202.522.3240/3245
Internet: www.theGEF.org

January 8, 2008

Dear Council Member,

UNDP as the Implementing Agency for the project entitled: ***India: Mainstreaming Conservation and Sustainable Use of Medicinal Plant Diversity in Three Indian States***, has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with UNDP's procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by Council in September 2005 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by UNDP satisfactorily details how Council's comments and those of the STAP have been addressed. I am, therefore, endorsing the project document.

We have today posted the proposed project document on the GEF website at www.TheGEF.org. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Monique Barbut
Chief Executive Officer and Chairperson

Attachment: Project Document

cc: Alternates, GEF Agencies, STAP

REQUEST FOR CEO ENDORSEMENT
UNDER THE GEF TRUST FUND

GEF

GEFSEC PROJECT ID: 1143
IA/EXA PROJECT ID: 1024
COUNTRY: India
PROJECT TITLE: Mainstreaming Conservation and Sustainable Use of Medicinal Plant Diversity in Three Indian States
GEF IA/EXA: UNDP
OTHER PROJECT EXECUTING AGENCY(IES): N/A
DURATION: 7 years
GEF FOCAL AREA: Biodiversity
GEF STRATEGIC OBJECTIVES: SO2 Mainstreaming Biodiversity in Production Landscapes/Seascapes and Sectors
GEF OPERATIONAL PROGRAM: OP-3 Forest Ecosystem
COUNCIL APPROVAL DATE: 13-Sep-2005
COUNCIL APPROVED AMOUNT*: 4,935,000
CEO ENDORSEMENT AMOUNT*:4,935,000
EXPECTED AGENCY APPROVAL DATE: February 2008
EXPECTED SUBMISSION DATE OF MID-TERM REPORT: September 2011
EXPECTED GRANT CLOSING DATE: August 2015
EXPECTED SUBMISSION DATE OF TERMINAL EVALUATION/ PROJECT COMPLETION REPORT: April 2015

FINANCING PLAN ($)		
	PPG**	Project*
GEF Total	345,000	4,935,000
Co-financing	(provide details in Section d): Co-financing)	
GEF IA/ExA	-	-
Government (in cash)		4,539,070
Government (in kind)		1,909,051
Others		31,000
Co-financing Total		6,479,121
Total		11,141,121
Financing for Associated Activities If Any:		

* For multi-focal area projects, indicate agreed split between focal area allocations

FOR JOINT PARTNERSHIP***		
GEF PROJECT/COMPONENT ($)		
(Agency Name)	(Share)	(Fee)
(Agency Name)	(Share)	(Fee)
(Agency Name)	(Share)	(Fee)

** May refer also to previous PDF grants
***Projects that are jointly implemented by more than one IA or ExA

Approved on behalf of the *UNDP*. This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the GEF Project Review Criteria for CEO endorsement.

John Hough
UNDP/GEF Officer-in-Charge
Date: November 26, 2007

Sultana Bashir, Regional Technical Advisor
Project Contact Person
Tel. and email: +662 2882728
sultana.bashir@undp.org

Biodiversity
OP 3

GEFSEC Project Tracking System
Project Clearance/Approval

PMIS Project ID : 1156
UNDP

India: Mainstreaming Conservation and Sustainable Use of Medicinal Plant Diversity in Three Indian States

[redacted]

Program Manager			Recommendation	Kavita Kumari 5/1/2000
Team Leader			Clearance	
Assistant CEO			Clearance	Colin Rees / Kenneth King 5/4/00
PDF B/C	**$0.345**	**$0.370**		
Program Manager			Recommendation	Kavita Kumari 5/1/2000
Team Leader			Clearance	5.1.00
Assistant CEO			Clearance	Colin Rees / Kenneth King 5/4/00
CEO			Approval	Mohamed T. El-Ashry 5/4/00
Work Program Inclusion	$5.280	$11.759		
Program Manager			Recommendation	Paz Valiente 7/26/05
Team Leader			Clearance	Gonzalo Castro 7/26/05
Assistant CEO			Clearance	
CEO			Approval	Leonard Good 8/2/05
Council Approval				
Need to circulate to Council for	>second review prior to CEO endorsement (4 weeks review period)			☐ Yes
	>CEO endorsement (second review waived)			☐ Yes
Program Manager			Recommendation	
Team Leader			Clearance	
Assistant CEO			Clearance	
Endorsement	$4.935	$11.414		
Program Manager			Recommendation	Yoko Watanabe 12/14/07
Team Leader			Clearance	Gustavo Fonseca 1-8-07
Assistant CEO			Clearance	1/8/08
CEO			Endorsement	Monique Barbut
Final Approval				
Implementing Agency			Approval	

Cumulative GEF Contribution

सत्यमेव जयते

SUDHIR MITAL
JOINT SECRETARY
Tel: 24363956
Fax: 24369192

भारत सरकार
पर्यावरण एवं वन मंत्रालय
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT & FORESTS

D. O. No. 4(2)/73/1998 - IC&SD.I

Dated: 26th August 2005

Dear Dr Burra,

Kind attention is invited to the UNDP-GEF proposal on "Mainstreaming conservation and sustainable use of medicinal plant diversity in three Indian states". This is to confirm the co-financing to the project as per the following details:

Name of Co-financier (source)	Classification	Type	Amount (US$)
NMPB	Government	Reoriented Baseline	1,894,863
Arunachal Pradesh SFD	Government	Reoriented Baseline	540,644
Chhattisgarh SFD	Government	Reoriented Baseline	1,051,282
Uttaranchal SFD	Government	Reoriented Baseline	1,052,281
MoEF	Government	In Kind	407,909
Arunachal Pradesh SFD	Government	In Kind	500,513
Chhattisgarh SFD	Government	In Kind	500,513
Uttaranchal SFD	Government	In Kind	500,116
FRLHT	NGO	In Kind	31,000
Total Co-financing			6,479,121

Regards,

Yours sincerely,

(Sudhir Mital)

United Nations
Development Programme
New Delhi-INDIA
01 SEP 2005

	RR	SDRR	DRR-OI
N			
A			✓

Dr. Neera Burra
Assistant Resident Representative
UNDP, 55, Lodhi Estate
New Delhi 110003

FAX-2962-ITA

GOVT. OF ARUNACHAL PRADESH
DEPARTMENT OF ENVIRONMENT & FORESTS
ITANGAR

NO.FOR.215/D-4/2005/615-16 Dated Itanagar, the 16th August, 2005.

To

The Secretary
Government of India
Ministry of Environment & Forests
Paryavaran Bhawan, CGO Complex
Lodhi Road, New Delhi 110003.

Sub: GOI-UNDP-GEF project "Mainstreaming conservation and sustainable use of medicinal plant diversity in three Indian states.

Sir,

The Government of Arunachal Pradesh has received the above mentioned project from the United Nation Development Programme. The state Government has agreed in principal to implement the project and to the co-financing of the project over the period of seven years amounting to about US $ 500,513 (in kind contribution) and US $ 540,644 (re-oriented baseline).

It is hoped that the Ministry of Environment and Forests will accord approval to the project at an early date.

Yours faithfully,

12/8/05

(A. K. Sinha)
Chief Conservator of Forests (P&D)
Arunachal Pradesh :; Itangar.

Copy to :

1. Mr. Ravi Cheliam, programme Officer, Sustainable Environment and aEnergy Division, U. N. D P. 55, Lodhi Estate, Post Box No. 3059, New Delhi 110003.

GOVERNMENT OF CHHATTISGARH
DEPARTMENT OF FOREST, DAU KALYAN SINGH BHAWAN,
MANTRALAYA, RAIPUR

No. 1710 P S F 2005. Raipur, Dt. 14.6.2005

To,

Secretary
Government of India.
Ministry of Environment & Forests
Paryavaran Bhawan.
CGO Complex, Lodhi Road
New Delhi -110003

Sub:- GOI-UNDP-GEF project "Mainstreaming conservation and sustainable use of medicinal plant diversity in three Indian states"

Dear Sir

Government of Chhattisgarh has received a Project from the United Nation Development Programme titled as above. The project had been prepared in consultation with the State Government and we are committed to implement it at the earliest. We are also agreeable to co-financing of the Project over the seven year period amounting to about US $ 1,55,1000 including US $ 500,000 in kind.

We hope and trust that the Ministry of Environment and Forests will accord early approval to the Project.

Yours faithfully,

(P. JOY OOMMEN)
PRINCIPAL SECRETARY
GOVT. OF CHHATTISGARH
DEPARTMENT OF FOREST
Raipur, Dt. /6/2005

End.No. P.S. F/2005.

Copy to 1. Mr. Ravi Chellam, Programme Officer, Sustainable Environment and Energy Division, U.N.D.P., 55, Lodhi Estate, Post Box No.3059, New Delhi 110 003
2. Mr R N Mishra, Principal Chief Conservator of Forests, Chhattisgarh Raipur

Sd/-
(P. JOY OOMMEN)
PRINCIPAL SECRETARY
GOVT. OF CHHATTISGARH
DEPARTMENT OF FOREST

No.462/FRDC/2005

From,

Vibha Puri Das,
Principal Secretary & Commissioner,
Forest & Rural Development,
Government of Uttaranchal.

To,

Shri Prodipto Ghosh,
Secretary,
Government of India,
Ministry of Environment & Forests,
Paryavaran Bhawan, CGO Complex,
Lodhi Road, New Delhi 110 003

Forest & Rural Development Commissioner Branch Dehra Dun : Date : 23 June, 05

Subject : Corrigendum to D.O.No.457/FRDC/2005 dated the 21st/23rd June, 2005.

Sir,

With reference to the above mentioned letter, I am directed to convey that the State Government is committing large sums of money for this sector in an ongoing manner and the co-financing of project over the 7 year period will be US $ 1,052,281 (re-oriented baseline co-financing) in addition to US $ 500,116 (in kind contribution). The above letter may be deemed to be amended accordingly.

Yours faithfully,

Sd/- Vibha Puri Das,
Principal Secretary & Commissioner,
Forest & Rural Development,
Government of Uttaranchal.

Copy to : (1) Shri Ravi Chellam, Programme Officer, Sustainable Environment & Energy Division, UNDP, India, and (2) Shri S.K.Chandola, Chief Wildlife Warden, Chandrabani, Dehra Dun for information.

for Principal Secretary and Commissioner,
Forest and Rural Development

Government of India

United Nations Development Programme

Mainstreaming Conservation and Sustainable Use of Medicinal Plant Diversity in Three Indian States (PIMS 1024)

Brief Description

India's medicinal plant resources have great national and global significance. India has some 8,000 medicinal plant species out of a world total of 40-50,000 and is the world's second largest producer of medicinal plants and herbal medicines. However, its medicinal plant resources, including globally significant diversity, are increasingly threatened by overexploitation to meet commercial demand. Over 95% of medicinal plants used by the herbal industry is harvested from the wild, primarily from India's forests, which are mostly owned and managed by the government. Despite this, wild harvesting is still largely uncontrolled and unmonitored. The objective of this project is to achieve the long-term conservation and sustainable use of India's medicinal plant diversity, particularly of its globally significant species, by mainstreaming these objectives into forest management policy and practice at the national, state and local level in three Indian states: Arunachal Pradesh in North-East India, Chhattisgarh in Central India and Uttaranchal in North-west India, which provide a broad range of ecological conditions, and hence medicinal plant diversity as well a range of institutional arrangements relating to forest management.

Table of Contents

Section **Page**

Acronyms

CBD	Convention on Biological Diversity
CBO	Community based organisation
CCF	Country Cooperation Framework
CCRAS	Centre for Clinical Research in Ayurvedic Science
CIMAP	Central Institute of Medicinal & Aromatic Plants
CITES	Convention on the International Trade in Endangered Species
CO	(UNDP) Country Office
DANIDA	Danish International Development Agency
DBT	Department of Biotechnology
DFO	District Forest Officer
DST	Department of Science and Technology
FAO	Food and Agriculture Organisation of the United Nations
FPC	Forest Protection Committee
FGB	Forest Gene Bank
FRLHT	Foundation for the Revitalization of Local Health Traditions
FSI	Forest Survey of India
GoI	Government of India
GEF	Global Environment Facility
GSMP	Globally Significant Medicinal Plants
Ha	Hectares
HAPPRC	High Altitude Plant Physiology Research Centre
HRDI	Herbal Research and Development Institute
ICFRE	Indian Council for Forestry Research and Education
ICIMOD	International Centre for Integrated Mountain Development
IDRC	International Development Research Centre
IFA	Indian Forest Act of 1927
IPR	Intellectual Property Rights
ISM & H	Indian Systems of Medicine and Homeopathy
IUCN	The World Conservation Union
ITA	Information Transfer Agreements
IW	Inception Workshop
ISG	Implementation Steering Group
JFM	Joint Forest Management
JFMC	Joint Forest Management Committees
LMG	Local Management Group
MAPPA	Medicinal and Aromatic Plants Program in Asia
MAPs	Medicinal and Aromatic Plants
MDG	Millennium Development Goals
MFP	Minor Forest Produce
MoEF	Ministry of Environment and Forests
MoF	Ministry of Finance
MoHFW	Ministry of Health & Family Welfare
MoRD	Ministry of Rural Development
MP	Medicinal Plants
MPB	Medicinal Plant Board
MPCA	Medicinal Plant Conservation Area
MTA	Material Transfer Agreements
NAPRALERT	NAtural PRoducts ALERT

NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-governmental organization
NMPB	National Medicinal Plants Board
NPD	National Project Director
NSC	National Steering Committee
NTFP	Non-Timber Forest Products
PCCF	Principal Chief Conservator of Forests
PF	Protected Forest
PISG	Project Implementation Steering Group
PPA	People's Protected Area
PMU	Project Management Unit
PRI	Panchayati Raj Institution
RCU	Regional Coordination Unit
RF	Reserved Forest
RRL	Regional Research Laboratory
SFD	State Forest Department
SFRI	State Forest Research Institute
SHER	Society for Himalayan Environmental Research
SMPB	State Medicinal Plants Board
SPMU	State-level Project Management Unit
STA	Senior Technical Advisor
TAG	Technical Advisory Group
TCM	Traditional Chinese Medicine
TFRI	Tropical Forest Research Institute
TK	Traditional Knowledge
TM	Traditional Medicine
UNDP	United Nations Development Programme
UNDAF	United Nations Development Assistance Framework
UT	Union Territory
VFC	Village Forest Committee
WHO	World Health Organization

PART I: SITUATION ANALYSIS

Context and Global Significance

A) The Biodiversity Significance and Economic Values of Medicinal Plants

1. Medicinal and aromatic plants[1] (MAPs) are recognized as a major but increasingly threatened global resource. Between 40,000 to 50,000 plant species are known to be used in traditional and modern systems of medicine across the world. The World Health Organization (WHO 2002) estimates that the majority of the world's population, particularly in developing countries, relies on traditional health care based on medicinal plants. A conservative estimate of the annual value of the global medicinal plant trade by The World Conservation Union (IUCN) is in the range of $40 to $60 billion. China is the world's largest producer of medicinal plants and medicines, followed by India (Lambert *et al.* 1997).

2. The vast majority of medicinal plants are harvested from the wild, particularly from the tropical and subtropical regions of the world (where two-thirds of all plant species are found). Over 70% of the globally known medicinal plants occur in tropical forests (Shankar 1998) and there is growing international concern about the rates of local and global extinction (Klingenstein *et al.* 1997). There is no consolidated record of how many species of medicinal plants are threatened with extinction at present but extrapolations based on the Threatened Plants Database of the World Conservation Union (IUCN) and the NAtural PRoducts ALERT (NAPRALERT) database suggest that at least 20% of medicinal plant species are threatened globally (Farnsworth & Soejarto 1991; Leaman 1998).

3. India is a member of the Group of Like Minded Megadiverse Countries, a group of 17 countries which together hold more than 75% of the world's biodiversity. India is particularly rich in medicinal plant resources, which have been used in traditional (codified) Indian health systems like *Ayurveda, Sidhha, Unani* and the Tibetan system for millennia. These systems are still very much alive today. Ancient medical texts also bear evidence of the use of plants for veterinary purposes, treating agricultural crop diseases and manufacturing vegetable dyes, cosmetics and perfumes – uses that are still prevalent today. The All India Ethnobiology Survey carried out by the Ministry of Environment and Forests (MoEF) in 1995 estimated that over 7,500 plant species are used by 4,635 ethnic communities for human and veterinary health care across the country.

4. In 1993, the Government of India (GoI) estimated that between 60-80% of India's population rely on medicinal plants for health care. Medicinal plants are particularly important to the rural poor, who are able to harvest these from the wild to meet their primary health care needs.

5. Low levels of subsistence-related medicinal plant harvesting generally do not pose a threat to the viability of harvested populations. There is, however, growing concern about the impacts on wild medicinal plant stocks of growing national and international demand for herbal products and the increasing commercialization of the medicinal plant economy. At least 10% of the 7,500 medicinal plant species used by local communities in India are also actively traded within India, with some 50 species also exported in the form of raw drugs and extracts (FRLHT 2003). In 1997, a National Consultation on Medicinal Plants

[1] According to the WHO, medicinal plants include '...any plant which, in one or more of its organs, contains substances that can be used for therapeutic purposes, or which are precursors for chemo-pharmaceutical semi-synthesis'. Aromatic plants are essential oil yielding plants. Aromatic plants may be used as condiments and in the cosmetic/ beauty care industry. The term 'medicinal plant' is used in this document to refer to both medicinal and aromatic plants unless otherwise stated.

organized by the MoEF revealed that over 95% of medicinal plants used by the herbal industry was harvested from the wild. Over 200 medicinal plant species in southern and northern India are classified as rare, endangered or threatened. The true number of threatened species, including globally significant species, is likely to be far higher, but the status of many species is insufficiently known.

6. Ninety percent of India's medicinal plants diversity is estimated to be found in its diverse natural forest habitats. The vast majority of such forests are owned and managed by state or Union Territory (UT) governments, mainly by the respective state forest departments (SFDs)[2,3], although there is increasing community participation in the management of such forests through initiatives like the Joint Forest Management (JFM) Programme (see Annex 1). There are also forests owned by state revenue departments and, in a few areas, notably the north-east of India, there are also community-owned forests.

7. Despite the fact that most of India's medicinal plant stocks are found on government-owned land, harvesting is still largely uncontrolled and unmonitored (Leaman 1998). There is little systematic or effective regulation or management of the commercial trade in MAPs by the government or self-regulation by traders and herbal medicine companies. In some parts of the country there are cooperative societies, particularly in tribal areas, which are meant to ensure a fair price to collectors amongst other things, but these are acknowledged to have been largely ineffective in meeting their stated objectives.

8. The commercial MAPs trade is also poorly understood or documented. There are many links in the supply and demand chain between the collector and the end users of medicinal plant products. Thus, collectors rarely know what are the end products of the plants they collect, where these are retailed (and at what prices) or the end users. Equally herbal product retailers higher up the market chain and herbal product manufacturers rarely know the original source of their materials or the environmental impacts that their demands may be having.

- This project seeks to achieve the long-term conservation and sustainable use of India's medicinal plant diversity, particularly of its globally significant species. The project will do this by mainstreaming conservation and sustainable use objectives into forest management policy and practice at the national, state and local level in three Indian states: Arunachal Pradesh in North-East India, Chhattisgarh in Central India and Uttaranchal in North-west India. Together, these states represent a broad complement of India's MAP diversity, including numerous globally significant species and populations (see Annexes 3 & 4 for further details on project sites and global significance).

Threats, root causes and barriers analysis

B) Threats to the Conservation and Sustainable Use of Medicinal Plants

---

[2] India has a federal structure comprising 28 states and 7 UTs. For simplicity, henceforth, the term 'state' is used to refer to both states and UTs.

[3] The Indian Forest Act of 1927 (IFA), the principal legislation relating to forests owned by the SFDs allows the constitution of two main categories of forest: the Reserved Forest (RF) and the Protected Forest (PF). In principle, the RF category was intended for forests perceived as being commercially valuable and therefore subject to stricter protection from local consumptive uses than the PF category. In practice, different types and degrees of local natural resource uses and rights of way and settlement were permitted in these forests at the time of demarcation, as rights, leases or concessions and there was great variation in how the provisions of the IFA were applied by individual forest officers across the country. Thus, the issue of access to and rights over forests and forest products has been highly contentious since colonial times. The IFA also contains provisions for establishing Village Forests, which were intended to meet the natural resource requirements of local populations, but relatively few such forests were ever established.

9. Sustainable management systems for MAP-supporting ecosystems were formerly widespread in India, but are now breaking down as traditional knowledge and local authority are eroded, leading to destructive, open-access or industrial forms of exploitation and the spread of new land uses that degrade and destroy MAP-supporting ecosystems. The precise way in which these changes are unfolding varies from place to place, and is never simple since multiple, interacting factors are always involved. Some of the key threats to medicinal plants and their underlying causes are described below.

1. Erosion of traditional rules and knowledge

- **Loss of traditional rules**. Traditional systems for natural resource management would often allow for each forest area to be divided up by agreement among different tribal settlements or communities. These arrangements used to persist even in forests that had been formally taken over by the government, but throughout India since Independence there has been an erosion of such systems. This is due to major demographic, socio-economic and cultural changes, and the associated break down of local political structures. Traditional systems have been increasingly replaced by centralized policies and laws that do not recognize traditional ways of managing and using natural resources.

- **Loss of traditional knowledge**. As traditional rules have been lost, so has traditional knowledge about medicinal plants, including appropriate harvesting practices. This is of particular concern as there is no comprehensive and reliable inventory of India's numerous medicinal plants and their varied uses.

- **Limitations of traditional knowledge**. Even in situations where traditional knowledge about MAPs persists, this may not be sufficient to determine appropriate levels of harvesting or the most suitable techniques at a larger commercial scale. Those who have traditionally harvested medicinal plants and other natural resources for subsistence purposes may not even fully comprehend the extent of actual or possible impacts of larger-scale commercial extraction on the sustainability of the resource. Furthermore, the range of products being collected in particular sites may well have expanded as a result of external demand and traditional collectors may not be familiar with harvesting these products on any large scale.

2. Alteration and redistribution of incentives

- **Increasing value of the resource**. An exponentially growing national and international demand for 'natural' products, particularly herbal products, has greatly intensified the exploitation of medicinal plants in India and across the region. The underlying reasons for this enormous growth in demand are complex and poorly understood or documented. They include the following:
    - *Demand in developing countries*. There is a long-standing and live tradition of using traditional medicines in most developing countries. Additionally such medicines are generally more accessible and affordable to rural populations.
    - *Demand in industrial countries*. There has been a recent resurgence of such interest in developed countries. The latter has been attributed to reasons such as: rising costs of more conventional health care and a greater interest in self-reliance and preventative health care both by individuals and national governments seeking to cut public spending on health care; the search for new drugs and cost-effective treatments for serious and allopathic drug-resistant diseases and renewed interest within pharmaceutical companies to isolate useful compounds from a wider range of plants; and more generally a greater interest in all things 'natural' and 'organic', which in turn has further stimulated the private sector to tap another new market. This interest in natural products is also shared by many urban elites in developing countries, notably in India.

- *Limited consumer awareness.* There is little consumer awareness about the nature of the MPA trade (e.g. the poor prices paid to impoverished collectors) and about its environmental impact. There are so many links in the producer-consumer chain in the MAPs sector that few end consumers have any idea of the provenance of most plant-based products let alone the environmental or social implications of their choices. There is thus little incentive for the producers of these products to regulate the sources of their raw materials with the associate positive knock-on effects this would have further down the supply chain.

- **Commercialisation of harvesting.** Strong national and international demand for herbal products means that there is an increasing incentive for people to poach MAPs. This makes it harder for resource managers to maintain exclusive access, and is a key underlying cause driving the overexploitation of MAPs.

- **Income generation potential.** Medicinal plant harvesting is often one of the few income-generating sources of employment available to many poor, rural communities, particularly to the landless and to marginal farmers, notably to women, and also to tribal people generally, many of whom are among the most impoverished and marginalized in India. Even where this is not the primary source of employment, NTFP collection often provides a vital economic buffer in times of low employment (e.g. agricultural low season), crop failure and other periods of economic stress. In some places, the high but seasonal income-generation opportunities offered by certain types of medicinal plants have also attracted temporary immigrants for this purpose. These non-local medicinal plant collectors who often have absolutely no knowledge of the ecology of harvested species or local conditions generally, and also little incentive to practice sustainable harvesting techniques as they are primarily motivated by the short-term income-generating potential of medicinal plant exploitation.

3. **Erosion of management authority**

- **Weak community property rights.** The majority of medicinal plants harvesting takes place in government forests that are owned and managed by SFDs, and where communities have no formal property rights to medicinal plants and the intellectual property rights (IPR) associated with them. This means that local collectors have little incentive to engage in sustainable harvesting, and also ensures that harvesters receive low prices, thus providing an incentive to harvest large quantities as quickly as possible.

