



2013 Annual Project Review (APR)

Project Implementation Review (PIR) OF UNDP Supported GEF Financed Projects

PIMS 1024 - Project Title: Mainstreaming the conservation and sustainable use of medicinal plants in three Indian states

Focal Area	Biodiversity
Lead RTA	
Lead Country(ies)	(IND) India
Revised Planned Closing Date	30-Sep-2014
Overall Risk rating	Moderate
Overall DO rating	Satisfactory
Overall IP rating	Satisfactory
GEF grant amount disbursed so far	3,471,404

Project Summary

India's forests are the primary source of over 95% of medicinal plants used by the country's herbal industry. However, these resources are increasingly threatened by overexploitation, and wild harvesting remains largely uncontrolled and unmonitored. This project aims to achieve a long-term conservation, sustainable and equitable 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, Chhattisgarh and Uttarakhand. The project also aims to mainstream the conservation and sustainable use of medicinal plants into the productive forest sector of Arunachal Pradesh, Chhattisgarh and Uttarakhand, with particular reference to globally significant medicinal plants (GSMPs). The project aims to create an enabling environment at the national and state levels for mainstreaming the conservation and sustainable use of Medicinal and Aromatic Plants (MAPs) into forest management policies and practices. At the local level, the project aims to mainstream MAPs into government and community forest management norms and practices at demonstration sites in the three states.

UNDP-GEF Technical Advisor's Comments

Explanation for change to Overall DO Rating or Overall IP Rating:

Is this the terminal PIR that will serve as the final project report? No

If the mid-term review (MTR) OR the terminal evaluation (TE) was started but not completed this reporting period, please explain how these are progressing and note if any delays are expected:

If the mid-term review (MTR) OR the terminal evaluation (TE) was completed this reporting period, or if this is the final APR/PIR, please address the following points here:

UNDP Country Office's Comments

If the mid-term review (MTR) OR the terminal evaluation (TE) was started but not completed this reporting period, please explain how these are progressing and note if any delays are expected:

If the mid-term review (MTR) OR the terminal evaluation (TE) was completed this reporting period, or if this is the final APR/PIR, please address the following points here:

Dates of Project Steering Committee/Board meetings during reporting period:

January 2013

PROGRESS TOWARD DEVELOPMENT OBJECTIVES

Description	Description of Indicator	Baseline Level	Target Level at end of project	Level at 30 June 2009	Level at 30 June 2010	Level at 30 June 2011	Level at 30 June 2012	Level at 30 June 2013
Objective: To mainstream conservation and sustainable use of medicinal plants, including GSMP into the productive sector of three Indian states: Arunachal Pradesh, Chhattisgarh and Uttarakhand.	Forest area actively managed for sustainable use of MAPs and maintenance of MAP diversity.	0 hectares. Criteria for what constitutes active management to favour sustainable use and maintenance of MAP diversity to be determined and agreed with key stakeholders such as State Forest Departments in Yr 1	c.32,000ha of forests in 21 MPCAs/FGB complexes primarily managed for sustainable use and conservation of MAPs. A further 6,000,000 ha under management that favours maintenance of MAP diversity, including GSMPs	0	21 MPCAs/ FGBs identified in three project states. (1. An area of 8680.84 ha in 7 sites in Uttarakhand. 2. An area of 10,500 ha in 7 sites in Arunachal Pradesh. 3. An areas of 2331 ha in 7 sites in Chhattisgarh.)	The criteria for what constitutes active management of forest to favour sustainable use and maintenance of MAP diversity has been developed and accepted by the stakeholders. The following has been done to achieve the set targets: a) the 21 identified MPCA sites have now been demarcated in the field in all the three states; b) the population of the Globally Significant Medicinal Plants in these MPCAs have been identified; c)One season of Botanical survey has been completed in 12 MPCAs to inventorise the presence of MAP species. d)A methodology to	1) In the 21 MPCA that have been identified and demarcated under the project earlier, management actions such as prohibition of grazing, protection against forest fires, creating pathways, removal of invasive and alien species, and erection of signage has been initiated. Management plans for the MPCAs are being prepared. 2) 25 MPCAs declared in India including a few from the current project have been proposed as a first list of MPCAs to be declared as National heritage sites to NBA under	A total of 5,666.09 hectares are protected through 19 Medicinal Plant Conservation Areas (MPCAs). The per-state breakdown of hectares protected as MPCA sites are as follows: in Arunachal Pradesh 1543 ha; in Chhattisgarh 2331.28 ha; and in Uttarakhand, 1,791.81 ha. In the three project states approximately 10156 ha of land has been planted with various medicinal plants including GSMPs. National Medicinal Plant Board is independently undertaking resource augmentation in all states of India including the project states. NMPB has reported plantations and gap filling in forest areas in more than 20,000 ha. Further, the recommendations of a National Consultation on National Forest Working Plan Codes (NFWPC) have been included as a chapter in the draft guidelines for NFWPC by the MoEF. The inclusion of medicinal plants in the NFWPC would lead to management of forests to favour maintenance of MAP diversity including GSMPs.

						<p>monitor the Ecological health of the selected GSMPs in the MPCAs has been finalised in consultation with the Forest Department of the 3 states; e) Based on the methodology, the ecological survey of these GSMPs has been completed in 4 MPCAs in Uttarakhand. f).The management of the MPCAs based on the identified criteria has commenced. Some of these criteria include - prohibition of grazing, regulation of collection of MAPs/ NTFPs and protection of these species from forest fire by creating a fire line.</p>	<p>the Biological Diversity Act 2002. 3) The Botanical surveys to inventorise the MAPs for all 21 MPCAs have been completed for two to three seasons. 4) The ecological data for the Globally Significant Medicinal Plants (GSMPs) and associated species has been collected and is being analysed for 18 MPCAs.</p>	
	<p>Natural canopy cover as a measure of overall ecological status of forests under active management for maintenance of MAP diversity.</p>	<p>Bi-annual district-wise data on canopy cover status as available from Forest Survey of India.</p>	<p>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</p>	0	<p>The exact forest and canopy cover of the project districts are being collected from Forest Survey of India as per the latest assessment 2009. The baselines to set after</p>	<p>1300 sq hectares of forest area has been set aside as forest gene Banks in each MPCA site in the 3 states. Botanical and ecological surveys</p>	<p>It is difficult to assess the improvement in the canopy cover of small areas covered under the project for protection and</p>	<p>It is not feasible to assess the improvement in the canopy cover under the MPCA sites. The Forest Survey of India typically records data state-wise but does not cover district or village-level areas as captured under MPCAs.</p>

			the 21 FGBs/MPCAs are situated.		obtaining this data.	have been conducted in each of these Forest gene Banks and baseline has been established. Any increase in the canopy cover can be reported next year only.	augmentation activities.	
	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 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 indicator to be established in year 1. Population stability of selected species maintained or improved over the years.	MPCA sites have been identified in the three project states and project staff trained by the Foundation for Revitalisation of Local Health Traditions.	The process of developing a protocol for monitoring the population status of selected MAP species has been initiated. Identification of GSMP species almost completed in all the three Project States. Key population of GSMP species identified in the MPCAs of three states. Capacity building for inventurisation and methodology & protocol to conduct the ecological studies in the identified areas initiated. FRLHT has started imparting technical capacity development to project staff and communities on establishing monitoring protocols. This activity is expected to be accelerated in the	a) MPCA wise GSMP species finalise, Arunachal Pradesh (24), Chattisgarh (14), Uttarakhand (35). B) Each of the MPCAs have been assigned with Flagship GSMP species based on its viable population; Arunachal Pradesh (09), Chattisgarh (11), Uttarakhand (13). c) Technical agency to carry out the botanical and ecological studies has been identified and awarded. d) The monitoring ecological methodology has been finalised. e) Data collection on the population status of GSMPs have been	The ecological study has been done in four MPCA in Arunachal Pradesh. The survey in Tezu-Parsuram kund MPCA revealed that Gynocardia odorata, Duabanga grandiflora and Callicarpa arborea, Terminalia myriocarpa are the important species with high density and frequency. Among these species Terminalia myriocarpa, Gynocardia odorata shows highest density of distribution with more than 0.15 IVI value. In Roying-	Population status of medicinal plant species is being monitored in 3 MPCAs in Arunachal Pradesh, 7 in Chhattisgarh, and 2 in Uttarakhand. Population stability and improvement can only be ascertained after a few seasonal ecological and botanical surveys. The data generated during last year would be analysed to assess the change in population densities of select medicinal plants. The actual impact of MPCA on the population status of select Medicinal Plants may be visible only after 5 years of establishment of the sites.

					coming year.	completed in 7 MPCA sites. The remaining are ongoing. f) Capacities have been developed of the front line forest staffs to manage the MPCAs.	Mayodiya MPCA population survey of 17 tree species, 22 shrub and 26 herbs were assessed. Few of these species are Coptis teeta , Panax sikkimensis, Podophyllum hexandrum, Valeriana jatamansi etc. In Kanubar-Wannu MPCA, the dominant species are Litsea cubeba, Gynocardia odorata and in Bomdial MPCA species such as Illicium griffithii, Swertia chirayita, Valeriana jatamansii are abundant. In Chhattisgarh, ecological survey was carried out in 7 MPCAs. A total of 217 species belonging to 64 different families were recorded. This includes 66 tree species, 16 shrubs, 110 herbs, 27 creepers and climber species. The ecological	
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							survey in Uttarakhand has been done in Mandal , Jhuni, Mohan and Bastiya MPCA. Species such as Piper mellesua, Bergenia ciliate shows high IVI value of 34.12 and 36.81 respectively in Mandal MPCA and Adhatoda zeylanica in Bastiya MPCA.	
	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	0	The process of establishing MPCAs/ FGBs are nearing completion in project states. Once the setting up is over, this activity will be carried out during the coming years.	A methodology has been developed to assess the population status of MAPs in the forests surrounding the MPCAs and FGBs; botanical surveys have been initiated in 2 sites. a)To develop sustainable collection protocol for MAPs sites have been identified in project states; Arunachal Pradesh (02), Chattisgarh (02), Uttarakhand (02). B) Species for sustainable collection have been identified;	Botanical Surveys to inventory the MAP species in areas surrounding the MPCAs have been carried out. The ecological surveys for these areas are yet to be commissioned.	Proposals have been solicited by Arunachal Pradesh and Uttarakhand for carrying out Rapid Mapping Exercise in the wider forests areas. Chhattisgarh had created a medicinal plant population database under a project funded by National Medicinal Plant Board in 2006. The change in population of medicinal plants in Chhattisgarh may only be assessed after a gap of at least ten years after documentation of baseline i.e. in 2016.

						Arunachal Pradesh (05), Chhattisgarh (10 shortlisted - 06 will be finalised), Uttarakhand (05). c) Task teams involving collectors, traders, forest staff, folk healers and Gram sabha members have been formed. d) Capacity building of collectors on sustainable collection process has been completed.		
	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 Sites where harvesting of GSMP populations takes place are known. Harvesting practices	Sustainable harvesting of 5 heavily exploited GSMPs in place by end of project. Monitoring protocols developed for monitoring harvesting and being used annually	0	The process of setting up of MPCAs/ FGBs are nearing completion in project states. Once the setting up is over, this activity will be carried out during the coming years.	a) MPCAs and FGBs have been demarcated , Local Management Groups are multi-stakeholder groups comprising of community members, traders, frontline staff of the forest dept, local healers etc for managing the FGBs. Globally significant med plants found in these MPCAs/ FGBs have been identified and their ecological status is being monitored every quarter	1) The list of species for developing sustainable harvesting regims are selected through base line surveys organised at 3 project states. 2) Two sites per state were identified and tentatively demarcated for the development of methodology for selected species. 3) Orientation program organised for 3	Sustainable collection protocols have been developed for 11 medicinal plant species. Three medicinal plant species are being collected sustainably as per the protocols. To monitor harvesting, task teams have been established and for all states collectors have been identified. To strengthen monitoring skills, the task team, the SMPB, and State Forest Department officials have been taken on exposure visits.

