



# Global Environment Facility

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May 12, 2009

Dear Council Member,

The World Bank as the Implementing Agency for the project entitled: **India: SLEM – Sustainable Land, Water and Biodiversity Conservation and Management for Improved Livelihoods in Uttarakhand Watershed Sector** under the **SLEM/CPP - Sustainable Land and Ecosystem Management Partnership PROGRAM**, has submitted the attached proposed project document for CEO endorsement prior to final Agency approval of the project document in accordance with the World Bank procedures.

The Secretariat has reviewed the project document. It is consistent with the project concept approved by the Council in November 2008 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by the World Bank satisfactorily details how Council's comments and those of the STAP have been addressed.

We have today posted the proposed project document on the GEF website at [www.TheGEF.org](http://www.TheGEF.org) for your information. We would welcome any comments you may wish to provide by June 10, 2009 before I endorse the project. You may send your comments to [gcoordination@TheGEF.org](mailto:gcoordination@TheGEF.org).

If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

A handwritten signature in black ink, appearing to read 'M Barbut', with a long horizontal stroke extending to the right.

Attachment: Project Document

cc: Alternates, GEF Agencies, STAP, Trustee



**REQUEST FOR CEO ENDORSEMENT/APPROVAL**  
**PROJECT TYPE: Full-sized Project THE GEF TRUST**  
**FUND**

**PART I: PROJECT INFORMATION**

**GEFSEC PROJECT ID: 3471**

**GEF AGENCY PROJECT ID: P112061**

**COUNTRY(IES): INDIA**

**PROJECT TITLE:** Sustainable Land, Water and Biodiversity Conservation and Management for Improved Livelihoods in Uttarakhand Watershed Sector

**GEF AGENCY(IES):** World Bank, (select), (select)

**OTHER EXECUTING PARTNER(S):** State of Uttarakhand, Watershed Management Directorate

**GEF FOCAL AREA(S):** Biodiversity, Land Degradation, (select), **GEF-4 STRATEGIC PROGRAM(S):**

**NAME OF PARENT PROGRAM/UMBRELLA PROJECT:** Sustainable Land and Ecosystem Management Country Partnership Program (SLEM\_CCP) and the Uttarakhand Decentralized Watershed Management Project

**Submission Date: April 2009**

**Re-submission Date:**

Expected Calendar	
Milestones	Dates
Work Program (for FSP)	Nov 2008
GEF Agency Approval	May 2009
Implementation Start	July 2009
Mid-term Review (if planned)	July 2011
Implementation Completion	July 2013

**A. PROJECT FRAMEWORK** (Expand table as necessary)

**Project Objective:** To restore and sustain ecosystem functions and biodiversity while simultaneously enhancing income and livelihood functions, and generating lessons learned in these respects that can be up-scaled and mainstreamed at state and national levels.

Project Components	Indicate whether Investment, TA, or STA**	Expected Outcomes	Expected Outputs	Indicative GEF Financing*		Indicative Co-financing*		Total (\$)
				(\$)	%	(\$)	%	
1. Watershed planning through community participation	INV/TA	Sustainable Watershed Management mainstreamed into Gram Panchayat (local village level government) Watershed Development Plans including parts of Micro-watersheds lying outside the Gram Panchayat and under the management of Forest Department.	20 Participatory Micro Watershed Management (MWS) plans completed and under implementation  10% increase in livelihood opportunities in the treated areas.	70,000	7	900,000	93	970,000
2. Controlling land degradation through the SLEM approach at	INV/TA	Reduced soil erosion, increased bio-mass and	• 20-30% of the area in selected MWS under improved SLEM	2,940,000	7	37,800,000	93	40,740,000

watershed level		enhanced availability of water in the watershed throughout the year	<p>techniques.</p> <ul style="list-style-type: none"> <li>• Increase in availability of water in the dry season by 5% in the treated MWS.</li> <li>• Increase in vegetative cover by 10% in the treated 20 MWS.</li> <li>• Implementation of 5 to 10 alternative technologies and approaches for enhancing water availability for agriculture and other domestic use.</li> </ul>					
3. Reduce pressure and dependence on the natural resource base through fostering Markets for NTFPs		Adoption of new technologies, processes and production systems for creation of markets for NTFPs.	<ul style="list-style-type: none"> <li>• Reduction in dependency of 2000 households on forest for fuel wood.</li> <li>• At least 20% of targeted households enter market with pine briquettes (produced from pine needles).</li> <li>• 10% increase in opportunities for sustainable alternative livelihoods (Non farm based livelihood options)</li> </ul>	2,100,000	7	27,000,000	93	29,100,000

4. Enhance biodiversity conservation and management through watershed planning and community participation	INV/TA	Improved biodiversity in qualitative and quantitative terms at watershed level	<ul style="list-style-type: none"> <li>• Increase in direct and indirect evidence of presence of key species of flora and fauna in 20 MWS.</li> <li>• 10% increase in tree and other vegetative cover in the 20 MWS.</li> <li>• 20% reduction in incidence of fire in treated MWS.</li> <li>• Cultivation of at least 5 local medicinal and aromatic plants by communities in 20 micro watersheds.</li> </ul>	1,050,000	7	13,500,000	93	14,550,000
5. Improve adaptation to climate change in natural resource based production systems		Enhanced understanding of the impacts of climate change on natural resource based mountain economies and preparation of adaptation strategy	<ul style="list-style-type: none"> <li>• Improved knowledge of the impact of climate change on mountain ecosystems documented and translated into coping strategy.</li> <li>• Formulation of strategy for managing impact of climate change in mountain ecosystems at the end of the project.</li> </ul>	140,000	7	1,800,000	93	1,940,000
6. Documentation of Best (Worst) practices to share within the state as well as nation-wide through the SLEM program		Enhanced knowledge of SLEM, biodiversity conservation and adaptation to climate change in mountain ecosystems for further replication and upscaling	At least 5 to 10 improved and innovative techniques and approaches documented, disseminated and up-scaled within the Uttarakhand state.	175,000	7	2,250,000	93	2,425,000

7. Contingency**				490,000	100		0	490,000
8. Project management				525,000	3.5	6,750,000	96.5	7,275,000
<b>TOTAL</b>				<b>7,490,000</b>		<b>90,000,000</b>		<b>97,490,000</b>

\* List the \$ by project components. The percentage is the share of GEF and Co-financing respectively to the total amount for the component.

\*\* Contingencies of 7% for price and physical fluctuations included during appraisal (March 26, 2009)

## B. FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	<i>Project Preparation*</i>	<i>Project</i>	<i>Agency Fee</i>	<i>Total at CEO Endorsement</i>	<i>For the record: Total at PIF</i>
GEF		7,490,000	749,000	8,240,000	7,700,000
Co-financing**		90,000,000		90,000,000	83,000,000
<b>Total</b>		97,490,000	749,000	98,239,000	90,700,000

\* Please include the previously approved PDFs and PPG, if any. Indicate the amount already approved as footnote here and if the GEF funding is from GEF-3. Provide the status of implementation and use of fund for the project preparation grant in Annex D.

\*\* Co-financing from the ongoing Bank financed Uttarakhand Decentralized Watershed Development Project

## C. SOURCES OF CONFIRMED CO-FINANCING, including co-financing for project preparation for both the PDFs and PPG. (expand the table line items as necessary)

<i>Name of co-financier (source)</i>	<i>Classification</i>	<i>Type</i>	<i>Amount (\$)</i>	<i>%*</i>
World Bank	Multilat. Agency	Soft Loan	70,000,000	78
GEF	Multilat. Agency	Grant		
	Bilat. Agency	(select)		
Project Government Contribution	Government	In Kind	16,850,000	19
Others		In Kind	3,150,000	3
<b>Total Co-financing</b>			90,000,000	100

\* Percentage of each co-financier's contribution at CEO endorsement to total co-financing.