- **Weak government control.** The fact that MAPs are mostly harvested in government forests limits the authority of traditional resource managers to prevent competitive exploitation (e.g. by outsiders), since this role has been expropriated by the state. There is typically, however, a weak official capacity to manage MAPs, due to an historical bias towards managing timber and other products perceived as having high fiscal value, which did not include MAPs. Hence, most Indian foresters lack the knowledge and skills needed to manage MAP harvesting, particularly within a context in which large numbers of poor people rely on these resources. A further constraint on the growth of government regulatory capacity to replace traditional management systems is the absence of comprehensive national legislation and policy. The need for this is increasingly recognized but it has proved difficult to develop for reasons that include: the intersectoral nature of the MAPs sector; the lack of information about many aspects relating to MAPs; and the lack of mechanisms for intersectoral dialogue and coordinated action. Attempts to correct these weaknesses among SFDs have been made by other stakeholders, including the GoI, which established the National Medicinal Plant Board (NMPB) in 2000, and the several state governments which have established State Medicinal Plants Boards (SMPB). Most of these institutions have very limited capacity to sustain the necessary dialogue and consensus-building processes.

- **Competition for land and other resources.** The rate of outright conversion of forests to other forms of land use has slowed since the 1980s. Nevertheless, there is increasing pressure on the natural resource base, due to the combined and inter-related impacts of economic growth and rising human and livestock populations. Thus, demand for land for settlement, agriculture, pasture and a host of development-related infrastructure and activities continues to grow. Inevitably, there is increasing pressure on India's remaining forest lands, which cover some 20% of its geographic area. Even where there is no outright forest clearance, there is often forest degradation as a result of unsustainable uses of natural resources, ranging from industrial and commercial uses (e.g. mining, timber logging) to a variety of subsistence-related uses such as livestock grazing and extraction of fuelwood and NTFPs. Some 70% of India's population is rural, extremely poor and largely reliant on local forests for a variety of natural products, regardless of their formal ownership. A threat to forests that is especially prevalent in the north-east region is the use of slash and burn cultivation or *jhum*.

10. In the face of major competing demands on forest land and resources for economic development, whether at a national scale or a local one, it has often proved difficult for SFDs to withstand or better manage these ever-growing pressures, including finding solutions that might minimize degradation or achieve compromises that might satisfy the multiple objectives of different stakeholders. Instead, SFD forests are often a de facto open-access resource and both destructive harvesting practices and over-harvesting are leading to the unsustainable exploitation of medicinal plants in India. Some 70% of medicinal plant harvesting is estimated to be conducted in ways that disrupt the reproductive cycle and rates of natural regeneration of the plants thereby threatening the viability of local populations. For example, whole plants are uprooted before having set seed, or harvesting takes placed during an inappropriate growth stage, or excessive quantities of fruit and seed are removed. The main reason for the overexploitation of medicinal plants is that the prevailing incentive structure governing the harvesting of medicinal plants does not favour sustainable harvesting.

Institutional, sectoral and policy context

i The Legal and Policy Framework

11. There are numerous laws and policies with some bearing on the sustainable use and conservation of MAPs in India (see Annex 1). Most of these predate the government's increased understanding of the economic value of MAPs and ensuing concern about their conservation status. The most relevant of the older policies and legislation from this project's perspective are the Biological Diversity Act, 2002, National Forest Policy, 1988, the Indian Forest Act (IFA),1927 and related state legislation, the Forest (Conservation) Act (FCA), 1980, and the Joint Forest Management orders and rules promulgated by both GoI and different states. These are the key policies guiding and regulating the use and management of state forests today. The Panchayats (Extension to the Scheduled Areas) Act, 1996 (PESA) is particularly relevant to community-owned forests and tribal areas as it gives local tribal people certain rights over natural resources (Annex 1).

12. The GoI's growing concern about the status of medicinal plants is better reflected in more recent policy statements and actions. Thus, the 1999 National Policy and Macro-level Action Strategy on Biodiversity recognizes the national significance of medicinal plants, and states that a key area for action is their *in situ* conservation and *ex situ* cultivation. The subsequent Final Technical Report of the UNDP-GEF sponsored National Biodiversity Strategy and Action Plan suggests detailed strategies for the conservation and sustainable use of medicinal plants (MoEF 2005).[4] [5] Also in 1999, the Planning Commission of India[6],

[4] However, states may also have their own versions of certain policies and laws as also state-specific policies for specific sectors. Similarly, centrally sponsored schemes may operate at the state level through different ministries.

recognizing the importance of the medicinal plants sector, set up a 'National Task Force on the Conservation, Cultivation, Sustainable Use and Legal Protection of Medicinal Plants'.

13. The Task Force's key recommendations include:

- Establishment of Medicinal Plant Conservation Areas covering all ecosystems and forests types of India.
- Identification of forest areas rich in medicinal plants and the formulation of management plans for these.
- Promoting sustainable harvesting of medicinal plants under Joint Forest Management schemes.
- Encouraging technically qualified NGOs to improve awareness about medicinal plants and their uses and to increase the availability of plant stock by developing and promoting agro-techniques for the cultivation of medicinal plants.
- The establishment of a medicinal plants boards at the national and state/UT level (Planning Commission of India, 2000).

14. In its Tenth Five Year Plan for 2002-2007, the Planning Commission clearly states that "the conservation, preservation, promotion, cultivation, collection and processing of medicinal plants and herbs required to meet growing domestic demand for Indian Systems of Medicine and Homeopathy drugs and the export potential must be ensured". It also states that, "Natural forests rich in medicinal plants should be identified and managed for sustainable supply of crude drugs."

15. The National Policy on Indian Systems of Medicine & Homeopathy of 2002 is also significant as the policy clearly states that the conservation of medicinal plant resources is an important aspect of promoting ISM in the country

ii Key Agencies and Work of Significance to the Sustainable Use and Conservation of MAPs

16. Throughout the country there are a number of past and current initiatives addressing different aspects of the use and conservation of MAPs. Such initiatives have involved a wide range of stakeholders, both governmental and non-governmental as well as civil society. Most have been on a limited scale and none address all the major threats to the sustainable use and conservation of MAPs in a comprehensive fashion.

The MoEF and SFDs

17. To date much of the work relating to the sustainable use and *in situ* conservation of MAPs by the central MoEF and SFDs has centered around the implementation of bilateral and multilateral agency-funded projects on medicinal plants conservation and use. These have included: one major initiative funded by DANIDA; two by UNDP-India under the Country Cooperation Framework (CCF) I and II; and one through the Medicinal and Aromatic Plants Program in Asia, an initiative funded by IDRC and Ford Foundation. International aid-agency funded forestry projects have sometimes also had a relatively minor medicinal plants component.

18. The DANIDA project was restricted to the southern Indian states of Karnataka, Kerala and Tamil Nadu, while the first UNDP project under CCF-I was confined to the two states of Andhra Pradesh and

[5] This report is now revised as the Draft National Biodiversity Action Plan by the Ministry of Environment and Forests, Government of India. Henceforth, all references to UNDP-GEF sponsored National Biodiversity Strategy and Action Plan may be interchanged with Draft National Biodiversity Action Plan.

[6] The Planning Commission is a centralized body which plays an integrative role in the development of a holistic approach to the policy formulation in critical areas of human and economic development at the national level.

Maharashtra. The current project, which has just been started under CCF-II, builds on past work in these states, as well as initiating work in four additional states: Madhya Pradesh, Orissa, Rajasthan and West Bengal. The present project proponent, the Foundation for Revitalisation of Local Health Traditions (FRLHT) was a major partner in the work funded by DANIDA and is now a major partner in the UNDP-India project. FRLHT and its work including the projects mentioned here are described further below. MAPPA's work is also described below.

19. Additionally, the National Afforestation & Ecodevelopment Board (NAEB) [7] of the MoEF has a scheme to promote the cultivation of Non-Timber Forest Products (NTFP) including Medicinal Plants. The scheme provides 100% central assistance to the States for cultivation of medicinal plants to augment the rising demand for plant-based drugs and to offset the scarcity because of unsustainable harvesting. The NAEB has advised the state governments to use at least 10% of the grants provided by the NAEB for afforestation using medicinal species, especially trees, planted as multi-species plantations.

The Foundation for the Revitalisation of Local Health Traditions (FRLHT)

20. Some of the most comprehensive and far-reaching efforts to date have been spearheaded by the FRLHT, an Indian NGO based in Bangalore established in 1991.

21. FRLHT has since been recognized as a Centre of Excellence of the MoEF. As a Centre of Excellence, FRLHT receives annual grants from MoEF, which last year amounted to 10% of their budget. They are partners with the MoEF but not formally affiliated with them.

22. FRLHT's mandate includes:

    i. The conservation, sustainable use and research on the biodiversity used by Indian Systems of Medicine

    ii. Promoting the role of traditional medicine in primary health care

    iii. Building inter-cultural bridges based on Traditional Knowledge and modern science

    iv. The revitalisation of informal, institutional and commercial transmission processes for the dissemination of Traditional Knowledge.

23. FRLHT has worked successfully in South India for many years, in collaboration with many partners, notably various SFDs and local communities. Their achievements include:

    - The establishment of 55 Medicinal Plant Conservation Areas (MPCAs) in collaboration with the SFDs of Andhra Pradesh, Karnataka, Kerala, Maharashtra and Tamil Nadu, which are jointly managed by the SFDs and the local communities.
    - Pioneeering the concept of Home Herbal Gardens of which there are currently over 150,000
    - Extensive documentation of local health traditions and facilitation of information and experience exchange between folk healers
    - The establishment of a successful community-owned enterprise in south India, the Gram Mooligai Company Ltd. The company is involved with the cultivation, collection, value addition and manufacture of traditional medicines.

[7] The NAEB was set up in August 1992 to facilitate afforestation, tree planting, ecological restoration and eco-development activities in the country. The focus was on degraded forest areas and lands adjoining the forest areas, national parks, sanctuaries and other protected areas as well as the ecologically fragile areas like the Western Himalayas, the Aravallis and the Western Ghats. See http://envfor.nic.in/naeb/naeb.html

- Research on the distribution and conservation status of medicinal plants in India and the medicinal plant trade
- Promoting and conducting dialogue with the private sector to persuade them that the conservation and sustainable use of medicinal plants is in the long term interests of the private sector.

24. Medicinal plant conservation efforts are most advanced in the states of Tamil Nadu, Karnataka, Kerala, Maharashtra and Andhra Pradesh. MPCAs have been established in all these states and considerable amount of documentation has also been done. Partnerships with local community groups and NGOs have been established at many sites in these states for the conservation and sustainable use of medicinal plants.

The Medicinal and Aromatic Plants Program in Asia (MAPPA)

25. MAPPA was launched in 1998 as a joint effort of IDRC and the Ford Foundation. The objective of MAPPA is to institute a system of long-term sustainable and equitable use of MAPs. This is to be achieved by improved resource conservation and the improved livelihood security of rural and marginalised communities. MAPPA's approach has been strategic research, partnership building and networking. The main types of activities supported by MAPPA are community-based conservation, participatory research and documentation. MAPPA's efforts have been spread all over south Asia including India, but are on a relatively small scale. Recently MAPPA has moved to ICIMOD in Kathmandu from IDRC in New Delhi.

The National Medicinal Plants Board (NMPB)

26. As a result of the Planning Commission's Task Force recommendations, the NMPB was set up in 2000. The NMPB is housed within the Department of ISM & H[8] in the Ministry of Health & Family Welfare (MoHFW). The NMPB is responsible for coordinating all matters relating to medicinal plants at the national level in order to protect, sustain and develop this sector. This includes: assessing demand and supply; developing policies and strategies for the *in situ* and *ex situ* conservation; promoting cost-effective cultivation; promoting more effective collectors' cooperatives; patenting and protection of IPRs; supporting and promoting research and development; and facilitating information exchange (see Annex 2 for further details). However, the NMPB has insufficient capacity to fulfill this mandate by acting on its own. For example, it has a sanctioned strength of only 5 staff including a Chief Executive Officer.

27. Additionally, the actual Department of ISM & H supports numerous education institutions offering training in ISM, while the Ministry of Health supported the plantation of medicinal plants under a scheme called *Vanaspati Van* plantations under GoI's last Five Year Plan.

Individual State Medicinal Plants Boards

28. In addition to the NMPB, the GoI has also requested all states to set up their own Medicinal Plants Boards and almost all of India's 28 states and 7 Union Territories have now established these. SMPBs are supposed to perform a similar function to the NMPB at the individual state level as well as at a regional level within India. However, SMPBs are not branches of the NMPB and therefore can be housed in different ministries. SMPBs have to obtain their funding independently, which is largely done through their respective state governments. Requests for funding from NMPB for specific projects must be routed via the relevant SMPB, which is tasked with monitoring the implementation of all projects funded by the NMPB in their respective states.

[8] Department of ISM & H was renamed Department of Ayush in 2003. Henceforth, all references to Department of ISM&H may be interchangeable with the Department of Ayush.

29. Like the NMPB, the SMPBs also have very low capacity. SMPBs normally have even fewer staff and most are at the very initial stage of establishment. Typically, the head of an SMPB performs this function as an additional responsibility to an existing government job.

Department of Science & Technology (DST)

30. The Science and Society Division of the (DST) is working to raise the awareness of the general public about the use and value of medicinal plants. In some regions like the north-east DST is planning to invest in the conservation and sustainable use of medicinal plants.

Stakeholder analysis

31. The present project design reflects the findings of extensive consultations at different levels during the project planning phase. Many of the stakeholders consulted in the development and design of this project during the PDF-B will also play an active role in its implementation through various mechanism as detailed later in the Stakeholder Involvement Plan in Section IV. The table below summarizes the main stakeholders at the national, state and local level.

Summary of key stakeholder groups and their potential roles in the project

Key Stakeholder	Role in the project
1) National-level	
MoEF	- Take leadership in the overall implementation of this project. - Provide overall administrative locus to the project and ensure the regular monitoring and evaluation of project implementation. - Steer and facilitate the required changes in the policy directives for encouraging MAP conservation and sustainable utilization. - Facilitate changes in the JFM resolutions and guidelines to incorporate MAP conservation and sustainable utilization concerns. - Issue guidelines to the project states and other states to adopt and assimilate the experiences of the project implementation in to their forest management. - Provide the required co-financing and coordinate with other Ministries and Departments at central and state government levels to ensure that the committed co-finance, both reoriented baseline and in kind are made available in a timely fashion. - Coordinate smooth release of release of project funds from UNDP-GEF.
NMPB and Department of ISM & H, MoHFW	- Participate actively in capacity development initiatives, to develop their own and SMPBs capacities to fulfil their broader mandate. - Take leadership in the development of a National Strategy for the MAP sector. - Include the MAP species identified for cultivation in their programmes (especially GSMPs) and allocate the required funds for this purpose.
MoRD	- Adopt and assimilate the best practices resulting from the implementation of this project into livelihood related programmes of the MoRD, to promote cultivation and sustainable harvest of MAPs more widely.
FRLHT	- Lead technical agency guiding the implementation of this project at

Key Stakeholder	Role in the project
	all levels. - Will play major role in capacity building at all levels - Will be closely involved with field research and monitoring activities.
2) State-level (Shared across states)	
State Governments & State Forest Departments including: Principal Secretaries of State Government Principal Chief Conservators of Forest District Forest Officers SMPBs	- Provide the required leadership in the respective states to enable the efficient implementation of this project and ensure the development of state-specific strategies for the MAP sector. -Establish and manage the MPCAs/FGBs; develop norms for managing forests in wider area around MPCA/FGB complexes to promote maintenance of MAP diversity; mainstream MAP conservation and sustainable use objectives into forest policy and practice. - Contribute the committed In Kind and re-oriented baseline co-financing to the project. -Evolve and adopt a participatory mechanism for project implementation. -Incorporate the policy changes and the guidelines in to the state level policy and action as well as different processes of forest management. - Incorporate training for MAP conservation management within broader forest management into the training modules of relevant state agencies. - Participate in the capacity building initiatives of the project.
NGOs	- Participate in the implementation of the various components of the project based on their respective areas of competence and expertise.
Community-based Organisations, representatives of different community-based institutions, including JFM Committees.	- Participate in the Local Management Groups (see Part III). - Participate in the capacity development initiatives of the project. - Take leadership in the management of the project at the demonstration sites, especially at the community-owned and managed sites. - Partner with SFDs in implementing the conservation, sustainable harvest and adaptive management of the MAPs. -Participate in dissemination of lessons learnt and successful models to other forest areas - Identify local-level 'project champions' in project villages and constitute Task Teams for specific project activities
Gram Sabhas and other Panchayati Raj Institutions[9]	- Partner in the implementation of community based components of this project. - Participate in the capacity building initiatives.
3) State-level – unique to each of the three states.	

[9] A Panchayati Raj Institution (PRI) is a local-level institution for self-government in rural areas that are recognized by the Constitution of India. PRIs are elected bodies and operate at three levels, a cluster of villages, a block and at the district level. PRIs are responsible for the preparation of plans for economic development and social justice and also for the implementation of schemes for economic development and social justice as entrusted to them by the respective state government and also by the GoI.

Key Stakeholder	Role in the project
Arunachal Pradesh	
North Eastern Council	- Provide direction to the state agencies for mainstreaming the conservation and sustainable use of MAPs in development projects that are based on natural resource use.
Non-Governmental Forest owners (as in North-eastern states)	- Participate actively in MPCA/FGB establishment and management, develop community management norms and practices for conservation and sustainable use of MAPs in wider forest area around MPCA/FGB complexes.
Chhattisgarh	
Chhattisgarh Forest Department	-Assimilate the FGB/MPCA concept into the current PPA strategy, with special emphasis on MAP conservation and sustainable use.
Uttaranchal	
Van Panchayats	- MPCA/FGB establishment and management, develop and implement management norms and practices for sustainable use and conservation of MAPs.

Baseline analysis

Baseline

32. India is the world's second largest producer of medicinal plants and medicines after China. India's wealth of medicinal plant species have been used in traditional Indian health systems like *Ayurveda, Sidhha, Unani*, and Tibetan systems for millennia and are still very much in use today. An estimated 60-80% of India's population rely on medicinal plants to meet their primary health care needs. The Government of India recognizes the importance of medicinal plants and has been committed to utilizing this resource wisely and has supported the strengthening of institutional capacity to achieve this at the national and state levels.

33. Over 95% of medicinal plants in use by the Indian herbal industry are harvested from the wild, primarily from productive forestlands. Forest habitat loss and degradation, and unsustainable exploitation of wild populations, including destructive harvesting and over-exploitation, constitute the principal threats to MAP diversity.

34. The baseline MAP management program focuses on producing MAPs for subsistence and commercial needs. India's MAP management approach is still evolving, but can be said to be comprised of three main elements: increasing cultivation and related research, passive management of a small number of MAP species harvested as non-timber forest products in productive forests, and an emerging emphasis on *in-situ* conservation through MPCAs (Medicinal Plant Conservation Areas). While the approach recognizes the importance of *in situ* conservation of MAP diversity, Government programs emphasize cultivation and to a small extent, establishment of MPCAs. Productive forestlands, which harbor the vast majority of MAP diversity, and mainstreaming MAP diversity conservation objectives into productive forestland management, are largely overlooked.

35. Forest managers have not benefited from MAP species harvest on any significant scale. Consequently, MAP management has not received much attention historically and is just a small part of overall NTFP

management. Existing forest management policies with a specific bearing on MAPs are limited to regulating the harvest volumes of a very small number of MAP species. The species included on these lists and the volumes stipulated have no ecological basis. Nor is the purpose of these restrictions to promote the management of productive forests in ways that protect MAP diversity and habitat.

36. India's emerging MAP management strategy does include *in situ* conservation of MAP species. But, in the short term, the national benefits of this conservation approach are not sufficient to cover its costs. These costs, or constraints on diversity management, are associated with additional information gathering, learning, outreach, and management effort. The lack of knowledge and technical skills on how to manage forest to maintain MAP diversity inhibits proactive conservation management.

37. The participation of a wide-range of stakeholders in forest ecosystem management is not a new concept in India. In all three states where the project will work, community management of forest resources is a part of the forest management baseline. This awareness offers an opportunity for developing innovative MAP co-management regimes between the Forest Division authorities and local communities.

38. Public awareness of the values of MAP resources is decreasing in many areas of India. Especially among young people, there is a declining level of awareness of their own cultural traditions with respect to the use and management of MAP biodiversity. Traditional knowledge regarding the gathering and innovative use of MAP species comprises an invaluable living legacy that is relevant to conserving MAP biodiversity. However, traditional knowledge is being eroded, before it has been recorded.

Global Environmental Benefits

39. This project will conserve globally significant medicinal plant biodiversity in three Indian States. Specifically, the project will ensure the *in situ* conservation of viable populations of some 80 globally significant species through a network of MPCA/FGB complexes (Annex 4). In the process of doing this, other global benefits will be generated as well, including significant indirect use (option and insurance) and passive use (existence) values. The global option and insurance values spring from India's large number of medicinal plant species. For world medicine and health maintenance, this diversity preserves options for as yet undiscovered new treatments and/or uses of MAP species. It also serves as a global insurance policy against the diminishing effectiveness of certain "industrial" drugs in the marketplace. For MAP harvest, the same genetic diversity could prove crucial to maintaining MAP productivity after future environmental shocks from climate change or other sources. The global existence value arises from nontrivial per capita existence values multiplied by the hundreds of millions of citizens who hold these values and live outside of India.

40. Additionally as global biodiversity significance will be a key criteria in determining the location of the MPCA/FBG complexes, there will be additional global benefits from the maintenance of other globally significant biodiversity both within these complexes and within the wider forest areas as forest management strategies that promote the conservation and sustainable harvesting of MAPs are likely to be beneficial for many other species compared to the destructive open-access harvesting regimes that currently exist in most forests.

GEF Project Alternative

41. The costs of the project are shared by the GEF and other financiers, with the GEF financing the agreed incremental costs of conserving globally significant MAP diversity and generating global environmental benefits. The overall objectives of the proposed project are the sustained conservation of India's MAP diversity. Upon completion of the project, State forest managers and local communities will be conserving MAP diversity in three Indian States by applying a new approach to productive forest management.

42. To accomplish this, the project proposes to complement the existing baseline situation in India with a GEF and Co-financed project alternative. The alternative will seek to remove various barriers to the mainstreaming of conservation and sustainable use objectives into the Indian forest sector. A key barrier to mainstreaming the sustainable use and conservation of medicinal plants into the productive forest sector is the lack of a focused strategy at the national and state levels that addresses the main threats to medicinal plants. National forestry policies provide a framework for forest management in the states. However, the detailed planning and implementation of activities in the forestry sector is carried out by the respective state governments. While existing national and state forestry policies are generally supportive of conservation, they do not focus on the threats to MAPs or the requirements for their effective conservation and sustainable management. The development of an effective policy framework for MAPs will require inputs from numerous sectors and stakeholders. However, there are currently insufficient mechanisms for effective inter-sectoral dialogue and action. The other major barriers to mainstreaming include information and capacity barriers, particularly within the SFDs and among local communities.

43. In the absence of this GEF project, MAP diversity, including GSMP diversity, will continue to be lost, generally along with losses of additional biological diversity as MAP habitat is lost or degraded. This will have direct and indirect local, national and global socio-economic implications through loss of revenue, loss of a major means of affordable health care and loss of traditional knowledge about MAPs, as well as reduced option values.

System Boundary

44. Baseline and incremental costs have been assessed temporally, over the planned seven-year time frame of the GEF intervention, and geographically by the three Indian States and the administrative boundaries encompassing participating State District Forests. The scope of analysis covers the national policy context for medicinal plants and forest management in India as well as within three Indian States: Chhattisgarh, Uttaranchal, and Arunachal. In addition, the scope of the analysis included up to seven District-level forests within each of the three Indian States. Thematically, the analysis considered medicinal plant and productive forest management policy and practice and the range of interventions necessary to address the proximate and underlying threats to MAP diversity, based on the detailed assessments performed during project formulation.

Summary of Cost

45. The total cost of the project including Co-funding and GEF funds is US$11,414,121. Of this total, co-funding constitutes 56% or US$6,479,121. GEF financing constitutes the remaining 44% of the total, or US$4,935,000. The incremental cost matrix provides a summary breakdown of baseline values and Co-financing and GEF financing by project Outcome.

PART II : STRATEGY

Project Rationale

46. At least 200 species of Indian medicinal plants are known to be threatened, although the true number is likely to be much higher as the status of many species has not been assessed. There is a general consensus among many of the major stakeholders that current patterns of MAP harvesting and trade are unsustainable. However, there is no adequate policy framework for developing and implementing a comprehensive action plan for the conservation and sustainable use of medicinal plants in India. To date, different actors scattered around the country have been engaged in a variety of activities relating to different aspects of the sustainable use and conservation of medicinal plant conservation, mostly at a small scale, with some notable exceptions such as the work undertaken by the Foundation for Revitalising Local Health Traditions (FRLHT), which is described later. The baseline situation with respect to threats and root causes has already been described earlier. This section deals with the policy and legal baseline and the key agencies, programmes and projects of significance to the medicinal plants sector in India.