		<p>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</p>				<p>(seasonal). Trainings and capacity building programmes for LMG members on sustainable harvesting, botanical identification and vegetation monitoring have been conducted in the three states. B) An action plan has been prepared in the three states for to record phenological observations, regeneration and changes in species composition seasonally. The action plan is being implemented by a Botanical Task team with the help of local community members who are being trained through a Village Botanist Course. C) The technical Project management Unit of the project under the Ministry of Environment and Forest has developed a</p>	<p>states and field exposure visit organised for Uttarakhand team. 4) In Uttarakhand species selected for development of methodology are put under collection, marketing and other post harvesting technologies per the specification of the project. They are also monitoring the impact of harvesting on ecological, economics and social aspects of sustainability.</p>	
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						Collection Manual on Sustainable harvesting of identified species (15) for the three states. Field testing of this manual is being in Uttarakhand has been done by involving the key stakeholders - local med plant collectors, front line staff of the Forest dept, local traders. Operation for collection will start soon.		
	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 owners.	0	The project is still in the initial stages to report any visible impact in this aspect.	State Medicinal Plant Boards in the three states have started undertakn ecological monitoring of the MPCAs on a periodic basis and the areas have started showing marginal increase in the population of some species. Moreover, efforts are being made by other agencies such as the Botanical Survey of India to also suggest areas for planting certain	Studies have been commissioned by each of the three project states to list the species of MAPs that may be included in Govt. Planting programs. The following agencies have been commissiond by the states: 1) Institute of Ayurveda and Integrative Medicine, FRLHT for Arunachal Pradesh 2) Covenant Centre for	In the three project states, a total area of 10,156 ha is under cultivation for various medicinal plants including GSMPs under private, common and marginal or degraded lands owned by various Govt Depts such as Forest and private owners. In Arunachal Pradesh a total of 4311 ha is under cultivation of MPs, including: Emblica officinalis, Moringa oleifera, Taxus wallichiana, Xanthoxylum armatum, Rubia cordifolia, Paris polyphylla, and Illicium griffithii. The State plantations on Forest and public land was 2009-10: 1000 ha, 2010-11: 177.3 ha, 2011-12: 244, 2012-13: 2790 ha. In Chhattisgarh a total of 1317 ha is under cultivation

						threatened species in Arunachal Pradesh.	Development (CCD) for Chhattisgarh and 3) The Energy Resource Institute for Uttarakhand. All the three agencies will submit their final reports by October 2012.	these include some GSMPs. One hundred ha are under cultivation of 10 medicinal plant species for roots, 485 ha of plantation of Terminalia chebula, Terminalia bellirica and Embilica officinalis, 140 ha of Lawsonia innermis, 592 ha of other medicinal plants. In Uttarakhand, a total area of 4527.84 ha is under cultivation of medicinal plant species such as Embilica officinalis, Cinnamum tamala, Picrorhiza kurrooa, Aconitum heterophyllum, and Saussurea lappa. The area coverage in 2008-09 : 1091 ha, 2009-10: 2080 ha; 2010-11: 710 ha and 2012-13: 72 ha. Cultivation is being taken up 6 farmers for Picrorhiza kurroa and Saussurea lappa covering 1.5 ha of land. Cultivation is set to increase as an additional 63 farmers have been registered with an area of over 5 has of land.
	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	0	The project is still in the initial stages to report any visible impact in this aspect.	a) The ToRs for the study to identify species that can go into afforestation and rural development programmes has been advertised and given to competent agency.	Studies have been commissioned by each of the three project states to list the species of MAPs that may be included in Govt. Planting programs. The following agencies have been commissioned by the states: 1) Institute of Ayurveda and Integrative	The final reports of the study commissioned to identify the additional highly marketed medicinal plant species that can be viably brought under cultivation have been received from all 3 states. For Arunachal Pradesh, FRLHT has identified 27 species suitable for cultivation under different afforestation programs. Detailed lists that consider district, altitude, and conservation status have been compiled and plantation techniques cognizant of these factors have been prepared. For

							Medicine, FRLHT for Arunachal Pradesh 2) Covenant Centre for Development (CCD) for Chhattisgarh and 3) The Energy Resource Institute for Uttarakhand. All the three agencies will submit their final reports by October 2012.	Chhattisgarh, the Covenant Centre for Development (North) has prioritized 9 species for cultivation and 22 species for plantation. For Uttarakhand, The Energy Resources Institute (TERI) has developed a list of 101 species for cultivation, 25 of which have been prioritized based on marketability. Separate lists were compiled for low and high altitude regions and nursery and plantation techniques for the species are being developed.
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 favour sustainable use and 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	In August 2009, Arunachal Pradesh conducted a workshop on policy related matters of MAPs. Reports of existing regulations on collection, trade and transit prevailing in the state were deliberated.	Extensive technical consultations were held at the national level on mainstreaming the conservation and sustainable use of MAPs into forest management policies and practices and as a follow up of these meetings, 5 Terms of References (ToRs), looking at various aspects of the preparation of draft National Strategy for the strengthened conservation of MAPs (including revision of JFM Guidelines) have been prepared and finalised. The process of selection of competent agencies for	Two studies to achieve this target were advertised. One study was commissioned to Indian Institute of Forest Management, Bhopal, to review the national policy on Joint Forest Management. This year, the institute has held the inception workshop and two regional consultative meetings (in Pune and Bhopal) to get the views of a range of stakeholders on the JFM policy and its	1) A study under Output 1.1, to develop a National strategy document on management of medicinal plants resources of the country, endorsed by MoEF, MoRD, ICAR, NMPB, CIMAP, DST, DBT, NBA, and industry that addresses conservation, sustainable use, research directions and cultivation of medicinal plants of India has been commissioned to IAIM, FRLHT.	There are number of initiatives under the project to mainstream conservation and sustainable use of medicinal plants into forest policies and practices at the national level. These are as follows: 1) Under Output 1.1 a National Strategy for conservation, cultivation and sustainable use of medicinal plants is being developed. This was presented in a side event during 11th Conference of Parties 2012. Five National Consultative meetings were organized under issue based themes. The final draft of the national strategy was submitted to UNDP and Ministry and will be peer-reviewed by experts. 2) A National Consultation was organized on 'Legal and Policy Framework for Medicinal Plants and Associated Traditional Knowledge in India' the recommendations of the

					<p>undertaking these tasks is in progress. Indian Institute of Management, Bhopal has been identified as the lead agency for the revision of JFM Guidelines.</p>	<p>gaps vis-a-vis medicinal plant conservation, sustainable use and cultivation. The study to develop a national strategy on conservation, sustainable use and cultivation of MAP was advertised but no suitable agency was found. This study is being readvertised now.</p>	<p>2) An interim report has been received from IIFM, Bhopal highlighting the outcomes of the various regional level consultations on JFM issues under Output 1.2</p> <p>3) The 5th NPSC had recommended commissioning of a study under Output 1.4 by National Medicinal Plants Board as part of the governments co-finance commitment to the project. The dialogues with NMPB have been initiated in this regard.</p> <p>4) A study has been commissioned to I-AIM for developing a long term strategy for rapid threat assessments of MAPs using IUCN guidelines under Output 1.6. The first Consultation workshop under</p>	<p>consultation have been shared with the Ministry of Environment and Forests. 3)A Long-term strategy for threat assessment of MAPs is being developed. Under this initiative Training of Trainers manual is under compilation. Outline of the draft strategy on threat assessment is prepared with 6 objectives and 10 targets. Plant information was compiled for 2 selected endemic species as per the IUCN Species Information Service (SIS). A link has been established with Species Survival Committee for Medicinal Plants, Specialist Group and Red List Unit (RLU), IUCN. 4) A course module introducing legal, policy issues and practices on Medicinal Plants is being developed for officers of the Indian Forest Service. 5) A study has been commissioned to identify gaps and revise the JFM guidelines. The study is on-going. 6) National Forest and other policies/laws affecting the medicinal plants sector have been reviewed by an agency commissioned by Arunachal and Uttarakhand. The draft report of the agency have been shared with MoEF for peer-review and further necessary action.</p>
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							the study had been organised by IAIM for scientist, experts and forest officials on 14 and 15 June 2012. 5) The study to develop a course module on Conservation and Sustainable Use of MAPs for Indian Forest Service Officers under Output 1.7 is being negotiated with Indira Gandhi National Forest Academy.	
	Strengthened capacity within National Medicinal Plant Board (NMPB) to fulfill their mandate	Limited technical and institutional capacity to fulfill 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 National Medicinal Plants Board at inception phase. Targeted capacity development of key staff based on results of capacity assessment in year 2 and year 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	In the PSC held in August 09, it was decided that an expert committee be constituted to look into the capacity building measures for the NMPB and a work plan be formulated. This is to be followed up by the PMU.	NMPB through various national schemes of the Department of Ayush (Central Ministry) has initiated action on capacity development using own resources. They have not used project resources for supporting capacity development activities. This development shall be discussed during the Mid Term Evaluation of the project and adjustments made accordingly in the project design and budgets.	The PSC meeting held in December 2010 took the decision that since the NMPB has sufficient funds for capacity development activities, the funds allotted for this component could be re-allotted for some other purpose based on the recommendations of the mid term review. NMPB has sufficient resources of its own to	A joint study under Outputs 1.5 and Output 2.5 has been commissioned to Insight Development Consultancy Group for developing a capacity development framework for the NMPB and the three project States SMPBs. An interim report has been received highlighting the gaps and needs	A draft report for Strengthening of the National Medicinal Plants Board to act as a nodal agency for the medicinal plants sector has been submitted to the Board for their consideration and consequent action.

			by Yr 3			support the fulfilment of its mandate. It has inhouse technical expertise and also supports work across the country by engaging consultants and commissioning studies which are of particular relevance to conservation and cultivation of MAP species.	for strenghtening of the SMPBs of Chhattisgarh and Uttarakhand. The report has been sent for review to a team of 5 experts. iDCG has also submitted a template for recording the in-kind contributions of the government to the project. This has been circulated to the three project states and MoEF.	
	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	0	The project is still in its initial stages and initial consultations have been started at national and state levels with various Departments and Ministries for having greater inter sectoral coordination on the conservation and sustainable use of MAPs. This aspect will be strengthened during the the coming years.	In the PSC held in December 2010, it was unanimously decided to invite representatives from the Ministry of AYUSH (National medicinal Plants Board), National Biodiversity Authority and the Botanical Survey of India to the next PSC to develop and strengthen the links with other departments and ministries. There has been a discussion to invite representatives	1) A study under Output 1.1, to develop a National strategy document on management of medicinal plants resources of the country, endorsed by MoEF, MoRD, ICAR, NMPB, CIMAP, DST, DBT, NBA, and industry that addresses conservation, sustainable use, research directions and cultivation of medicinal plants of India has been	The project has taken some initiatives to develop inter-sectoral, inter-ministerial and inter-departmental linkages. These are as under: 1) The project is closely associated with the Expert Committees and Steering Committees of National Biodiversity Authority (NBA) and National Medicinal Plants Board (NMPB) and Foundation for Revitalisation of Local Health Traditions (FRLHT). The Project also participates in Expert meetings called by both Government and Non-Government Institutions. Further, the technical support for the project is provided by FRLHT which is a Centre of Excellence for MoEF and Ministry of Health. The various Government Ministries/Departments/Institutions