## D. GEF RESOURCES REQUESTED BY FOCAL AREA(S), AGENCY (IES) OR COUNTRY (IES)

<i>GEF Agency</i>	<i>Focal Area</i>	<i>Country Name/ Globate</i>	<i>(in \$)</i>			
			<i>Project Preparation</i>	<i>Project</i>	<i>Agency Fee</i>	<i>Total</i>
World Bank	Land Degradation	India		4,056,000	406,000	4,462,000
World Bank	Biodiversity	India		3,120,000	312,000	3,432,000
World Bank	Climate Change	India		315,000	31,000	346,000

(select)	(select)						
(select)	(select)						
(select)	(select)						
<b>Total GEF Resources</b>					7,490,000	749,000	8,240,000

\* No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

#### E. PROJECT MANAGEMENT BUDGET/COST

<i>Cost Items</i>	<i>Total Estimated person weeks</i>	<i>GEF (\$)</i>	<i>Other sources (\$)</i>	<i>Project total (\$)</i>
<i>Local consultants*</i>	3150	315,000	3,150,000	3,465,000
<i>International consultants*</i>				
<i>Office facilities, equipment, vehicles and communications**</i>		157,500	2,700,000	2,857,500
<i>Travel**</i>		52,500	900,000	952,500
<b>Total</b>		525,000	6,750,000	7,275,000

\* Provide detailed information regarding the consultants in Annex C.

\*\* This includes computers, printers, scanner, photocopier, camera, heat convectors, ACs and a contribution to cover costs of field trips.

#### F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

<i>Component</i>	<i>Estimated person weeks</i>	<i>GEF(\$)</i>	<i>Other sources (\$)</i>	<i>Project total (\$)</i>
<i>Local consultants*</i>	1400	700,000	3,600,000	4,300,000
<i>International consultants*</i>				
<b>Total</b>		700,000	3,600,000	4,300,000

\* Provide detailed information regarding the consultants in Annex C.

#### G. DESCRIBE THE BUDGETED M&E PLAN:

Monitoring and Evaluation will be carried out through the existing arrangements under the Watershed Management Directorate (WMD) in Dehradun which provided guidance on the Monitoring and Evaluation of the ongoing Uttarakhand Decentralized Watershed Development Project. The M&E strategy for the ongoing project will be extended to the GEF activities. Additional monitoring parameters will be added to respond to the GEF specific indicators as outlined in the attached results framework. The following levels of project monitoring are being pursued under UDWDP and the GEF component will be included in all of them:

- A. Internal Monitoring
- B. External Monitoring
- C. Participatory Monitoring and Evaluation (PM&E)
- D. Environmental and Social Safeguard Monitoring and
- E. Evidence based monitoring

**A. Internal monitoring:** At WMD, a Deputy Project Director (DPD M&E) heads a six-member team responsible for initiating and coordinating ongoing monitoring of project implementation and for conducting impact studies. Besides the DPD, the team consists of an economist, a GIS analyst and three assistants for data entry and statistics. From time to time, monitoring teams are constituted with members drawn from various technical wings of the directorate who regularly visit the project area.

Progress in relation to the annual work programs will be documented on a monthly basis through Monthly Progress Reports (MPRs) generated at the division level and consolidated at WMD level. The data will be captured in the Management Information System (MIS). A separate module for the GEF component will be designed. Validation of MIS data will be undertaken through validations in the field on quarterly basis.

Annual work programs will also include timetables for undertaking regular impact studies that will be derived directly from the result framework. Random field visits, monthly meetings, checklists, brainstorming amidst all stakeholders will be undertaken at district level while at regional level this will occur on a half yearly basis. These visits and various forms of interaction with stakeholders will be an integral part of the M&E plan. At the state level, there is a State Steering Committee under the chairmanship of the Principal Secretary, Government of Uttarakhand. The committee consists of secretaries of concerned line departments and of NGO representatives. Besides ensuring inter-departmental coordination at state level, this committee also has the mandate of monitoring and evaluating the progress of the project and may request periodic targeted studies to feed into the ongoing implementation process or for proposing broader policy changes. A distinct M&E effort to monitor and record impacts of GEF activities will be undertaken for reporting purposes to the Indian Council of Forestry Research and Education (ICFRE), the institution that has been selected as the Technical Facilitation organization (TFO) for the SLEM-CPP (see further MSP project *Policy and Institutional Reform for Mainstreaming Upscaling SLEM in India*).

**B. External Monitoring:** An external agency will carry out a baseline survey, concurrent evaluations and the final evaluation. In order to secure quality monitoring and evaluation of the GEF component, the external monitoring arrangements of UDWDP will be extend to the GEF component. At present The Energy and Resources Institute (TERI) provides the external monitoring consultants for UDWDP.

The Terms of Reference of TERI will be modified to include the monitoring arrangements and parameters specific to the GEF initiative. TERI will carry out M&E for the GEF component on a 10% sample basis. At present TERI has collected base line information on 263 attributes from a sample of 100 selected GPs (20% sample basis).

The GEF initiative will be implemented in 20 selected MWS. The same baseline information will be collected for the GEF project but, in addition, GEF specific baseline requirements will be included in the survey. The requisite information will be collected through discussions with village communities, through focus groups discussions across different social and income groups and through questionnaire surveys.

Subsequent to having established the baseline, external monitoring will be undertaken as of the second year and thereafter on an annual basis. All monitoring reports will be submitted to the Ministry of Environment and Forest, ICFRE in its capacity as the TFO of SLEM-CPP, GEF and the World Bank. During the last year of project implementation, a final impact evaluation will be undertaken by the external consultant.

**C. Participatory Monitoring (PME):** The annual work programs for the GEF component will include a plan for implementing a process evaluation to assess how the participatory indicators are performing during

the implementation phase. The participatory indicators in use for evaluation in UDWPD will be modified to include indicators relevant for the GEF additionality.

The PME will be carried out by GP level PME teams constituted in every GP under UDWDP. The PME teams include representatives from all stakeholder groups at GP level. They have the mandate of carrying out participatory monitoring and evaluation of project implementation in respective Gram Panchayat on a half-yearly basis. The project's team of experts from different technical disciplines and for social mobilization will assist in conducting the PME.

To ensure maximum community participation, other community members (apart from the designated 15 members of PME team) will also be encouraged to participate in the exercise. Participatory monitoring will be linked to capacity building of community institutions to allow them to monitor the entire process during both implementation and post implementation.

**D. Environmental and Social Safeguard Monitoring:** This form of monitoring is integrated with the development and implementation of the micro watershed management plans as they are prepared in accordance with the Environmental and Social Management Framework (ESMF). Indicators that will be added to the ESMF in response to the GEF initiative, such as water quantity and quality, soil quality, floral and faunal diversity, employment generated, improved income and changes in labor requirements (of particular interest in relation to women and children) will not only add strength to the evaluation of watershed interventions but also promote community participation in monitoring for sustainability and equity. There is substantial capacity to use GIS packages within WMD. This capacity will be augmented by provide training on the use of remote sensing images in conjunction with up-to-date GIS software packages and equipment.

**E. Evidence based monitoring:** The GEF initiative will generate specific lessons learned, case studies and success stories. This body of new knowledge and experience will constitute evidence based monitoring results that will be captured through all the above levels of monitoring. The data base on lessons learned will be shared with ICFRE and used for knowledge dissemination. IVFRE as necessary, in coordination with WMD will undertake field visits to project sites to record good SLEM practices.

**LINKAGES WITH ONGOING GOVERNMENT M&E:** As mentioned above, there is, at state government level a State Steering Committee under the chairmanship of the Principal Secretary, Government of Uttarakhand. The committee consists of secretaries of concerned line departments and of NGO representatives. Besides ensuring inter-departmental coordination at state level, the committee has the mandate of monitoring and evaluating progress of the project and may request evaluative studies to be undertaken as inputs to understand better the ongoing implementation process or for proposing broader policy changes.

The common watershed guidelines of the Government of India came into force on 1<sup>st</sup> April 2008. As per these guidelines, a state level nodal agency (SLNA) had to be established by Sept. 2008. The SLNA has been mandated with the task of monitoring all watershed projects in the state. After the setting-up of SLNA in the state, the M&E will be linked to the SLNA in order secure continued monitoring post project completion date.