47. There are clearly many dimensions to the present harvesting and trade in MAPs all of which will need to be addressed in the long-term if we are to achieve their conservation and sustainable use. Given the multifaceted, complex nature of the threats to the long-term sustainability of MAPs, including the many different scales on which these threats operate, it would be difficult for a single project to address all of these in a cost-effective manner. After considering various alternatives, the present project has decided to focus on mainstreaming the sustainable use and *in situ* conservation of medicinal plants into the productive forest sector. Specifically, this project seeks to promote the conservation and sustainable use of MAPs in three Indian states with special emphasis on Globally Significant Medicinal Plants (GSMPs).

48. There is a general consensus that for most harvested MAPs, an approach that focuses on *in situ* conservation and sustainable harvesting is the only viable option for the foreseeable future for a number of reasons. *In situ* conservation of MAPs is undoubtedly the most cost-effective way of conserving their inter- and intra-specific genetic diversity. Cultivation can and should be considered for as many species as possible, particularly threatened ones. However, there are many barriers to the effective cultivation of MAPs as well as some potential adverse impacts on biodiversity. Such barriers include information and technological barriers and market barriers (see FRLHT 2003 and Schippmann *et al* 2002). Currently, only some 300 species of medicinal plants are being cultivated across the country, most on a very limited scale. Only some 100 species are cultivated on any substantial scale, when there are over 750 species in commercial trade and over 200 threatened species generally. Of the cultivated species, only 30 are known to be highly traded or threatened. The degree of threat from harvesting to medicinal plants varies according to several criteria. Thus, most at risk from over-harvesting or inappropriate harvesting methods are: a) species with a narrow geographic distribution; b) species that are habitat-specific; and c) species that naturally occur only in small populations wherever they are found. Additionally the natural resilience of individual species to harvesting pressures varies according to different biological characteristics. Thus, for example, slow-growing species are more vulnerable than fast-growing ones.

49. It is clear from the foregoing that those species that are likely to be most at risk from destructive harvesting are also going to be the most difficult to cultivate on any large scale. Equally, while consumers have access to very low-priced wild products there is little incentive to purchase more costly cultivated stocks of raw materials and thus little incentive for investment in cultivation by potential MAPs farmers. Thus, it becomes imperative to focus first on ensuring the viable populations of medicinal plants are conserved *in situ* and that the harvesting of wild MAPs is sustainable, especially of GSMPs and species that are more vulnerable to extinction. The current project will be working with a total of at least 400 species of medicinal plants including at least 80 GSMP, including several critically endangered species (see Annex 4).

50. It is also clear that the long-term sustainability of medicinal plants in the wild will require addressing the demand side of the trade in MAPs. However, this trade is extremely complex, dynamic and poorly understood. Addressing the demand side will require considerable time and investment in first understanding trade dynamics. Meanwhile, demand for medicinal plants-based products continues to grow inexorably. Given the limited ability of cultivation to supply that demand and given that 95% of all medicinal plants are found in natural forests, it seemed doubly appropriate to focus first on addressing conservation and sustainable harvesting in the wild to ensure that wild stocks are not eliminated while we work out how to address the trade dimension. This project will attempt to tackle limited aspects of the demand side at the community-level in selected demonstration sites, such as trying to obtain fair prices for collectors from local traders, local value addition, and exploring the possibility of a sustainable harvest certification system.

51. The project builds on the earlier work done by FRLHT, including the PDF-B, but goes well beyond this early work in several important respects as it has been designed after a detailed 'gap analysis' of the prevailing state of affairs within the MAPs sector.

52. First, the project will be attempting to integrate the conservation and sustainable use of MAPs into national policies, including the development of a national strategy for the conservation and sustainable use of MAPs. Comparable state-level strategies are to be developed for three project states. As explained earlier, such strategies do not exist at present. Second, the project will attempt to scale up the impact of such activities by bringing about a much more inter-sectoral approach to the *in situ* conservation of MAPs, by involving several other relevant stakeholders in addition to SFDs, both at the policy-level and at the activity-level in target project states, notably the NMPB and SMPBs, but also others as detailed later. Much of the focus of FRLHT's earlier work has been on the establishment of MPCAs by working mainly with SFDs and local communities and documentation of species and traditional health traditions. Additionally, the project will put much more emphasis on developing methods for sustainable harvesting of selected MAPs, particularly GSMP. Again, much of FRLHT's earlier work concentrated on small-scale cultivation and marketing by local communities and there was no special focus on GSMP. Finally, the project will be working in community-owned and/or managed forests, where very little work has been done in connection with MAPs. Technical agencies in addition to FRLHT will also be involved in this project.

53. The main change since the PDF-B is that the number of project states has been reduced from 7 to 3 primarily for logistical reasons and the difficulties of coordinating such complex work in so many different sites spread across India. Additional states will be considered for replication of lessons learned from this project.

54. There are relatively few on-going GEF projects dealing with the sustainable use and conservation of MAPs, although several are currently being developed. Projects under implementation include the Traditional Medicine Programme in Zimbabwe, a Medium-Size Project, and a conservation and sustainable use of MAPs Full-Size project in Egypt. However, more generally, there are a large number of individuals, organizations and programmes engaged in work on different aspects of the use and conservation of MAPs across the world. This project will ensure that it learns from the experiences of all such major work

including both GEF and non-GEF funded initiatives as well as disseminating the lessons learned from this project to the wider field.

Policy Conformity

55. The project is consistent with GEF Biodiversity Strategic Priority 2. Its primary focus is to mainstream the conservation and sustainable use of MAPs within the productive forest sector in India by bringing about changes at the national and state policy level, developing and promoting mechanisms for more effective intersectoral dialogue and action, and increasing the capacity of key stakeholders such as SFDs, local communities, the SMPBs and the NMPB to better manage and benefit from MAP resources.

56. The project also addresses GEF Operational Program 3 (Forest Ecosystems) as 90% of MAPs are found in India's forests. Specifically, the project will help develop the capacity of both SFDs and local communities to better manage MAP resources including their habitat. Consequently, a much broader range of biodiversity than MAP species alone is likely to benefit from improved forest management. All three project states include areas of exceptional biodiversity value and one state, Arunachal Pradesh, is located within the Eastern Himalayan global biodiversity hotspot. An important aspect of the project will be to generate baseline information on the status and characteristics of MAP diversity in project sites as well as to document and protect traditional knowledge about MAPs. Another key component of the project is to develop, test and demonstrate sustainable harvesting methods for selected MAP species. Another important component is to ensure that viable populations of medicinal plants, including GSMP, are conserved *in situ* through the FGBs and MPCAs. The maintenance of such wild stocks as well as the documentation and preservation of traditional knowledge about MAPs are clearly important for the further development of cultivation programmes for MAPs, which are currently limited.

57. The project is also in line with the Global Strategy for Plant Conservation (GSPC), which was adopted by the Conference of the Parties of the Convention on Biological Diversity in April 2002 (Decision VI/9). The GSPC has the long-term objective of halting the current and continuing loss of plant diversity. The GSPC comprises 16 broad outcome-oriented and interlinked targets relating to the conservation of plant species, grouped around the major themes of: (a) understanding and documenting plant diversity; (b) conserving plant diversity; (c) using plant diversity sustainably; (d) promoting education and awareness about plant diversity; and (e) building capacity for the conservation of plant diversity. Its relevance to a project which aims to conserve large numbers of economically-important wild species in a mega-diversity country can hardly be over-stated. The project will contribute to meeting several of the GSPC-determined global targets for the year 2010, specifically:

- (iii) *"Development of models with protocols for plant conservation and sustainable use, based on research and practical experience"*;
- (ix) *"70 per cent of the genetic diversity of crops and other major socio-economically valuable plant species conserved, and associated indigenous and local knowledge maintained"*;
- (xi) *"No species of wild flora endangered by international trade"*;
- (xii) *"30 per cent of plant-based products derived from sources that are sustainably managed"*; and
- (xiii) *"The decline of plant resources, and associated indigenous and local knowledge, innovations and practices that support sustainable livelihoods, local food security and health care, halted"*. (See http://www.biodiv.org/programmes/cross-cutting/plant/targets.asp).

Project Goal, Objective, Outcomes and Outputs/Activities

58. The overall **goal** of the project is to conserve India's medicinal plant diversity. The project **objective** is to mainstream the conservation and sustainable use of medicinal plants into the productive forest sector of three Indian states, with particular reference to GSMPs. The three states, Arunachal Pradesh in the north

east, Chhattisgarh in central India and Uttaranchal in the north-west, were selected for the following reasons:

- They are rich in MAPs but these resources are under increasing threat.
- They have a high number of endemic and other GSMP species.
- They represent a diverse range of the country's major forest types.
- They represent a diverse range of cultural and socio-economic conditions including a diversity of traditional health practices and knowledge as well as property rights regimes.
- There has been no comparable work on medicinal plants in this region, but there is considerable state government interest in the MAPs sector.

59. Arunachal Pradesh is located within the Eastern Himalaya global biodiversity hotspot and is estimated to harbour some 12% of India's medicinal plant diversity in its tropical evergreen and semi-evergreen forests, while Chhattisgarh has around 11% in its dry and moist deciduous forests. The sub-tropical and temperate biomes of the North-west region of India, where Uttaranchal is located, contains more than 1,200 medicinal plant species, or some 15% of India's medicinal plant diversity.

60. Both Chhattisgarh and Uttaranchal have declared themselves as 'Herbal States' in 2001 and 2002, respectively. Additionally, Chhattisgarh is one of two states in India to have established People's Protected Areas (PPAs) with the objective of managing forests in partnership with local communities. Parts of PPAs which are rich in medicinal plants are being designated as Medicinal Plant Reserves and resource inventories have been commissioned. Chhattisgarh has also established processing centres for local value addition. Uttaranchal has also started a state-wide effort to document the distribution of medicinal plants and is in the process of compiling information on all aspects of selected species, so that consolidated information is easily available.

61. The project aims to achieve its stated objective through the following five proposed outcomes:

    1. An enabling environment at the national level for mainstreaming the conservation and sustainable use of MAPs into forest management policies and practices

    2. Forest management policies in the three project states that promote and support the conservation and sustainable use of MAPs.

    3. Conservation and sustainable use of MAPs are mainstreamed at the local level into government and community forest management norms and practices at demonstration sites in the three project states.

    4. Materials and methods developed for replicating the successful models of conservation and sustainable use of medicinal plants across other sites in the three states, and more broadly.

    5. Effective project monitoring and evaluation, lessons learning and adaptive management

Outcome 1: <u>An enabling environment for mainstreaming the conservation and sustainable use of MAPs into forest management policies and practices at the national level.</u>

GEF Contribution: $700,732, **Co-financing** $ 994,380

62. To achieve this outcome, the project will seek to facilitate inter-sectoral dialogue and coordinated action between key partners including: the MoEF (especially the National Biodiversity Authority, National Board for Wildlife, the National Afforestation and Ecodevelopment Board); the Ministry of Health & Family

Welfare (notably the National Medicinal Plants Board); the Ministry of Rural Development; and the Department of Science and Technology.

63. Specific outputs that will be accomplished to achieve this outcome include:

1.1 A national strategy that addresses issues relating to the *in situ* and *ex situ* conservation, cultivation and the sustainable use of medicinal plants, including the role of medicinal plants in the livelihoods of local communities, access of local communities to traditional medicine, protection of traditional knowledge and the trade in medicinal plants. The need for a holistic national strategy which will enable the required inter-sectoral coordination for the MAP sector has been identified through the PDF-B. The project will facilitate the inter-sectoral consultations and dialogue especially between important government agencies like MoEF, NMPB, MoRD, DST and DBT and key NGOs and research institutions and provide the required expert inputs to draft a national strategy. Local consultants will be used to review the related policies and strategies and their reports will be important inputs into the strategy formulation. Workshops and seminars will be held at the national level to initially seek inputs and later on to discuss and finalize the national strategy.

1.2 Revised national guidelines for JFM developed by MoEF with a stronger focus on the conservation and sustainable harvesting of medicinal plants, especially GSMPs. Experts in participatory resource management and gender will review the existing JFM guidelines and their findings will be used in regional and national consultations in which all the important stakeholders will participate. These consultations will be lead by MoEF and NMPB. The outputs of these consultations will be consolidated and used to guide the revision of the JFM guidelines by MoEF.

1.3 Legal mechanisms developed to protect traditional knowledge specifically relating to the sustainable harvest, cultivation and use of medicinal plants within the guidelines of the Biological Diversity Act (2002) through the National Biodiversity Authority, the National Medicinal Plant Board and other sectoral agencies as appropriate. Legal consultants will undertake research studies for developing and incorporating appropriate legal mechanisms to protect traditional knowledge. Stakeholder consultations will be held to inform this research about the issues. Regional and national workshops will be held to disseminate the research findings and to finalize the legal mechanisms. These legal mechanisms will include model Material Transfer Agreements and Information Transfer Agreements for holders of traditional knowledge. These agreements will strengthen access and benefit sharing mechanisms within the context of bio-prospecting.

1.4 Identification of medicinal plant species suited for cultivation and inclusion in the list of plants used for afforestation and income generating programmes of the NAEB (MoEF) and the Ministry of Rural Development. Forestry, agricultural and crop consultants will be commissioned to undertake field surveys, review the existing list of species used by government agencies and to develop criteria for identifying and evaluating the suitability and potential of MAP species for cultivation and use in government afforestation and income generation programmes. These consultants will also develop a package of practices for specific species and demonstrate it in selected sites. Training will be provided to the people involved and training materials will also be produced to enable the replication of these efforts.

1.5 Capacity of NMPB strengthened to enable it to function more effectively as an inter-sectoral coordinating body for the MAPs sector in India and to enable it to fulfill its mandate. A review will be conducted of the existing capacity within the NMPB with reference to its mandate. Based on this review a capacity development plan will be prepared. Special training materials will be developed for the training of the NMPB staff and the need for additional human resources will be assessed.

1.6 A long-term strategy and protocols for threat assessment and monitoring of the conservation status of MAPs in India. A thorough review of the information related to the conservation status of MAPs in India will be undertaken by a network of researchers based in organizations across India. This review will cover the distribution of species, their *in situ* status, species-wise area under cultivation and volumes in trade. Based on the results of this review and in consultation with major stakeholders especially the National Board for Wildlife and the NMPB, the strategy and protocols with a robust set of indicators for threat assessment will be developed. These methods will be field tested and then fine tuned prior to widespread dissemination so that these assessments are periodically and widely carried out.

1.7 A course module on the conservation and sustainable use of medicinal plants developed for the Indian Forest Service training curriculum. Undertake a review of the training syllabus of the IFS to identify gaps related to the conservation and management of MAPs. Based on the identified gaps and with the help of expert inputs a training module will be developed. The module will be reviewed by an expert group prior to testing it with the trainees and based on feed back this will be refined and finalized. The required training materials to support the module will also be developed.

Outcome 2: Forest management policies in the three project states that promote and support the conservation and sustainable use of MAPs.

GEF Contribution: $ 940,668, **Co-financing** $ 1,854,422

64. The project will work with the SFDs, the SMPBs, Biodiversity Boards and civil society to facilitate the mainstreaming of conservation and sustainable use of medicinal plants into state-level policies and forest management practices.

65. Specific outputs that will be accomplished to achieve this outcome include:

2.1 Individual State Medicinal Plant Conservation & Sustainable Use Strategies that build on national policies to address state-specific threats and barriers to the sustainable use and conservation of medicinal plants. The project will facilitate the inter-sectoral consultations and dialogue especially between important state government departments like Forests, Rural Development, Health and SMPB and key NGOs and research institutions and provide the required expert inputs to draft a state-level strategy. Local consultants will be used to review the related state-level policies and strategies and their reports will be important inputs into the strategy formulation. Workshops and seminars will be held at the state level to initially seek inputs and later on to discuss and finalize the state-level strategies.

2.2 Revised state forest policies that support the conservation and sustainable use of MAPs. Policy and forestry consultants will review the state-level policies and identify the gaps. Consultations will be held with the stakeholders to seek inputs for the revised policies. Workshops will be held based on the inputs received from the stakeholder consultations and the policy reviews to revise the state policies.

2.3 Revised state-level JFM Orders and Guidelines for the three project states that integrate and strengthen MAP conservation and sustainable use objectives within the overall JFM programmes and practices. . Legal and community participation experts will undertake reviews of the state-level JFM Orders and Guidelines. Revisions of the JFM Orders and Guidelines are undertaken by the state forest department based on the gaps identified.

2.4 State-level legal mechanisms to protect traditional knowledge relating to the sustainable harvest, cultivation and uses of medicinal plants through the respective State Medicinal Plant Boards and State Biodiversity Boards (when established) and Community Biodiversity Registers. Findings of the national

review and research will be used to guide the process at the state level. State-level reviews will also be carried out where required. Workshops will be conducted with the relevant stakeholders to develop the appropriate legal mechanisms.

2.5 Capacities of the SMPBs in each of the three project states strengthened to enable these to function inter-sectorally and fulfill their mandate in the respective states. Reviews of the existing capacities with the SMPBs will be carried out to determine the capacity development needs. Based on this needs assessment capacity development plans will be prepared. Training materials will be prepared for imparting the required training to the SMPB staff. The need for additional human resources will be assessed.

2.6 Identification of MAP species suited for cultivation and inclusion in the species lists used for afforestation and income generating programmes of the NAEB and the MoRD at the state level and also in the afforestation programmes of the State Forest and Rural Development departments of each of the three states. The results of the national-level review and research will be used to guide the process in the project states. The afforestation schemes at the state-level will also be reviewed and suitable MAP species will be identified by using the criteria developed at the national level.

2.7 Revised forest division working plans that provide clear guidelines for the effective conservation management and sustainable use of medicinal plants in all project districts. Workshops for the Working Plan Officers conducted by forestry and biodiversity experts to build their capacities related to the conservation and sustainable utilization of MAPs. These workshops will also be used to develop guidelines for revising the working plans. Based on these guidelines the working plans will be revised.

2.8 Comprehensive baseline and M&E system, including standardized protocols, for monitoring the status of medicinal plant resources in each project state. The threat assessment protocols developed at the national level will be adapted to the local conditions in each of the project states. Collaborations will be established between the SFDs, research organizations and CBOs to enable the consolidation of information related to the MAP resources in each state. Field surveys will be undertaken to prepare the comprehensive baseline. These surveys will be designed to be as participatory as possible. Documentation and database experts will design and guide this process. Once the baselines are established the information will be widely disseminated to the other forest divisions, SMPBs, State Biodiversity Boards, CBOs, research institutions and conservation NGOs. Mechanisms for regular monitoring will be established.

Outcome 3: <u>Conservation and sustainable use of MAPs are mainstreamed at the local level into government and community forest management norms and practices at demonstration sites in the three project states.</u>

GEF Contribution: $ 1,828,000, **Co-financing** $ 1,000,008

66. One of the important conservation and sustainable use initiatives of this project will be the establishment and management of Medicinal Plants Conservation Areas (MPCAs) and Forest Gene Banks (FGBs) in state forests by the respective SFDs in close collaboration with local community groups. The purpose of the MPCA (which covers some 200 ha and is nested within the larger FGB which covers 1,500 ha) is to enable the strict conservation of populations and habitats of medicinal plant diversity. The FGBs themselves will serve as *in situ* gene banks of each state's medicinal plant diversity. These FGBs will be used as pilot sites for developing and testing methods for sustainable harvest of selected medicinal plant species as well as to supply seeds and planting material for medicinal plant nurseries and afforestation.

67. The second major project strategy to achieve this outcome will involve working with existing community institutions wherever these already exist in community-owned or managed forests at each demonstration site to develop forest management norms and practices that favour the sustainable use and conservation of MAPs. These institutions include the *Van Panchayats* of Uttaranchal as well as various Village Forest Committees, Forest Protection Committees, Ecodevelopment Committees and Women's Self-Help Groups in all the project states.

68. Specific outputs that will be accomplished to achieve this outcome include:

3.1 Demonstration of *in situ* and *ex situ* techniques and approaches to the conservation and sustainable management of medicinal plant diversity (especially GSMP) in state forests including the establishment of 5 MPCA/FGB complexes in each project state. Field surveys on the lines described in 2.8 above, will be carried out at each of the proposed FGB/MPCA sites to determine the occurrence and status of MAPs especially GSMPs and to establish the required baselines. Data from these surveys will guide the exact location and boundaries of the FGBs and MPCAs. The presence of motivated local community groups, contiguous and healthy forest cover and logistics of managing the sites will be additional considerations driving the decision regarding the location. FGBs and MPCAs will be established by the SFD in collaboration with the local communities, SMPBs, research organizations and NGOs. This process is designed to be fully participatory. Sustainable harvesting trials based on traditional knowledge as well as modern scientific principles will be carried out within the FGBs for selected species especially GSMPs. Based on the results of these trials protocols for sustainable harvest of these species will be developed. A Local Management Committee will be established to guide and manage this process. A MAP nursery will be established close to each FGB while a state level Seed Centre for MAP will also be established.

3.2 Strengthened medicinal plants conservation management capacity within SFDs. A review of the existing capacities within each of the SFDs will be carried out to determine the capacity development needs. A capacity development plan will be developed and this will include special training. A training module along with the required training materials will be developed both for induction training as well as in-service training. The module will be tested and fine tuned based on feed back. At least three training programmes will be conducted in each state through the project to institutionalize the process.

3.3 Pilot demonstration sites for the *in situ* and *ex situ* conservation and sustainable management of medicinal plant diversity on community-owned or community managed forest land, including the establishment of 2 MPCA/FGB complexes in each project state. Participatory field surveys with strong participation from the local community groups will be carried out in each of the proposed FGB/MPCA site in community owned and or managed sites to determine the occurrence and status of MAPs especially GSMPs and to establish the required baselines. Data from these surveys will guide the exact location and boundaries of the FGBs and MPCAs. FGBs and MPCAs will be established by the local community groups in collaboration with the SFDs, SMPBs, research organizations and NGOs. Sustainable harvesting trials based on traditional knowledge as well as modern scientific principles will be carried out within the FGBs for selected species especially GSMPs. Based on the results of these trials protocols for sustainable harvest of these species will be developed. A Local Management Committee will be established to guide and manage this process. A MAP nursery will be established close to each of the FGBs.

3.4 Strengthened community capacity for the conservation and sustainable use of medicinal plants. A community training expert will conduct a participatory needs assessment exercise with each of the local communities to determine their capacity building needs. Based on this a capacity development plan will be developed in consultation with a forestry expert. Training modules will be developed and tested with the community prior to finalizing its contents. Training programmes will be conducted to

build the capacities of the local people. Special attempts will be made to build on the available knowledge of plants and to train village botanists who can then participate in the field surveys.

3.5 Strengthened community capacity to enable communities to document and conserve their traditional knowledge related to the sustainable use of medicinal plants and Traditional Medicine and how to protect and benefit from their IPRs. A team comprising of a community training expert and an IPR expert will undertake a review of the existing capacities within the local communities and based on this assessment design a training programme which will enable the local communities to document and conserve their traditional knowledge. A key output of these initiatives will be Community Knowledge Registers. Software will be designed to document the traditional knowledge in addition to the Community Knowledge Registers.

Outcome 4: Materials and methods developed for replicating the successful models of conservation and sustainable use of medicinal plants across other sites in the three states, and more broadly.

GEF Contribution: $ 980,600, **Co-financing** $ 1,994,961

69. Since replication is an important outcome of this project, documentation of both the process as well as the technical elements of implementation will be emphasized. Documentation will include both publications and audio-visual material ranging from field reports, process documentation reports, technical manuals, films, media reports to proceedings of workshops and seminars. Technical information generated through the project and experiences of project implementation will be disseminated in various ways and will include field visits, exchange visits, websites, workshops and seminars.

70. Replication efforts will be targeted at other sites within the three project states as well as at sites in four other states of India (Sikkim, Meghalaya, Himachal Pradesh and Jammu & Kashmir). These efforts will target state government personnel of relevant departments, conservation NGOs, research institutions, local community groups, traditional healers and students from local schools and colleges.

71. Specific outputs that will be accomplished to achieve this outcome include:

4.1 A state-level strategy for the conservation and sustainable use of MAPs developed in each of the four replication states. Selected key officials from the four replication states will be involved in the process of developing the state-level strategies in the 3 project states. This will provide them with the required experience to undertake a similar exercise in their states.

4. 2 Capacities of SMPBs in the four replication states strengthened by learning from the experience of the SMPBs in the project states to enable them to take the lead in coordinating activities in this sector in their respective states. A capacity needs assessment for the SMPBs will be carried out. Based on the findings, the training materials developed in the 3 project states will be adapted for each of the replication states.

4. 3 Training module and other materials developed for SFD personnel in the project states adapted for use in the replication states including translation into local languages where needed. A review of existing capacities within each of the SFDs in the replication states will be carried out and the findings will be used to adapt the training module and materials developed in the 3 project states for the replication states.

4. 4 Demonstration of *in situ* and *ex situ* conservation and sustainable management of MAP diversity in productive forestlands in districts other than those covered by the project in the three states through exchange visits. Forest officers from non-project divisions in the project states will be encouraged to visit the demonstration sites to learn from the implementation experience. The project will work with

these forest officers in undertaking field surveys to locate potential FGBs and MPCAs. The actual establishment and management experience will be shared by the officers in the project sites with their colleagues to enable peer to peer learning.