						<p>also from the Ministry of Commerce and the Ministry of Rural Development to explore the links with trade and also links with the government program on Rural employment guarantee program thru reforestation and watershed development. A dialogue has been initiated with senior government officials at the Ministry of Rural Development.</p>	<p>commissioned to (AIM, FRLHT.2) The NPSC recommended commissioning of a study under output 1.4 to develop criteria for selection of species for inclusion in the government planting programs through NMPB. 3) With the support from NBA and SBBs of 2 project states namely Uttarakhand and Arunachal Pradesh have initiated the process of converting LMGs into BMCs under the BD Act 2002. 4) A preliminary discussion has been initiated to provide linkage of interministerial and inter-sectoral for effective translation of policy interventions and replication of lessons learnt from the project.</p>	<p>such as NMPB, NBA, Ministry of Rural Development, Botanical Survey of India etc. are represented on the National Project Steering Committee which provides the inter-sectoral linkages. 2) A draft inter-sectoral national strategy for conservation and management of medicinal plants is being prepared in consultation with the various Ministries/ Departments/Institutions. The Ministries and Technical institutions contributed to the drafting of the National Strategy by participating in three issue based thematic consultations. 3) A national consultation on 'Legal and Policy Framework for Medicinal Plants and Associated Traditional Knowledge in India' was organized. Various ministries/departments, NGO, Technical Institution, Autonomous Government Institutions provided their inputs for drafting a sui-generis regime on TK protection and other policies. 4) Partnerships with the State Biodiversity Boards and State Forest Department, Horticulture etc. were established. In Chhattisgarh, letters have been sent to Chhattisgarh Biodiversity Board requesting it to establish Biodiversity Management Committees in the MPCA areas. Similarly, in Arunachal Pradesh, BMC is functional in two MPCA sites. In Uttarakhand, 7 BMCs are constituted in the vicinity of MPCA</p>
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	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 in years 3 & 4 and adopted by the end of the	0	Focussed Technical Group Consultations were held at national level on this aspect. As a follow up, it was decided to have a detailed study on this and develop the strategy based on that. Accordingly, ToR for developing a strategy that deals with the protection of traditional knowledge has been prepared. The process of selection of competent agency for undertaking this task is in progress.	Terms of Reference were finalised and advertised based on which an agency (The Energy Research Institute) has been selected. TERI has conducted a national inception workshop and developed an action plan to carry out the study. A few field visits for stakeholder consultations have been completed.	The Energy Resource Institute has submitted an interim report under Outputs 1.3 and 2.4, which is being subjected to peer review. The interim report gives a brief analysis of International treaties, (for example; Convention on Biological Diversity (CBD), Trade Related Aspects of Intellectual Property Rights (TRIPS), and Nagoya Protocol etc) as well as national legislations, laws and regulations (for example; The Biological Diversity Act 2002, The Wildlife (Protection) Act 1972, Forest Conservation Act 1980, The Indian Forest Act 1927, Protection of Plant Varieties and Farmers' Rights	The Energy Resources Institute (TERI) has submitted the final report on legal mechanism to protect TK related to harvest, cultivation and use of MAPs. The institute has also drafted a sui generis regime for TK on Medicinal Plants in India by keeping the draft TK Rules under the Biological Diversity Act as the foundation.

							Act 2001, The Scheduled Tribes and Other Forest Dwellers (Recognition of forest Rights) Act 2006, Panchayat (Extension to Scheduled Areas) Act 1996, The Geographical Indications of Goods (Registration and Protection) Act 1999).	
Forest management policies in the three project states that promote and support the conservation and sustainable use of MAPs	State forest policies reviewed to favour sustainable use and conservation of MAPs.	Limited focus on MAPs in key state forest policies. Eg JFM guidelines do not refer to MAPs and forest division working plans do not address conservation and management of MAPs. Other opportunities for forest policy changes to be identified by end of year 1.	Revised JFM orders/circulars with stronger focus on conservation of MAPs. Nature of required revisions to be determined based on policy analysis on year 1. Forest division work plans in project districts revised.	Relevant policies for management and sustainable use of MAPs have been assessed and reviewed in Arunachal Pradesh, one of the three project states. The other two project states are in the process of initiating analysis of their relevant state policies. In Uttarakhand work is already initiated, with the state government providing an enabling environment and	In Uttarakhand experts were hired to look into the forest policy issues related to MAPs. The draft report prepared by them (after extensive consultations) is now being reviewed by an expert Committee at the State level. Further, an expert has been hired in Uttarakhand for the documentation of Traditional knowledge. In Chhattisgarh, a Compendium on Rules, policies and strategies for mainstreaming the conservation of medicinal plants is prepared. This review report includes JFM	All the three states have developed terms of reference for commissioning studies to achieve the given target. while Arunachal has commissioned 2 out of the 6 studies envisaged in the project to Enviro-Legal Defence Fund (ELDF), Uttarakhand has conducted the selection process for the commissioning these studies. Chhattisgarh will be advertising these studies shortly at	Separate studies have been commissioned by the 3 project states under Outputs 2.2 and 2.3 individually to Enviro Legal Defence Firm. ELDF has submitted an interim report for the state of Arunachal Pradesh and the same is being peer reviewed.	For two states (Arunachal Pradesh and Uttarakhand), draft strategies have been prepared and are being peer-reviewed. In Arunachal Pradesh and Uttarakhand, the agency has submitted a policy brief after reviewing the National and State level Laws and Policies for consideration of State Government. Forest Division Working Plans in Arunachal Pradesh (2 divisions), Chhattisgarh (2 divisions) and Uttarakhand (1 division) are being revised so as to include conservation and management of Medicinal Plants.

				support.	rules, conservation rules, Traditional knowledge and IPR issues, etc.	the national level. b) The inception workshop for these studies in Arunachal Pradesh is done. This workshop highlighted the action plan and also conducted a stakeholder analysis. ELDF has completed the desk review process.		
	Strengthen capacity of SMPBs to fulfil the mandate	Limited to non-existent capacity. Capacity needs of each SMPB to be assessed by year 2/qtr2.	Over 80% of SMPB management and technical level staff to be sufficiently trained to deliver their mandate by year five.	The State Medicinal Plants Board of Arunachal Pradesh and Uttarakhand are in the process of engaging consultants to assess their existing capacity. Both states have prepared their action plans for the respective capacity assessment. Chhatisgarh has identified certain areas in which capacity needs assessment is to be conducted. This exercise will be completed by	Around 20 per cent of the staff from project states have undergone capacity development programmes by now. These include: 1. Project Staff from Arunachal Pradesh and Uttarakhand were trained at FRLHT on MAP conservation, inventourisation, herbarium preparation, documentation of local health traditions and sustainable harvest. 2. Project staff and officials of all three States attended the Technical Workshop on MAPs at FRLHT in October 2009. 3. Exposure visits of project staff organized to plant based	Uttarakhand State Medicinal Plant Board has done a rapid assessment of their capacity gaps and identified the issues to be brought to the national PSC for further approvals. Some of these gaps are being addressed by offering trainings in different areas of work such as preparation of Community Knowledge Registers, methodology to develop sustainable harvest protocols. Trainings were conducted for	A joint study under Outputs 1.5 and Output 2.5 has been commissioned to Insight Development Consultancy Group for developing a capacity development framework for the NMPB and the three project States SMPBs. An interim report has been received highlighting the gaps and needs for strengthening of the SMPBs of Chhattisgarh and Uttarakhand. The report has been	Insight Development Consultancy Group (IDCG) submitted a final report to the NMPB and the project state SMPBs on developing a capacity development framework for the NMPB and the three project state SMPBs. Based on the recommendations emanating from the report, the State Medicinal Plants Boards of all three project States are engaging technical staff. Capacities of the technical staff in all project SMPBs are being developed through participation in various state, national, and international meetings and workshops. Additionally, a number of exposure visits across the country have facilitated capacity development for the SMPB staff from all the Project states

				<p>end 2009- January 2010.</p> <p>enterprises and MPCAs in South India. 4. Uttarakhand organised a workshop on Village Herbal Gardens in March, 2010. 5. Uttarakhand staff attended the Exit strategy workshop of CCF II Medicinal Plants Project in Bangalore in March 2010. 6. Project staff attended a state level exit strategy workshop on CCF II Medicinal plants project at Bhopal, Madhya Pradesh. 7. In Uttarakhand, Project staff were trained on GIS, GPS and Remote Sensing for preparing digital map and demarcation of MPCAs at Uttarakhand Space Application Centre (USAC), Dehradun during April, 2010. 8. A meeting of folk healers and community members were organized in Khalla during May, 2010. 9. Uttarakhand Project staff were trained at Central Post Harvesting Engineering and Technology Institute, Ludhiana on post harvest practices,</p>	<p>officials of Uttarakhand SMPB in Udaipur, for officials of Aruanchal State Medicinal Plant Board in Sundarbans; exposure visit for officials to old and established MPCA sites in Auroville and Markanam (Tamil Nadu).</p>	<p>sent for review to a team of 5 experts. iDCG has also submitted a template for recording the in-kind contributions of the government to the project. This has been circulated to the three project states and MoEF.</p>
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					storage and value addition of MAPs and agriculture/horticulture produce during June, 2010.			
	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	In early September, a four member project team from Uttarakhand visited FRLHT for training on MPCAs and sustainable use and harvesting of MAPs. Similar training courses will be conducted with the project teams from Arunachal Pradesh and Chhattisgarh.	The Project Appraisal meeting held with Additional Chief Secretary and Commissioners of Rural Development in Uttarakhand during August, 2009 stressed the need for having more intersectoral coordination on the conservation and use of MAPs. However, in all the Project States, a formal mechanism needs to be institutionalized in this connection. Efforts to be made in this direction in the coming years.	In the state of Uttarakhand, some efforts have been made to establish inter-sectoral linkages. The District Development Cooperative (Bhesaj Vikas Ikai) under the department of horticulture, the Herbal Research and Development Institute under the State Medicinal Plant Board and the Uttarakhand Forest Development Corporation have agreed jointly to promote and expand the cultivation of MAPs in the state. Emphasis will also be placed on exploring markets for MAPs within and outside Uttarakhand. Initial discussions have been held with the	1) State specific strategy is being developed under Output 2.1 to address the intersectoral linkages, conservation, sustainable use issues, traditional knowledge, IPR etc., 2) A preliminary discussion has been initiated to provide linkage of interministerial and inter-sectoral for effective translation of policy interventions and replication of lessons learnt from the project.	1) The draft strategies to address the inter-sectoral linkages, conservation, sustainable use issues, traditional knowledge, IPR has been prepared and submitted to the review committee for 2 states, Uttarakhand and Arunachal Pradesh. 2) To facilitate state-level inter-sectoral and technical coordination, partnerships with the State Biodiversity Board, State Forest Departments, Horticulture etc. were established. BMC establishment is complete or underway to coordinate diverse stakeholders in local-level MP management. In Arunachal, BMCs are functional for 2 MPCA sites. In Uttarakhand, all 7 MPCA sites are fortified with BMCs. 3) In Uttarakhand, SMPB made linkages with Centre for Aromatic Plants (CAP) to train farmers on cultivation and primary processing techniques for medicinal and aromatic plants.

						state owned drugs manufacturing unit in Mohan in District Nainital for purchase of cultivated and sustainably harvested MAPs from forests under Van Panchayats and FGBs.		
Conservation and sustainable use of MAPs mainstreamed at the local level into government and community forest management norms and practices at demonstration sites in 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 and 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.	Though approximately 12 MPCAs\FGBs have been identified, there has been a request for change in sites by the three states, in the PSC meeting on August 10, 2009. The proposal for change has come in the light of the project document being formulated about 7 years ago. Additionally, the sites have to fit the criteria of MPCAs with significant presence of Globally Significant Medicinal Plants and	15 MPCAs/ FGB (five in each state) covering around 15000 ha identified in three project states.	Policy Study is underway in Arunachal Pradesh to understand the existing framework of law and policy provisions focusing on conservation and sustainable use of MAPs. On identification of gaps in government policies and community-level norms, recommendation will be made to mainstream these matters in relevant policies. Study in Uttarakhand is in the process of being commissioned. Agencies have been identified to review the JFM policy and the legal	In Chhattisgarh, the total area under protection through MPCA is 2331 hectares. This is surrounded by the buffer zone - FGB with an area of 9100 hectares. Similarly in Arunachal Pradesh, and Uttarakhand the area under MPCA is approx. 1400 ha surrounded by 9100 ha FGB.	A total of 5,666.09 hectares are under protected through MPCA sites and surrounding MPDAs. Additionally, 5 Forest Division Working Plans are being revised in the three project States so as to include Medicinal Plants conservation and management. In the three project states, a total area of approximately 10156 ha is under cultivation for various medicinal plants including GSMPs.