### **THE M&E BUDGET**

3.5 % of the project budget has been earmarked for M&E purposes. Yearly allocations and main tasks will be as per the table below:



Financial Year	Year 1	Year 2	Year 3	Year 4
Activity	Establishment of Baseline	<ul style="list-style-type: none"> <li>• Regular monitoring as per M&amp;E Plan</li> <li>• Implementation of specific studies</li> </ul>	<ul style="list-style-type: none"> <li>• Regular monitoring as per M&amp;E Plan</li> <li>• Implementation of specific studies</li> </ul>	Final Impact Monitoring
Budgeted Amount (US\$)	50,000	20,000	80,000	100,000

## **PART II: PROJECT JUSTIFICATION**

### **A. DESCRIBE THE PROJECT RATIONALE AND THE EXPECTED MEASURABLE GLOBAL ENVIRONMENTAL BENEFITS:**

Uttarakhand is a mountainous state in northern India known for its diverse eco-system, rich faunal and floral biodiversity, rivers, and valleys and a rich cultural heritage. 90 percent of the land is hilly with fragile soils and steep slopes that are highly prone to soil erosion during the monsoon season. The state is losing fertile soil at a rate of up to 10 times the national average each year. This problem is further compounded by declining soil fertility (N= 0.15%; Organic Content= 0.17%, P= 0.05%; 0.13%) due to high erosion (up to 65 t/ha/yr in steep slopes) and nutrient leaching through run-off (up to 37% of rainfall)<sup>1</sup>. Land degradation is therefore a serious problem in Uttarakhand with up to 1.6 million hectares facing varying degrees of degradation<sup>2</sup>.

The total population of the state is 8.48 million (census 2001) out of which most of the poor in the state live in the hills where 38.5 percent of the population is below the poverty line as compared to 26 percent of those living on the plain. A growing human population with a 19.3 percent increase in last decade, combined with an increasing livestock population is resulting in a growing demand for food, fuel-wood, and fodder for livestock. As population and livestock densities increase, the rate of degradation and the dependence on common property resources requiring collective management approaches, also increase. Many parts of the state are experiencing drought-like conditions with acute drinking water shortages. Depletion in source discharges of nearly 30 percent is leading to non-functionality of drinking water schemes<sup>3</sup>.

At present, there is a poor understanding of the impact that climate change and variability will have on natural resource- based mountain ecosystems and their economies and therefore what an adaptation strategy for the mountain regions should consist of. A particular aspect of this is that, due to climate change the temperature line will move uphill bringing with it the agricultural frontier. The climbing temperature line will also affect wild flora and fauna, which will migrate uphill and might be outcompeted in parts of its traditional area of occupation. Both of these consequences will result in modifications of the ecosystems downhill as well as uphill. In a longer perspective, this might influence the management regimes of land that is now outside the jurisdiction of WMD as well as the Forestry Department. The project will endeavor to monitor the consequences of climate change with regard to its potential impact on land management in the frontier zone and develop recommendations on how to deal with them to appropriate state authorities.

The rural population is highly dependent on forest resources for meeting its livelihood security with regard

<sup>1</sup> GB Pant Institute of Himalayan Environment and Development

<sup>2</sup> Survey conducted by Ministry of Rural Development Department of Land Resource in collaboration with NRSA department of Space, 2001

<sup>3</sup> Swajal Uttarakhand, 2008

to fuel, fodder and timber. Fuel-wood consumption per capita varies from 2.8 kg per capita per day at higher altitudes (>2000 mtr) to 1.42 kg per capita per day at lower altitudes (1000-1500 mtr.). This translates into almost 2 million tons of fuel-wood per year for the Uttarakhand Himalayas or about 1.0 million tons of carbon<sup>4</sup>. In addition, the increased interaction of animals with humans entering the forests for collection of fuel-wood and fodder is resulting in rising incidences of man/animal conflicts and this is reflected in people collecting fuel-wood from reserve forests when community forests are unable to meet their demands. Although agriculture is one of the core economic activities for over 80 percent of the population, the role of forests in sustaining the agriculture and animal husbandry system is immense. According to an estimate, to generate one unit of energy from agriculture, 10-12 energy units of forest biomass are used<sup>5</sup>.

Such high levels of dependency on forests, combined with the depletion of their resources, implies that a continuous supply of environmental services from the forest will not be possible to conserve without enabling the poor people to have access to modern and efficient energy sources, and through other interventions that will reduce the pressure on forests and the environmental services they provide; the very future of forests and forest ecosystems are under threat. The challenge is compounded by the fact that the resource management system in the mountains is characterized by small and fragmented holdings that, to about 80 percent are managed by women. These holdings lack modern technological inputs for crop cultivation, storage and value addition. They also suffer from poor infrastructural facilities with regard to transport, and marketing. The pressure on bio-diversity resources is very high due to the population's high dependence on forest-based biomass for energy, fodder and other environmental services.

The GEF project is linked to the World Bank supported Uttarakhand Decentralized Watershed Development Project (UDWDP) that in turn draws on the positive experiences from the Integrated Watershed Development Hills-II project that was completed in 2005. The UDWDP is consistent with the World Bank's Country Assistance Strategy that has a priority to "support better management of watersheds, while enhancing the livelihood opportunities of the poor". The project focuses on protection of watersheds, along with community-level capacity building and promotion of livelihoods. The mid-Himalayas cover about one third of the state and covers eleven out of thirteen districts of the state. The project is spread over an area of around 238,000 ha, ranging from 700 m to 2000 m altitude in 76 selected micro watersheds in the middle Himalayas. About 451 Gram Panchayats (GP) identified in 18 blocks of 11 districts are participating in this project. A total population of 254,000, living in the project area will benefit from it.

The development objective of the UDWDP is to improve the productive potential of natural resources and increase incomes of rural households in selected watersheds in Uttarakhand using socially inclusive, institutionally and environmentally sustainable approaches. A secondary objective is to support policy and institutional development in the state to harmonize watershed development projects and programs across the state in accordance with best practices. The project has three groups of activities: i) participatory watershed development and management, ii) enhancing livelihood opportunities and iii) institutional strengthening. Two main community institutions involved in project implementation are Van Panchayats (VP), responsible for management of village forest, including regulation of usufruct and revenue sharing arrangements of forest resources, and Gram Panchayats (GP), the local government authority at village level with an executive body elected by the villagers and with responsibility for administration, management and development of village resources.

The GEF supported project will have the following activities:

- i) Watershed planning through community participation. 20 out of a total of 76 Micro Watersheds (MWS) included in the UDWDP supported project will be included focusing on (i) mainstreaming

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<sup>4</sup> Bhatt and Sachan, 2004, Vide Lead India, 2007

<sup>5</sup> Lead India, 2007

sustainable watershed management approaches into Gram Panchayat (GP) watershed development plans; (ii) enhancing biodiversity richness, in quantitative and qualitative terms at watershed level through domestication and cultivation of threatened medicinal and aromatic plants; and (ii) enhancing the understanding of the impact of variability and climate change impacts on the mountain ecosystems and help devise adaptation and mitigation strategies. In addition to meeting the selection criteria of UDWDP which includes erodability, poverty incidence and absence of basic infrastructure, these 20 MWS will be of so called 3<sup>rd</sup> or 4<sup>th</sup> drainage order meaning that that the stream that flows through them has bifurcated only three or four times since its origin. These watersheds are thus located in high altitudes and located close to the agricultural frontier. The GEF project alternative will thus purposefully target 20 micro watersheds that have high erosion indices, which are left behind in terms of socio-economic and other criteria, are predominantly situated close to the agricultural frontier and therefore are especially vulnerable to climate variability and change. Watersheds are the focus because they constitute an ecosystem consisting of biophysical resources such as soil and water, along with vegetation in the form of trees, bushes, grasses and herbs that provide sustenance for livestock production and farming as well as for a number of other enterprises.

Furthermore, by adopting a planning approach based on the watershed principle (as opposed to only village development planning), the project will be able to address important externalities that would otherwise fall outside a village development planning approach which normally focuses exclusively on a village's own priorities. In particular, treatment, through for example tree planting in areas not covered by village authorities may not be included in their plans. However, the treatment of "common" areas, areas falling outside the jurisdiction of village authorities, is essential to ensure full soil erosion control, halt of biodiversity loss and optimal water management for the benefit of the natural environment as well as for agriculture and other domestic water use, i.e. regulating vital ecosystem functions. The result of this approach will be an increase in agricultural productivity and a disproportionate benefit to the most disadvantage groups as they depend more on common property resources than those with access to more land. Through this targeted approach on the most vulnerable areas, the impact of the project will be positive both in socio-economic and environmental terms.