4. 5 Strengthened medicinal plants management capacity of SFD staff and selected local community groups in the four replication states. Exchange visits by members of the local communities and forest officers from the 4 replication states to sites in the 3 project states will enable them to learn from the experience of project implementation. Additionally reviews of capacities of local communities will be carried out to determine their capacity building needs. Training materials will be adapted to the needs of the local communities in each of the replication states.

4. 6 Revised forest division working plans that provide clear guidelines for the conservation management of MAPs in selected districts in replication states. Working Plan officers from the replication states will be invited to participate in the process of revising the forest working plans in the three project states. Additionally targeted workshops will be conducted in the replication states to enable the wider capacity building to undertake the required revisions.

Project Indicators, Risks and Assumptions

72. The key primary indicators of project success will be:

- Long-term viability of populations of selected species of MAPs, including GSMPs, maintained or enhanced in FGBs and MPCAs within the project states as a result of the improved management of MAPs by SFDs and local communities.
- An enabling environment that supports the conservation and sustainable use of MAPs, including national and state-level strategies for the sustainable use and conservation of MAPs, with special reference to GSMPs.
- Evidence of the NMPB and project state SMPBs achieving their stated mandate as a result of the project having helped to develop their capacity.
- Sustainable harvesting methodologies available and being used for high priority MAPs, including GSMPs in at least 21 demonstration sites.
- Uptake and dissemination of major lessons learnt from the project elsewhere in India and potentially further afield.

73. The primary assumptions of this project are that significant global and national benefits in terms of the improved conservation status of MAP species, including GSMP, can be secured without addressing the demand side.

74. Other major assumptions are given in detail in the logframe but include the following:

- Key government agencies both at the national level, such as MoEF and NMPB, and at the state level, such as the SFDs and SMPBs remain interested in pursuing intersectoral dialogue and achieving changes in policy and management practice for more effective conservation and sustainable use of medicinal plants in general and GSMP in particular.
- Local communities will continue to be supportive of the conservation and sustainable use of medicinal plants.
- There will be interest and government finance made available within other states for replicating the successful lessons generated by this project.

Expected global, national and local benefits

75. By effectively mainstreaming the conservation and sustainable use of medicinal plants into the productive forest sector, the project hopes to produce the following national and global benefits:

- Preservation of a wide range of the genetic diversity of MAPs, including GSMP
- Preservation of a broad range of biodiversity as the habitat of MAPs and thus associated species and ecological processes will also be protected including globally significant biodiversity
- Maintenance of option values as by preserving greater genetic diversity, there is greater potential for discovering new uses for as yet undocumented species or for known species as these are investigated further or as new demands and uses develop.
- Continued and improved access to affordable medicine by the rural poor and others both nationally and internationally.
- Sustainable and potentially improved incomes for collectors, especially the most marginalized, through better prices and sustainable supplies
- The development of new technologies and methods for sustainably harvesting MAPs, particularly GSMP.
- The transfer of successful models and lessons learned from the demonstration sites to other parts of India and other countries where MAPs are under pressure in the wild.

Country Ownership : Country Eligibility and Country Drivenness

A) COUNTRY ELIGIBILITY

76. India is eligible for assistance from the GEF as it ratified the Convention on Biological Diversity on 18 February 1994 and notified its participation in the restructured GEF on 12 May 1994.

B) COUNTRY DRIVENNESS

77. This project was designed with the assistance of FRLHT after a series of consultations with a wide range of stakeholders during the PDF-B process (for details refer to www.frlht.org.in). Subsequently, further consultations have been held with MoEF, the state governments of Arunachal Pradesh, Chhattisgarh and Uttaranchal, NMPB, and MoRD to reach an agreement on the project strategy and co-financing. Thus, the proposed objectives and project strategy are fully in line with both national and state-level priorities relating to the sustainable use and conservation of medicinal plants. In particular, the lack of intersectoral coordination has been identified as a key barrier to the effective management and conservation of medicinal plants diversity in India. Other barriers which have been identified include the limited capacity among local communities, the SFDs, the SMPB and the NMPB for the conservation and sustainable management of medicinal plant resources and for the documentation and conservation of Traditional Knowledge.

78. The commitment of the Government of India to the conservation and sustainable use of medicinal plants is reflected in the importance given to this sector in the 10th Five Year Plan and the budgetary allocations made for this sector to the Ministry of Environment and Forests and the Ministry of Health. The commitment of both GoI and state governments to this project is indicated by the high level of co-financing that is being provided to this project which exceeds US$ 4.5 million in cash (reoriented baseline

funding) and US$ 1.9 million in kind. Additionally, recurrent project implementation expenditures have been underwritten by the MoEF and the SFDs and they have indicated their commitment by their willingness to continue the project initiatives beyond the project period. The Final Technical Report of the GoI-UNDP-GEF National Biodiversity Strategy and Action Plan (NBSAP)[10] Enabling Activity project has placed a strong emphasis on the conservation and sustainable use of medicinal plants.

79. The proposed project is strongly supported by the UNDP India Country Office and will be part of a long-term initiative to improve the conservation status of medicinal plants, the associated traditional knowledge and the sustainable livelihoods of the local communities all over India. The first step of this initiative was a project implemented in partnership with GoI as part of the CCF-1 (1998-2002) in two states. Currently under CCF-2 a larger and more holistic initiative is under implementation in 9 states of India. Through the UNDP-GEF Small Grants Programme numerous small interventions in this sector have been implemented all over India.

80. The project is also fully consistent with UNDP's Country Programme (2003-2007) <www.undp.org.in/ncpo.htm> The project is part of the Vulnerability Reduction and Environmental Sustainability theme, and specifically addresses the objectives of mainstreaming global environmental concerns especially biodiversity conservation into national projects, programmes and policies, and the strengthening of national capacity and capacity of local communities to address global environmental concerns.

81. The project also supports the Poverty Eradication and Sustainable Livelihoods theme, particularly the objective of strengthening partnerships between community-based organizations, civil society organisations and government agencies to develop, test and disseminate innovative, gender-equitable and community-managed approaches to sustainable livelihoods and environmentally sustainable natural resource management with a focus on medicinal plants.

82. The project through its work with local communities will support the UNDAF theme of Strengthening Decentralization and its sub-theme of capacity development for promoting effective community management.

83. The major thrust of the project interventions is capacity development for improved conservation and sustainable management of medicinal plants, especially GSMPs, which is part of UNDP's mandate.

84. This project is also consistent with the Convention on Biological Diversity (CBD) and its guidance from the Conference of the Parties. The full project is expected to provide models for replication, in other regions of India and other countries.

85. See Section IV, Part I for the endorsement by national operational focal point.

Sustainability

86. The main focus of the GEF intervention is removing key barriers that prevent the effective mainstreaming of policies and practices for conservation and sustainable use of medicinal plants across different relevant sectors. This is to be achieved through policy reforms at both national and state level and addressing the capacity and information barriers faced by key sectors such as the SFDs, the NMPBs, SMPBs, MAP collectors, and community forest owners, managers and users.

[10] Now referred to as Draft National Biodiversity Action Plan

87. Many of the key components of the project have been designed to operate within the existing framework of State Government departments and administration systems and thereby will leverage on-going Government funding for existing programmes and activities. Key project components that will entail recurrent expenditure are being underwritten by government co-financing rather than GEF resources, including components such as the continued implementation of capacity development programmes in project states and the replication of major project components in other states.

88. At the field level, the project will seek to build on and strengthen existing community institutions where these exist and are appropriate to achieve project outcomes thereby increasing the social sustainability of the project. Additionally, as there is considerable technical expertise available within India, the project will make minimal use of international experts, thereby further increasing the sustainability of project outcomes and replication.

89. Given the importance placed on the sustainable use and conservation of medicinal plants by a wide range of stakeholders, including GoI and state governments, it is clear that financial and other resources are very likely to be made available to sustain and replicate effective project interventions that promote the conservation and sustainable use of medicinal plants. A good indicator of the level of government commitment is the importance given to the medicinal plants sector in the country's 10th Five Year Plan and the budgetary allocations made for this sector to the MoEF and the Ministry of Health.

90. Overall, the project's impacts are therefore likely to extend well beyond the life of the project. However, the extent of post-project sustainability will be re-assessed during the project's mid-term evaluation and steps taken to increase the long-term sustainability of project outcomes.

Replicability

91. Strategies for replication and the broader adaptation and application of the major lessons and models developed through the present project have been integrated into project design as these are key to generating greater a broader range of both national and global benefits.

92. One of the project's five outcomes is to develop materials and methods for both replication and wider dissemination of key lessons and successful models for the conservation and sustainable use of medicinal plants in other sites in the three project states as well as in four additional states selected as a target for replication where-ever possible more widely across the rest of India and internationally. Certain project components will be more easily replicated than others after adapting for local circumstances, such as policy reforms (e.g. the state-level MAP Conservation and Sustainable Use Strategies, revised JFM Guidelines and Forest Working Plans) and training modules for MAP conservation management for the SFDs.

93. Models developed in community-owned or managed forests will tend to be more site-specific and while general lessons are likely to be transferable, the models themselves will need to be carefully adapted to local circumstances at potential replication sites.

94. Beyond the immediate national context, many of the lessons learnt from this project may be applicable in other tropical countries with a tradition of use of medicinal plants. The International Centre for Integrated Mountain Development (ICIMOD) with its experience and expertise in community-based approaches in natural resource management, especially in the sustainable management of medicinal plant resources will be involved in sharing of experiences and expertise, especially with the dissemination of the project findings and experiences in the neighboring countries. Dissemination and uptake of important lessons and models will be greatly facilitated by the fact that FRLHT is a well-recognized organization within the medicinal plants field and is part of large international and national network which are concerned with the issues addressed by the project. MoEF, NMPB, SFDs and SMPBs will also play a key role in facilitating the process of replication and lessons learning along with other technical agencies and their networks.

95. Apart from the initial facilitation, the bulk of initiatives and activities relating to replication and lessons learning will be funded out of government budgets.

PART III : MANAGEMENT ARRANGEMENTS

A. Management Structure

96. **Project Executive:** The Ministry of Environment and Forests (MoEF), GoI will execute this project and in this role assume the overall responsibility for the achievement of the project outcomes. The MoEF's responsibility will be one of facilitating the required level of inter-sectoral coordination with other relevant ministries and departments of GoI especially the NMPB and also ensuring the required level of participation from the three state governments in which the project is to be implemented and also from the four state governments in which replication is to be done. More specifically, MoEF's project finance and management responsibilities will include: 1) ensuring that the committed co-financing is made available on a timely basis for project implementation by all concerned; 2) ensuring that funds are available for the four state governments for carrying out the replication activities; 3) coordinating the financing from UNDP and GEF with that from other sources; 4) assisting in preparing Terms of Reference for contractors and required tender documentation; and 5) chairing the National Steering Committee (NSC). The administration of project funds will be the joint responsibility of the MoEF and the UNDP.

97. **National Project Director:** The concerned Joint Secretary, MoEF, will be the National Project Director (NPD). The NPD will coordinate project execution on behalf of GoI and ensure its proper implementation.

98. Project implementation will be overseen by a **National Steering Committee** (NSC), which will function as the Project Management Board, will be responsible for ensuring that the project is implemented in line with the agreed project design and consistent with national and state development policies. The NSC will meet at least once a year and it will provide the required oversight to this project and also ensure the overall co-ordination of the programme. The NSC will be chaired by the Additional Secretary, MoEF, GoI. Its membership will include the concerned Joint Secretary, MoEF, the concerned Directors from MoEF and the Ministry of Rural Development (MoRD), and the concerned Joint Secretaries from MoRD and the Department of Indian System of Medicine and Homeopathy (ISM&H), GoI; the Principal Chief Conservator of Forests or the Principal Secretary of the Department of Environment & Forests of the three states; the CEO or a representative of the National Medicinal Plants Board (NMPB); two representatives of UNDP; the Director and/or a representative of the Foundation for the Revitalisation of Local Health Traditions (FRLHT); and two non government representatives nominated by the government, one from the private sector and one from the field[11]. The meetings of the NSC will be convened by the NPD.

99. The **Project Implementation Steering Group** (PISG)[12] will be responsible for directing the management of the project. The PISG will be chaired by the National Project Director (NPD). The membership of the PISG will include the designated officer in the Forest Department in the three project states; a representative of the NMPB; a representative of a cooperating NGO from each of the three project states; the concerned Project Officer from UNDP; and the Project Coordinator from FRLHT. The PISG will meet at least thrice a year or more often if required.

100. A **Project Management Unit** (PMU) will the administrative hub for the project located in the MoEF. The PMU with a full-time Project Manager supported by one programme officer, one project administrative assistant and one accounts officer will assist the PISG in the implementation of the project. The project manager will be in charge of overseeing the day-to-day project implementation and management of project activities, organizing and overseeing national and international consultant input, and overseeing monitoring and evaluation and ensuring that the project is on track. One of the most important responsibilities of the project manager will be working effectively with members of the PISG and State level project Implementation Steering Groups (ISGs) to ensure that project-inspired activities proceed on schedule within each partner Ministry and non-governmental organization. The Project Manager is also responsible for the preparation and timely submission of the Annual Workplan (AWP) and the quarterly and annual progress and financial reports to UNDP. The Project Manager will maintain a log of the main issues (Issues Log) that may require decisions from the NPD and the PISG. The Project Manager will also maintain a log of risks (Risk Log) that may affect the project's progress towards the achievement of outcomes. The PMU will facilitate national and state level implementation of the project. The PMU will also work closely with state-level Project Coordinators and their teams in the initial stages until these are phased out. The PMU will also work closely with the Senior Technical Advisor.

101. **Project Assurance:** UNDP's primary responsibility under this partnership will be to support the Project Assurance function which provides an independent feedback (through periodic monitoring, assessment and evaluation) on how appropriate project milestones are managed and completed.

102. **UNDP support for project management:** The UNDP Country Office will support project implementation by being responsible for maintaining project budget and project expenditures, recruiting and contracting project personnel and consultant services, subcontracting, assisting with equipment procurement, and providing other assistance upon request of the MoEF. Project implementation arrangements will streamline and decentralize UNDP's normal service delivery

[11] NSC is now referred to as Project Steering Committee (PSC)
[12] PISG is now referred to as Project Steering Committee (PSC)

procedures in the interest of cost-effective and time-efficient project management. Based on the approved Annual Work Plan, UNDP will release funds directly to the local implementing partners on a quarterly basis. Using the UNDP Financial Report format, the IAs will report expenditure on a quarterly basis together with a request for advance required for the next quarter. These will be consolidated by the Project Manager and after authentication by the NPD forwarded to UNDP for necessary action. The Combined Delivery Report prepared by UNDP on a quarterly basis as well as the annual year-end CDR will be verified and certified by the NPD. The UNDP Country Office will also monitor project implementation and achievement of the project outputs and ensure the proper use of UNDP/GEF funds. Financial transactions, reporting and auditing will be carried out in compliance with national regulations and UNDP rules and procedures. The UNDP Country Office will carry out its day-to-day management and monitoring functions through an assigned Programme Officer in New Delhi, who will be also responsible for the day-to-day coordination with the project team.

103. Project activities will be implemented in the states in partnerships with SFDs, non government agencies, civil society and private sector. The lead agency for the implementation of this project in the three states will be the respective SFDs with technical inputs from FRLHT, the lead technical agency for the project along with inputs from other technical agencies as relevant under the overall guidance and supervision of the Project Manager. Additional technical guidance will be provided to FRLHT and Project Manager through periodic inputs from a **Senior Technical Advisor and a Technical Advisory Group** (see below). For the sites that are managed by local communities, local non government agencies will take a lead in project implementation again with technical guidance from FRLHT and other technical agencies which will play a major role in capacity development at the state and local level.

104. **State-level project implementation steering groups** (ISGs)[13] will be established in each state with representation from all key state departments to direct and oversee project implementation and management at the state level. Each ISG will be chaired by the Principal Chief Conservator of Forests (PCCF) and operationally headed by the designated nodal forest officer for Medicinal Plants in the state. Other members will include representatives of the relevant state departments. The Principal Chief Conservator of Forests will be responsible for effective and timely project implementation.

105. **State Project Management Unit (SPMU)** will be established in each of the three states to assist the ISG in the implementation of the project. The SPMU will be headed by the designated nodal officer and supported by two officers. They will work closely with the ISGs and the Local Management Groups (LMGs) in order to oversee that the project-inspired activities proceed on schedule and facilitate effective state level implementation of the project. At each of the sites, the project will be implemented by a **Local Management Group** (LMG). The structure and function of the LMG will be decided in the inception phase.

106. The successful implementation of this project requires strong technical leadership and a high level of coordination due to its inter-sectoral nature and its implementation at the national level and in the three project states and four replication states. While FRLHT is the lead technical agency, other technical agencies will be involved with project implementation. A small **Technical Advisory Group** (TAG) will also be constituted to advise the NSC, the PISG, the ISGs and the PMU on the technical aspects of the project. The TAG will comprise of national members who will continue to provide their expertise even after the project is operationally closed to ensure institutionalising of TAG as an advisory body for PISG and ISGs and international members selected for a short term and on a needs basis. The selection of consultants will be carried out by the PISG in close consultation with UNDP-India. Criteria for selecting TAG members will include expertise, experience, project requirements and the ability to devote time to advise the project. Additionally, a **Senior Technical Advisor** (STA) with significant international

[13] State-level project implementation steering groups is renamed state-level project steering committees.

expertise will be appointed to strengthen technical leadership and coordination by providing independent guidance to FRLHT's technical leadership. The STA will be selected by a committee constituted by the PISG in close consultation with UNDP-India. The STA will be an independent expert, who will work intensively with the project during the first year to put in place systems and processes for effective project implementation, monitoring and evaluation, and adaptive management. After the first year, the STA will remain closely associated with the project for the rest of the project period to provide expert guidance on a basis to be determined at the end of the first year. The Project Management Unit (PMU) will support the STA.

107. FRLHT along with other identified technical agencies will facilitate the technical orientation and capacity building of the implementing partners in the three states. The technical agencies will work closely with the STA, TAG, PMU and state-level project coordinators to amongst other things: develop a strong M&E plan including good baselines, indicators and clear targets; develop a strategy for phased project implementation; appraise the implementation proposals received to ensure that they are in line with the objectives and operational elements of the project, and assist in the periodic evaluation of quality and pace of technical progress.

108. Draft ToRs have been developed for all project implementing structures (see **Section IV, Part III** of this document) and these will be reviewed and further developed during the Project Inception Phase. These ToRs will guide the project implementation.

109. In order to accord proper acknowledgement to GEF for providing funding, a GEF logo should appear on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgment to GEF. The **UNDP logo** should be more prominent -- and separated from the **GEF logo** if possible, as UN visibility is important for security purposes.

PART IV : MONITORING AND EVALUATION PLAN AND BUDGET

110. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team and the UNDP Country Office (UNDP-CO) with support from UNDP/GEF. The Logical Framework Matrix (**see Section II Part II** of this document) provides *performance* and *impact* indicators for project implementation along with their corresponding *means of verification*. These will form the basis on which the project's Monitoring and Evaluation system will be built. Key components of this system would include the following:

- Project management systems that include adaptive management mechanisms.
- Periodic project strategic and annual work planning completed according to an agreed timetable.
- Regular project monitoring and evaluation and integration of lessons learned into the adaptive management process.
- The regular production, review and dissemination of project progress reports.
- The dissemination of project results and lessons both in-country and more widely.

111. The following sections outline the principal components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The project's Monitoring and Evaluation Plan will be presented and finalized at the Project's Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

1. MONITORING AND REPORTING

1.1. Project Inception Phase

112. The project will have an Inception Phase extending for six months and this will involve amongst other things the setting up of project management structures and systems; recruitment and orientation of project staff; reviewing and refining of stakeholder involvement plan; reviewing the socio-economic and ecological baselines and revisiting the logframe indicators and targets; developing and agreeing a project implementation plan; reviewing and updating the risk management analysis; and conducting the Project Inception Workshop which will involve the full project team, relevant government counterparts, co-financing partners, the UNDP-CO and representation from the UNDP-GEF Regional Coordinating Unit, as well as UNDP-GEF (HQs) as appropriate.

113. A fundamental objective of this Inception Workshop (IW) will be to assist the project team and all key stakeholders to understand and take ownership of the project's goals and objectives, as well as finalize preparation of the project's first annual work plan on the basis of the project's logframe matrix. This will include reviewing the logframe (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise finalize the Annual Work Plan (AWP) and overall Project Implementation Plan with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project. Additionally, the UNDP Local Project Advisory Committee which reviewed the present project document on 9th July 2007 recommended that during the IW, linkages with HDR indicators, gender participation, broader community involvement, private sector participation and IPR issues should be made explicit and better linked to project activities.

114. Additionally, the purpose and objective of the Inception Workshop will be to: (i) introduce project staff with the UNDP-GEF *expanded team* which will support the project during its implementation, namely the CO and responsible Regional Technical Advisor; (ii) detail the roles, support services and complementary responsibilities of UNDP-CO and RCU staff vis à vis the project team; (iii) provide a detailed overview of UNDP-GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Project Report (APR), Tripartite Review Meetings, as well as mid-term and final evaluations. Equally, the IW will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget rephasings.

115. The IW will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff and decision-making structures will be discussed again, as needed, in order to clarify for all, each party's responsibilities during the project's implementation phase.

1.2. Monitoring responsibilities and events

116. A detailed schedule of project review meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for Tripartite Reviews, Steering Committee Meetings, (or relevant advisory and/or coordination mechanisms) and (ii) project related Monitoring and Evaluation activities.

117. *Day to day monitoring of implementation progress* will be the responsibility of the Project Manager under the supervision of the NPD based on the project's Annual Work Plan and its indicators. The Project Team

will inform the UNDP-CO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.

118. The Project Manager with technical inputs from the STA and the TAG will fine-tune the progress and performance/impact indicators of the project in consultation with the full project team at the Inception Workshop with support from UNDP-CO and assisted by the UNDP-GEF Regional Coordinating Unit. Specific targets for the first year implementation progress indicators together with their means of verification will be developed at this Workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan. The local implementing agencies will also take part in the Inception Workshop in which a common vision of overall project goals will be established. Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

119. Measurement of impact indicators related to global benefits will occur according to the schedules defined in the Inception Workshop and tentatively outlined in the indicative Impact Measurement Template at the end of this section and in the Monitoring and Evaluation Tracking Tool for SP2 projects. The measurement, of these will be undertaken through subcontracts or retainers with relevant institutions (e.g. vegetation cover via analysis of satellite imagery, or populations of key species through inventories) or through specific studies that are to form part of the projects activities (e.g. through surveys for capacity building efforts) or periodic sampling.

120. Periodic monitoring of implementation progress will be undertaken by the UNDP-CO through quarterly meetings with the project proponent, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

121. UNDP will conduct yearly visits to projects that have field sites, or more often based on an agreed upon scheduled to be detailed in the project's Inception Report / Annual Work Plan to assess first hand project progress. Any other member of the Steering Committee can also accompany, as decided by the SC. A Field Visit Report will be prepared by the County Office and circulated no less than one month after the visit to the NSC and the project team.

122. *Annual Monitoring* will occur through the ***Tripartite Review (TPR).*** This is the highest policy-level meeting of the parties directly involved in the implementation of a project, with a core group composed of UNDP, MoEF (usually the NPD) and the Project Manager. The project will be subject to Tripartite Review (TPR) at least once every year. The first such meeting will be held within the first twelve months of the start of full implementation. The project proponent will prepare an Annual Project Report/Project Implementation Review (APR/PIR) and submit it to UNDP-CO at least two weeks prior to the TPR for review and comments.

123. The APR will be used as one of the basic documents for discussions in the TPR meeting. The project proponent will present the APR to the TPR, highlighting policy issues and recommendations for the decision of the TPR participants. The project proponent also informs the participants of any agreement reached by stakeholders during the APR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary.

Terminal Tripartite Review (TTR)

124. The terminal tripartite review is held in the last month of project operations. The project proponent is responsible for preparing the Terminal Report and submitting it to UNDP-CO and UNDP-GEF's Regional Coordinating Unit. It shall be prepared in draft at least two months in advance of the TTR in order to

allow review, and will serve as the basis for discussions in the TTR. The terminal tripartite review considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation or formulation.

125. The TPR has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks are provided in Table H-2 and these will be fine tuned at the Inception Workshop. These benchmarks are based on delivery rates, and qualitative assessments of achievements of outputs.

1.3. Project Monitoring Reporting

126. The Project Manager in conjunction with the UNDP will be responsible for the preparation and submission of the following reports that form part of the monitoring process. Items (a) through (f) are mandatory and strictly related to monitoring, while (g) through (h) have a broader function and the frequency and nature is project specific to be defined throughout implementation.