				<p>comparatively undisturbed. In the case of Chhattisgarh, some of the proposed sites fall within the naخال dominated areas which is difficult for the government officials to penetrate. There is a request for sites in a nearby accessible locality. Provisional identification of sites has taken place: Chhattisgarh has reviewed the new proposed sites; Uttarakhand too has requested for change in sites, whereas Arunachal Pradesh is yet to take a final decision on this.</p>		<p>framework for protection of MAPs and the Traditional Knowledge around these. In order to mainstream these principles of conservation and sustainable use of MAPs in practice, capacity building measures such as exposure visits trainings and village botanist courses are being conducted. 18 MPCAs /FGB (six in each state) each covering around 200 ha identified and demarcated in the three project states by the State Forest Department. B) 3 MPCAs/FGBs are being managed by community.</p>		
	<p>Ha of community forests actively managed for sustainable use of MAPs and maintenance of MAP diversity.</p>	<p>Minimal, Indicators to be established in Yr 1 along with criteria for what constitutes 'active management to favor sustainable use & maintenance of MAP</p>	<p>Capacity gaps of communities, such as those for management and monitoring to be established by end of Yr 1 Subsequently developing monitoring</p>	<p>0</p>	<p>Six MPCAs/ FGB sites have been identified in the three project states (two in each state) in community owned/ managed lands. The exact area under such</p>	<p>a) 6 sustainable collection sites have been identified and demarcated for management and sustainable</p>	<p>a) 13 species high traded and GSMP have been identified for sustainable collection in three states. B) Base line</p>	<p>In Arunachal Pradesh 1143 ha and in Uttarakhand 250 ha are being actively managed for sustainable use of MAPs and maintenance of MAP diversity. Capacity building of communities with regard for management, monitoring, and</p>

		diversity including suitable ecological indicators Minimal	protocols and management practices.		management is now being decided in consultation with the communities.	collection. Area covered under sustainable harvesting is 1500 ha together in the 3 states b) The gaps have been identified and capacity building programs initiated for the LMGs and the front line forest department staff. c) A detailed action plan for operation has been prepared for each sites - which includes formation of task teams, collection of raw drugs, value addition and marketing.	data related to 5 sites have been documented. C) Base line data & traditional knowledge with respect to 13 species have been documented.	general awareness has been carried out in all 3 states.
	Extent of documentation of traditional knowledge on MAPs	Documentation is minimal	10 registers should be produced every year in the villages near FGBs (1 per village)	0	Capacity building activities for documenting traditional knowledge initiated at village level, which is a pre-requisite for the preparation of Community Registers. FRLHT Bangalore is taking a key role in this aspect and the actual preparation of Registers is expected to begin in the coming year.	40 Community Knowledge Registers have been prepared (30 in Uttarakhand and 10 in Chhattisgarh). The project in each of the 3 states has identified villages in the fringe of each MPCA where registers will be developed. Knowledge - holders in particular the folk	A national consultation cum workshop was organized under output 3.5 on Peoples Biodiversity Register on 22 -23 December 2011 in collaboration with National Biodiversity Authority. The workshop has discussed on recognizing CKRs	In Uttarakhand and Chhattisgarh, four and seven draft PBRs, respectively, were jointly prepared with relevant communities. Training conducted on preparation of Peoples Biodiversity Registers (PBR) for SMPB staff, community representatives (Biodiversity Management Committees) & Forest Department staff in all states.

						<p>healers and women birth-attendants have been identified. Key documenters have been identified in these villages from amongst the Local Management Group and Forest Department. These people have been trained in documentation and formats have been developed for this purpose. A field exposure for this team members has been conducted outside the states.</p>	<p>and PBR Health , MPCAs to be declared as heritage sites and converting LMGs as BMCs as per the BD act 2002.</p>	
	<p>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</p>	<p>Documentation minimal</p>	<p>Target values for mid and end of project to be determined during Year 1</p>	<p>0</p>	<p>1. Project staff from Uttarakhand were trained at FRLHT on Development of Biocultural Community Protocols during June, 2010 and for documentation of Traditional Knowledge and herbarium preparation during June, 2010. 2. Exposure visit organized for 150 local MAP cultivators of Chhattisgarh to manufacturing units of medicinal plants products at Patanjali</p>	<p>A one year Village Botanist course has been initiated for the youths, LMG members and forest dept. staff living near MPCAs/FGBs to enrich their knowledge on botanical identification of medicinal plants, basic principles of vegetation monitoring, systematic documentation of</p>	<p>1) Village Botanists 3rd level out of a 4 level Course: One field visit per state was organized for the 3 project states. A total of 20 participants from Uttarakhand, 19 males and 1 female; 22 from Chhattisgarh, 17 males and 5 females; and 17 all male participants from Arunachal Pradesh attended</p>	<p>The legal rights and obligations of the communities related to MAPs are enshrined in Bio-Cultural Community Protocols (BCPs). One BCP per each project state was prepared by the communities and facilitated by civil society organisations. These were released at the second meeting of the Inter Governmental Committee on Nagoya Protocol and showcased at the eleventh Conference of Parties to the Convention on Biological Diversity. At present Uttarakhand is in the process of preparing six additional BCPs.</p>

				<p>Yogapeeth, Hardwar during August, 2009. 3. Capacity development workshop conducted for 85 identified traditional healers in Chattisgarh and formal network of traditional healers are being established. 4. Capacity development and training programme conducted for the LMGs of Arunachal Pradesh on documenting traditional knowledge and preparing CKRs. The actual process of writng Community Knowledge Registers will be starting once capacity development programmes are over.</p>	<p>local knowledge and basic principles of the Biodiversity act which includes sensitisation of their legal rights . 90 village youths, LMG members and forest dept. staff from 3 states have been identified and enrolled in the village botany course in a one year correspondence program. B) The participants have completed their first and second level course of this program. The programme expects to have have at least 50 Village Botanists ready for engagement with the forest department for various assignments by the end of the Course which will have at least 10% women members.</p>	<p>the course. A total of 30 participants from the 3 states, of which 5 females dropped out from the course. A strategy is being chalked out to minimise the drop out in the next course. 2) Capacities of 40 Forest department staff (2 females) and 178 community people (50 females) from 3 project states were built on conservation and sustainable use of MAPs through 4 training programmes and 4 exposure visits. 3) Around 60 community people (25 females) and 15 forest department staff were trained on documentation of traditional knowledge through 3 exposure visits, one per state. 4) State specific training manuals on Village</p>	
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							<p>Botanists course in local language has been distributed to all the VBs of the 3 states.</p> <p>5) One English training manual on sustainable harvesting was prepared and reviewed by experts. This manual is being considered for translation in Hindi.</p>	
<p>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.</p>	<p>1) Knowledge products developed under the project shared with various stakeholders.</p> <p>2) Regional and national level workshops organized on medicinal plants conservation and sustainable use in order to exchange ideas, best practices and sharing lessons across the country including South-South countries.</p> <p>3) Proposals developed for five States to replicate best practices and sharing lessons from the project</p>		<p>This will be taken up after the Mid Term Review.</p>			<p>A high level meeting is being organised on 1 october 2011 under the Chairpersonship of the Secretary, Ministry of Forest Department, Govt of India, where Forest Secretaries/ Principal Chief Conservator of Forest of the project states will share their experiences with the 5 PCCFs of the replication states. A Strategy for replicating the good practices within these 3</p>	<p>1) As per the suggestions of the MTE, three agencies that specialise in Communications have been hired for each of the three states. The agencies hired for Arunachal Pradesh and Chhattisgarh have developed state specific communication strategy and are now in the process of developing the tools.</p> <p>2) A National Level brainstorming workshop had</p>	<p>The three communication agencies engaged under the project have developed a state specific communication strategy and tools for replication of successful models of conservation and sustainable use within the states. The project shared the recommendations emanating from the various studies and knowledge products at national and international platforms such as Indian Biodiversity Congress, International Herbal Fair, second meeting of the Inter-Governmental Committee on Nagoya Protocol and Eleventh Conference of Parties to the Convention on Biological Diversity. An e-network of experts and practitioners has been established to facilitate sharing of good practices, knowledge, and successful models of Conservation and Sustainable Use of Medicinal</p>

						<p>states and for 5 additional states is being developed. A letter is going to the Chief Secretaries of the project states to invite key officials and community members from replication states to all capacity development and experience sharing programmes being organised in their states. People from J& K are already being invited to the capacity building programmes in Uttarakhand.</p>	<p>been organised to discuss and deliberate on the inclusion of conservation and sustainable use of MAPs in the National Forest Working Plan Codes. This platform gave a chance to sensitise the other states about issues relating to MAP Conservation and Sustainable use.</p> <p>3) A workshop had been organised on Traditional Knowledge, documenting the TK and IPR from 19 to 21 June in Pune, India. The workshop was attended by 15 participants from three states of India. The main focus of the workshop was the documentation of TK and creating Home Herbal Gardens through experience and knowledge</p>	Plants.
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RATINGS OF PROGRESS TOWARD MEETING DEVELOPMENT OBJECTIVES

DO Rating: Please review the Development Objective Progress page of this APR/PIR and then answer the questions below. A DO rating will be generated based on your answers.	
1	Please rate the cumulative progress being made toward achieving the end-of-project targets as reported in the project results framework in the DO page of this APR/PIR
2	Please rate the likelihood that the project will deliver environmental and social benefits for an extended period after project completion?
3	Please rate the likelihood that social or political risks may threaten the sustainability of project outcomes
<u>Project Manager/Coordinator: Is the person managing the day to day operations of the project.</u>	
MANDATORY RATING MUST BE PROVIDED for projects under implementation in one country or regional projects where appropriate.	
Please justify your rating and address the following points in your comments. Please keep word count between 500 words minimum and 1200 words maximum.	
1.	Explain why you gave a specific rating.
2.	Note trends, both positive and negative, in achievement of outcomes as per the updated indicators provided in the DO sheet.
3.	Fully explain the critical risks that have affected progress.
4.	Outline action plan to address projects with DO rating of HU, U or MU.
Overall 2009 Rating	Moderately Satisfactory
Overall 2010 Rating	Satisfactory
Overall 2011 Rating	Satisfactory
Overall 2012 Rating	Satisfactory
2013 Rating	Satisfactory
Comments	The various studies under Outcome 1 have progressed very well and most would be completed by December 2013. The draft of the national strategy for conservation, management and sustainable use of medicinal plants has been prepared and circulated among the stakeholders for review and comments. A draft national policy on legal mechanism to protect TK specially relating to sustainable harvest, cultivation and use of medicinal plants within the Biological Diversity act 2002 has been prepared. The course curriculum for officers of the India Forest Service is being suitably revised so as to include Medicinal Plants conservation and sustainable use. The long-term strategy for threat assessment would also be ready by December 2013. Almost all studies and tasks under Outcome 2 are coming to an end and would be accomplished by December 2013. The activities required to establish MPCAs/MPDAs are almost complete and sustainable harvest protocols have been developed for 11 species. BMCs have been created at the local level to strengthen the conservation of biodiversity resources through preparation of PBR. Inclusion of the management of MAPs in the working plan of the selected forest

	divisions of the three project states. Inclusion of MAPs in the forestry curriculum at various levels. Communication strategy and tools have been developed to disseminate knowledge on MAPs conservation and augmentation.
<u>UNDP Country Office Programme Officer: Is the UNDP programme officer in the UNDP country office who provides oversight and supervision support to the project.</u>	
MANDATORY RATING MUST BE PROVIDED for projects under implementation in one country. Not necessary for regional or global projects.	
Please justify your rating and address the following points in your comments. Please keep word count between 500 words minimum and 1200 words maximum.	
1.	Explain why you gave a specific rating, for example, if your rating differs from the rating provided by the project manager please explain why.
2.	Note trends, both positive and negative, in achievement of outcomes as per the updated indicators provided in the DO sheet.
3.	Fully explain the critical risks that have affected progress.
4.	Outline action plan to address projects with DO rating of HU, U or MU.
Overall 2009 Rating	(MS) Moderately Satisfactory
Overall 2010 Rating	(S) Satisfactory
Overall 2011 Rating	(S) Satisfactory
Overall 2012 Rating	(S) Satisfactory
2013 Rating	(S) Satisfactory
Comments	7 MPCAs per project State have been established; botanical and ecological surveys have been carried out; areas have been demarcated and conservation and protection activities have been completed. Conservation activities are now being incorporated in the management and Working plans to ensure sustainability of action. Most of the policy and strategy studies commissioned under this project are near completion. Peer reviews and national level final consultations are being scheduled. Sustainable harvest protocols for 10 species have been developed and these are being field tested in 5 sites. Documentation of traditional knowledge in the form of Peoples\ Biodiversity registers and Bio-cultural Community Protocols is completed in the 3 project states. Based on this and discussions with the State Biodiversity Boards, private sector is being invited to partner and create models of Access and Benefit Sharing. In the three project states, a total area of 10,156 ha has been brought under cultivation for various medicinal plants including GSMPs in private, common and marginal or degraded lands owned by various Govt Depts such as Forest and private owners.
<u>Project Implementing Partner: Is the representative of the executing agency (in GEF terminology). This would be Government (for NEX/NIM execution) or NGO (for CSO Execution) or an official from the Executing Agency (for example UNOPS).</u>	
RECOMMENDED but NOT MANDATORY for projects under implementation in one country and regional projects.	
Please justify your rating and address the following points in your comments. Please keep word count between 200 words minimum and 500 words maximum.	