This component of the GEF supported project alternative will result in mainstreaming sustainable watershed management approaches into Gram Panchayat<sup>6</sup> (GP, see further below) watershed development plans for particularly sensitive areas. These plans will have a focus on integrated treatment of watersheds including parts of micro-watersheds lying outside the authority of GPs but under the management of the Forest Department. As explained in Part III of this document, the plans will be endorsed at all levels of local and state government thereby ensuring proper implementation resulting in reduction in soil erosion rates, enhancement of biomass and enhanced availability of water in the watershed throughout the year.

ii) Controlling land degradation through the SLEM approach at watershed level. The MWS development plans will include a number of activities that have been specified during the planning phase and focus on integrated treatment of watersheds. The type of activities that will be undertaken include soil erosion bunds, vegetative barriers and agro-forestry and, with a focus on non-arable, communal and government lands such initiatives as forest regeneration, pasture and silvi-pasture development, construction of soil-erosion bunds, vegetative barriers, etc. Some activities not directly related to watershed treatment but important for improving market accessibility for example, will include upgrading of potable water supplies and upgrading of link roads, bridle paths and mule tracks. In line with the procedures and rules that have been developed for the UDWDP, communities will prioritize (with the help of project staff), implement, operate and maintain village development and watershed investments in their MWS. Communities will be required to contribute towards the costs of each sub-project and undertake to operate and maintain the investments. The GPs will commit itself to ensuring that the cost sharing norms and other rules that have been established under the UDWDP will be followed

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<sup>6</sup> Gram Panchayat is the Local Government authority at village level

iii) Reduce pressure and dependence on the natural resource base through fostering markets for Non-timber Forest Products (NTFP): The role of the forest in the ecosystem and for the livelihood of the rural population has been discussed above. The forest is a source of firewood and timber as well as fodder in addition to the role it plays in a well functioning ecosystem. In order to safeguard an intact forest environment and at the same time secure a steady supply of firewood, timber and fodder and reduce the incidence of forest fires, the abundant availability of the Chir Pine needle will be exploited through the introduction of a technical solution for utilization and conversion of Chir pine<sup>7</sup> biomass into briquettes for meeting household and other energy requirements of communities. Such a technological breakthrough would allow households to switch from wood fuel to Chir pine briquettes and thereby reduce the pressure on the forest and reduce substantially the time women and girls now spend on collecting firewood, time they would be able to spend on other activities in support of their families. Through the introduction of pine briquettes on the market, they will contribute to diversifying family income and to a sustainable livelihood. As the project area lies in the chir pine zone, pine needles are abundantly available in the area.

The pine briquette technology has been successfully piloted under the UDWDP and will be scaled up. Women Self Help Groups will be encouraged to take up the activity as an income generating activity and they will be supported through the development of market linkages. The abundance of pine needles renders them a fire hazard during the summer season. A positive secondary effect of the chir pine briquette initiative will be a reduction in the incidence of fire in the treated micro watersheds. It is true that a well functioning Chir pine forest ecosystem depends on regular fires, but such fires are required about every seven years while currently the fires occur every second or third year thus leading a degeneration of the forest and other species thriving in this ecosystem.

iv) Enhance biodiversity conservation and management through watershed planning and community participation: In order to abate soil erosion and loss of forest biomass that both lead to a decline in agricultural production and an expansion of the cultivated area accompanied by loss of biodiversity, it is necessary to increase agricultural productivity in the hills. The GEF project alternative will contribute to enhance biodiversity in quantitative and qualitative terms at watershed level through adoption of improved packages of practices including crop diversification and intensification that in turn will consist of introducing improved varieties of traditional crops and the introduction of high value crops. The packages will also include better input support and improved pre and post harvest practices. Although emphasis on crop diversification to high value crops in which the area has an advantage will be made, care will be taken to ensure that traditional varieties of crops are not lost and value addition to traditional production streams are pursued. Creation of alternative income generating activities will be an important component and to this effect cultivation of threatened medicinal and aromatic plants will be an important activity under this component.

v) Improve adaptation to climate change in natural resource based production systems: As mentioned above, the consequences of climate variability and change in the Uttarakhand mountain ecosystem are not yet well understood. The temperature gradient will move uphill, impacting wild flora and bring with it the agricultural frontier. The melting of glaciers that is already taking place at an average rate of 20-22 meters per year may lead to many rivers becoming seasonal in the future, thus affecting the natural as well as the cultivated ecosystem with unforeseen economic and livelihood consequences.

This project will help enhance the understanding of the impact of climate change and variability on the mountain ecosystems that are particularly sensitive to consequences of climate change and help devise adaptation or coping strategies with a focus on integrate land management, biodiversity concerns and consequences of climate variability and change on sustainable management regimes and livelihood strategies for such marginal areas. It is estimated that the entire project period will be required to study and understand

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<sup>7</sup> **Pinus Roxburghii**

the climate change issues and thereafter to formulate the strategy. A first step in this process has been taken through a scene-setting workshop organized in cooperation with the Indian institute TERI (The Energy and Resource Institute) of which the Chairman of IPCC is the Director and in which he participated.

vi) Documentation of best (worst) practices to disseminate within the state as well as nation-wide through the SLEM Country Partnership Program: As a component project of the SLEM Country Partnership, the lessons learned from this project (good and bad) will be shared not only within the state of Uttarakhand but also nation-wide. The lesson from this project will be of particular significance for other mountainous regions of India but possibly also beyond to other mountainous countries in South Asia. Lessons learned will be documented through short studies, publications, short films and documentaries aimed enhancing the knowledge of SLEM, biodiversity conservation and adaptation to climate change in mountain ecosystems. There will be approximately to practices and approaches identified, documented and disseminated as part of this component. Regular communication and coordination under this component with the Ministry of Environment and the ICFRE, the Technical Facilitation Organization will ensure avenues for knowledge dissemination beyond the boundaries of this project and more importantly for mainstreaming science based policy improvements in the national land management policies.

vii) Project Management, Monitoring and Capacity Building: This component will provide resources for the incremental project operation and management cost, hiring technical and non technical staff on contractual basis. For monitoring and evaluation, external consultant will be hired and short studies commissioned from time to time. In addition, the component will also finance the hiring of Financial Review Consultant and capacity building of staff including exposure visit and workshops.

Global and local benefits with regard to land degradation are closely interlined as stated by GEF in the goals for the land degradation focal area. Global environmental benefits will be achieved through simultaneously supporting local and state level objectives related to reducing environmental degradation through the watershed approach. Parameters that will be measured to demonstrate progress will include reduction in soil loss, increased water availability throughout the year, increase in biomass in treated landscapes, reduction in forest fire and consequently increase of the carbon stock in treated landscapes.

The global benefits with regard to biodiversity will be related to a halt in biodiversity degradation in the highly sensitive mountain environment of northern India. This will be measured through increased presence of key indicator species including their migration uphill as a consequence of climate change. It will also be measured through frequency in quantity and quality of medicinal and aromatic plants in the wild, as they will be safeguarded by developing sustainable management approaches (including cultivation). Through rendering such plants an economic and commercial value, the populations will have an interest in, and motivation for developing sustainable management and harvesting techniques for them. These benefits will be achieved through a reversal of the forest degradation trend and through a regeneration of deforested areas. Linkages with institutions and organizations active in both the government and non-governmental sectors will be established to avoid duplication of efforts and to tap their expertise in the areas of medicinal plant cultivation, value addition and marketing.

All these measures combined, will significantly add to the long-term security of globally threatened, fragile and vulnerable mountain ecosystems. The attached results framework lists the specific indicators that will be monitored to ensure that the watershed plans deliver the results for which they will be designed.