(a) Inception Report (IR)

127. A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year/ Annual Work Plan divided in quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan would include the dates of specific field visits, support missions from the UNDP or consultants, as well as time-frames for meetings of the project's decision making structures. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.

128. The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation.

129. When finalized the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP will review the document.

(b) Annual Project Report (APR)

130. The APR is a UNDP requirement and part of UNDP's Country Office central oversight, monitoring and project management. It is a self -assessment report by project management to the CO and provides input to the country office reporting process and the Multi-Year Funding Framework/ Results Oriented Annual Report, as well as forming a key input to the Tripartite Project Review. An APR will be prepared on an annual basis prior to the Tripartite Project Review, to reflect progress achieved in meeting the project's Annual Work Plan and assess performance of the project in contributing to intended outcomes through outputs and partnership work.

131.The format of the APR is flexible but should include the following:

- An analysis of project performance over the reporting period, including outputs produced and, where possible, information on the status of the outcome

- The status of implementation of each individual activity
- The constraints experienced in the progress towards results and the reasons for these
- The three (at most) major constraints to achievement of results
- AWP and other expenditure reports (ERP generated)
- Lessons learned
- Updates of the risk log and issues log
- Clear recommendations for future orientation in addressing key problems in lack of progress

(c)Project Implementation Review (PIR)

132. The PIR is an annual monitoring process mandated by the GEF. It has become an essential manageme and monitoring tool for project managers and offers the main vehicle for extracting lessons fro ongoing projects. Once the project has been under implementation for a year, a Project Implementatio Report must be completed by the CO together with the project. The PIR can be prepared any time during the year (July-June) and ideally prior to the TPR. The PIR should then be discussed in the TPR so that the result would be a PIR that has been agreed upon by the project, the executing agency, UNDP CO and the concerned UNDP-GEF Regional Technical Advisor (RTA).

133. The individual PIRs are collected, reviewed and analysed by the RTAs prior to sending them to the focal area clusters at the UNDP/GEF headquarters. The focal area clusters supported by the UNDP/GEF M&E Unit analyse the PIRs by focal area, theme and region for common issues/results and lessons. The PTAs play a key role in this consolidating analysis.

134. The focal area PIRs are then discussed in the GEF Interagency Focal Area Task Forces in or around November each year and consolidated reports by focal area are collated by the GEF Independent M&E Unit based on the Task Force findings.

135.The GEF M&E Unit provides the scope and content of the PIR. In light of the similarities of both APR and PIR, UNDP/GEF has prepared a harmonized format for reference.

(d) Risk Management System

136. UNDP will monitor the project through its Risk Management System (RMS) which has been incorporated as a module in Atlas. Any risks reported will be accompanied by a management response and a risk mitigation plan. Both risk classification and the associated management response will be reviewed and updated every 3 months by UNDP. Projects with a high number of risks associated, particularly of a critical nature, will receive enhanced supervision from UNDP, including the closer engagement of the UNDP-GEF Regional Technical Advisor.

(e) Quarterly Progress Reports

137. Short reports outlining main updates in project progress will be provided quarterly to the local UNDP Country Office and the UNDP-GEF regional office by the project team. See format attached.

(f) Periodic Thematic Reports

138. As and when called for by UNDP or the Implementing Partner, the project team will prepare Specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report wil be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learnt exercise, specific oversight

in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered. UNDP is requested to minimize its requests for Thematic Reports, and when such are necessary will allow reasonable timeframes for their preparation by the project team.

(g) Project Terminal Report

139. During the last three months of the project the project team will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met, or not achieved, structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities.

(h)Technical Reports (optional)

140. Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

(i) Project Publications (optional)

141. Project Publications will form a key method of crystallizing and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. The project team will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognizable format. Project resources will need to be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget.

2. INDEPENDENT EVALUATION

142. The project will be subjected to at least two independent external evaluations as follows:-

(i) Mid-term Evaluation

143. An independent Mid-Term Evaluation will be undertaken at the end of the second year of implementation. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference

for this Mid-term evaluation will be prepared by UNDP CO based on guidance from UNDP-GEF Regional Coordination Unit.

(ii)Final Evaluation

144. An independent Final Evaluation will take place three months prior to the terminal tripartite review meeting, and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from UNDP-GEF Regional Coordination Unit.

Audit Requirements

145. As with all nationally executed projects, this project will also be audited periodically. GEF funded projects with an annual expenditure exceeding US$ 100,000 must be audited annually. The objective of the audit is to provide the UNDP Administrator with the assurances that UNDP resources are being managed in accordance with: a) the financial regulations, rules, practices and procedures prescribed for the project; b) the project document and work plans, including activities, project management and the project implementation arrangements, monitoring, evaluation and reporting provisions; c) the requirements for execution in the areas of management, administration and finance.
146. While the Government is responsible for ensuring that the audit requirements are met, the project may be subject to audit by the auditors of UNDP, and UNDP shall have right of access to the relevant records.
147. The Government must ensure that the audit is performed in accordance with the generally accepted standards and provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Resource Management Guide. The Government should ensure that the Audit Report is duly reviewed and that it reaches UNDP headquarters via UNDP India CO by 30 April of each year. The Audit will be conducted by the legally recognized auditor of the Government, or by a commercial auditor engaged by the Government.

3. LEARNING AND KNOWLEDGE SHARING

148. Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums. In addition:

- The project will participate, as relevant and appropriate, in UNDP/GEF sponsored networks, organized for Senior Personnel working on projects that share common characteristics. UNDP/GEF shall establish a number of networks, such as Integrated Ecosystem Management, eco-tourism, co-management, etc, that will largely function on the basis of an electronic platform.

- The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned.

149. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identify and analyzing lessons learned is an on- going process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered not less frequently than once every 12 months. UNDP/GEF shall provide a format and assist the project team in categorizing, documenting and reporting on lessons learned. To this end a percentage of project resources will need to be allocated for these activities.

TABLE H-1: INDICATIVE MONITORING AND EVALUATION WORK PLAN AND CORRESPONDING BUDGET

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team Staff time*	Time frame
Inception Workshop	▪ Project Manager ▪ NPD ▪ UNDP	25,000	Within first six months of project start up
Inception Report	▪ Project Team ▪ UNDP CO	None	Finalised within one month of the IW
Measurement of Means of Verification for Project Purpose Indicators	▪ Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members	To be finalized in Inception Phase and Workshop. Indicative cost 100,000	Start, mid and end of project
Measurement of Means of Verification for Project Progress and Performance (measured on an annual basis)	▪ Oversight by STA and Project Manager ▪ Measurements by regional field officers and local IAs	To be determined as part of the Annual Work Plan's preparation. Indicative cost 200,000	Annually prior to APR/PIR and to the definition of annual work plans
APR and PIR	▪ Project Team ▪ UNDP CO ▪ UNDP-GEF RCU	None	Annually
TPR and TPR report	▪ Government Counterparts ▪ UNDP CO ▪ Project team	5,000	Every year, upon receipt of APR/ PIR
Steering Committee Meetings	▪ Project Manager ▪ UNDP CO	5,000	Following Project IW and subsequently at least once a year
Periodic status reports	▪ Project team	5,000	To be determined by Project team and UNDP CO during Inception Phase and agreed at IW
Technical reports	▪ Project team ▪ Hired consultants as needed	15,000	To be determined by Project Team and UNDP-CO
Mid-term External Evaluation	▪ Project team ▪ UNDP- CO ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e.	40,000	At the mid-point of project implementation.

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team Staff time*	Time frame
	evaluation team)		
Final External Evaluation	▪ Project team, ▪ UNDP-CO ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e. evaluation team)	50,000	At the end of project implementation
Terminal Report	▪ Project team ▪ UNDP-CO ▪ External Consultant	None	At least one month before the end of the project
Lessons learned	▪ Project team ▪ UNDP-GEF Regional Coordinating Unit (suggested formats for documenting best practices, etc)	21,000 (average 3,000 per year)	Yearly
Audit	▪ UNDP-CO ▪ Project team	7,000 (average $1000 per year)	Yearly
Visits to field sites (UNDP staff travel costs to be charged to IA fees)	▪ UNDP CO ▪ Government representatives ▪ UNDP-GEF RTA	20,000 (average one visit per year)	Yearly
TOTAL INDICATIVE COST *Excluding project team staff time and UNDP staff and travel expenses*		US$ 493,000[14]	

Annex H-2: IMPACT MEASUREMENT TEMPLATE

150. These indicators are drawn from the Logframe Matrix and are related to the measurement of global benefits achieved by the project rather than project implementation progress. These will have to be fine tuned and detailed in the Inception Workshop.

Key Impact Indicator	Target	Means of Verification	Sampling frequency	Location
Area of forest actively managed for sustainable use of MAPs and maintenance of MAP diversity especially of GSMPs.	By Year 4 at least 4 FGBs and MPCAs established in each project state resulting in 18,000 ha of forest managed for sustainable use of MAPs and maintenance of MAP diversity especially of GSMPs and by Year 6 three more FGBs and MPCAs	Targeted biological and management surveys. Government records, field visits and	In Years 3, 4, 5 & 6 of the project.	In all FGBs & MPCAs.

Key Impact Indicator	Target	Means of Verification	Sampling frequency	Location
	established in each state taking the total area under focused MAP management to 31,500 ha. A further 6,000,000 ha under management that favours maintenance of MAP diversity, including GSMPs	project M & E reports.		
Natural canopy cover as a measure of the overall ecological status of forests under active management for maintenance of MAP diversity.	Bi-annual district wise data on canopy cover status is available from Forest Survey of India	Canopy cover maintained or increased as appropriate in each project site. Exact target will be set after baselines are updated for the forests in which the 21 FGBs/MPCAs are situated.	Forest Survey of India Biennial Reports National Remotes Sensing Agency data Sample monitoring plots in different habitat types for FGBs	
Population status of selected MAP species including GSMPs within FGB/MPCA complexes.	Monitoring protocols with species specific plots including appropriate types of ecological indicators to be established in Yr 1. Population stability of selected species maintained or improved against baseline over the years	Ecological survey reports on abundance, density, distribution, germination and regeneration rates of target species	Yrs 1, 3, 5 and end of project.	In all FGBs & MPCAs.
Status of selected MAP including GSMP species in wider exploited forests surrounding FGB/MPCA complexes.	Available generic protocols will be adapted to develop species specific protocols with appropriate types of ecological indicators for specific species established in Yr 1. Population stability of selected species maintained or improved as measured against baseline	Ecological survey reports.	Yrs 1 & 3, 5 and end of project	In all forest divisions of the project.
Increase in area (ha) cultivated with different MAP species,	At least 5000 ha of cultivation under different MAP species under private,	Government records such	Annually.	In the three

Key Impact Indicator	Target	Means of Verification	Sampling frequency	Location
especially GSMPs by government cultivation/afforestation programmes.	common and marginal or degraded lands owned by various Govt Depts such as Forests, and private owners.	as agriculture, revenue, NMPB and forest departments.		project states.
Increase in number of MAP species, especially GSMPs used in afforestation / cultivation programmes.	Based on the life history strategies of each species and habit, an additional 5 – 7 highly marketed species will be brought under cultivation. These may include herbacious rhizomatous species and species amenable for asexual propagation	Government records.	Annually.	In the three project states.

PART V: LEGAL CONTEXT

151. This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of India and the United Nations Development Programme, signed by the parties in 2007. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.

152. The UNDP Resident Representative in India is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by the UNDP-GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

a) *Revision of, or addition to, any of the annexes to the Project Document;*

b) *Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;*

c) *Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and*

d) *Inclusion of additional annexes and attachments only as set out here in this Project Document*

SECTION II: Strategic Results Framework and GEF Increment

PART I : INCREMENTAL COST ANALYSIS

Benefits and Outcomes	Baseline (B)	Alternative (A)	Increment (I = A-B)
Domestic Benefits	Medicinal plants provide substantial benefits in terms of local health care and trade though this is declining due to loss of habitat and destructive harvesting practices. Breakdown of traditional controls on harvest results in open access resource and subsequent overexploitation. Communities lose access to MAP's as they are overexploited and as a result lose their traditional health care systems leading to further adverse socio-economic impacts.	More sustainable MAP management in state and community forestlands benefits local communities over the long term including continued long-term access to affordable health care and improved incomes. Laws and policies recognize and reinforce the significance of traditional controls on MAP harvest.	Enhanced ability of stakeholders in government institutions, local communities and NGOs to conserve biodiversity through sustainable use. New MAP management regime demonstrates sustainable harvest practices in community and state forestlands.
Global Benefits	MAP diversity, including globally significant medicinal plant (GSMP) biodiversity in India's forestlands is being diminished.	Fifteen forest gene bank/ medicinal plant conservation areas (FGB/MPCA) conserve priority GSMP species in state forestlands across three Indian states. Six FGB/MPCA conserve priority GSMP species in community forests across three Indian states. Some 6,000,000 ha of diverse	Biodiversity conservation objectives mainstreamed into national and state forest policies. MAP diversity conservation objectives mainstreamed into state and community forest management practice. Conservation efforts are improved in productive forest habitat through capacity

Benefits and Outcomes	Baseline (B)	Alternative (A)	Increment (I = A-B)
		forest habitat actively managed in ways that promote MAP diversity with beneficial impacts on other biodiversity, including globally significant diversity. Global indirect use values, future use values and existence values of GSMP secured. The project's GSMP conservation best practices are shared throughout India. Lessons learned contribute to the development of mainstreaming biodiversity practice in productive forests across India.	building, stakeholder participation, and applying new partnerships and resources.
	Baseline (US$ over 7 yr period)	**Alternative**	**Increment**
Outcome 1: An enabling environment is established at the national level for mainstreaming conservation and sustainable use of GSMP into state level forest management policies and practices	MoEF 350,000 NMPB 37,660,000 **Total: 38,010,000**	**Total: 39,533,380**	In-kind Re-oriented Baseline Co-financing: 720,435 In Kind co-financing : 273,945 GEF: 700,735 **Total 1,695,112**
Outcome 2: Forest management policies in three Indian states promote and support the conservation and sustainable use of MAPs	**Total: 52,556,348**	**Total: 55,259,270**	In-kind Re-oriented Baseline Co-financing: 1,100,928 In-kind Co-financing: 753,494 GEF: 940,668 **Total 2,795,090**
Outcome 3: Conservation and sustainable use of MAPs mainstreamed at the local level	Chhattisgarh: 7,420,000 Arunachal Pradesh, Northeastern		In-kind Re-oriented Baseline Co-financing: 720,936

Benefits and Outcomes	Baseline (B)	Alternative (A)	Increment (I = A-B)
into government and community forest management norms and practices at demonstration sites in three project states	Tribal Foundation. 29,400 **Total: 7,449,400**	**Total: 10,159,408**	In-kind Co-financing: 279,072 GEF: 1,828,000 **Total: 2,828,008**
Outcome 4: Materials and methods developed for replicating the successful models of conservation and sustainable use of medicinal plants across other sites in the three states, and more broadly	**Total: 0**	**Total: 3,133,623**	In-kind Re-oriented Baseline Co-financing: 1,512,585 In kind Co-financing: 482,376 GEF: 980,600 **Total: 2,975,561**
Total:	**Total Baseline 98,015,748**	**Total 109,429,869**	**In-kind Re-oriented Baseline Co-financing: 4,054,884** **In-kind Co-financing:1,788,887** **GEF: 4,450,000** **Total Intervention: 10,293,771**

Note: Project management cost is not a part of above captioned incremental cost analysis. Project management total cost is US$ 1,120,350 of which US$ 485,000 is GEF financing, and US$ 635,350 is co-financing.

PART II : LOGICAL FRAMEWORK AND OBJECTIVELY VERIFIABLE IMPACT INDICATORS

Project Strategy	**Objectively verifiable indicators**				
Goal: To conserve India's medicinal plant diversity					
Objective	**Indicator**[15]	**Baseline**	**Target**	**Sources of verification**	**Risks and Assumptions**
Objective: To mainstream conservation and sustainable use of medicinal plants including GSMP into the productive forest sector of three Indian states: Arunachal Pradesh, Chhattisgarh and Uttaranchal	Forest area actively managed for sustainable use of MAPs and maintenance of MAP diversity	0 ha. Criteria for what constitutes 'active management to favor sustainable use & maintenance of MAP diversity to be determined and agreed with key stakeholders such as State Forest Departments in Yr 1	c. 32,000 ha of forest in 21 MPCA/FGB complexes primarily managed for sustainable use & conservation of MAPs. A further 6,000,000 ha under management that favours maintenance of MAP diversity, including GSMPs	Targeted biological and management surveys. Field visits, project M&E reports, forest management records	Significant global and national benefits secured by focusing mainly on supply side of MAPs production
	Natural canopy cover as a measure of the overall ecological status of forests	Bi-annual district wise data on canopy cover status is available from Forest	Canopy cover maintained or increased as appropriate in each	Forest Survey of India Biennial Reports National Remotes Sensing	Continued national and state government commitment to

[15] Indicators are further specified and quantified in the 'Target' column along with timelines.

	under active management for maintenance of MAP diversity.	Survey of India	project site. Exact target will be set after baselines are updated for the forests in which the 21 FGBs/MPCAs are situated.	Agency data Sample monitoring plots in different habitat types for FGBs	achieving the project objective, particularly within MoEF, NMPB, SMPBs, SFDs.
	Population status of selected MAP species including GSMP within FGB/MPCA complexes	Qualitative population status indicators for over 50 species known. For trees and shrubs density per unit area, data are not available, and will be monitored. Similarly, for herbs, areas of occurrence and qualitative assessment of population status also will be monitored.	Monitoring protocols with species specific plots including appropriate types of ecological indicators to be established in Yr 1. Population stability of selected species maintained or improved over the years	Ecological survey reports on abundance, density, distribution, germination and regeneration rates of target species during Yrs 1 & 3, 5 and end of project	MAP collectors and other forest user/owners from local communities continue to support project objectives MAP distribution and status may be affected by events such as extreme weather conditions or other perturbations, such as forest fires, increase in herbivores that consume particularly species, etc.
	Population status of selected MAP including GSMP species in wider exploited forests surrounding FGB/MPCA complexes	Baseline as above.	Available generic protocols will be adapted to develop species specific protocols with appropriate types of ecological indicators for specific species established in Yr 1.	Ecological survey reports Yrs 1 & 3, 5 and end of project	

			Population stability of selected species maintained or improved as measured against baseline		
	Number of MAP species including GSMP being harvested sustainably in demonstration sites	Sites where harvesting of GSMP populations takes place are known. Harvesting practices for some of the highly traded plants along with general impacts are broadly known, but comprehensive assessments are not available. Identification and definition of indicators of 'sustainable harvesting' & monitoring protocols to be defined in year 1	Sustainable harvesting of 5 heavily exploited GSMPs in place by end of project. Monitoring protocols developed for monitoring harvesting and being used annually	Ecological & social survey reports for baseline, mid and end of project and annual monitoring records as well as annual detailed assessment of impacts on regeneration levels, biomass levels, flowering and fruiting intensities of the 5 GSMP	
	Increase in area under different MAP species cultivated by government programmes	Isolated examples of cultivation over limited area	At least 5000 ha of cultivation under different MAP species under private, common and marginal or degraded lands	Government records such as agriculture, revenue, NMPB and forest departments.	

			owned by various Govt Depts such as Forests, and private owners.		
	Increase in number of MAP species used in afforestation / cultivation programmes	10% of species are known to be cultivated sporadically in the state.	Based on the life history strategies of each species and habit, an additional 5 – 7 highly marketed species will be brought under cultivation. These may include herbacious rhizomatous species and species amenable for asexual propagation	Government records	
Outcome 1: An enabling environment at the national level for mainstreaming the conservation and sustainable use of MAPs into forest management policies and practices	National forest policy revised to favor sustainable use & conservation of MAPs	No specific focus on MAPs in national forest policy Eg JFM Guidelines do not address sustainable use or conservation of MAPs	Revised national JFM guidelines with stronger focus on conservation of MAPs	The revised JFM guidelines	Key government stakeholders at national and state level are committed to intersectoral dialogue and action to bring about required cross-cutting changes in forest policy and practice and have full backing for doing so at highest political levels
	Strengthened capacity within NMPB to fulfill their	Limited technical and institutional capacity to fulfil key parts of	Capacity needs assessment of NMPB in inception phase.	Capacity assessment reports	Other government departments have

	mandate	its mandate such as assessing supply of MAPs, actively managing supply and demand and particularly for intersectoral national coordination	Targeted capacity development of key staff based on results of capacity assessment in Yrs 2 & 3. Mechanisms for assessing supply and demand of MAPs developed and adopted by NMPB by Yr 5. Mechanisms for intersectoral coordination developed and functionng effectively by Yr 3	Number and content of targeted trainings Number and role of trained officers NMPB reports, project reports and records Minutes of national intersectoral meetings	sufficient interest in working with NMPB
	Greater intersectoral cooperation at national and state level to achieve sustainable use and conservation of MAPs	No formal intersectoral cooperation in relation to MAPs to date. However, State and Central agencies involved with medicinal plants issues have been identified and committed themselves to provide their expertise for coordinating project components	An intersectoral technical coordination committee established and functioning in each of the project states by end of Yr 2 A National Strategy for the Sustainable Use & Conservation of MAPs signed off by at least 3 central ministries including MoEF and MoH by Yr 4 End of project policy and sector review	Reports and minutes of Technical coordination committee meetings. Reports of different ministries/government departments The endorsed strategy is published Policy & sectoral review concluded with key revisions identified.	