1.	Explain why you gave a specific rating.
2.	Note trends, both positive and negative, in achievement of outcomes as per the updated indicators provided in the DO sheet.
3.	Provide recommendations for next steps.
Project Implementing Partner	
Overall 2009 Rating	
Overall 2010 Rating	(S) Satisfactory
Overall 2011 Rating	
Overall 2012 Rating	(S) Satisfactory
2013 Rating	
Comments	
GEF Operational Focal point: Is the government representative in the country designed as the GEF operation focal point.	
HIGHLY RECOMMENDED but NOT mandatory for projects under implementation in one country. Not necessary for regional or global projects.	
Please justify your rating and address the following points in your comments. Please keep word count between 200 words minimum and 500 words maximum.	
1.	Explain why you gave a specific rating.
2.	Note trends, both positive and negative, in achievement of outcomes as per the updated indicators provided in the DO sheet.
3.	Provide recommendations for next steps.
GEF Operational Focal point	
Overall 2009 Rating	
Overall 2010 Rating	
Overall 2011 Rating	
Overall 2012 Rating	
2013 Rating	(MU) Moderately Unsatisfactory
Comments	The rating is "MU" – i.e. "Marginally Un-satisfactory" because though this GEF project started late (sometime in 2009) however since then it has not been able to develop a cross-

	sectoral coordination mechanism for the conservation and sustainable use of medicinal plants. What is going to change after the implementation of this GEF project in this sector is a question? The sustainability of the work done under GEF-funded project remains as a major concern.
Other Partners: For jointly implemented projects, a representative of the other Agency working with UNDP on project implementation (for example UNEP or the World Bank).	
RECOMMENDED but NOT MANDATORY for jointly implemented projects.	
Please justify your rating and address the following points in your comments. Please keep word count between 200 words minimum and 500 words maximum.	
1.	Explain why you gave a specific rating.
2.	Note trends, both positive and negative, in achievement of outcomes as per the updated indicators provided in the DO sheet.
3.	Provide recommendations for next steps.
Other Partners	
Overall 2009 Rating	
Overall 2010 Rating	
Overall 2011 Rating	
Overall 2012 Rating	
2013 Rating	
Comments	
UNDP Technical Adviser: Is the UNDP-GEF Technical Adviser.	
MANDATORY RATING MUST BE PROVIDED for all projects.	
Please justify your rating and address the following points in your comments. Please keep word count between 500 words minimum and 1200 words maximum.	
1.	Explain why you gave a specific rating (do not repeat the project objective).
2.	Note trends, both positive and negative, in achievement of outcomes as per the updated indicators provided in the DO sheet.
3.	Fully explain the critical risks that have affected progress.
4.	Outline action plan to address projects with DO rating of HU, U

	or MU.
UNDP-GEF Technical Adviser	
Overall 2009 Rating	(MS) Moderately Satisfactory
Overall 2010 Rating	(MS) Moderately Satisfactory
Overall 2011 Rating	(MS) Moderately Satisfactory
Overall 2012 Rating	(S) Satisfactory
2013 Rating	(MS) Moderately Satisfactory
Comments	<p>This reporting year is yet another successful year for the project following the highly useful mid-term review. As recommended during the last PIR, the project has prioritized actions that will maximize its chances of meeting its development objectives. A number of strategic interventions have been completed or are on-going. These include for example the drafting of the National Strategy for conservation of medicinal plants, an activity that is expected to render the much required national framework that sets standards and effectively coordinates the currently discrete and divergent efforts undertaken by a multitude of agencies. Based on the encouraging developments during the past two years following the MTR, the project is rated as 'satisfactory' for progress against delivering its development objective. While the National Strategy is yet to be approved, salient features of the Strategy are already being implemented such as integrating medicinal plant conservation concerns into sectoral plans at the local level (e.g. Forest Working Plans), making medicinal plant conservation and utilization an integral part of the teaching curriculum for Forest Officers in collaboration with the responsible institute (IGNFA) – these will ensure that project successes are sustained beyond the project period. The project also took advantage of the UNCBD COP being held in Hyderabad to present the National Strategy and seek feedback from a large number of biodiversity experts gathered there. In addition the project made several notable achievements. It has far exceeded targets set for it several important indicators including the total area under sustainable management of MAPs and sustainable harvesting protocols for important MAPs. The sustainable harvesting protocols are of paramount importance given that the major conservation issue related to medicinal plant resources is over-harvesting. The project has also comprehensively identified several MAP species for cultivation, currently implemented in over 4527 ha in the three States. In order that the efforts to conserve and utilize MAPs would continue to benefit from a supportive institutional home after the project and to also address the issues of coordination among a large number of agencies involved, the project prepared a report on strengthening the National Medicinal Board as a nodal agency for the sector in the country. Likewise it has developed</p>

	<p>several effective linkages with related initiatives in the country – for instance with the National Biodiversity Authority (NBA), and the State Biodiversity Boards (SBBs) – while also building the capacity of the State Medicinal Plants Boards to fulfill their mandates. Finally, the project has successfully set up and secured protection of high value medicinal plant biodiversity areas covering around 10,156 ha as Medicinal Plant Conservation Areas (MPCAs) in the three States. At least 4 People’s Biodiversity Registers (PBRs) have also been prepared to document and preserve the profound traditional knowledge related to medicinal plants available in the region. Efforts to document lessons develop outreach and communication materials to promote replication of successful models under the project are also on-going and completed products actively disseminated through various fora. The project team is commended for successfully turning around this project, following an exemplary adaptive management approach to planning and implementation of project activities these last two years. It is now entering into the final year of its (extended) duration. It is recommended that the remaining period be utilized to focus on three sets of prioritized actions: a) consolidate important achievements such as in the finalization of the National Strategy; confirm the mandate and responsibility of the National Medicinal Plants Board as the appropriate mechanism for guiding, coordinating and overseeing conservation and development of medicinal plants sector in the country; and advancing further the integration of MAPs into the curriculum of IFS and mainstreaming of medicinal plant conservation into local level sectoral plans such as the Forestry Working Plans; b) provide targeted support to the field activities initiated especially at the community level thus far to bring them to successful fruition (and in order not to spread too thin, to consider extending support to new field activities only on an exceptional basis) – of high priority here should be activities focused on securing the MPCAs and finalizing the sustainable harvesting protocols; c) develop an exit strategy that will elaborate how on-going and planned activities post-project will be continued including lead agency, funding etc., while also documenting lessons and best practices that can be shared widely to motivate replication in the three States and beyond. The project should also plan to undertake the Terminal Evaluation towards the end of the next reporting period so that information generated can be fully utilized to support the elaboration of the exit strategy.</p>
Highly Satisfactory (HS)	Project is expected to achieve or exceed all its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as 'good practice'.
Satisfactory (S)	Project is expected to achieve most of its major global environmental objectives, and yield satisfactory global

	environmental benefits, with only minor shortcomings.
Moderately Satisfactory (MS)	Project is expected to achieve most of its major relevant objectives but with either significant shortcomings or modest overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield some of the expected global environment benefits.
Moderately Unsatisfactory (MU)	Project is expected to achieve its major global environmental objectives with major shortcomings or is expected to achieve only some of its major global environmental objectives.
Unsatisfactory (U)	Project is expected not to achieve most of its major global environment objectives or to yield any satisfactory global environmental benefits.
Highly Unsatisfactory (HU)	The project has failed to achieve, and is not expected to achieve, any of its major global environment objectives with no worthwhile benefits.

IMPLEMENTATION PROGRESS RATING

IP rating: Please review the Implementation Progress page of this APR/PIR and then answer the questions below. An overall IP rating will be generated based on your answers.	
1	Please rate the progress in delivery of outputs. For example, do the annual outputs represent sufficient progress in order to achieve the project outcomes (see DO page of this APR/PIR)?
2	Please rate the efficiency in delivery of outputs. For example, in this reporting period are budget resources being spent as planned? (i.e. is project delivery on target?)
3	Please rate the quality of risk management. For example, in this reporting period were project risks managed effectively?
4	Please rate the quality of adaptive management. For example, in this reporting period were actions taken to address implementation issue identified in the APR/PIR last year?
5	Please rate the quality of monitoring and evaluation. For example, in this reporting period were sufficient financial resources allocated to project monitoring and evaluation
Project Manager/Coordinator: Is the person managing the day to day operations of the project.	
MANDATORY RATING MUST BE PROVIDED for projects under implementation in one country or regional projects where appropriate.	
Please justify your rating and address the following points in your comments. Please keep word count between 500 words minimum and 1200 words maximum.	
1.	Explain why you gave a specific rating.
2.	Summarize annual progress and address timelines of project output/activity completion in relation to annual workplans.
3.	Outline the general status of project expenditures in relation to annual budgets, the effectiveness of project management units in guiding project implementation, and the responsiveness of the project board in overseeing project implementation.
Overall 2009 Rating	(MS) Moderately Satisfactory
Overall 2010 Rating	(S) Satisfactory
Overall 2011 Rating	(S) Satisfactory
Overall 2012 Rating	(HS) Highly Satisfactory
2013 Rating	(S) Satisfactory
Comments	As committed in the AWP 2012-13, many of the outputs are completed while the rest are on tract. The activities related to establishment of MPCAs and MPDAs are almost over, Sustainable harvesting protocols have been developed and are now being field tested, resource augmentation and nursery development have been undertaken by States in MPDAs and adjoining areas. PBRs are almost ready in most