## **B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL PRIORITIES/PLANS:**

India has a number of strategies and plans that reflect its growing concern for, and dedication to addressing the growing threat to the country's natural resource base: the National Environment Policy (2006), the National Action Plan (NAP) to Combat Desertification (2001), and the National Policy and Macro level Action Strategy on Biodiversity (India's BASP). India's BASP emphasizes the importance of sustainable use of biodiversity as an important strategy for its preservation. It makes references to the National Conservation Strategy, the Policy Statement on Environment and Development, to the National Forest Policy and the National Wildlife Action Plan as other strategic and policy statements that are also underlining the importance of sustainable use as a conservation approach.

India's National Communication to the UNFCCC underlines the importance of adaptation to climate change in order to cope with its effects. The strategy emphasizes that the approach that have been developed for watershed management is applicable also with regard to better adapting to climate variability and change. The key factor that needs to be managed is water and in particular in marginal areas that have been left behind by the green revolution. It is in these areas that production needs to increase in order to meet the needs of its people. The National Land use policy and the National Water Policy emphasize the importance of addressing land degradation in a development context.

In 2003, the Ministry of Rural Development issued Guidelines enabling local government institutions to have a more meaningful role in planning, implementation and management of watersheds and economic activities in rural areas. Accordingly, local government institutions are legally responsible for a wide range of functions (e.g. land improvement, soil conservation and farm forestry) that cover the entire range of operations that define a watershed management program.

The 11th Five Year Development Plan (2007-2012) gives considerable attention to natural resource management saying, "Sustainable management of natural resource is presently the most critical concern at all levels." In addition, there are a number of national programs managed by national level ministries. Thus, the Ministry of Agriculture is responsible for implementing the National Watershed Development Project in rain-fed areas, the Soil Conservation in the Catchments of the River Valley Project and the Watershed Development Project in Shifting Cultivation areas project. The National Rainfed Area Authority (NRAA), in coordination with the Planning Commission has formulated 'common guidelines for watershed development projects' in order to have a common understanding and approach by all ministries implementing watershed projects. The guiding principles of the new guidelines are based on equity and gender sensitivity, decentralization, supporting institutions with responsibility for social mobilization, high emphasis on community participation, capacity building, technological inputs, and monitoring, evaluation and learning. The NRAA guidelines have been integrated into the design of the Uttarakhand Decentralized Watershed Development Project as well as the GEF alternative.

### **C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS:**

The Land Degradation SP1, i.e. Supporting Sustainable Agriculture and Rangeland Management is relevant as are Strategic Objective 2 and SP4 and 5 under the Biodiversity focal area. The project will contribute to developing an enabling environment that will place Sustainable Land and Ecosystem Management (SLEM) in the mainstream of development policy and practices at the regional, national and local levels. The project will address the issues of land degradation and water source protection, biodiversity conservation and management leading to sustainable livelihoods. It will further initiate the development of adaptation strategies required as a result of rising temperature and consequential adjustment in land use patterns. The GEF inputs are expected to lead to enhancement in productivity and in sustaining the various institutions created under the project.

#### **D. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:**

The project will contribute to the implementation of the World Bank's country assistance strategy (CAS) through accelerating growth and pro-poor rural development based on a sustainable utilization of the natural resource base. Through its link with the UDWDP it is linked to all the initiatives referred to in section B above that the Government has put in place to further the sustainable development of the natural resource base and in particular the sustainable development of watersheds. Further, this project is part of the SLEM-CPP and national level coordination of projects under the partnership will be carried out through the established arrangements with MoEF and ICFRE. ICFRE will thus be responsible for mainstreaming and facilitating the scaling up of lessons learned from projects in the partnership. In order to allow for this mainstreaming and upscaling process to proceed efficiently, each project under the SLEM-CPP will submit progress and evaluation reports to ICFRE which will, in turn stay in close contact with each one of them in order to be able to carry out its mandate effectively.

#### **E. DESCRIBE THE INCREMENTAL REASONING OF THE PROJECT:**

The business as usual scenario would be the on-going World Bank supported Uttarakhand Decentralized Watershed Development Project (UDWDP). It is clear that the World Bank supported project will go a long way in addressing the fundamental issues that have been described in this document. The support to village organizations, support in terms of improving the productivity of the traditional agricultural system and basic support in terms of watershed planning are all important components of that project. It is also clear that the state government of Uttarakhand will benefit from these experiences and lessons learned from the World Bank supported project in designing and implementing its own support to watersheds. These benefits will go beyond the scope this project through the knowledge sharing mechanisms established under the SLEM CPP. The business as usual scenario is thus likely to result in a real momentum for rolling out a massive effort for gradual improvement in land management in the mountainous regions of the state.

The incremental value of the GEF alternative is in the following features:

- (1) **Focus on highly sensitive selected micro-watersheds:** Focuses on a select number of watersheds that are suffering from intense erosion, low socio-economic status, most of them situated close to the agricultural frontier. These factors combined lead to severe land degradation, high threat to biodiversity and unknown consequences of climate change. The GEF resources will be targeted to the select watersheds to help in providing additional technical assistance for eliciting community participation in rehabilitation of degraded watersheds, carbon emission reduction, biodiversity conservation and management, development of sustainable livelihoods and development and adoption of cleaner and energy efficient fuels.
- (2) **Integrated approach to watershed management:** The expected incremental benefits resulting from the integrated approach that the GEF alternative will pursue are protection of ecosystem integrity leading to long-term conservation of biodiversity thus providing resilience to future shocks (including those generated through increased climate variability and climate change). It will also include improved management of soil and water leading to enhanced direct use values such as increased availability of surface and groundwater for domestic use, irrigation and livestock, and enhanced indirect values such as increased carbon sequestration, reduction in top soil erosion and reduced vulnerability to flooding and erosion during extreme events. Improved soil and water management will further result in increased production and delivery of high value and environmentally beneficial produce resulting in an enhanced value of the natural resource base that in turn will be reflected in investments in its sustainability and productivity.

- (3) **Adaptation to climate change in mountainous ecosystems:** GEF resources for piloting an operational approach to adaptation will contribute to a study for enhancing the understanding of impacts of climate change on natural resource based mountain economies. Such a study will result in better understanding of the consequences of climate change such as the ‘agriculture frontier’ moving uphill and affecting the prevalent land use and land management systems in the state. Improved understanding of the impact of climate change on natural resource based mountain economic systems will allow for preparation of an adaptation strategy in response to those changes.
- (4) **Documentation and dissemination of lessons learnt and practices:** The integrated approach to addressing these factors which the GEF resources will allow for is an incremental value that goes beyond the zone of intervention of the UDWDP. The lessons will be disseminated to the rest of the Uttarakhand state and other mountainous states in India through its inclusion in the SLEM partnership.

**F. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED AND OUTLINE RISK MANAGEMENT MEASURES:**

The major risks with this project are related to: (i) the extent of people’s participation in project activities related to biodiversity conservation and management (ii) social discipline while protecting common property resources such as natural forest and plantation sites, (iii) risk of social conflicts in villages based on conflicting interests of different stakeholder groups, (iv) shortcomings in the marketing system for both inputs and produce that would slow down the development of income generating activities,(v) sustainability of interventions after the withdrawal of the project, and (v) natural calamities like earthquakes, landslides due to excessive rain and uncontrolled breakout of fire.

The risks will be addressed through intensive and sustained efforts at capacity building of communities. An important aspect of the project is therefore to build capacity at village and community level to plan, implement and maintain new initiatives that will lead to their improved livelihood. Provided such improvement can be demonstrated within a reasonable time-frame, the risk for failure in the decentralized approach should be minimal. Indeed, experience has shown that a top down approach has not worked in the past resulting in a break down of innovations once external inputs were no longer available. With regard to natural calamities, the risk for landslides due to heavy rain and forest fires triggered by Chir pine needles should be reduced over time as properly managed watersheds with adequate vegetative cover will be much less prone to landslides than a deforested area. Similarly, provided Chir pine needles can be used for briquette fabrication, forest fires triggered by them should reduce significantly. Climate models are inconclusive with regard to the impact of climate change in this part of the mountain regions of India but the likely affect is that rainfall intensity will increase while the total amount well adapted to respond to the likely affects of climate change of precipitation might not change significantly.