	Strengthened and new legal mechanisms to protect community interests over MAPs, including IPR	Existing forest laws do not relate to medicinal plants.	Appropriate legal mechanisms and measures that build on existing mechanisms identified and developed in years 3 & 4 and adopted by end of project	New regulations or laws Amendments to existing laws & regulations	There is sufficient political will at state and national level ratify and adopt new legal mechanisms and/or changes to existing mechanisms
Output 1.1 A national strategy for the conservation & sustainable use of MAPs	A comprehensive national strategy on MAPs	No such strategy exists.	A holistic national strategy paper which addresses conservation, cultivation, sustainable use and trade of MAPs and protection of associated traditional knowledge developed by Yr 3 and issued in the form of a policy guideline to the states by GoI by Yr 5.	National strategy document and associated GoI notification of the strategy	
Output 1.2 Revised national JFM guidelines with a stronger focus on conservation & sustainable use of MAPs	The revised national guidelines for JFM	Current JFM guidelines do not address sustainable use or conservation of MAPs.	Revised national JFM guidelines with stronger focus on conservation and sustainable use of MAPs especially GSMPs are issued by GoI by year 3.	Revised JFM guidelines and the GoI notification associated with it.	
Output 1.3 Legal mechanisms to protect Traditional Knowledge on	Legal mechanisms to protect Traditional Knowledge on MAPs.	There are no implementation strategies or regulations related to traditional	Critical gaps in legal framework for protection of Traditional Knowledge,	Report on gaps in legal coverage. Proposed draft regulations & laws or amendments to	

harvesting, cultivation & use of MAPs		ownership rights	including IPR identified in Yr1. Regulations and legislation to safeguard traditional knowledge developed by Yr 3 by central government and adopted by Yr 4	existing laws. The notification and adoption of the legal mechanisms by the concerned government agencies	
Output 1.4 Identification of MAPs suitable for cultivation & inclusion in afforestation & income generating programmes of the NAEB and MoRD	Field verified list of MAPs suitable for cultivation and inclusion in NAEB & MoRD afforestation & income-generating programmes	NMPB has identified and notified 32 species with regional prioritization for cultivation and augmentation, but the list is not based on field information .	Legally notified state specific and field verified species specific list of actions and interventions in place on rolling basis in each of project states in Years, 3, 4 and 5	Instructions issued by MoEF and MoRD and the respective state governments notifying the list of identified species. The official government notifications and the adoption of the identified species in the officially supported afforestation and income generating programmes.	
Output 1.5 Strengthened capacity of NMPB towards sustainable management and mainstreaming of MAPs	Intersectoral dialogue & cooperation at national level Technical assistance provided to states by NMPB	Currently NMBP has limited capacity to for or engaging in or leading intersectoral dialogue and coordination at national level and limited technical know-how on the sustainable management of wild MAPs	1. Increased instances of intersectoral dialogue and cooperation between relevant government ministries on MAPs conservation and sustainable use. 2. Increased requests by relevant State Government Agencies for technical assistance by NMPB 3.Enhanced fund	Project reports on targeted capacity development provided to NMPB NMPB reports. Minutes of intersectoral meetings Survey feedback from state agencies on technical assistance provided by NMPB	

			flow to this sector from different ministries		
Output 1.6 Strategy and protocols developed for threat assessment and monitoring conservation status of MAPs	Threat assessment & conservation status monitoring strategy and protocols.	Currently methods for generating field information for assessment of threat and conservation status of MAPs, including GSMPS do not exist.	Scientifically developed and field tested threat assessment protocol for MAPs developed (building on existing rapid threat assessment methods) and published by Yr 4 together with overall MAP monitoring strategy. Strategy and protocols adopted by the project state governments in the management of MAPs by Yr 5.	The monitoring strategy and threat assessment protocol and government orders mandating the adoption of it as a part of the management of MAPs.	
Output 1.7 Course module on the conservation & sustainable use of MAPs developed for the Indian Forest Service curriculum	A course module on conservation and sustainable use of MAPs	Currently the syllabus for Indian Forest Service curriculum does not include a module on conservation and sustainable use of MAPs.	To develop the module by year 2 and have it included in the syllabus by year 5.	Adoption of the revised syllabus with the MAP course module in the teaching of Indian Forest Service officers and other field functionaries.	
Outcome 2 Forest management policies in the three project states that promote and support the	State forest policies revised to favor sustainable use & conservation of MAPs	Limited focus on MAPs in key state forest policies, eg JFM Guidelines do not refer to MAPs & Forest Division Working Plans do not address conservation	Revised JFM orders/circulars with stronger focus on conservation of MAPs. Nature of required revisions to be determined based on policy	The revised orders/circulars Revisions to other relevant policy documents published The revised Working Plans	State governments are committed to goals of the CBD and see their relevance with respect to MAPs sector and hence

conservation and sustainable use of MAPs		management of MAPs. Other opportunities for forest policy changes at state level to be identified by end of Yr 1.	analysis by Yr 1 Forest Division Working Plans in project districts revised		need to modify existing forest policies accordingly
	Strengthened capacity within SMPBs to fulfill their mandate	Limited to non-existent capacity. Capacity needs of each SMPB to be assessed by Yr2/Q2	Over 80% of SMPB management and technical level staff to be sufficiently trained to deliver their mandate effectively by Yr 5	Individual State SMPB baseline and end of project capacity assessment reports Project records of targeted capacity development of key SMPB staff based on capacity assessment findings Reports of the SMPBs Verification by interviewing potential SMPB clients.	SFDs, SMPBs and other key sectors committed to intersectoral cooperation to effect policy changes that favour conservation and sustainable use of MAPs, preservation of Traditional Knowledge and protection of community-level IPR.
	Greater intersectoral cooperation to achieve sustainable use and conservation of MAPs	Minimal. No dedicated policy for MAPs although growing interest, eg Chhattisgarh & Uttaranchal declared as 'Herbal States'. Baseline studies by Yr 2/Q2 to include: a) Detailed analysis to establish extent of conflict and cooperation and	State-level intersectoral & technical coordination committees established. Individual state strategies for the Sustainable Use & Conservation of MAPs signed off by at least 2	Extent of change in intersectoral coordination and cooperation from baseline measured by numbers of meetings of state coordination committee, membership of committee, minutes and reports of committees and concrete MAP conservation measures implemented as a result of committee actions	SFDs, SMPBs and other key sectors committed to intersectoral cooperation to effect policy changes that favour conservation and sustainable use of MAPs, preservation of Traditional

		main requirements for effective consultation and intersectoral action; and b) A detailed review of state-level policies and key sectors to be undertaken to identify key areas for policy harmonization	government departments in each state by Yr 6	Project monitoring reports. Reports of different ministries/government departments Number of state departments that sign off on each state strategy	Knowledge and protection of community-level IPR.
Output 2.1 State Medicinal Plant Conservation & Sustainable Use Strategies for Arunachal Pradesh, Chhattisgarh & Uttaranchal.	The state-specific strategies	No state-specific MAP conservation and sustainable use strategies other than in Uttaranchal State which has a plan, but that is not as comprehensives as the strategies to be developed through this project.	State-specific strategies addressing the conservation, cultivation, sustainable use and trade of MAPs and protection of associated traditional knowledge formulated for Arunachal Pradesh by year 3 and Chhattisgarh and Uttaranchal by year 4 and notified by each of the three state governments by the following year.	Published strategies and notifications.	
Output 2.2 Revised state forest policies that support conservation & sustainable use of	Revised state forest policies	No specific focus on MAPs in forest policies of these three states.	Revised forest policies that favour sustainable use and conservation of MAPs formulated and adopted by the	Publication of the revised forest policies in the three states.	

MAPs.			three project states by year 4.		
Output 2.3 Revised state-level JFM Orders & Guidelines that integrate and strengthen MAP conservation and sustainable use objectives within overall JFM programmes and practices.	Revised state-level orders and guidelines for JFM	State-level JFM orders and guidelines do not address sustainable use or conservation of MAPs.	Revised state-level JFM orders and guidelines with stronger focus on conservation and sustainable use of MAPs especially GSMPs are issued by the respective state governments by year 4.	Copy of the revised state-level JFM orders and guidelines.	
Output 2.4 State-level legal mechanisms to protect traditional knowledge on harvesting, cultivation & use of MAPs.	Strengthened or new state-level legal mechanisms to protect Traditional Knowledge on MAPs including IPR.	Existing forest laws do not relate to medicinal plants. States are in the process of developing their own legislation to implement the National Biodiversity Act[16] which has potential for helping communities protect their interests over MAPs	Legal gaps at state level identified by year 2 following national level analysis. Proposed mechanisms and/or amendments to existing laws and regulations to be based on changes to national level legislation and to be adopted by Yr 6..	The notification and adoption of the legal mechanisms by the concerned state government agencies.	
Output 2.5 Strengthened capacities of SMPBs	Capacity of SMPBs to deliver their main mandate in relation to MAP conservation & sustainable use	Limited to non-existent capacity. Capacity needs of each SMPB to be assessed by Yr2/Q2	Over 80% of SMPB management and technical level staff to be sufficiently trained to deliver their mandate effectively by Yr 5	Individual State SMPB baseline and end of project capacity assessment reports. Project records of targeted capacity development of key SMPB staff based on capacity assessment	

[16] Now referred to as Biological Diversity Act, 2002

				findings Reports of the SMPBs Verification by interviewing potential SMPB clients.	
Output 2.6 Identification of MAPs suitable for cultivation & inclusion in afforestation & income generating programmes of the NAEB & MoRD at the state level & SFDs & state Rural Development Boards.	State-level lists of suitable MAPs for cultivation in afforestation and income generating programmes of NAEB and MoRD, and SFDs & state Rural Development Boards	Currently no such state-specific field-verified lists of species exists.	Initial state-wise lists ready and notified by Yr 4 by relevant state government departments and final list notified by Yr 6.	The state government notifications and the adoption of the identified species in the government supported afforestation and income generating programmes.	
Output 2.7 Revised forest division working plans that provide clear guidelines for the conservation management of MAPs in all project districts.	Revised forest division working plans in the project districts	Currently the forest divisions working plans do not focus on sustainable use of MAPs.	Revised forest division working plans incorporating the guidelines for the sustainable use of MAPs published in the project districts published and adopted in all the project districts through the course of the project depending on when the working plans are due for revision.	The revised forest division working plans	
Output 2.8 Comprehensive baseline and M&E system developed for monitoring the	Scientifically compiled comprehensive baseline on the status of MAPs in each of	Currently none of the project states have a specific information on the status of MAPs or monitoring	By year 5 the project states will have a dataset on the status of MAPs (i.e. species wise quantitative	Project reports and reports of the state government agencies involved with the conservation and management of MAPs.	

status of medicinal plant resources in each project state	the project states.	protocols.	data on plant density and distribution in the FGBs and state-wide assessments of distribution and abundnce) and operational systems for MAP monitoring.		
Outcome 3 Conservation and sustainable use of MAPs mainstreamed at the local level into government and community forest management norms and practices at demonstration sites in the three project states.	Ha of government forest actively managed for sustainable use of MAPs and maintenance of MAP diversity	0 ha. Criteria for "active management" to favor sustainable use & maintenance of MAP diversity and suitable ecological indicators to be determined in Yr 1	At least 4 MPCAs/FGBs (established in each project state by Yr 4 (3 in state forest & 1 in community forest - 12 in total covering 18,000 ha) & 7 in total per project state by Yr 6 (5 in state forest and 2 in community forest – 21 in total or c. 32,000ha). Mid-way through the project and by the end of the project, respectively, an additional 2,000,000 ha and 6,000,000 ha of forest will be under active management for sustainable use and maintenance of MAP diversity.	Government records & project M&E records	Local government & communities perceive value in conservation of MAPs and moving towards more sustainable harvesting of MAPs

	Numbers of SFD officers actively applying their training in conservation management of MAPs	0. Criteria for measuring this to be developed by Yr 2/Q2 at same time as when training module being developed.	To be established of Yr 2/Q3	To be determined, but to include field verification component and triangulation – eg results of ecological surveys combined with interviews with different stakeholder groups	
	Ha of community forest actively managed for sustainable use of MAPs and maintenance of MAP diversity	Minimal, Indicators to be established in Yr 1 along with criteria for what constitutes 'active management to favor sustainable use & maintenance of MAP diversity including suitable ecological indicators	Capacity gaps of communities, such as those for management and monitoring to be established by end of Yr 1 Subsequently developing monitoring protocols and management practices.	Field surveys, project M&E reports, key informant interviews	
	Number of MAP species, including GSMP, for which sustainable harvesting techniques developed.	0	5 GSMPs per year from the Yr 3 onwards.	Species harvest protocols developed and implemented in selected Forest Divisions. Project records & Forest Division records	
	Number of MAP collectors and other groups practicing sustainable harvesting	0	75% of MAP collectors and all JFM groups practice sustainable harvesting in forest divisions for which sustainable harvesting protocols have been developed for target GSMPs by Yr 6	Project sample surveys Forest Division and JFM committee records.	

	Extent of documentation of Traditional Knowledge on MAPs	Documentation is minimal	Target values for mid and end of project to be determined during Yr 1		
	Improved knowledge among MAP collectors and community forest users/managers about MAPs generally and about their legal rights, obligations and the requirements for maintaining MAP diversity and abundance	Documentation minimal	Target values for mid and end of project to be determined during Yr 1	M& E reports related adoption of protocols	
Output 3.1 Demonstration of *in situ* & *ex situ* techniques for the conservation management, including sustainable use, of MAP diversity, especially GSMP in state forests	MPCAs,,FGBs, sustainable harvesting practices, propagation and cultivation methods	No such techniques currently in use in project areas	At least 4 MPCAs/FGBs per project state by Yr 4 (3 in state forest and 5 by Yr 6 demonstrating sustainable management practices to target groups of stakeholders Stable or increased population of target GSMPs as against baseline in state owned forest areas by end of project	Government records & project M&E records.	
Output 3.2 Strengthened MAP conservation management	Numbers of SFD officers actively applying their training in	0.	To be established by end of year 1.	To be determined, but to include field verification component and triangulation – eg results of	

capacity within SFDs.	conservation management of MAPs.			ecological surveys combined with interviews with different stakeholder groups.	
Output 3.3 Pilot demonstration sites for the *in situ* & *ex situ* conservation & sustainable management of MAP diversity on community-owned or managed lands.	No. of pilot demonstration sites for *in situ* and *ex situ* MAP conservation & management on community lands	0	At least 1 MPCAs/FGBs established and functioning effectively in community forest in each state by Yr 4 and 2 in each state by Yr 5, with 6 in total by end of project. Additionally, pilot propagation and cultivation of MAPs in private home gardens and farmlands and community lands adjoining forest areas, with a target of 5,000 ha under such cultivation by end of project.	Project monitoring reports, PIRs, MTE & TE reports	
Output 3.4 Strengthened community capacity for the conservation and sustainable use of MAPs.	Proportion of MAP collectors & users practicing MAP conservation & sustainable use.	0	To be established by end of year 1.	Targeted sample surveys in project sites	
Output 3.5 Strengthened community	Extent of documentation of Traditional	Currently none although the process was started under the	10 such registers to be produced every year in the villages	Community biodiversity registers and other community documents.	

capacity for documenting and conserving Traditional Knowledge relating to MAPS, including traditional medicine, harvesting techniques and how to protect their IPRs.	Knowledge on MAPs by the local communities in the form of documents like community biodiversity registers.	National Biodiversity Act 2002	around the FGBs (i.e. 1 per village) from year 2 onwards, with a total of 70 community registers/state produced by end of project		
Outcome 4: Materials and methods developed for replicating the successful models of conservation and sustainable use of medicinal plants across other sites in the three states, and more broadly.	Number of additional forest divisions in project states and in replication states adopting successful models. Precise criteria to be determined by mid-project. These could include policy changes, new policies, capacity development of SMPBs, SFDs, MAP collectors, community forest users/managers, increased sustainable harvesting of MAPs in state forests and community forests. Number of states developing strategies for Conservation & Sustainable Use of	Baseline values where known, others to be established by end of Yr 1 **Policies** • No state in India has dedicated strategies for the sustainable use and conservation of MAPs **Capacity of different stakeholder groups** • To be established mid-project **Forest Working Plans**	All targets to be determined by end of Yr 1	Government records Revised Policies Revised Working Plans Revised JFM Guidelines Records of number and nature of exchange visits between project demonstration sites and other areas involving range of stakeholders	Forest owners, managers and users are interested in conserving MAPs and harvesting them sustainably and therefore receptive to adapting lessons and experience of project to their local circumstances and have capacity to do so including sufficient funds at their disposal.

	MAPs based on national and project state strategies. Revision of forest division working plans in at least 2 forest divisions in each of the 4 replication states. Training material and modules used and applied. Establishment of effective FGB/MPCA complex in each replication state	• Probably none that take MAPs into account but to be confirmed **Training materials & course modules** • Probably none, but to be confirmed **FGBs/MPCAs** • None in target replication states in either state or community forests			
Output 4.1 State-level strategies for the conservation & sustainable use of MAPs developed in 4 replication states.	State-level strategies in 4 additional states	No such strategies currently exist.	State-specific strategies addressing the conservation, cultivation, sustainable use and trade of MAPs and protection of associated traditional knowledge formulated, notified and adopted by four additional state governments by year 7.	Copies of the four state strategy documents and the state government orders notifying these.	

Output 4.2 Capacities of SMPBs strengthened in 4 replication states based on experience of SMPBs in project states.	Capacity of SMPBs in 4 replications states to fulfil their mandate in relation to MAP conservation & sustainable use	Limited to non-existent capacity but to be confirmed by replication states.	Capacity targets to be set in Yr 3 together with relevant state authorities	Comparison of baseline and end of project capacity based on reports of the SMPBs	
Output 4.3 Training materials & module developed for SFD in project states adapted for use in replication states.	Adapted MAPs training materials and module	Currently no such materials available.	To have the state-specific training materials and module ready for the four replication states by year 5 and also have it accepted by the concerned state governments for use in the respective states.	Project reports and published training materials and correspondence from the state governments accepting the use of these training materials.	
Output 4.4 Demonstration of *in situ* & *ex situ* methods and approaches to the conservation & sustainable use of MAPs through exchange visits between project sites and new districts in replication states.	Number of exchange visits, number and type/affiliation of participants involved and techniques demonstrated	None	Targets to be set in Yr 3	Government records & project M&E records.	
Output 4.5 Strengthened capacity for conservation	Increased awareness & knowledge about different options for improved MAP	Limited such awareness or knowledge	Specific targets to be established by Yr 3.	Before and after capacity self-assessments of sample of SFD managers and community MAP collectors	

management of MAPs by SFD and selected local communities in replication states.	conservation and management, including in situ & ex situ techniques, potential policy changes, etc			& users in replication states Government records & project M&E records.	
Output 4.6 Revised forest division working plans that provide clear guidelines for the conservation management of MAPs in selected districts in replication states.	Revised forest division working plans incorporating the guidelines for the conservation management of MAPs published in the selected districts of the replication states.	Currently the forest divisions working plans do not focus on conservation of MAPs.	Agreement by replication state governments by end of project to revise forest division working plans to incorporate principles for effective conservation management of MAPs when the working plans are due for their next revision.	Eventual publication and adoption of the revised forest division working plans	

SECTION III : Total Budget and Workplan

Award ID:	00049929
Award Title:	PIMS 1024 BD FSP India Medicinal Plants
Business Unit:	IND10
Project Title:	PIMS 1024 BD FSP India Medicinal Plants
Implementing Partner (Executing Agency)	Ministry of Environment & Forests, Government of India

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agency	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD	Amount Year 6 (USD)	Amount Year 7 (USD)	Total (USD)	See Budget Note
				71300	Local Consultant	34,202	52,152	19,082	1,478	1,478	1,478	1,044	**110,914**	1
				71200	International consultant	19,659	8,811	8,811	8,811	8,812	1,778	6,584	**63,266**	2
			GEF	71600	Travel	35,617	52,960	28,188	12,944	3,929	3,930	2,773	**140,340**	3
				72100	Contractual Services Companies	67,069	66,463	27,893	12,939	3,123	3,128	2,231	**182,846**	4
				72300	Materials & Goods	10,055	15,092	9,536	4,205				**38,888**	5
				72500	Supplies	5,916	8,001	5,919	4,321	864	1,382	2,419	**28,822**	6
				74200	Audio visual/Print Prod cost	9,470	13,136	6,109	1,834				**30,549**	6

				74500	Misc. expenses	36,343	40,349	22,659	4,442	470	496	350	**105,108**	7
					Total Outcome 1	**218,330**	**256,964**	**128,196**	**50,974**	**18,675**	**12,192**	**15,400**	**700,732**	
	SFDs of the three project states/ NMPB/MoEF/FRLHT			71300	Local Consultant	5,869	27,708	35,081	25,255	23,145	14,812	1,044	**132,914**	8
				71200	International consultant	19,659	8,811	8,811	8,811	8,812	1,778	6,584	**63,266**	9
				71600	Travel	6,311	38,772	43,466	30,595	30,595	30,599	2,773	**183,110**	10
				72100	Contractual Services Companies	21,837	57,611	64,964	75,402	70,680	9,816	2,201	**302,511**	11
				72300	Materials & Goods		14,166	16,388	17,057	20,166			**67,777**	12
OUTCOME 2: Forest management policies in three project states for conservation and sustainable use of MAPs				72500	Supplies	2,504	6,331	6,508	6,504	5,854	4,018	2,419	**34,137**	13
				74200	Audio visual/Print Prod cost	3,415	4,736	5,041	4,431	4,330	3,214		**25,167**	13
		62000	**GEF**	74500	Misc. expenses	292	38,126	41,265	40,514	10,087	1,153	350	**131,785**	14
					Total Outcome 2	**59,887**	**196,261**	**221,523**	**208,569**	**173,668**	**65,390**	**15,370**	**940,668**	
OUTCOME 3: Mainstreaming conservation of MAPs at local level	SFDs of the three project states/ NMPB/MoEF/FRLHT	**62000**	**GEF**	71300	Local Consultant	735	883	34,435	34,582	34,585	1,250	884	**107,355**	15
				71200	International consultant	16,634	7,456	7,456	7,456	7,456	11,044	8,261	65,764	16

				71600	Travel	1,955	57,902	88,117	88,508	88,509	47,771	2,347	**375,109**	17
				72100	Contractual Services Companies	1,555	218,523	254,226	275,313	285,307	34,315	1,862	**1,071,101**	18
				72500	Supplies	219	950	1,170	1,023	731	1,170	2,047	**7,310**	19
				72300	Materials & Goods		35,334	39,037	39,037	39,039	35,335		**187,782**	20
				74500	Misc. expenses	247	2,518	2,592	2,642	2,642	2,643	296	**13,580**	21
					Total Outcome 3		**323,566**	**427,033**	**448,561**	**458,270**	**133,528**	**15,697**	**1,828,000**	
OUTCOME 4: Development of materials and methods for replication	SFDs of the three project states/ NMPB/MoEF/FRLHT			71300	Local Consultant	869	1,043	11,304	31,910	68,303	67,737	20,860	**202,026**	22
				71200	International consultant	19,659	8,811	8,811	8,811	8,812	1,778	6,584	**63,266**	23
				71600	Travel	2,311	2,773	8,467	9,062	32,631	32,500	8,700	**96,443**	24
				72100	Contractual Services Companies	1,837	2,205	27,756	72,999	87,752	87,757	30,850	**311,156**	25
				72500	Supplies	259	1,123	26,449	27,475	30,838	31,150	31,945	**149,239**	26
				74200	Audio visual/Print Prod cost			12,200	17,341	15,800	15,600	15,400	**76,341**	26
		62000	**GEF**	74500	Misc. expenses	292	350	1,136	13,273	45,456	10,536	11,088	**82,129**	27
					Total Outcom			**96,122**	**180,871**	**289,591**	**247,058**	**125,426**	**980,600**	

					e 4									
Project management unit	SFDs of the three project states/ NMPB/MoEF/FRLHT			71300	Local consultant	26,656	31,987	39,984	45,315	45,315	45,315	31,988	**266,560**	28
				72200	Equipment	3,669	15,902	19,572	17,126	12,236	19,572	34,252	**122,329**	29
				71600	Travel	5,168	3,876	9,691	5,814	9,691	9,690	20,681	**64,611**	30
		62000	**GEF**	74500	Miscellaneous	2,205	1,575	4,410	2,520	4,412	4,430	11,948	**31,500**	31
					Total Management	**37,698**	**53,340**	**73,657**	**70,775**	**71,654**	**79,007**	**98,869**	**485,000**	
				PROJECT TOTAL		**315,915**	**830,131**	**946,531**	**959,751**	**1,011,858**	**537,174**	**270,763**	**4,935,000**	

Summary of Funds:								
GEF	**315,915**	**830131.18**	**946531.1**	**959751.17**	**1011857.8**	**537174**	**270762.89**	**4935000**
Govt.	380,575	1,317,582	1,456,204	844,966	1,253,003	947,903	247,888	6,448,121
NGO	4,500	4,500	4,500	4,500	4,500	4,500	4,000	31,000
Total:	**700,990**	**2,152,213**	**2,407,235**	**1,809,217**	**2,269,361**	**1,489,577**	**522,651**	**11,414,121**

Budget Notes:

Please note that an activity-based budget is provided by Outcome in Annex 7 of the project document.

Outcome 1:

1. **Local consultancy outputs** (Years 1-7: 279 consultant weeks, at the rate of US$397/week):

    - A comprehensive review of national laws and policies of relevance to Medicinal and Aromatic Plants (MAPs) conservation and sustainable use (Sub-output 1.1.1) as inputs to the formulation of a national strategy for Medicinal and Aromatic Plants (MAPs) conservation and sustainable use (Output 1.1).
    - Gender consultations (Sub-output 1.2.2) as inputs to the proposed revision of the national Joint Forest Management (JFM) guidelines to better mainstream MAP conservation and sustainable use with special attention to Globally Significant MAPs. (Output 1.2)
    - Draft legal mechanism for protection of traditional knowledge on MAP exploitation within the ambit of the Biological Diversity Act (2002) (Sub-output 1.3.2)
    - Capacity assessment of the National Medicinal Plants Board (NMPB) and preparation of a capacity development plan (Sub-output 1.5.1)
    - Training materials to develop capacity of the NMPB (Sub-output 1.5.2)
    - Mid-term evaluation, final evaluations, lessons learnt assessments, as well as logframe revision exercise, with particular attention on mainstreaming of conservation and sustainable use of MAPs at national level.

2. **International technical assistance outputs** (Years 1-7: 18 consultant weeks, at the rate of US$3,500/week). The budget also includes annual return airfares of c.US$3000, a daily consultancy rate of US$650/day and DSA at $297/day.
    - Development of an effective project management, monitoring and evaluation system as well as periodic technical guidance to the project in relation to major project monitoring milestones. To provide solutions based on international best practices on MAP conservation and management to ensure enabling environment for mainstreaming the conservation and sustainable use of MAPs into forest management policies and practice at national level.
    - Together with local consultant, mid-term evaluation, final evaluations, lessons learnt assessments, as well as logframe revision exercise, with particular attention on mainstreaming of conservation and sustainable use of MAPs at national level.

3. **Travel:** $140,340 has been budgeted for travel under this outcome in Years 1-7 for travel by national consultants, sometimes as part of a multidisciplinary team, to undertake the required reviews, stakeholder consultations, capacity assessments, training material development and actual training and field based work summarized in Budget Notes A & C. Consultants will be selected on a competitive basis and may not necessarily be based in the Delhi or the project states. Consultants would need to travel to Delhi where the NMPB and the PMU are located, if not already based in Delhi, as well as travel to Dehra Dun (which is several hours by road or rail from Delhi) where many of India's key forest and wildlife agencies are located, including the Indira Gandhi Institute for Forest Academy where IFS officers are trained, as well as to the three project states and some of the field sites within the states. The three project states, and particularly the field sites, are in relatively remote parts of India and logistically difficult to reach as explained further in Budget Note 10 below.

Moreover, travel to the 3 project states and to the different field sites (7 per state) will be necessary for both the local consultants and international consultants to be able to deliver the outputs planned under this outcome. Logistical issues and costs involved are discussed further in budget notes 7 & 13.