	MPCA sites, BCPs which were not part of the project were also released. The project took active part and showcased lessons learnt and shared good practices at the eleventh Conference of Parties to the Convention on Biological Diversity. The States have commissioned studies under Outputs 2.1, 2.2, 2.3, 2.4, 2.5, and 2.6. While Studies under Output 2.6 is complete in all states, very good progress has been made on the others. Similarly at the National level studies have been commissioned under Outputs 1.1, 1.2, 1.3, 1.5, 1.6 and 1.7. These are progressing well and are being monitored by MoEF, UNDP, NPSC and review committees very frequently. TSG has been guiding and reviewing the progress of the field level outputs of the project Review/Expert committees have been constituted to guide the implementation of the project outputs SPSC and NPSC meetings were held regularly to review and monitor the project
UNDP Country Office Programme Officer: Is the UNDP programme officer in the UNDP country office who provides oversight and supervision support to the project.	
MANDATORY RATING MUST BE PROVIDED for projects under implementation in one country. Not necessary for regional or global projects.	
Please justify your rating and address the following points in your comments. The QORs and delivery data in the ERBM portfolio project monitoring report should inform your rating. Please keep word count between 500 words minimum and 1200 words maximum.	
1.	Explain why you gave a specific rating. If your rating differs from the rating provided by the project manager please explain why.
2.	Summarize annual progress and address timeliness of project output/activity completion in relation to annual workplans.
3.	Outline the general status of project expenditures in relation to annual budgets, the effectiveness of project management units in guiding project implementation, and the responsiveness of the project board in overseeing project implementation.
Overall 2009 Rating	(MS) Moderately Satisfactory
Overall 2010 Rating	(S) Satisfactory
Overall 2011 Rating	(S) Satisfactory
Overall 2012 Rating	(S) Satisfactory
2013 Rating	(S) Satisfactory
Comments	Being the second last year of implementation, the studies commissioned under the project in the earlier years are taking shape. One of the main component of the project is development of a national level inter-sectoral strategy on conservation, sustainable use and cultivation of medicinal plants. All the work being done at the State and national level under other outcomes feeds into this crucial output. A national level consultation was conducted to discuss the draft strategy formulated after several thematic consultations. Another important

	<p>component that was completed this year was development of a sui generis mechanism for protection of traditional knowledge associated with medicinal plant. A national level consultation was held this year to finalise the recommendations after due consultations with senior representatives of a range of Ministries such as Environment and Forests, Agriculture, Rural Development, Horticulture, Health, Commerce, and national/ state level institutions such as the National Biodiversity Authority, National medicinal Plants Board, Geographical Indications Registry, State Biodiversity Boards, State Medicinal Plants Board and Senior Attorneys of the Supreme Court dealing with matter of IPR. Partnership with the Indira Gandhi National Forest Academy was established this year to mainstream the subject of medicinal plants conservation and Sustainable use in the curriculum of the officers of the Indian Forest Service. Similar work was also initiated in the State Forest Training Academies of the three project states. Efforts have been made to orient the States on use of the tool of Geographical Indications for protection of endemic medicinal plants and protection of traditional knowledge. Due to efforts made through this project, the State Biodiversity Boards of Uttarakhand and Chhattisgarh have created Biodiversity Management Committees and People's Biodiversity Registers and Bio-cultural Community Protocols are being done by these BMCs. Sustainable harvest protocols have been developed for 11 GSMP species and these are being field tested now. Efforts are being made to link up with private sector to develop models of ABS in tune with the spirit of the Nagoya Protocol. An innovative initiative in the project this year was to engage agencies to develop communication strategy and tools for the project outreach and knowledge sharing. The project and knowledge products developed under this project were show cased at 2 international events - the second meeting of the Inter-Governmental Committee on the Nagoya Protocol in New Delhi (July 2012) and the Eleventh Conference of Parties of the Convention on Biological Diversity in Hyderabad (October 2012). Project is in the process of consolidating work under different outputs and outcomes through regular review and steering committee meetings. Convergence is being promoted by bringing together different agencies engaged in the project.</p>
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Project Implementing Partner: Is the representative of the executing agency (in GEF terminology). This would be Government (for NEX/NIM execution) or NGO (for CSO Execution) or an official from the Executing Agency (for example UNOPS).

RECOMMENDED but NOT mandatory for projects under implementation in one country or regional projects.

Please justify your rating and address the following points in your comments. Please keep word count between 200 words minimum and 500 words maximum.

- | | |
|-----------|---|
| 1. | Explain why you gave a specific rating. |
| 2. | Note trends, both positive and negative. |
| 3. | Provide recommendations for next steps. |

Overall 2009 Rating	
Overall 2010 Rating	(S) Satisfactory
Overall 2011 Rating	
Overall 2012 Rating	(HS) Highly Satisfactory
2013 Rating	
Comments	
GEF Operational Focal point: Is the government representative in the country designed as the GEF operation focal point.	
MANDATORY RATING MUST BE PROVIDED for projects under implementation in one country. Not necessary for regional or global projects.	
Please justify your rating and address the following points in your comments. Please keep word count between 200 words minimum and 500 words maximum.	
1.	Explain why you gave a specific rating.
2.	Note trends, both positive and negative.
3.	Provide recommendations for next steps.
Other Partners: For jointly implemented projects, a representative of the other Agency working with UNDP on project implementation (for example UNEP or the World Bank).	
RECOMMENDED but NOT mandatory for jointly implemented projects.	
Please justify your rating and address the following points in your comments. Please keep word count between 200 words minimum and 500 words maximum.	
1.	Explain why you gave a specific rating.
2.	Note trends, both positive and negative.
3.	Provide recommendations for next steps.
Overall 2009 Rating	
Overall 2010 Rating	
Overall 2011 Rating	
Overall 2012 Rating	
2013 Rating	
Comments	

UNDP Technical Adviser: Is the UNDP-GEF Technical Adviser.	
MANDATORY RATING MUST BE PROVIDED for ALL projects.	
Please justify your rating and address the following points in your comments. The QORs and delivery data in the ERBM portfolio project monitoring report should inform your rating. Please keep word count between 500 words minimum and 1200 words maximum.	
1.	Explain why you gave a specific rating. If your rating differs from the rating provided by the UNDP Country Office Programme Officer and/or the Project Manager please explain why.
2.	Summarize annual progress and address timelines of project output/activity completion in relation to annual workplans.
3.	Outline the general status of project expenditures in relation to annual budgets, the effectiveness of project management units in guiding project implementation, and the responsiveness of the project board in overseeing project implementation.
UNDP Technical Adviser	
Overall 2009 Rating	(MS) Moderately Satisfactory
Overall 2010 Rating	(S) Satisfactory
Overall 2011 Rating	(S) Satisfactory
Overall 2012 Rating	(S) Satisfactory
2013 Rating	(S) Satisfactory
Comments	This is yet another successful year for the project. Following a restructured project management team and improved coordination achieved both at the national and at the State levels, the implementation of project activities during the reporting period has progressed exceedingly well. The RTA rates the implementation progress of the project as S – ‘satisfactory’. During the year the project completed a number of important activities leading to achievement of several important outcomes as described under the DO rating comments. These include the drafting of the national strategy for conservation and utilization of medicinal plants – an important national framework that will guide the development of the medicinal plants sector in the country. Activities related to development and mainstreaming of medicinal plants into the curriculum of IFS Forest Officers training are on-going per plan. Another noteworthy set of activities completed during the year was that related to clarifying the legal mechanisms to protect traditional knowledge in medicinal plants while identification of important MAP species for cultivation and promoting these at the community level was continued as per plan. Similarly the project has completed several assessments and surveys (e.g. the seasonal botanical surveys in the different MPCAs), which together with expert knowledge on ecological characteristics of individual species is being used to prepare the sustainable harvest

	<p>protocols for key medicinal plant species. In this process, the project is paying particular attention to ensure that local knowledge is integrated as well. Another key activity completed during the year was the review of various forest legislations in the three states, results of which will be used to formulate specific recommendations for integration of medicinal plants conservation into the respective forest regulation. These will also inform the eventual development of state level strategy for conservation and development of medicinal plants (while also being linked to the National Strategy). Likewise, activities such as consultations with forestry planners in the three states were completed to advance integration of MAPs conservation issues into forestry Working Plans. The project has also developed a number of information and communication materials including specific communication strategy for each of the three states. During the year the project's financial management was also satisfactory – having achieved a delivery rate of 100% in 2012 and on track in the two quarters under review in 2013. It has also taken recommendations made during the last PIR into account while the engagement by the UNDP CO in the implementation and monitoring of the project is of extremely high level of quality. This is however not documented by using UNDP monitoring tools such as ATLAS and ERBM, to record risks and issues. It is recommended that this be rectified during the next reporting period. The project should in the next reporting period pay attention to strategic activities as outlined under the DO rating comments, keeping in mind the limited time and resources now at its disposal. In particular, the project should also work on ensuring the sustainability of the MPCAs and should also support formulation of participatory management plans for these community-based protected areas – key to securing medicinal plants conservation. By taking into consideration all the above and especially timely implementation of planned activities and several outstanding achievements made, this project is rated as satisfactory for its implementation progress in current reporting year.</p>
Highly Satisfactory (HS)	Implementation of all components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be presented as 'good practice'.
Satisfactory (S)	Implementation of most components is in substantial compliance with the original/formally revised plan except for only few that are subject to remedial action.
Moderately Satisfactory (MS)	Implementation of some components is in substantial compliance with the original/formally revised plan with some components requiring remedial action.
Moderately Unsatisfactory (MU)	Implementation of some components is not in substantial compliance with the original/formally revised plan with most components requiring remedial action.
Unsatisfactory (U)	Implementation of most components is not in substantial compliance with the original/formally revised plan.
Highly Unsatisfactory (HU)	Implementation of none of the components is in substantial

	compliance with the original/formally revised plan.
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PROGRESS IN PROJECT IMPLEMENTATION

Outcome 1- Key Outputs this Reporting Period: An enabling environment at the national level for mainstreaming the conservation and sustainable use of MAPs into forest management policies and practices

Output 1.1 - The draft national strategy for conservation, cultivation and sustainable use of medicinal plants has been prepared and submitted to MoEF. The Strategy will address mainly six issue based thematic areas for which national consultations have been organized for three thematic areas. Output 1.2 - There were issues between the agency undertaking a study under this output and MoEF/UNDP. The issues have been sorted and the study would be completed soon. Output 1.3 - The Energy Resources Institute has submitted the final report on legal mechanism to protect TK related to harvest, cultivation and use of MAPs. The institute has also drafted a sui generis regime for TK on Medicinal Plants in India by keeping the draft TK Rules under the Biological Diversity Act as the foundation. Output 1.4 - The National Medicinal Plant Board is considering revising a list of medicinal plant species that may be included under the planting programs. The NMPB is also considering commissioning a study to assess the economic value of medicinal plants in India. Therefore, project funds may not be needed. Output 1.5 – The Insight Development Consultancy Group has submitted its report to the National Medicinal Plants Board for its consideration and necessary action. Output 1.6 – Institute of Ayurveda and Integrative Medicine (FRLHT) is preparing a national strategy for long term threat assessment of Medicinal Plants. Under the study, I-AIM has conducted 3 need assessment workshops in each of the project states. Modules for Training of Trainers has been developed, a manuscript on profile of 47 red listed medicinal plants has been prepared. Output 1.7 – Indira Gandhi National Forest Academy has been engaged to develop a course curriculum on the conservation and sustainable use of medicinal plants for officers of the Indian Forest service. The Academy has constituted a core committee and organized a brainstorming session to identify the gaps and develop the course curriculum.

Outcome 2- Key Outputs this Reporting Period: Forest management policies in the three project states that promote and support the conservation and sustainable use of MAPs

Output 2.1 The task of developing a state specific strategy on conservation and sustainable use of medicinal plants has been commissioned for Arunachal Pradesh and Uttarakhand. The agencies have finished literature review, conducted consultations, and drafted the strategy which needs to be aligned to the national strategy and subsequently reviewed by experts. The project has solicited proposals for Outputs 2.1, 2.2 and 2.3 regarding development of State specific strategy and revision of State Forest Policies for Chhattisgarh. Output 2.2, 2.3 and 2.4 - A draft legal policy identifying gaps in Forest Policies, etc. for mainstreaming conservation and sustainable use of medicinal plants have been prepared for Arunachal Pradesh and Uttarakhand which are under review. Output 2.5 - A report on the need and recommendation for strengthening the capacity of the SMPBs in each of the 3 project states has been prepared and submitted to the states. Accordingly, Terms of Reference (ToRs) for Monitoring, Communication and Livelihood specialists have been drafted. Output 2.6 – The three project states have received state specific reports on species that may be included in afforestation and income generation programs. ToRs have been developed for a study on 'Assessing the Cultivation and Trade of MAPs in Uttarakhand'. Output 2.7 - Consultative meetings conducted for the working plan officers for the 3 states to include MAPs in Divisional Working Plans. Six sites have been identified for revision of Forest Divisions Working Plans in the three project States. Output 2.8 – Proposals have been solicited for conducting Rapid Mapping Exercise and developing a database for resource monitoring in the

states of Uttarakhand and Arunachal Pradesh. Database on MAPs of Uttarakhand in the form of CDROM has been prepared. Chhattisgarh had documented the population status of MPs under a NMPB project in 2006. Therefore, the component is not required in Chhattisgarh.