**G. EXPLAIN HOW COST-EFFECTIVENESS IS REFLECTED IN THE PROJECT DESIGN:**

The GEF additional financing will build upon the institutional system that has been already established under the UDWDP. Furthermore, the baseline studies and experiences learnt from the four years that UDWDP has been under implementation will ensure that the GEF additional funding will be targeted at well defined initiatives related to watershed management adding an important global dimension. This will be done in support of the project’s broader agenda that include substantive support to capacity building at village and other local government levels. The impact of the GEF funds can therefore be maximized at the local level. In addition, through this project’s linkage to the SLEM CPP, the lessons learned will feed into a larger context and be made available for upscaling and mainstreaming not only within the state of Uttarakhand but in also in other states. Technical innovations will be of particular interest for other mountainous states in India while experiences related to villages and local government level planning and management of watersheds and



the natural resource base will be of wider applicability.

### **PART III: INSTITUTIONAL COORDINATION AND SUPPORT**

#### **A. PROJECT IMPLEMENTATION ARRANGEMENT:**

1. The World Bank is the GEF agency for the project, which is a well targeted additionality to the on-going Uttarakhand Decentralized Watershed Development Project (UDWDP). The World Bank is the main partner in technical as well as in financial terms of the state of Uttarakhand in the UDWDP. The project is included in the project pipeline of SLEM Country Partnership Program led by the Bank. Technical assistance has been provided by the Bank during project preparation and throughout its implementation. Regular supervision and monitoring of the project implementation progress will be carried out through regular supervision missions as per World Bank operational procedures. The Government of India regularly monitors and reviews the progress of implementation of the project through its Department of Economic Affairs (DEA) and the Ministry of Agriculture, which is the nodal ministry for the ongoing UDWDP project. The MoA is represented in the GEF Empowered Committee Chaired by MOEF.
2. **Government of Uttarakhand:** At the State Government level, a ‘Secretary Watershed Development’ is in place to lead watershed developments in the state. A dedicated watershed management directorate is functioning as the nodal agency for watershed development in the state. The Watershed Management Directorate (WMD) under the leadership of a Chief Project Director will be responsible for the overall implementation of the project. The main responsibility of WMD will include (amongst others) to ensure: 1) that adequate staffing is provided at all levels to implement the project and achieve its objectives, 2) the orderly implementation of various components 3) ensure that adequate and timely trainings are provided to all stakeholders, including project staff, to fulfill requirements 4) that project accounts are maintained in accordance with the project’s financial regulations, 5) that system are in place for timely release of funds to the concerned project units and implementing user groups, 6) that baseline, midterm and end of project reports are delivered as per work plan and schedule, 7) physical and financial progress is monitored through the project’s Management Information System (MIS), 8) that the project is implemented in accordance with its work program and comply with its Environment and Social Management Framework (ESMF) and other such requirements as agreed with the World Bank and GEF.
3. **State Steering Committee:** A state level Steering Committee under the chairmanship of the Principal Secretary and the Forest and Rural development Commissioner is established to provide overall guidance, policy support and to facilitate inter departmental coordination. The Chief Project Director is the secretary of the committee. The committee is composed of representatives from relevant Government departments such as rural development and agriculture. Up to 50% of the committee members are elected representative of PRIs, Zila Panchayat (local government institutions), NGOs, Academic and technical institutions.
4. **District/ Divisional Level:** Below the Chief Project Director (CPD), the WMD has two Project Directors (PDs), one each for Garhwal and Kumaon region. Below the PD are Deputy PDs (DPDs) each with a number of Multi-disciplinary Teams (MDTs) made up of 4-6 specialists. The MDTs include experts in the areas of horticulture, agriculture, animal husbandry, minor irrigation, forestry and community mobilization. The community mobilizers are being provided with two regional level field NGOs (One each in Garhwal and Kumaon region). The MDTs facilitate interaction with the GPs with regard to community mobilization, participatory appraisals and need assessments to be undertaken at village level. The MDTs are

assisted by village motivators who are members of the villages. The MDT is responsible for: 1) dissemination of key messages to the community regarding the project's rules, procedures and terms of participation, 2) orienting the community on the project objectives, 3) facilitating the formation of Revenue Village Committees (RVC) and other appropriate users groups, 4) facilitating the preparation of MWS level plans, 5) facilitating general meetings of the Gram Sabha or User groups for approval of plans, 6) assisting in transmitting the MWS plans to the DPDs for appraisal, 7) ensuring smooth and timely fund flow, 8) ensuring that timely training is provided to all stakeholders requiring such training in order to implement the project in accordance with guidelines.

5. **Revenue Village Committee and other User Groups:** The responsibility for preparation of the micro watershed plans at the village level will lie with the revenue village committee. The planning process will be participatory and technical support will be provided by the MDT. All the RVC level plans will be consolidated at the micro watershed level by the concerned MDT and subsequently forwarded to DPD for technical and financial appraisal and final approval. Actual implementation of the activities as identified in the MWS plans will be carried out by the concerned RVC and other User Groups, Vulnerable groups, Self-Help Groups (SHGs) or individuals. In case all the above mentioned groups express inability to implement any given activity and this is communicated in writing to the DPD concerned, the activity may be carried out departmentally.


#### **PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF:**

The project is in total alignment with the PIF as endorsed by the GEF CEO on 15<sup>th</sup> September 2008. The minor cost differences at project appraisal are a result of the detailed activity planning and the inclusion of 7% contingencies for price and physical contingencies. At the time of the appraisal the monthly accumulated inflation for March 2009 based on CIP index was 7.8% as reported by Indian Ministry of Labor. Contingencies are calculated on the baseline cost of activities where variations could occur during implementation. The total co-financing was increased which resulted in increase total project cost which is higher than PIF.

The 11<sup>th</sup> development plan and the approval of guidelines for watershed management have further strengthened the rationale for the project and the specific contributions that the GEF alternative will bring to it. The SLEM Country Partnership Program is now further developed and it is evident that the suite of projects that are now under development (most of the PIFs have been submitted and approved by GEF) will address land degradation, biodiversity and climate change challenges, which India is facing in a comprehensive and mutually supportive manner. The function of the upscaling and mainstreaming project under the SLEM will ensure that the experiences gained in the suite of SLEM projects will be shared in a broad constituency and made available to other actors to pursue. Through that function, SLEM component projects will also be able to learn from experiences from other organizations and projects and their experiences and lessons learned can gradually be incorporated into this and other SLEM projects.

**PART V: AGENCY(IES) CERTIFICATION**

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for CEO Endorsement.

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Steve Gorman <i>GEF Executive Coordinator The World Bank</i>		April 15, 2009	Malcolm Jansen <i>Regional GEF Coordinator (SAR) World Bank</i>	202 458- 2748	Mjansen@worl dbank.org

**ANNEX A: PROJECT RESULTS FRAMEWORK**  
**Sustainable Land, Water and Biodiversity Conservation and Management for Improved Livelihoods in Uttarakhand Watershed Sector**