4. **Contractual services** (some 455 consultant weeks at the rate of US$ 401/week) spread over Years 1-7 will be used to

   - Organize national-level consultations to share, discuss and finalize the proposed national strategy for MAP conservation and sustainable use (Sub-output 1.1.3)
   - Prepare the final national MAP strategy document and associated reports from the consultations (Sub-output 1.1.4)
   - Organize multi-sectoral consultations on resource management (sub-output 1.2.1) as inputs to the proposed revision of the national Joint Forest Management (JFM) guidelines to include a stronger focus on the sustainable management of MAPs, particularly globally significant MAPs (Output 1.2)
   - Organize national-level stakeholder consultations and regional consultations to discuss and finalize the proposed revised guidelines for Joint Forest Management on MAP conservation and sustainable use (Sub-output 1.2.3 and 1.2.4)
   - Conduct field surveys and stakeholder consultations to discuss and finalize legal mechanism for protection of traditional knowledge on MAP exploitation within the ambit of the Biological Diversity Act (2002) (Sub-output 1.3.1 and 1.3.3)
   - Conduct field surveys to develop criteria to assess the suitability and potential of different MAPs for cultivation in government afforestation and income-generating programmes (Sub-output 1.4.1)
   - Conduct training and capacity development on identification and assessment of MAP suitability for cultivation (Sub-output 1.4.3)
   - Prepare and disseminate reports and publications on criteria for assessing MAP suitability for cultivation in government afforestation and income-generating programmes (Sub-output 1.4.4)
   - Develop a long-term strategy for monitoring the conservation status of MAPs in India, including identification of appropriate research institutions to participate in a monitoring network and targeted training of selected researchers (Sub-outputs 1.6.1 & 1.6.2)
   - Conduct periodic field surveys for M&E purposes, document and disseminate project results and key lessons learned under this outcome nationally and internationally.

5. **Materials & Goods** Field surveys are required to determine the suitability of different MAP species for inclusion in government afforestation and income-generating programmes. Various specialized materials and goods will be required for conducting these surveys and for cultivation trials in 21 sites spread over the three states. These sites were selected to ensure adequate representation of MAP diversity, including globally significant MAPs. Successful trials will be used to develop a demonstration package of best practices for farmers and government officials.

6. **Supplies & Communications, Printing & Publication** This is a politically, technically and logistically complex multisectoral multi-state project. Achieving consensus on the policy changes planned under this outcome will require good communication and information exchange between different sectors and stakeholders at different levels. The costs of stationery and office supplies, communications, printing and publication have been budgeted to cover the numerous policy and legal reviews,

associated consultations envisaged under this Outcome, along with the development of new a new course module and a variety of training materials.

7. **Miscellaneous** Given the technical and logistical complexity of the project (3 remote states and 21 field sites), a slightly higher amount has been budgeted under the miscellaneous head for this outcome, although miscellaneous costs comprise less than 9% of the total GEF budget. For Outcome 1, the precise costs of the field trials are difficult to anticipate as much will depend on the site-specific conditions, including such things as labour charges, the nature and amount of equipment and other materials and goods required for testing the cultivation potential of different MAP species and for demonstrating their potential to farmers and government. Travel and other costs are also likely to rise over the life of the project due to inflation and foreign currency fluctuations. The project will look for cost-savings wherever possible, particularly in relation to travel to the states and field sites, for example, where it makes sense to pool activities required to deliver outputs under different outcomes and where it is possible to identify qualified consultants capable of delivering these outputs to reduce the number of visits to a particular state or field site.

Outcome 2:

8. **Local consultancy outputs** (Years 1-7: 335 consultant weeks, at the rate of US$397/week):

    - Comprehensive review of forest management policies in three project states (Arunachal Pradesh, Chhattisgarh and Uttaranchal) (Sub-output 2.1.1) & revised state-level strategies for sustainable MAP management (Sub-outputs 2.1.2 and 2.1.4) and revised state forest policies that promote conservation and sustainable use of MAPs (Sub-output 2.2.1)
    - Revised state-level JFM Orders and guidelines that integrate and strengthen MAP conservation and sustainable use objectives within overall JFM programmes and practices (Sub-output 2.3.1)
    - Review of existing legal mechanisms to protect traditional knowledge on harvesting, cultivation of MAPs (Sub-output 2.4.1)
    - Capacity assessments of State Medicinal Plants Boards and capacity development plans for SMPBs in each project state (Sub-output 2.5.1)
    - Review of all existing government schemes for afforestation and income generation and identify suitable MAP species for cultivation (Sub-output 2.6.1)
    - Develop and implement new models for afforestation and income-generation that prioritize MAP cultivation (Sub-output 2.6.2)
    - Mid-term evaluation and final evaluations of the project, selected lessons learnt assessments in relation to forest management policies that support the conservation and sustainable use of MAPs.

9. **International technical assistance outputs** (Years 1-7: 18 consultant weeks, at the rate of US$3,500/week). The budget also includes annual return airfares of c.US$3000, a daily consultancy rate of US$650/day and DSA at $297/day.
    - Provide technical guidance and develop project management as well as monitoring and evaluation system in regard to forest management policies that promote conservation and sustainable use of MAPs.
    - Together with local consultant, mid-term evaluation and final evaluations of the project, selected lessons learnt assessments in relation to forest management policies that support the conservation and sustainable use of MAPs.

10. **Travel** $ 183,110 has been planned under this outcome in Years 1-7 to enable national consultants and contracted local companies/NGOs to travel to the 3 project states since much of the work planned

under this outcome needs to be conducted within each project state, but there also needs to be coordination between the states and with relevant central government agencies based in Delhi as well as relevant technical agencies based in other parts of India. It is highly unlikely that it will be possible to identify suitable consultants or local companies and NGOs from within the project states given the specialized nature of the planned work and the relatively low capacity of the three project states which are among the least developed in India. Consultants may be drawn from any part of India and typically airfares between state capitals or from New Delhi to different states are between US$200-500 return depending on the distance. In the case of one of the project states, Arunachal Pradesh, there are no flights to the capital Itanagar. Travellers must first fly to Guwahati in Assam and then travel 8 hours to reach Itanagar. Daily flights are not available to remote areas and so consultants will need to overnight en route and will require DSA. Additionally, it will be necessary to travel to each of the seven field sites within each project state in order to develop comprehensive baseline and M&E system. As can be seen from Annex 5 these sites are geographically spread out to ensure maximum coverage of globally significant MAPs. Most are in remote locations with rugged terrain and can only be accessed by road from the state capitals. There is limited public transport and it would be difficult to transport project materials and goods without private (hired) transport. Most of the field sites are located between 200-400 km from the state capitals and it takes between 2-3 hours to travel 100 km in this terrain. Daily hire rates for reliable vehicles vary between US$40-65.

11. **Contractual services** (754 consultant weeks, at the rate of US$ 401/week) spread over Years 1-7 will be used to

    - Organize stakeholder and expert consultations to discuss proposed revisions to state forest policies in the three project states (Sub-output 2.2.1)
    - Organize community-level consultations to review and finalize state-level Joint Forest Management Orders and Guidelines (Sub-output 2.3.2 and 2.3.3)
    - Organize state-level consultations to discuss and finalize state-level legal mechanisms to protect traditional knowledge on harvesting, cultivation and use of MAPs (Sub-output 2.4.2)
    - Organize training and capacity development workshops for State Medicinal Plants Boards (Sub-output 2.5.3)
    - Review existing capacity within State Forest Department for sustainable MAP management in the three project states, formulate capacity development plan, prepare training materials, and conduct relevant training (Sub-outputs 2.7.1-2.7.3)
    - Expand and consolidate the baseline data in the project states and develop an M&E system, through field surveys, the development of a database for monitoring data and M&E protocols
    - Periodic field surveys for M&E purposes
    - Document and disseminate project results and key lessons learned nationally and internationally.

12. **Materials & Goods** Specialized materials and goods will be needed to develop suitable cultivation and harvesting techniques for effective incorporation of different MAP species in various government afforestation and income generation programmes. Successful planting techniques require the establishment of nurseries and growth chambers for initial growth of seedlings before transfer to the field, plus subsequent tending to ensure survival and growth including shade control, possible irrigation and other environmental management depending on the species growth requirements. Other equipment will be required for demonstrating MAP harvesting and processing techniques to local farmers and others.

13. **Supplies & Communications, Printing & Publication** The costs of stationery and office supplies, communications, printing and publication have been budgeted to cover the numerous policy and

legal reviews, associated consultations as well as monitoring and evaluation activities envisaged under this Outcome, along with the development of a variety of training materials.

14. **Miscellaneous** A slightly higher amount has been budgeted under the miscellaneous head for Outcome 2 as for Outcome 1 for the same reasons given in Budget Note 7, ie the uncertainties surrounding the actual costs of the field cultivation and harvesting trials and of travel to different areas. The project will look for cost-savings wherever possible, particularly in relation to travel to the states and field sites, and where it makes sense to pool activities required to deliver outputs under different outcomes. Thus the amounts budgeted for miscellaneous expenditure under the remaining outcomes is relatively small, such that overall, miscellaneous costs comprise less than 9% of the total GEF budget.

Outcome 3:

15. **Local consultancy outputs** (Years 1-7: 270 consultant weeks, at the rate of US$397/week):

    - Strategies for mainstreaming conservation management of MAP diversity into government and community forest management norms and practices in the three project states (Sub-output 3.1.3)
    - Capacity assessment of State Forest Departments (SFDs) for MAP conservation management in the 3 project states
    - Capacity development plans and training materials for each SFD based on identified capacity gaps (Sub-output 3.2.1 and 3.2.2)
    - Assessment of local community capacities for conservation and sustainable use of MAPs and training materials and module to develop capacity based on identified gaps (Sub-output 3.4.1 and 3.4.2)
    - Assessment and documentation of traditional knowledge on MAPs and review of Intellectual Property Rights of communities in relation to MAPs (Sub-outputs 3.5.1 & 3.5.2) as inputs to strengthening community capacity for documenting and conserving traditional knowledge relating to MAPs (Output 3.5)
    - M&E and documentation of the progress development of community capacity for documenting and conserving traditional knowledge and protecting their IPRs
    - Mid-term evaluation, final evaluations, selected lessons learnt assessments, logframe revision exercise with regard to this outcome.

16. **International technical assistance outputs** (Years 1-7: 19 consultant weeks, at the rate of US$3,500/week). The budget also includes annual return airfares of c.US$3000, a daily consultancy rate of US$650/day and DSA at $297/day.
    - Development of an effective project management system which include monitoring, evaluation, lesson learning and adaptive management to ensure that activities planned under this outcome are implemented properly
    - Periodic technical guidance to the project particularly in relation to major project monitoring milestones and to provide solutions based on international best practices on MAP conservation and management to ensure successful mainstreaming of conservation and sustainable use of MAPS at local level.
    - Together with local consultant, mid-term evaluation, final evaluations, selected lessons learnt assessments, logframe revision exercise with regard to this outcome.

17. **Travel** US$ 375,109 has been budgeted under this outcome in Years 1-7 as much of the planned work is field-based, and includes establishing the actual Medicinal Plant Conservation Areas and Forest Gene

Banks as well as working with Forest Department staff in individual forest divisions in the project sites as well as communities. Certain amount of budgeted is earmarked for monitoring and evaluation mission for above mentioned activities. The complexities and costs of travel have already been explained under Budget Notes 3 & 10 above.

18. **Contractual services** (2671 consultant weeks, at the rate of US$ 401/week) spread over Years 1-7 will be used to

    - Conduct field demonstration of in situ and ex situ techniques for MAP conservation management, including sustainable use in the 3 project states as well as prepare MAP inventories and related documentation, disseminate information and undertake education, interpretation and advocacy on MAP conservation and sustainable management (Sub-output s 3.1.1-3.1.2 and 3.1.4 & 3.1.6)
    - Implement Joint Forest Management at project demonstration sites (Sub-output 3.1.5)
    - Conduct training on MAP conservation management for selected State Forest Department officers (sub-output 3.2.3)
    - Identify and establish pilot sites for demonstration of *in situ* and *ex situ* conservation and sustainable management of MAPs on community-owned or managed lands (Sub-output 3.3.1-3.3.3)
    - Field test training modules for community capacity development (Sub-output 3.4.3) on MAP conservation and management and conduct actual trainings once module finalized (Sub-outputs 3.4.4 and 3.5.3)
    - Conduct periodic field surveys for M&E purposes as well as document and disseminate project results and key lessons learned obtained from this outcome nationally and internationally.

19. **Supplies** Stationery and other office supplies are required for the preparation and distribution of various project progress and monitoring reports as well as to cover the costs of acquiring appropriate technical materials such as existing publications and reports on MAP conservation and sustainable use techniques and best practices as well as more general materials, publications and tools on capacity development and other technical areas relevant to the project.

20. **Materials & Goods** Outcome 3 involves considerable field-based demonstration of *ex situ* and *in situ* techniques for the conservation and sustainable use of MAP resources in 3 project states and 21 fields sites, which in turn will require some specialized field equipment, for example to assess response and regeneration rates of MAP species after regulated harvesting, as well as equipment for harvesting, extracting, processing and storage. Additionally, GPSs, GIS mapping equipment and other tools will be required for effective conservation mapping, monitoring and management as well as more basic field equipment such as tape measures, weighing scales, pegs and other materials for demarcating boundaries of MPCAs/FGBs, etc.

21. **Miscellaneous** A very small amount has been budgeted for miscellaneous expenses to cover unanticipated costs. Also see Budget Notes 7 & 13.

Outcome 4:

22. **Local consultancy outputs** (Years 1-7: 509 consultant weeks, at the rate of US$397/week):

    - Replication strategies and methodologies for replication of successful models and strategies for conservation & sustainable use of MAPs in 4 other states (Sub-output 4.1.1 and 4.1.2)

- Selected inputs into capacity assessments and related capacity development plans of State Medicinal Plants Board, State Forest Departments in the 4 replication states (Sub-output 4.2.1 and 4.5.1)
- Adaptation of project training materials and modules targeting different actors for use in replication states (Sub-output 4.3.1 & 4.2.2.)
- Demonstration of successful *in situ* and *ex situ* methods for MAP conservation and sustainable use to key actors from replication states (Sub-output 4.4.3)
- Documentation of process used by project to revise forest working plans to incorporate MAP conservation objectives and selected inputs into revisions of working plans in replication states (Sub-output 4.6.1, 4.6.4,4.6.5)
- Organize expert consultation involving relevant partners in replication states (Sub-output 4.6.2)
- Mid-term evaluation, final evaluations, lessons learnt assessments, logframe revision exercise with regard to replication of successful models of conservation and sustainable use of MAPs.

23. **International technical assistance outputs** (Years 1-7: 18 consultant weeks, at the rate of US$3,500/week). The budget also includes annual return airfares of c.US$3000, a daily consultancy rate of US$650/day and DSA at $297/day.
    - Develop an effective project management system, provide periodic technical guidance to the project particularly in relation to major project monitoring milestones and solutions based on international best practices on MAP conservation and management in relation to the replication of successful model of conservation and sustainable use of MAPs in other sites within three states and more broadly
    - Together with local consultant, mid-term evaluation, final evaluations, lessons learnt assessments, logframe revision exercise with regard to replication of successful models of conservation and sustainable use of MAPs.

24. **Travel** Some travel by national consultants ($96,443 over 5 years) will be required to develop the replication strategy, to test the replication methods and materials as well as to allow exchange visits between key actors and beneficiaries from project states and the proposed replication states. Also see Budget Notes 7 & 13 on logistics.

25. **Contractual services** (775 consultant weeks, at the rate of US$ 401/week) spread over Years 1-7 will be used to

    - Conduct stakeholder meetings to disseminate replication strategies and methods (Sub-output 4.1.3)
    - Evaluate and adapt or develop training materials for enabling the capacity development of SFDs and local communities in the replication states, disseminate such materials and conduct some key training (Sub-output 4.5.2-4.5.4)
    - Periodic field testing and verification of tools and methods for M&E purposes
    - Document and disseminate project results and key lessons learned nationally and internationally.

26. **Supplies & Communications, Audiovisual, Printing & Publication** A larger amount is budgeted for supplies ($149,239) and communication, audiovisual, printing, publication production costs ($76,341) in order to ensure effective dissemination and uptake of successful project approaches and models in the 4 replication states and further afield. A variety of media (visual, tv, radio, etc.) will be used for dissemination purposes to ensure that information is communicated in local languages and through a

variety of media and not just written documents given the relatively low literacy rates in many rural parts of India.

27. **Miscellaneous** A very small amount has been budgeted for miscellaneous expenses to cover unanticipated costs. Also see Budget Notes 7 & 13.

Project Management:

While the current co-financing ratio of the project management costs are higher than the overall co-financing ratio for the project, this is because it is difficult for state governments to specify exactly how much cofinancing each of the state governments and national government agencies will be able to allocate to individual project management budget lines until the project has been approved and the start date is known. We are confident of obtaining additional cofinancing from national and state sources and thereby decreasing the GEF contribution to project management in line with the overall project cofinancing ratio.

28. **Local Consultants:** Personnel costs for 1 Project Management Unit (PMU) at the national level and 3 state-level PMUs in each of the project states. This is necessary to ensure effective coordination given the geographic spread of the project. Only local consultants will be hired for project management purposes.

29. **Office facilities, equipment, vehicles and communications:** The project will be implemented in the relatively inaccessible hilly states of the country, which have bad roads and limited public transport. Thus dedicated project vehicles will be important to ensure smooth implementation of the project. Vehicles are to be hired as required to support the work of the national and state-level PMUs at a total cost of US$14,285/year over 7 years. Reliable communications and efficient information management and exchange will also be essential and as the concerned State Governments have limited budgets for equipment and communications, $12,329 has been budgeted to provide each of the 4 PMUs with computer and printer facilities and $10,000 to supplement existing government budgets for communications.

30. **Travel:** A total of $108,611 ($64,611 GEF and $44,000 co-financing) has been budgeted for actual travel by members of the national and state PMU to allow for effective project coordination between the PMUs and within the different field sites in each project states (with 7 field sites per state).

31. **Miscellaneous:** Finally, a small proportion of the budget has been reserved under this head as a contingency fund to deal with unexpected situations and costs that may arise during the life of the project relating to project management that could not be anticipated in advance as well as to contend with fluctuating exchange rates and inflation.

SECTION IV : Additional Information

PART I : OTHER AGREEMENTS

1. Project Endorsement Letter from Ministry of Environment & Forests (please refer to CEO endorsement template)

2. Letters of Co-financing Commitment (Please refer to CEO endorsement template)

PART II : ORGANIGRAM OF PROJECT (OPTIONAL)

PART III : TERMS OF REFERENCES FOR KEY PROJECT STAFF, MAIN SUB-CONTRACTS AND PROJECT IMPLEMENTATION STRUCTURES[17]

153. The broad terms of reference of key project committees and positions are provided below. These are indicative and will be reviewed and finalized during the early part of the project Inception Phase with inputs from the key stakeholders.

1. Project Management Unit:

154. A Project Management Unit (PMU) with a full-time project manager supported by one programme officer, one administrative assistant and one accounts officer will assist the PISG in the implementation of this project. The PMU will be located in the MoEF. The PMU will facilitate national and state level implementation of the project and work closely with state-level Project Coordinators and their teams in the initial stages until these are phased out. The PMU will also work closely with the Senior Technical Advisor and report to the NPD.

155. The key responsibilities for the PMU will include:

- Coordinating project implementation with all the implementing partners, concerned state government and central government agencies and UNDP-GEF.
- Providing the required support related to technical reporting to the implementing partners.
- Providing the required support related to financial matters including financial reporting to the implementing partners.
- Coordinating with all the implementing partners to ensure that all the required technical and financial reports are submitted in a timely manner to GoI as well as UNDP-GEF.
- Organising the recruitment of national and international consultants to the project,
- Organising the project evaluations.
- Ensuring that there is adequate documentation by all the implementing partners at all stages of implementation and in collating this documentation.
- Facilitating the publication of project outputs.

[17] This entire section has been inserted at the time of submission for CEO endorsement.

a) Project Manager:

156.The project manager (PM) will be in charge of overseeing the day-to-day project implementation and management of project activities, organizing and overseeing national and international consultant input, and overseeing monitoring and evaluation and ensuring that the project is on track. One of the most important responsibilities of the project manager will be working effectively with members of the PISG and ISGs to ensure that project activities proceed on schedule within each partner Ministry and non-governmental organization. The PM will be part of the PMU and work closely with the Senior Technical Advisor and FRLHT and other relevant technical agencies. The PM will report to the NPD and concerned senior official at UNDP.

157.Key responsibilities will include:

- Provide leadership to the PMU to enable it to function efficiently and fulfill its mandate.
- Coordinate the planning, management and implementation of project activities as set out in the project document and as guided by the PISG and the NSC.
- Work in close collaboration with NPD and Senior Technical Advisor to ensure coherence between all the project components and partners.
- Ensure the sharing and flow of information in a transparent manner among all the project stakeholders as appropriate.
- Coordinate the preparation of detailed annual work plans consistent with the envisaged outputs and objectives of the Project Document that incorporates the work plans prepared by all the implementing partners.
- Manage the project budget in collaboration with the designated Programme Officer in UNDP and ensure that timely financial reports are submitted by all implementing partners.
- Participate in the recruitment of project personnel, subcontractors and consultants and assist the NPD, STA in their supervision of project personnel to enable strong quality control.
- Supervise the procurement and maintenance of project equipment.
- Supervise the timely preparation and submission of quarterly and annual progress reports, work plans, budgets, and financial reports by all the implementing partners.
- Ensure regular liaison with the UNDP Country Office, government agencies, and all project partners.
- Undertake monitoring of the project, facilitate internal and external evaluations and promote information dissemination and sharing of lessons learnt through the implementation of this project.
- Support the NPD and STA in their resource mobilization efforts and development of partnerships.

b) Programme Officer

158.The programme officer (PO) is responsible for the day-to-day guidance and operational management of the project and support activities. The PO will support, initiate, monitor and manage the project. The PO will report to the project manager and help liaise with the government departments.

159.Key responsibilities will include:

- Consult with key partner institutions on a frequent basis and co-ordinate all actions with these partner institutions and on going programs.
- Provide overall technical assistance to the development and delivery of project activities.
- Select, recruit and supervise project professional staff and administrative support staff.
- work closely with partner institutions and project manager and other to manage project, prepare and revise workplans
- organize and implement project activities according to work plans

- prepare and submit financial reports, quarterly progress reports and other technical reports for effective project implementation

c) Project Administrative Assistant

160. The Administrative Assistant (AA) will be under the direct supervision of the project manager and s/he will be responsible for the following tasks:

- Provide clerical support to all staff including typing, faxing documents, mailing, filing and miscellaneous activities
- Ensure filing and cleanliness of the office and upkeep premises
- Ensure adequate supply of stationary, its distribution and inventory of stocks.
- Ensure proper communication between the manager and the rest of the staff

d) Project Accountant

161. The Project Accountant will be under the supervision of the project manager and will be primarily responsible for managing the finances of the project. Specifically, s/he will be responsible for the following tasks:

- Maintain up-to-date records of project finances and expenditures;
- Review financial expenditures and ensure such expenditures are in compliance with government, UNDP and GEF rules and procedures;
- Ensure all project expenditures are authorized by the NPD and verified by the PM;
- Ensure timeliness in receipt and disbursement of project funds;
- Prepare reports of financial expenditures as per the requirements of UNDP and GEF.

2. Senior Technical Advisor:

162. A Senior Technical Advisor (STA) significant international expertise will be appointed to strengthen technical leadership and coordination by providing independent guidance to the PMU. The STA will be selected by a committee constituted by the PISG in close consultation with UNDP-India. The STA will be an independent expert, who will work intensively with the project during the first year to put in place systems and processes for effective project implementation, monitoring and evaluation, and adaptive management. After the first year, the STA will remain closely associated with the project for the rest of the project period to provide expert guidance on a basis to be determined at the end of the first year. The Project Management Unit (PMU) will support the STA. The STA will work under the direct supervision of the NPD and in close cooperation with the Technical Advisory Group (TAG) of the project.

163.Key responsibilities of the STA will include:

- Provide strong technical leadership and strategically important inputs to the project especially in its first year of implementation when the STA will be engaged by the project on a full time basis.
- Provide advice and guidance in the implementation of the project especially to the FRLHT and the Project Manager, to ensure it achieves its overall objective and concrete outcomes as identified in the project document.
- Provide a high level of coordination during project inception and implementation at the national, state and local levels.
- Establish the required management systems including coordination systems for the efficient implementation of the project, and ensure sharing and flow of information in a transparent manner among all project stakeholders as appropriate.
- Support the PM in the overall management of the project and to ensure coherence between all components of the project and implementing partners.
- Link up with other medicinal plants and traditional knowledge projects and initiatives in India and globally for the sharing of learning and experience.
- Provide advice and assistance to the PM and FRLHT in organization and conduction of the inception workshop and development of the technical work plan for the project.
- Provide advice related to the strategic and annual work plans.
- Participate in the recruitment of project personnel, subcontractors and consultants, ensuring strong quality control and providing advisory support as required.
- Contribute to resource mobilization and development of partnerships to further the objectives of this project.
- Contribute to the establishment of a monitoring and evaluation plan and system for the project.
- Provide constant training and mentoring to national staff of the project and involved national stakeholder organizations.
- Assist the project in the preparation of required documents for National Steering Committee meetings and participate in such meetings.