Outcome 3- Key Outputs this Reporting Period: Conservation and sustainable use of MAPs mainstreamed at the local level into government and community forest management norms and practices at demonstration sites in three project states.

Output 3.1 and 3.3 - Seasonal Botanical surveys were conducted and results are under compilation for 7 MPCAs each in Chhattisgarh, Arunachal Pradesh & 2 MPCAs in Uttarakhand. Ecological survey have been conducted for 7,4 & 4 identified MPCAs in Arunachal Pradesh, Uttarakhand and Chhattisgarh respectively. Developed sustainable collection regimes for 11 species for field implementation and sustainable collection. Sustainably collected, value added (*Dioscoria hispida*) and marketed one species in each state. Augmented the resources (*Cinnamomum tamala* and *Tinospora sinensis*) in two sustainable collection sites. Resource augmentation of Medicinal Plants including GSMPs has been done through plantation and cultivation on 4179 ha. Output 3.2 - Identified four State level Forestry Training Institute to introduce MAPs in the curriculum for frontline Forestry staff in the 3 project states. Conducted Village Botanist course in 3 project states and trained 45 para taxonomists. Output 3.4 - Developed capacity of 60 members (local community, forest department staff & SMPB staff) through orientation and exposure visits. Output 3.5 - Formed BMCs in MPCA areas and documented local bio-resources and associated traditional knowledge through 14 draft Peoples' Biodiversity Register across all states and one complete Bio-cultural Community Protocols in each project state.

Outcome 4- Key Outputs this Reporting Period: 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.

The three communication agencies engaged under the project have developed a state specific communication strategy and tools for replication of successful models of conservation and sustainable use within the states. The communication strategy and tools have been field tested at the MPCA sites and are now being replicated for the whole state. The project shared the recommendations emanating from the various studies and knowledge products at national and international platforms such as Indian Biodiversity Congress, International Herbal Fair, second meeting of the Inter-Governmental Committee on Nagoya Protocol and Eleventh Conference of Parties to the Convention on Biological Diversity. An e-network of experts and practitioners has been established to facilitate sharing of good practices, knowledge, and successful models of Conservation and Sustainable Use of Medicinal Plants.

Adjustments

Adjustments to Project Milestones, Project Strategy and Risk Management.

Key Project Milestones

Have significant delays occurred in the project start, inception workshop, Mid-term Review, Terminal Evaluation or project duration?

Yes

If yes, were these changes reported in a previous APR/PIR?

Yes

Key project milestone	Scope of delay (in months)	Briefly describe change or reason for change	Briefly describe the implications or consequences this has had on project implementation
Project Start (i.e. project document signature date)			
Inception Workshop			
Mid-term Review			
Terminal Evaluation			
Project Duration (i.e. project extension)	18	The envisaged project period was from March 2008 to March 2013. However, after the midterm evaluation as per the recommendations of the MTE and National Project Steering Committee an extension of 18 months was proposed.	The implication on project implementation in terms of cost escalation, in particular project management cost will be monitored. The exchange gain from the recent increase in the exchange rate of INR against USD meant that there will be more funds for project implementation.

Adjustments to Project Strategy

Has the project made any changes to its strategy (i.e. logframe/results framework) since the Project Document was signed?

Yes

If yes, were these changes reported in a previous APR/PIR?

Yes

Change Made to	Yes/No	Briefly describe the change and the reason for
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		that change
Project Objective		
Project Outcomes		
Project Outputs/Activities		

Risk Management

List number of critical risks as noted in the ATLAS risk log and briefly describe actions undertaken this reporting period to address each critical risk.

# of Critical Risks (type/description)	Risk management measures undertaken this reporting period
Regulatory	Chhattisgarh is a very politically-sensitive region in India. Three of the project's Medicinal Plant Conservation Areas (MPCAs) are situated in the areas where law and order is often an issue. The political sensitivity of the region is a continuing risk to project activities in the area. This past year, an awareness raising puppetry show facilitated by the communication agency was cut short due to threats from extremist groups. In Chhattisgarh, the strong communication work done by the State Medicinal Plant Board and the communication agency have been instrumental in demonstrating to diverse audiences and aimed at benefiting local forest-dwelling tribes and has also demonstrated to diverse audiences including the public and extremists, that the aims of this project are clearly to the benefit of local forest-dwelling tribes.

Adjustments general comments:

RTA Comments: There is only one risk that has been categorized as critical. However there are a number of risks highlighted by the UNDP CO worth noting here. 1) Out of 7 MPCAs in Arunachal Pradesh, 5 lie in the community owned forest. Out of this 2 MPCAs are in proximity of a new hydroelectric project that is in the process of being approved. Although the MPCA sites will not be physically affected by the hydroelectric project but since the community is being highly compensated by the government for the deviation of the land, the community similarly expects compensation for use of their forest lands for the two MPCAs. The project team has been educating the community about the conservation benefits of the MPCAs and thus trying to convince both the political class and the community not to insist on compensation. In one MPCA the community has agreed not to

demand compensation. The project is strengthening its communication work in the area, and aims specifically to use community-to-community dialogue to help deliver the message that MP conservation and sustainable use is in the best interest of tribal groups. Furthermore, to offer realistic alternatives, the project is exploring eco-tourism opportunities in the Medicinal Plant Development Areas that can help generate revenue and employment opportunities for local communities. 2) Within the current co-finance mechanism, some partners have inadequately documented funding figures and channels. This has led to under-reporting physical and financial progress. The Ministry is requesting the project States to report the co-finance. Additionally, it has been decided to engage an agency to build the capacity of the project partners to document co-finance and also undertake documenting the co-finance to the project from 2008. 3) There have been delays in receiving the utilization certificate (UC) from the implementing officers (DFO/Deputy Conservator of Forests). In consultation with the Ministry of Environment and Forests, the UNDP CO has suspended release of further funds till UCs for 100% advances are received. 4) Natural calamities in Uttarakhand that occurred in June 2013, namely cloud bursts resulted in overwhelming amounts of rainfall and consequential natural disasters (flooding, landslides, etc), making some of the Medicinal Plant Conservation Areas now inaccessible. Implementation of project activities in these areas may be delayed. The need for specific corrective action will have to be assessed as soon as the areas become accessible. 5) Frequent transfer of Nodal Officers (CEO-SMPB) in Uttarakhand is affecting timely implementation of activities. As a result progress in the State has been slow. The Ministry of Environment and Forest and UNDP have asked FRLHT to visit the field more frequently to orient the new officers.

Finance: cumulative from project start to June 30 2013

DISBURSEMENT OF GEF GRANT FUNDS

How much of the total GEF grant as noted in Project Document plus any project preparation grant has been spent so far? (e.g. PPG + MSP or FSP amount. Do not break down by PPG or project budget.)

Estimated cumulative total disbursement as of 30 June 2013. (i.e.CDR information up to 20 June 2013)	3471404.00
Add any comments on GEF Grant Funds	FSP expenditure = 3,126,405 + PPG expenditure = 345,000

DISBURSEMENT OF CO-FINANCING

How much of the total Co-financing as noted in Project Document has been spent so far? Co-financing is the amount committed in the project document for which co-financing letters are available

Estimated cumulative total co-financing disbursed as of 30 June this year. Please breakdown by donor.	0.00
Add any comments on co-financing including other types and amounts of additional co-financing such as in-kind, private sector, grants, credits and	No transparent means of tracking co-financing has been carried out. Both the MoEF and the 3 States report spending significant amounts budgeted to improve medicinal plants conservation and

loans.	management related activities -- as co-finance to the project. Implementation of a system of tracking co-finance should be followed on a priority basis in the next reporting period.
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ADDITIONAL LEVERAGED RESOURCES

These additional resources can be from the same donors or new donors.

Estimated cumulative leveraged resources as of 30 June 2013	
Add any comments on Leveraged Resources.	

Other Financial Instruments

Does the project provide funds to other Financial Instruments?	N
If yes, please discuss developments that occurred this reporting period only.	

Communications and KM

Tell the Story of Your Project and What has been Achieved this Reporting Period

1) Who benefits from this project? There is a diverse range of stakeholders who are benefiting from this project, including medicinal plant collectors who are primarily women, forest-dwelling communities including Scheduled Tribes and Scheduled Caste, traditional healers, government officials at all levels, BMC members, etc. Furthermore the biodiversity impacts in terms of contribution to regional ecosystem services should be noted. This project helps protect 5,666 hectares under Medicinal Plant Conservation Areas (MPCA) and the surrounding Medicinal Plant Development Areas and has also set up water and soil conservation activities through the installation of check dams in 3 MPCA sites in Chhattisgarh and the construction of gully plugs in 4 MPCA sites in Uttarakhand. 2) How does the project improve stakeholder's lives and advance development? The project is improving the forest-dwelling medicinal plant collector's life by providing opportunities that merge economic and environmental development goals. In the Bodmalla van Panchayat of Uttarakhand, the project facilitated the State Medicinal Plants Board (SMPB) to engage the community in the rearing of 4,000 saplings of Cinnamomum tamala to supplement the vulnerable tree population in the surrounding area. This activity helped utilize 20 hectares of barren land while poor medicinal plant collectors involved in re-afforestation work collectively earned Rs. 30,000. Furthermore, the project enhanced a medicinal plant nursery in which 1,000 saplings were given for plantation on medicinal plant collectors' land so that they may earn extra income. Traditional healers and ancient medicinal practices are dependent on the continued supply of medicinal plants. While the project is making contributions to the survival of traditional practices, and has even helped support traditional healers through co-provision of infrastructure for clinics. Furthermore, traditional healers from the Project gained much exposure at the 11th Conference of Parties of the Convention on Biological Diversity, where they held workshops for an international audience. 3) What was the most notable achievement in this reporting period? Within the national forest policy, there are no

specific guidelines that focus on medicinal plants or address sustainable use and conservation of these species. The project is making important headway to mainstream protection of medicinal plants and associated traditional knowledge in national-level policy. As the policy framework of India is extremely centralized, developments at the policy level are essential for state and local level improvements of the protection of MPs and associated traditional knowledge. This year, a draft of the national strategy for the conservation and sustainable use of medicinal plants was submitted. Additionally, traditional knowledge needs special protection in India. With project support, a report on a legal mechanism to protect traditional knowledge related to the harvest, cultivation, and sustainable use of medicinal plants has been submitted to the Ministry. The institute has also drafted a *suis generis* regime for traditional knowledge on medicinal plants in India and keeps the draft Traditional Knowledge Rules under the Biological Diversity Act as the foundation. One Bio-cultural Community Protocol (BCP) was published for each Project state. BCPs enshrine the legal rights and obligations of communities involved with MPs and are a step towards operationalising the Access and Benefit Sharing mechanism of the Nagoya Protocol. 4) What has this project changed and how did this change happen? This project has fundamentally increased communication between different government institutions and facilitated cross-sectoral convergence on issues related to medicinal plants. These changes have occurred through a series of inter-sectoral meetings and high-level dialogue, highlighting both the necessity and opportunity in convergence.