<b>Project Development Objective</b>	<b>Result/Outcome Indicators</b>	<b>Use of Result Information</b>
<ul style="list-style-type: none"> <li>To restore and sustain ecosystem functions and biodiversity while simultaneously enhancing income and livelihood functions, and generating lessons learned in these respects that can be up-scaled and mainstreamed at state and national levels;</li> </ul>	<ul style="list-style-type: none"> <li>20 number of Micro watershed management plans completed and under implementation</li> <li>10% increase in livelihood opportunities in treated areas;</li> </ul>	<ul style="list-style-type: none"> <li>At supervisory and mid-term assessments, review performance of project planning and implementation and make recommendations for future interventions</li> </ul>
<b>Intermediate Results</b>	<b>Results Indicators for Each Component</b>	<b>Use of Outcome Monitoring</b>
Community participatory watershed planning expanded with an additional focus on local benefits of sustainable land and ecosystem management	<ul style="list-style-type: none"> <li>Sustainable Watershed Management mainstreamed into 20 GP plans including parts of watersheds for which two or more GPs have shared governance responsibility;</li> </ul>	Measure progress at regular supervision and yearly monitoring and data collection occasions and adjust intervention practices according to need.
Controlling land degradation through the SLEM approach at watershed level	<ul style="list-style-type: none"> <li>20-30% of the area in selected MWS under improved SLEM techniques;</li> <li>Increase in availability of water in the dry season by 5% in the treated MWS</li> <li>10% increase in tree and other vegetative cover in the 20 MWS.</li> <li>Implementation of 5 to 10 alternative technologies and approaches for enhancing water availability for agriculture and other domestic use</li> </ul>	Measure progress at regular supervision and yearly monitoring and data collection occasions and adjust intervention practices according to need.
Reduce pressure and dependence on the natural resource base through fostering Markets for NTFPs	<ul style="list-style-type: none"> <li>Reduction in dependency of 2000 households on forest for fuel wood.</li> <li>At least 20% of targeted households enter market with pine briquettes (produced from pine needles).</li> <li>10% increase in opportunities for sustainable alternative livelihoods (Non farm based livelihood options)</li> </ul>	Measure progress at regular supervision and yearly monitoring and data collection occasions and adjust intervention practices according to need.
Enhance biodiversity conservation and management through watershed planning and community participation	<ul style="list-style-type: none"> <li>Increase in direct and indirect evidence of presence of key species of flora and fauna in 20 MWS.</li> <li>50% reduction in incidence of</li> </ul>	Measure progress at regular supervision and yearly monitoring and data collection occasions and adjust intervention practices according to need

	<p>fire in treated MWS</p> <ul style="list-style-type: none"> <li>• Cultivation of at least 5 local medicinal and aromatic plants by communities in 20 micro watersheds.</li> </ul>	
Improve adaptation to climate change in natural resource based production systems	<ul style="list-style-type: none"> <li>• Improved knowledge of the impact of climate change on mountain ecosystems documented and translated into coping strategy.</li> </ul>	Measure progress at regular supervision and yearly monitoring and data collection occasions and adjust intervention practices according to need
Documentation of Best (Worst) practices to share within the state as well as nation-wide through the SLEM program	<ul style="list-style-type: none"> <li>• At least 5 to 10 new and innovative techniques and approaches documented, disseminated and up-scaled within the Uttarakhand state</li> </ul>	At supervisory and mid-term assessments, review effectiveness of SLEM approaches and techniques and make recommendations for future interventions

**Arrangements for Results Monitoring for the Project**  
**Sustainable Land, Water and Biodiversity Conservation and Management for Improved Livelihoods in Uttarakhand Watershed Sector**

Outcome Indicators	Target Values				Data Collection and Reporting		
	Baseline YR 1	YR2	YR3	YR4	Frequency of Reports	Data Collection Instruments	Responsibility for Data Collection
<b>Project Development Objective</b>							
20 number of Micro watershed management plans completed and under implementation	Identification of target groups and land; definition of proposed interventions and initiation of interventions	Increase to 20% of target value	Increase to 60% of target value	Increase to 100% of target value	Baseline, annual and final evaluation report	Evaluation protocols and through field surveys	External consultants under super vision of WMD
10% increase in livelihood opportunities in treated areas	Baseline available	Not Measured	5% increase over baseline	10% increase over baseline	Baseline, interim reports year 3 and 4 and final impact evaluation	Evaluation protocols and through field surveys	External consultants under super vision of WMD
<b>Watershed planning through community participation</b>							
Result/Outcome Indicators	Baseline YR 1	YR2	YR3	YR4	Frequency of Reports	Data Collection Instruments	Responsibility for Data Collection
Sustainable Watershed Management mainstreamed into 20 MWS plans including parts of watersheds for which two or more GPs have shared governance responsibility;	100 % plans finalized at the end of YR1	20 % implementation of MWS plans completed	60 % implementation of MWS plans completed	100 % implementation of MWS plans completed	Annual reports	Evaluation Protocols prepared by contracted consultants	External consultants in sample villages under super vision of WMD
<b>Controlling land degradation through the SLEM approach at watershed level</b>							
Result/Outcome Indicators	Baseline YR 1	YR2	YR3	YR4	Frequency of Reports	Data Collection Instruments	Responsibility for Data Collection
20-30% increase of area in targeted	Identification of interventions and	Increase to 20% of target value	Increase to 60% of	Increase to 100% of target	Baseline, annual reports and final	Evaluation protocols and	External consultants in

MWSs under improved SLEM techniques	target group and initiations of activities		target value	value	evaluation report	through field surveys	sample villages under super vision of WMD
Increase in vegetative cover by 10% in the treated 20 MWS	Establish baseline	Increase to 20% of target value	Increase to 60% of target value	Increase to 100% of target value	Baseline, annual reports and final evaluation report	Evaluation protocols and through field surveys	External consultants in sample villages under super vision of WMD
Implementation of 5 to 10 alternative technologies and approaches for enhancing water availability for agriculture and other domestic use	Identification of interventions and target group and initiations of activities	At least 2 techniques and approaches under upscaling	At least 5 techniques and approaches under upscaling	5 to 10 techniques and approaches under upscaling	Annual monitoring review	Evaluation protocols and reports	Project Team in cooperation with WMD
<b>Fostering Markets for NTFPs</b>							
<b>Result/Outcome Indicators</b>	<b>Baseline YR 1</b>	<b>YR2</b>	<b>YR3</b>	<b>YR4</b>	<b>Frequency of Reports</b>	<b>Data Collection Instruments</b>	<b>Responsibility for Data Collection</b>
Reduction in dependency of 2000 households on forest for fuel wood	Not measured because MWS plans will be under preparation	Reduction in dependency of 20% households	Reduction in dependency of 60% households	Reduction in dependency of 100% households	Baseline, annual reports and final evaluation report	Evaluation protocols and through field surveys	External consultants in sample villages under super vision of WMD
At least 20% of targeted households enter market with pine briquettes (produced from pine needles).	Not measured because MWS plans will be under preparation	5% of targeted households enter market	10% of targeted households enter market	20% of targeted households enter market	Baseline, annual reports and final evaluation report	Evaluation protocols and through field surveys	External consultants in sample villages under super vision of WMD
10% increase in opportunities for sustainable alternative livelihoods (Non	Establish baseline	Not measured	5% increase over baseline	10% increase over baseline	Baseline and final impact evaluation	Evaluation Protocols prepared by contracted consultants	External consultants in sample villages under super vision of WMD

farm based livelihood options)							
<b>Biodiversity conservation and management through watershed planning and community participation</b>							
<b>Result/Outcome Indicators</b>	<b>Baseline YR 1</b>	<b>YR2</b>	<b>YR3</b>	<b>YR4</b>	<b>Frequency of Reports</b>	<b>Data Collection Instruments</b>	<b>Responsibility for Data Collection</b>
Increase in direct and indirect evidence of presence of key species of flora and fauna in 20 MWS.	Establish baseline through selection of key indicator species	Not measured	5 % increase over baseline	10 % increase over baseline	Baseline, annual reports and final impact evaluation	Evaluation Protocols prepared by contracted consultants	External consultants in sample villages under supervision of WMD
20% reduction in incidence of fire in treated MWS	Establish baseline	Not measured	60% of target value reached	100% of target value reached	Annual status reports and final evaluation report		
Cultivation of at least 5 local medicinal and aromatic plants by communities in 20 micro watersheds	Not measured because MWS plans will be under preparation	20% of target value reached	60% of target value reached	100% of target value reached	Annual status reports and final evaluation report		
<b>Adaptation to Climate Change</b>							
<b>Result/Outcome Indicators</b>	<b>Baseline YR 1</b>	<b>YR2</b>	<b>YR3</b>	<b>YR4</b>	<b>Frequency of Reports</b>	<b>Data Collection Instruments</b>	<b>Responsibility for Data Collection</b>
Study on impact of climate change on mountain ecosystems completed.	Preparations for study completed	Study initiated	Study ongoing	Study completed	Annual monitoring review	Status reports	WMD and institution/ consultant conducting the study
Formulation of strategy for managing impact of climate change in mountain ecosystems at the end of the project			Formulation of strategy initiated	Strategy completed	Annual monitoring review	Status reports	WMD and institution/ consultant conducting the study
<b>Documentation of Best (Worst) practices to share within the state as well as nation-wide through the SLEM program</b>							