3. Technical Consultancy Inputs:

164.**a) Policy & Legal Specialist:**

Key Responsibilities

- Review current strategies and policies in place at the national level and in the project states to identify the gaps for ensuring sustainable use of MAPs
- Work with relevant partners to develop a national strategy for MAP conservation and sustainable use and state-level policies.
- Work with relevant partners to identify and/or develop suitable legal mechanisms to protect traditional knowledge relating to sustainable harvest, cultivation and use of MAPs within the guidelines of Biological Diversity Act (2002)

165. **b) Capacity Assessment & Development Component (different specialists to undertake different subcomponents based on required skills and experience):**

Key Subcomponents

- Conduct a capacity needs assessment of the National Medicinal Plants Board in order to formulate a targeted capacity development program to enable the NMPB to better fulfil its mandate, including functioning effectively as an intersectoral coordinating body
- Conduct capacity needs assessment of State Medicinal Plants Board in order to formulate targeted capacity development programs to enable the SMPBs to better fulfil their mandate
- Identify MAP conservation and sustainable use related capacity gaps of local communities living in and around the forests and develop targeted capacity development program for MAP collectors and farmers
- Strengthening local capacity for conserving and applying traditional knowledge, documentation, IPRs and sustainable use of MAPs
- Develop a course module for conservation and sustainable use of MAPs for Indian Forest Service curriculum

166. c) M&E Specialist(s):

Key Responsibilities:

- Work with the PMU to develop a project M&E system in line with UNDP's results based management approach and the principles of adaptive management, based on the GEF-approved logframe. This will include review and updating of baselines, indicators, targets, risks and assumptions as well as developing monitoring protocols to be able to report on both project implementation and impact, including measures of conservation impact and sustainability.
- Lead periodic M&E surveys according to project M&E and implementation plans and ensure that project implementation is adapted as necessary in line with M&E feedback.

167. d) Dissemination & Replication Component:

Key Responsibilities:

- Analysis and consolidation of lessons learnt through the implementation of the project and of best practices and models that are suitable for replication and broader uptake
- Develop strategies for dissemination of project experiences, lessons learnt and best practices for different target audiences through different strategies.
- Develop a comprehensive and financially sustainable strategy for replication of effective models for MAP conservation in other parts of India, including other states.

4. National Steering Committee:

168. The National Steering Committee (NSC) will be the apex body, which will be responsible for ensuring that the project is implemented in line with the agreed project design and consistent with national and state development policies. The NSC will meet at least once a year and it will provide the required oversight to this project and also ensure the overall co-ordination of the programme. The NSC will be chaired by the Additional Secretary, Ministry of Environment and Forest, (MoEF), Government of India, (GoI). Its membership will include the concerned Joint Secretary, MoEF, the concerned Directors from MoEF and the Ministry of Rural Development (MoRD), and the concerned Joint Secretaries from MoRD and the Department of Indian System of Medicine and Homeopathy (ISM&H), GoI; the Principal Chief Conservator of Forests or the Principal Secretary of the Department of Environment & Forests of the three states;, the CEO or a representative of the National Medicinal Plants Board (NMPB); two representatives of UNDP; the Director and/or a representative of the Foundation for the Revitalisation of Local Health Traditions (FRLHT); and two non government representatives nominated by the government, one from the private sector and one from the field . The meetings of the NSC will be convened by the National Programme Director who will be the concerned Joint Secretary in MoEF.

169. Key responsibilities of the NSC will include:

- Approving the Project Implementation Plan and the project's annual work plans and budget allocations.
- Ensuring that the project is implemented as per the agreed project design and in line with the Project Implementation Plan to be developed during the Inception Phase and the more detailed Annual Workplans and Budgets
- Ensuring that implementation is consistent with national and state development policies.
- Facilitating and monitoring the required level of inter-sectoral coordination for the successful implementation of the project.

- Facilitating additional resource mobilization both from donors as well as from Government programmes.
- Ensuring the required levels of participation from the three project states and the four replication states.
- Ensuring that the committed co-financing is made available on a timely basis for project implementation by all concerned.
- Ensuring that funds are available for the four state governments for carrying out the replication activities.
- Reviewing performance of the project on an annual basis and based on the major findings recommend adjustments to the project implementation strategies and plans to enable it to remain relevant to the global, national and local contexts.
- Provide policy guidance to the project, especially to enable it to leverage emerging opportunities.
- Facilitate the linking and mainstreaming of project implementation experience into national policy and practice.

5. Programme Implementation Steering Group:

170. The Project Implementation Steering Group (PISG) will be responsible for directing the management of the project. The PISG will be chaired by the Joint Secretary, MoEF, GoI, who will be the National Project Director (NPD). The NPD will be responsible for ensuring the proper implementation of the project on behalf of the Government. The membership of the PISG will include the designated officer in the Forest Department in the three project states; a representative of the NMPB; a representative of a cooperating NGO from each of the three project states; the concerned Project Officer from UNDP; and the Project Coordinator from FRLHT. The PISG will meet at least twice a year or more often if required.

171. Key responsibilities of the PISG will include:

- To provide general oversight and policy direction to the project.
- Approving the project's quarterly work plans and budget allocations.
- Ensuring the timely access to the committed co-funding.
- Promoting at all levels high levels of coordination and collaboration to support project implementation and to avoid duplication especially at the demonstration sites.
- Advising the project implementing partners on the policy guidance received from the NSC and in converting them into concrete project activities.
- Regular monitoring of project implementation and to intervene when required ensuring smooth project implementation.
- Support replication or scaling up of successful actions from demonstration sites to other sites nationally and facilitate cross-sectoral learning by sharing lessons from project implementation experience.
- Coordinating the financing from UNDP and GEF with that from other sources.
- To approve the selection process and appointment of selection committees for recruiting key project staff including STA, Project Manager and members of TAG.
- Assisting in preparing Terms of Reference for contractors and required tender documentation.

6. National Project Director:

172. The concerned Joint Secretary in the Ministry of Environment and Forests will be the National Project Director (NPD). The NPD will chair the PISG and work closely with the NSC and oversee the project implementation on a daily basis. The NPD will be responsible for ensuring the proper implementation of the project on behalf of the Government.

173. Key responsibilities of the NPD will include:

- Provide leadership to ensure the efficient and timely implementation of the project.
- Chair the PISG and ensure that the PISG fulfills its mandate.
- Provide technical and policy advice.
- Assume direct responsibility for the committed co-finance from government.
- Act as the lead government representative of the project during all important meetings, reviews and evaluations.
- Ensure the efficient coordination between all the stakeholders, especially government ministries and departments to enable the smooth implementation of the project.
- Support the recruitment of candidates, national and international, for long term and short term assignments for the project.

7. Technical Advisory Group:

174. A small Technical Advisory Group (TAG) will be constituted to advise the NSC, the PISG and the PMU on all technical aspects of the project. The TAG may comprise of national or international members selected for a short term or over a longer duration by the PISG in close consultation with UNDP-India. TAG members will have expertise in issues relating to the sustainable use and conservation of MAPs including appropriate technical skills in botany, ecology, economics and social sciences, as well as specific knowledge about key areas such as sustainable harvesting of MAPs, the MAP trade, traditional medicine and knowledge about MAPs, IPRs, capacity development and bringing about institutional change. In addition to relevant expertise, other criteria for selecting TAG members will include experience, project requirements and the ability to devote time to advise the project.

175. Key responsibilities of the TAG will include:

- To provide multi-disciplinary technical advice to the NSC, PISG and the PMU on all aspects of the project.
- To periodically evaluate the technical quality of the project implementation and to provide advice for improving technical quality of implementation.
- To link the project to innovative as well as similar projects and initiatives both in India as well as globally.

8. FRLHT and other technical agencies:

176. FRLHT along with other identified technical agencies will facilitate the technical orientation and capacity building of the implementing partners in the three project states as well as in the four replication states. The technical agencies will work closely with the STA, TAG, PMU and state-level project coordinators to amongst other things: develop a strong M&E plan including good baselines; develop a strategy for phased project implementation; appraise the implementation proposals received to ensure that they are in line with the objectives and operational elements of the project, and assist in the periodic evaluation of quality and pace of technical progress.

177. Key responsibilities of FRLHT will include:

- Technical orientation of all the implementing partners to ensure that there is a minimum technical quality and consistency in project implementation.
- Training of all project partners to ensure that they have the required skills to implement this project, especially the *in situ* and *ex situ* conservation initiatives.
- Participate and/or provide technical advice for all the planned policy and legal reviews.
- Provide advice and also participate in the capacity assessments of NMPB and the SMPBs and contribute to the development and implementation of capacity building of these institutions.
- Contribute to the development of the long-term strategy and protocols for threat assessment and monitoring the conservation status of medicinal plants in India.
- Contribute to the development of all training and academic outputs envisaged in the project.
- Provide the required technical leadership to enable the successful implementation of the planned replication activities.
- Contribute to the M & E activities, technical reporting and documentation of project experiences and lessons learnt.

9. Implementation Steering Groups:

178. State-level project implementation steering groups (ISGs) in each state will have representation from all key state departments to direct and oversee project implementation and management. Each ISG will be chaired by the Principal Chief Conservator of Forests (PCCF) and operationally headed by the designated nodal forest officer for Medicinal Plants in the state. Other members will include representatives of the relevant state departments.

179. Key responsibilities of the IMGs will include:

- Overseeing the overall project implementation in the respective states to ensure that the project is implemented as per the agreed project design and consistent with national and state development policies.
- Facilitating and monitoring the required level of inter-sectoral coordination at the state-level for the successful implementation of the project.
- Developing the project's annual work plans and budget allocations for the respective states.

- Ensure timely access to the committed co-funding for the project.
- Facilitating additional resource mobilization both from donors as well as from State Government programmes.
- Reviewing performance of the project on a regular basis and based on the major findings recommend adjustments to the project implementation strategies and plans to enable it to remain relevant to the national and local contexts.
- Provide policy guidance to the project, especially to enable it to leverage emerging opportunities.
- Facilitate the linking and mainstreaming of project implementation experience into state policy and practice.

10. State Project Management Unit (SPMU) in each of the three states to assist the ISG in the implementation of the project. The SPMU will be headed by the designated nodal officer and supported by two officers. They will work closely with the ISGs and the Local Management Groups (LMGs) in order to oversee that the project-inspired activities proceed on schedule and facilitate effective state level implementation of the project. At each of the sites, the project will be implemented by a LMG. The structure and function of the LMG will be decided in the inception phase.

180. Key responsibilities will include:

- Coordinate successful implementation of the project activities with the implementing partners and agencies in the state.
- Provide the required support related to technical and financial reporting, and ensure timely submissions of all required technical and financial reports.
- Promote coordination and collaboration at the state level.
- Coordinate with all relevant state level stakeholders to avoid duplication of or conflicting actions at demonstration sites and promote synergy.
- Support organization of project evaluations.
- Ensure adequate documentation by all implementing partners

PART IV: STAKEHOLDER INVOLVEMENT PLAN

181. During the PDF-B Phase priority was given to the identification of primary stakeholders in the medicinal plants sector who have direct dependence on medicinal plant resources as such dependence has major implications for resource sustainability. After the national inception workshop where there was representation from the 7 PDF-B states and from the national ministries and related departments, a series of discussions were held with the representatives of various government and non-government agencies working in the biodiversity related issues in the respective states. At the national level, stakeholders range from the Central Ministries (including MoEF, Ministry of Health & Family Welfare, Department of Science and Technology (DST), to relevant national NGOs and central research institutions.

182. The PDF-B core team members visited the states to hold discussions and seek inputs in identifying the primary stakeholders. The process adopted in these consultations included sharing information about various aspects of the medicinal plants sector in the country[18] ranging from its diversity and richness to the extensive traditional knowledge associated with these resources that exists in India. These deliberations helped to clearly identify the major stakeholder groups in each of the states and then to identify sub groups within. A key part of the state-level consultation process was to:

[18] This was based on the FRLHT's experience in peninsular India through DANIDA Project in 3 states and CCF I in 2 states

- Ascertain the expectations of each of the stakeholder groups and main actors
- Share proposed project priorities as identified by FRLHT with participants in order to obtain their views and suggestions and thereby refine and add to state-specific priorities.
- Communicate the outcome of these consultations widely and ensure a transparent process to help stakeholders develop a sense of ownership to this process.

183. Five broad categories of stakeholders were identified at the state-level: 1) Forest owners and managers including both SFDs and communities; 2) traditional medicine practitioners and other holders of traditional knowledge; 3) NGOs, CBOs and farmers active in the MAPs sector; 4) Industries and trading associations/organizations involved with the MAPs sector; and 5) Research institutions, universities, colleges and hospitals involved in research and use of MAPs and traditional medicine. The consultations also included MAPs collectors, notably tribal people and women.

184. The second step of the PDF-B process was to facilitate identification of two active and keen representatives from each of the five major stakeholder groups (depending on whether all the five stakeholder groups existed and were active in the state) to be part of the State Level Planning Committee (SLPC) constituted later by the State Government. The SLPCs were chaired by the Principal Secretaries of (Forests), (exception Chhattisgarh, where the Hon. Forest Minister was the Chairman).

185. The government also constituted a Working Group (WG) comprising of 5-8 persons drawn out of the membership of the SLPC, with a competent local expert (from either Government or Non-Government) to act as the convenor of the WG. This WG then conducted the intensive consultative process as per the guidelines and orientation manual[19] prepared for this purpose by FRLHT.

186. The activities of the WG included and were aimed at obtaining inputs, guidance and support for project objectives from the identified stakeholder groups, through different mechanisms and in different stages of the Preparation Phase. The principle adopted in soliciting consultation and suggestion from the stakeholders was to consult 'pure' groups of stakeholders and not a mix of different stakeholder groups at any of the organised consultations. This was done to provide fair and equal opportunity to each of the stakeholder groups and to avoid dominance of one group over the other.

187. The following activities were conducted in order to achieve information dissemination, consultation and participation.

- **Meetings with national authorities and institutional level meetings with government and NGO representatives:** Numerous preparatory activities/consultations were organised including an inception workshop in October, 2002 at New Delhi in which MoEF officials, SFD officials and representatives of various NGOs and research organisations, academic institutions and UNDP participated to conceptualise the project idea.
- **Meetings with local institutions/stakeholders**: Throughout the Preparation Phase teams responsible for baseline studies and assessments conducted numerous meetings with regional, state and local institutions with potential or demonstrated interest in the project. The objective of these meetings was to obtain information about their current programs and approaches relating to biodiversity especially of MAPs, institutional strengths and weaknesses, as well as interest and capacities for participating in the project.

[19] Guidelines for State Level consultation for preparing a community oriented action plan for medicinal plants conservation and sustainable utilisation of medicinal plants prepared by FRLHT

The baseline studies included secondary research and compilation and primary research in 3 representative areas in each state.

- **Structured gathering of information:** Several structured forms of consultation were applied for obtaining specific information in areas such as institutional capacities (for public institutions representing potential partners in the project), biodiversity knowledge and application, past experience related to development action and research in medicinal plants and demonstrated capacity to take up one or many of the components of the project towards achieving the project objectives.
- **Dissemination of information**: In order to promote transparency and facilitate participation, a Communication Plan for the Preparatory Phase was put in place aimed at dissemination of information about the project rationale and objectives. As part of this plan a web based e-group consultation was organised and run by the GEF plan coordinator from FRLHT for a period of 50 days during April to June 2003, when the consultative process was in operation at the state level. More than 70 interested sectoral people joined this e-group discussion and contributed to the planning process. In three of the project states Radio was also used to disseminate the information related to the project planning and about the multifaceted nature of the medicinal plants sector.
- **Public hearings for general public:** The WGs in the states conducted several public hearings to solicit opinions and suggestions from the general public on specific issues such as need for conservation of MAPs and the knowledge related to such resources in the state. Most of these were organised by taking advantage of public assemblages already taking place at the village level in the form of weekly fairs and religious congregations.
- **Questionnaires for gathering opinion from experts:** A well structured questionnaire was prepared by the WG in each state and this was sent to known experts in the field, who otherwise did not prefer to participate in other modes of participation, to get their considered views on the proposed project components. The number of such questionnaire based participation ranged between 50 to 300 in the states.
- **Meetings to ensure policy level and political commitment:** The final meeting of the SLPC in the states was either held at the level of the Hon. Chief Minister of the states or at the Forest Minister/Health Minister level. In Uttaranchal the meeting was held at the level of Chief Secretary to obtain complete government concurrence on the project. In Arunachal Pradesh the Action Plan was cleared at the level of Hon. Health Minister of the State. In two states, viz; Sikkim and Meghalaya, FRLHT GEF Plan Coordinator was given time to make a presentation about the project and its development process to the full Cabinet of the State. This resulted in obtaining complete support of the state government.

The stakeholder involvement plan for implementation of the project:

188. The implementation phase of the project is envisaged to derive strength from the experience of the intensive consultation process adopted during the PDF-B process. Given below is a preliminary plan for involving stakeholders in the implementation of this project. This plan will be reviewed and further developed during the Inception Phase of this project. This process will include the assessment of the interest of stakeholders in participating in this project; detailing of the roles of key stakeholders and capacity assessments of stakeholders.

189. Mechanisms and Strategies for Promoting Stakeholder Participation

A. Approach and Principles

190. The participatory approach is an integral part of the project's implementation strategy, as it has been the case during the Preparation Phase. A participatory approach to activities is built in all stages of the project cycle, including monitoring and evaluation, and will be refined during the inception phase.

1. Information, as a prerequisite to participation. Successful participation requires transparency and full and fair access to information. The project has devised a communication strategy to ensure that the flow of information is continuous and targeted to all audiences. Several mechanisms will be put in place through the project to ensure that all stakeholders are informed about activities and overall advances and progress in implementation. These mechanisms will be targeted at different stakeholder groups taking into account their unique requirements.

2. Build on the existing participatory institutions. The project will take complete advantage of the national and state policy driven participatory structures constituted under the Joint Forest Management resolutions of the GoI and the states. The JFM committees are functioning in the states to protect and manage the forest areas allocated to them. There are Forest Development Agencies (FDAs) in the form of federations of the village level JFM societies and these have the capacities for administrative and financial decision making. A novel mechanism of constituting Task Teams for different specific elements of the project will be developed to facilitate intensive implementation of components of the project in a participatory mode. This will be based on the Team Think concept of social development through participation. While different Task Teams will be responsible for specific components, the task of integrating all the components will be facilitated by the FDAs.

3. Sustainability through capacity building in local state institutions. The project will target the institutions operating at the community level to enable them to actively participate in developing and implementing activities to ensure continuity and replicability once the project is finalized. A novel horizontal method of capacity building developed in one another project related to development of sustainable harvest methods for NTFPs called Community to Community Training (CTCT) will be adopted to disseminate the lessons learnt during the project implementation in each of the states. The process involves organisation and conducting of training programmes by the Task Teams of one village for other village communities under the umbrella of JFM committees. This comes in as a very handy and useful mechanism for transfer of experiences in the most efficient and effective way.

B. Formal Mechanisms of participation

191. The formal mechanisms of participation and the various project implementation structures are outlined in the Management Arrangements in Part III. These arrangements will be validated during the inception phase of the project following additional consultation with potential members.

192. At the national level, formal participation in the project will be achieved through the broad based *National Steering Committee* made up of representatives of GoI Ministries and departments, the state governments, non- government organizations and UNDP.

193. At the state and the local level, the SLPCs created during the planning phase could continue to provide guidance to the implementation of the project, while at the local level it is designed to facilitate participation at the community level through the Task Teams of the JFM. There is a strong presence of the Panchayati Raj Institutions (local government bodies) in the states and efforts will be made to integrate them in to the Task Teams.

194. At the state level three types of organisations will be involved in the implementation of the project components. They belong to;

I. Government agencies other than those already mentioned

II. Autonomous Government and Non Government Research and Academic institutions

III. Community Level Organisations

Agencies to be involved in different aspects of project implementation

	Project State	Government agencies	Autonomous Government and Non Government Research and Academic institutions	Community Level Organisations
1	Arunachal Pradesh	• Department of Horticulture • Dept of Rural Development • Forest Development Corporation Department of ISM	• RRL Itanagar • G B Pant Institute of Himalayan Environment and Development, Itanangar • Botanical Survey of India • State Biodiversity Research and Development Trust, Itanangar • State Forest Research Institute • Himalayan Indigenous Medicinal and Aromatic Plant Research & Development Society Itanagar • WWF India, Itanangar	• Orchid Society of Arunachal Pradesh • Oju Welfare Association Naharlagun • R K Mission Arunachal Pradesh • Native People Committee, Itanangar • Pali Vidya Peeth, Itanangar • Herbs for Better Health Toing Dibang Valley
2	Chhattisgarh	• Department of Horticulture • Dept of Rural Development • Forest Development Corporation • Department of ISM • Department of Agriculture	• SFRI, Jabalpur • TFRI Jabalpur • Shrishti Herbal Research Institute • Ravishankar University Raipur	
3	Uttaranchal	• Department of Horticulture • Dept of Rural Development • Forest Development Corporation • Cooperative Department • Beshaj Sangh	• CCRAS Ranikhet • HRDI, Gopeshwar • Wildlife Institute of India Dehradun • SHER, Dehradun • INHERE, Masi • G B Pant Institute of Himalayan Environment, Kosi Almora • G B Pant University, Pantnagar • ICFRE, Dehradun • Vivekananda Hill Agriculture Research Institute, Almora	• Shri Nanda Devi Lok Vikas Samithi Gopeshwar

			• HAPPRC, Srinagar • CIMAP, Pantnagar • Oushadhiya Vanaspati Van Samsha, Dehradun	

195. These organisations and agencies have actively participated and contributed to the process of stakeholder consultation as well as the development of overall proposal. The specific activities in which these organisations will be involved will be decided in consultation with the organisations during the inception workshop of the project.

C. Specific activities and participatory mechanisms

196. The participatory approach is built into the design of the project and as such does not reflect itself in a restricted set of activities. Nevertheless some activities have a direct aim at fostering participation:

1. A network of demonstration initiatives will be put in place in order to integrate the local stakeholders and facilitate the learning process.
2. A web page containing different topics relating to the project will be created and maintained (activities, directory of organizations, biodiversity, achievements of the project, best practices, methodologies, technical support materials for transfer of technologies, reports).
3. Facilitated participatory appraisal and planning workshops on biodiversity and MAP friendly practices will be held throughout the life of the project.
4. Interactive radio and TV programming will be established to allow communities to discuss local issues and problems affecting biodiversity especially MAPs.
5. Information management system will be developed to strengthen links between local stakeholders and the government agencies though NGOs.
6. Design and operation of collection and management systems of geo referenced information on conservation, traditional knowledge, livelihood opportunities, markets for sustainably harvested MAPs, prices and inputs.
7. Establishment of Interpretation Centres to facilitate a continuous exchange of ideas among different stakeholders and enable the dissemination of progress and newer ideas across different regions in the state and across the states.
8. Local and regional seminars designed to share methodologies, experiences and lessons learnt.
9. Conduct of exchange visits and study trips to best practices sites as a way to achieve peer to peer learning between community leaders and other partners in different regions especially to achieve the replication objective of the project.

PART V – REFERENCES & ANNEXES 1-7 ATTACHED IN SEPARATE FILE

SIGNATURE PAGE

Country: India

UNDAF Outcome(s)/Indicator(s): Strengthening decentralization and promoting gender equality
(Link to UNDAF outcome., If no UNDAF, leave blank)

Expected Outcome(s)/Indicator (s):
(CP outcomes linked t the SRF/MYFF goal and service line)
National capacity built to contribute to global environmental agenda setting, and global environmental concerns mainstreamed in national development planning.

Expected Output(s)/Indicator(s):
(CP outcomes linked t the SRF/MYFF goal and service line)
National capacity built to contribute to global environmental agenda setting, and global environmental concerns mainstreamed in national development planning.

Implementing partner:
(designated institution/Executing agency)
National capacity built to contribute to global environmental agenda setting, and global environmental concerns mainstreamed in national development planning.

Other Partners:
State Forest Departments and State Medicinal Plants Boards of Arunachal Pradesh, Chhattisgarh & Uttaranchal, Ministry of Rural Development, Dept. of Science and Technology, NGOs, local communities, research institutions and State Forest Departments of Sikkim, Meghalaya, Himachal Pradesh & Jammu & Kashmir.

Programme Period: 2006 - 2013
Programme Component:_____
Project Title:_ PIMS 1024 BD FSP Mainstreaming Conservation and Sustainable Use of Medicinal Plant Diversity in Three Indian States (PIMS 1024)
Project ID: 00049929
Project Duration: 7 years
Management Arrangement: NEX

Total budget:	**11,414,121**
GEF	4,935,000
Total co-financing	**6,479,121**
• National Government (in cash)	1,894,863
• National Government (in-kind)	407,909
• State Government (in cash)	2,644,207
• State Government (in kind)	1,501,142
• NGO (in kind)	31,000
Total co-financing (in cash)	4,539,070
Total co-financing (in kind)	1,940,051

Agreed by (Government):_____
Agreed by (Implementing partner/Executing agency):_____
Agreed by (UNDP):_____