Adaptive Management this Reporting Period

Documentation of traditional knowledge is extremely minimal in India. Within the context of international legal battles over bio-resources and associated medical and dietary applications, the documentation of traditional knowledge is extremely important to secure indigenous communities' rights over their bio-wealth and ancient practices. The project originally set out to document traditional knowledge on medicinal plants via Community Knowledge Registers (CKR) that would provide a log of local biodiversity and its application in food, medicine, and culture. However, CKRs lacked the legal recognition needed to offer the community substantial protection. The Project investigated other forms of documentation and is now in the process of transforming the 40 CKRs that were made last year, into People's Biodiversity Registers (PBRs). PBRs are comprehensive databases that record people's traditional knowledge and biological resources while also providing an insight of the status, uses, history, and impacts of this ecological wealth. PBR documentation also helps to align the project with the Government of India's wider biodiversity goals and helps Project states satisfy their mandates under the Biodiversity Act of 2002. Additionally, while the PBRs offer a medium for conservation, protection of IPR, and traditional knowledge, the Project further extended its remit to push for the publication of Bio-cultural Community Protocols (BCPs) that help to operationalize the ABS mechanism of the Nagoya Protocol by asserting community rights over local bio-resources and knowledge. This year 7 drafts have been prepared, and 1 BCP for each project state has been published and was released in a side event to the 11th Conference of the Parties for the Convention on Biological Diversity.

Lessons Learned

Technical The National Medicinal Plants Board and the State Medicinal Plant Boards (SMPB) of Arunachal Pradesh, Chhattisgarh, and Uttarakhand are the nodal agencies for the medicinal plants sector. However, the NMPB and SMPBs have had limited to non-existent capacity to deliver their mandates at the on-set of the project. A study has been commissioned to assess gaps and address strengthening of the NMPB and SMPBs. To provide technical inputs FRLHT has been engaged and the

capacity of the staff is being increased through exposure visits, trainings, meetings etc. Social The project focus is mainly on policy issues at the national and state levels. There are limited resources for entry level activities and engagement of local communities, traditional and folk healers, BMCs etc. Political The medicinal plants sector though huge in terms of providing health security and livelihood security to the local communities, does not translate into significant economic terms for both the government and private sector. This has a bearing on the uptake of project activities and achievements by the government and private sector.

PARTNERSHIPS

Civil Society Organisations/NGOs

Partnerships with strong local NGOs across the three Project states were made to engage hard-to-reach stakeholders. In the project state of Uttarakhand, Lok Chetna Manch has helped establish two medicinal plant cultivation groups. One of these is called Yuvak Mangal Dal and comprises of 21 young men who have organized to build their livelihoods around cultivation of high-value medicinal plants. The young men in Yuvak Mangal Dal had previously only had employment for four months out of the year in tourism. After exposure to the project and the medicinal plant market, they are now taking steps to develop cultivation areas that can provide them with employment during the 8 months of tourism's off-season. The project-supported NGO has connected the young men of Yuvak Mangal Dal with the Horticulture Department to procure cultivation materials. While also in its infancy, a similar initiative has been started by a group of 26 women in Uttarakhand who plan to set up cultivation sites on their families' private land to generate income.

Indigenous Peoples

The project is working with forest-dwelling indigenous groups to develop linkages with the nationally and globally expanding medicinal plant (MP) sector, while also working with them to develop sustainable medicinal plant collection methods to secure livelihoods. In Arunachal Pradesh, a scheduled tribe living around the project established Jorum Medicinal Plant Conservation Area had been collecting and selling the MP *Rubia cordifolia*. The market was highly disorganized, and the tribal people did not have the bargaining power to negotiate fairer returns with traders. Under the project, a Task Team of diverse stakeholders was established to monitor and manage local biodiversity wealth and traditional knowledge. The Task Team institutionalizes gender equality in bio-resource decision-making by mandating at least 30% female representation. The Jorum Task Team exceeds this, and 5 out of its 11 members, including the Chairman, are women.

Private Sector

The project aims to create market linkages between collectors at the grassroots and major medicinal plant sector companies to facilitate fair and regular earnings for collectors. In Arunachal Pradesh, the project connected a Scheduled Tribe community to Agrivista Ltd. By cutting out middlemen and working directly with industry, the community saw an increase in their returns for *Rubia cordifolia* by 172%, from 22 Rs/kg to 60 Rs/kg. Furthermore, *Rubia cordifolia* gathering was carried out with project-developed sustainable collection protocols and partially executed in a sustainable collection area for monitoring. As Scheduled Tribes are some of the most impoverished in India, advancements in their economic well-being are vital for sustainable development.

Similarly, in Uttarakhand, the Project helped connect remote villagers with pharmaceutical and dietary companies to try and enhance their socio-economic well-being. In Jhuni village, medicinal plant collectors were connected directly to the Indian Pharmaceutical Corporation Ltd. The community now receives fixed rates for two high-value medicinal plants, Picrorhiza Kurroa Benth and Sussurea Lappa. Before market intervention, villagers received between 50 and 80 Rs/kg for Picrorhiza kurroa, and now they are earning 125 Rs/kg. For Sussurea Lappa the villagers are receiving a 175% increase in their returns, from 200 Rs/kg to 550 Rs/kg.

The project provided a platform at to the medicinal and aromatic plants industry to voice their opinion on the legal and policy framework for medicinal plants at a National Consultation on the subject.

GEF Small Grants Programme

NA

Other Partners

Partnerships have been made with the State Medicinal Plant Boards (SMPB) of Arunachal Pradesh (AP), Chhattisgarh (CG), and Uttarakhand (UK). The uptake of the project's communication activities in CG is a good demonstration of the way SMPBs are taking medicinal plant (MP) conservation and sustainable use more seriously.

The CG SMPB has crafted a unique mobile MP exhibition van known as a 'chalit pradershani', in order to raise village-level awareness around MP use, sustainable collection, and protection of traditional knowledge. The CG SMPB also made a series of short videos on sustainable collection, using local collectors as the actors. They have showed these films to orient MP gathers in appropriate sustainable collection methodology, and have noted the community's receptiveness upon seeing their fellow collectors in videos. Furthermore, the CG SMPB disseminated information on MPs through conventional methods such as posters, brochures, and booklets.

The CG SMPB engaged with an NGO called Dustyfoot Productions to develop a long-term communication strategy for the state. Despite facing issues with extremist groups, the team developed long-lasting tools and influential activities to raise support from at the local level. A medicinal plant mascot was created and is now recognized across the state. It is still being used by the mobile MP exhibition van of the CG SMPB. Additionally, various theatre performances, wall paintings, and other workshops helped engage MP collectors, locals, and field-level forest division staff with the need for MP conservation. An outstanding show-case of these performances was held in front of an international audience at the eleventh meeting of the Conference of the Parties, as well as other state and national events.

PROGRESS IN ADDRESSING GENDER EQUALITY

Has a gender or social needs assessment been carried out?

No

If a gender or social assessment has been carried out what were the findings?

NA

Does this project specifically target women or girls as direct beneficiaries?

No

Have there been any changes in specifically targeting women or girls as direct beneficiaries this reporting period?

Yes

If yes, please explain:

The participation of women in the Village Botanist Course has been low due to issues related to having to attend classes away from home. Efforts are being made to ensure women participation in the Village Botanist Course by enrolling women from the front line forest staff of the project states. Women are also being trained in sustainable harvest and primary processing of Medicinal Plants. Further, women are being involved in activities around MPCAs such as nurseries, resource augmentation, home herbal gardens etc.

Please discuss any of the points above further or provide any other information on the project's work on gender equality undertaken this reporting period

Some points to consider: impact of project on daily workload of women, # of jobs created for women, impact of project on time spent by women in household activities, impact of project on primary school enrolment for girls/boys, increase in women's income etc. Be as specific as possible and provide real numbers (e.g. 100 women farmers participating in sustainable livelihoods programme).

While the project design did not specifically target women at the onset, it does focus centrally on medicinal plant collectors of which the vast majority are women. The project has developed a number of activities that strengthen the awareness, skills, decision-making power, and economic opportunities of women involved with the collection or use of medicinal plants across the three Project states of Arunachal Pradesh (AP), Chhattisgarh (CG), and Uttarakhand (UK).

Importantly, the project has strengthened the role of women as bio-resource decision makers by mandating a minimum of 30% female representation in recently established Sustainable Harvest Task Teams. In all project states, the teams are exceeding this by 50% female representation, and in AP the chairman of one task team is a woman.

With regards to MP awareness raising, the Project state of Uttarakhand has successfully reached out to at least 1,154 women, and 516 children (294 boys and 222 girls). Women have also been instrumental in MP awareness raising campaigns. In AP, the Project has facilitated leadership development for 25 women, by providing opportunities to participate in delivering MP awareness raising programmes. In CG, nine villages in three MPCA areas were covered in MP awareness raising

campaigns which reached out to 2050 women (205 girls). Three out of 12 films shot on different subjects were focused on stories of women vaidyas.

Women's skills in MP identification and taxonomy, traditional knowledge and bio-wealth documentation, MP cultivation and income generation activities, and sustainable collection were developed through a number of orientation, training, and exposure activities. A Village Botanist Course aimed at nurturing a more scientific understanding of MPs, was carried out in each project state.

Importantly, the four female VBC participants of CG have been given practical opportunities to apply their skills within the State Forest Department (SFD). Women trained under the VBC are helping the SFD in identification and documentation of MPs in the Project's Medicinal Plant Conservation Areas. Recently the women have collected seed, seeding materials, and saplings of a few MP species from MPCA sites and have facilitated the CG State Medicinal Plant Board (that comes under the SFD) to raise MP saplings in a demonstration garden established on the CG SMPB campus.

Over the last year, training on traditional knowledge and biodiversity documentation facilitated women to be instrumental in the creation of People's Biodiversity Registers (PBRs) and Biocultural Community Protocols (BCPs). In Arunachal Pradesh, 14 women were highly active in PBR and BCP documentation; in CG one woman leader was particularly active, and in UK 30 women were participants in PBR and BCP documentation. These activities not only harnessed women's unique knowledge about their ancestral practices and local bio-resources, but also helped them understand why the conservation and documentation of these practices and resources are important in a larger picture. Through the documentation of PBRs and BCPs women for the first time gained an understanding of their rights over local bio-resources.

As women are the primary collectors of MPs. Sustainable harvesting orientation programmes were developed with women in mind. Furthermore, to connect sustainable harvesting with income generating activities, a number of in and out of state exposure visits were held for medicinal plant collectors to see different enterprises related to MPs. Last year, from Arunachal Pradesh, 9 key women participated in orientation and exposure visits, as did 21 women from CG and 14 women from UK.

In Uttarakhand, medicinal plant nursery development has generated job opportunities for over 100 women in remote areas,

ENVIRONMENTAL OR SOCIAL GRIEVANCE

What environmental or social issue was the grievance related to?

Social equity and inclusiveness

What is the current status of the grievance?

On-going

How would you rate the significance of the grievance?

Minor

Please describe the on-going or resolved grievance noting who was involved, what action was taken to resolve the grievance, how much time it took, and what you learned from managing the grievance process (maximum 500 words). If more than one grievance was addressed this reporting period, please explain the other grievance (s) here:

The Local Communities had certain reservations regarding the future of the MPCAs. They were concerned that the MPCA would encroach on their rights to collect NTFPs especially MAPs from the area.

The project is trying to create market linkages for some more sustainably collected medicinal plants from MPCA areas in an attempt to demonstrate that there are far more benefits for them (including financial) by being part of an MPCA than being alone. For instance increased incomes were earned as follows: in Uttarakhand: 30 quintals (dry wt.) of Cinnamomum tamala leaves were collected sustainably and linked to the mandi (herbal market), established by government of Uttarakhand. An income of approximately Rs. 65000/- was generated for 76 families from this collection. Further, a MoU has been signed between the Bodmalla Van Panchayat, SMPB and Forest Department in October 2012 to facilitate the collection process. Resource augmentation of Cinnamomum tamala was undertaken in degraded forests and private lands (approx 45 ha.) of Bodmalla village. In which, 4000 seedlings have been raised by the local farmers and planted in the vicinity areas.

In addition local communities are reassured that setting up MPCA does not take away the resource from them. The project has been explaining that the MPCAs will be managed by the local communities based on a management plan prepared through the participation of all participating households in the community.