<b>Result/Outcome Indicators</b>	<b>Baseline YR 1</b>	<b>YR2</b>	<b>YR3</b>	<b>YR4</b>	<b>Frequency of Reports</b>	<b>Data Collection Instruments</b>	<b>Responsibility for Data Collection</b>
<ul style="list-style-type: none"> <li>At least 5 to 10 improved and innovative techniques and approaches documented, disseminated and up-scaled within the Uttarakhand state</li> </ul>	Initiation of documentation and coordination with Uttarakhand state	Continued documentation and coordination with Uttarakhand state. At least 2 techniques and approaches under upscaling	Continued documentation and coordination with Uttarakhand state. At least 5 techniques and approaches under upscaling	Continued documentation and coordination with Uttarakhand state. 5 to 10 techniques and approaches under upscaling	Annual monitoring review	Status reports and documentation through print, audio and video	Project Team in cooperation with WMD

## ANNEX B: RESPONSES TO PROJECT REVIEWS

(from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF)

### *Responses to STAP comments:*

- With regard to **comment 3 in the STAP submission** it should be noted that the 20 selected micro watersheds are within the total number of 76 that have been selected for the UDWDP. Each watershed ranges in size between 3,000 and 5,000 ha. The MWS selected for GEF additional funding will benefit from the services and resources that are available to the larger World Bank supported project and they are therefore designed totally within the context of that larger scale watershed project.
- With regard to the positive downhill externalities of soil erosion, it should be noticed that the erosion in the selected MWS is very high and the state is losing soil at an alarming rate, ten times the national average. In Uttarakhand with 90 percent of land being hilly with fragile soils and steep slopes, soil erosion is a serious concern both for upstream and downstream villages.
- With regard to **comment 4 in the STAP submission** related to the use of Chir pine needles for briquette production, it should first be noticed that the project is not operating in the Jhaunsar region as referred to in the comment. Further, the quantity of needles available is so huge that the quantities that will be used for briquette fabrication will still leave plenty to use for bedding for cattle and possible other needs. In addition the “bedding-needles” will be used for briquette fabrication so there is no wastage of such needles.
- With regard to other uses of the needle such as for pine needle boards this is being done as a state operation as no private entrepreneur has yet come forward to undertake this activity. Until now, the transport costs related to this operation are too high for profitability.
- The issue related to toxic gases emitted during combustion of pine needles, it should be noticed that the process of making the briquettes starts with producing charcoal from the needles during which process the bulk of the toxic gases presumably are emitted. This process is taking place outdoors and should therefore have a minimum negative impact. The briquettes themselves emit much less smoke and even if no test related to the gases mentioned have been undertaken (such tests are now being planned ) it is very unlikely that the negative effects are significant. No complaints from smoke disturbances have been made by people using the briquettes.
- With regard to **comment 5 in the STAP submission**, to tap the Chir pine for resin is noted and this is already happening in large scale under the auspices of the Forest Department. This proposal related to fabrication of briquettes based on the Chir pine needle is a new initiative that would add one more utility to the ones already defined. This new innovation is targeted so that it will not only be a potential source of income for people in remote villages, it will also result in very considerable time save for women and girls in collection of firewood. It will also secure availability of fuel during days when firewood collection is either not possible or would be very cumbersome due to harsh weather conditions in the mountains
- With regard to **comment 6 in the STAP submission** related to the conservation value of commercialization of aromatic and medicinal plants, it should first be noted that this is only one approach aimed at safeguarding biodiversity in the treated watersheds. It is also understood that taking the pressure off a few species will not automatically lead to reduced pressure on other species. However, the project maintains the opinion that if it is possible to cultivate and commercialize a few aromatic and medicinal plants, this will not only contribute to income distribution of concerned villages but also to long term conservation of concerned plant species. Rendering such species an economic value and being able to produce them in larger quantities and not depend totally on their collection in the wild is a recognized conservation approach used for several species.
- With regard to **comment 7 of the STAP submission**, it is agreed that this is an internal risk and the mitigation approach that have been defined is internal to the project.

**Switzerland has offered two comments on the project.**

- It is suggested that the study on adaptation to climate change should be given high priority and be completed before other project activities are implemented. It is agreed that the study is very important and potentially will have considerable impact on future coping strategies of mountain communities. However, the study will take the duration of the project period and following the advice from Switzerland, would reduce the project to a study on climate change. Further, even if the study will result in recommendations that will modify existing practices of natural resource management and propose new approaches and techniques, it still the conviction of the state authorities and project personnel that much can be done already now to improve the livelihood conditions of concerned communities and safeguard biodiversity in the selected MWS.
- The second issue is related to the interest of farmers to cultivate traditional crops when high value (= high yielding) varieties become available. High value is not necessarily linked to high yielding as the example of aromatic and medicinal plants might demonstrate. Even so it is recognized that traditional crops will only be maintained by the farmers if they are of economic interest or have some other benefit to the farmer.

**ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT\***

<i>Position Titles</i>	<i>\$ / person week</i>	<i>Estimated person weeks</i>	<i><u>Tasks to be performed</u></i>
<b><u>For Project Management</u></b>			
<b>Local</b>	100	100	Financial review consultant for internal audit of GEF component
		1050	External consultant for M&E
		50	Consultancies for short studies related to M&E issues
		1950	Assistance for contractual staff with issues such as data entry inputs and project assistance
<b>International</b>		0	
<b><u>For Technical Assistance</u></b>			
<b>Local</b>	500	930	NGO services at village and MWS levels for social mobilization and technical support
		20	Consultancy for social and environmental reviews and problem solving
		50	Consultancy for market study, establishing market linkages and related technical support
		50	Short studies for bio-diversity and livelihood opportunities such as on aromatic and medicinal plants and other emerging opportunities
		300	Consultancy for adaptation to climate change study
		50	Consultancy for documentation and information, education and communication and
<b>International</b>		<b>0</b>	

The data in the table refers to consultants and amount to be hired with GEF funds.

**ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS**

- A. EXPLAIN IF THE PPG OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PPG ACTIVITIES UNDERTAKEN.**
- B. DESCRIBE IF ANY FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION.**
- C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS IN THE TABLE BELOW:**

<i>Project Preparation Activities Approved</i>	<i>Implementation Status</i>	<i>GEF Amount (\$)</i>				<i>Co-financing (\$)</i>
		<i>Amount Approved</i>	<i>Amount Spent To-date</i>	<i>Amount Committed</i>	<i>Uncommitted Amount*</i>	
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
<b>Tota</b>						

\* Uncommitted amount should be returned to the GEF Trust Fund. Please indicate expected date of refund transaction to Trustee.

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Report No:

**FINAL DRAFT**

**INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT**

**PROJECT PAPER**

**FOR**

**PROPOSED ADDITIONAL FINANCING**

**IN THE AMOUNT OF  
(US\$ 7.49 MILLION EQUIVALENT)**

**TO THE**

**THE GOVERNMENT OF INDIA**

**FOR A**

**SUSTAINABLE LAND, WATER AND BIODIVERSITY CONSERVATION AND  
MANAGEMENT FOR IMPROVED LIVELIHOODS IN UTTARAKHAND  
WATERSHED SECTOR**

**Sustainable Development Unit  
South Asia Regional Office**

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**CURRENCY EQUIVALENTS**  
(Exchange Rate Effective May --, 2009)

Currency Unit	=	
Rupees (Rs.) 48.50	=	US\$1
US\$	=	SDR 1

**FISCAL YEAR**

2009

-

**ABBREVIATIONS AND ACRONYMS**

CAS	Country Assistance Strategy
CEO	Chief Executive Officer
CPD	Chief Project Director
DEA	Department of Economic Affairs
DPD	Deputy Project Director
ESMF	Environmental and Social Assessment and Management Framework
FM	Financial Management
ICFRE	Indian Council of Forest Research and Education
IDA	International Development Association
IGA	Income Generating Activities
IMME	Information Management Monitoring and Evaluation
FIG	Farmers Interest Groups (FIG)
GEF	Global Environment Facility
GP	Gram Panchayats
GPDWP	Gram Panchayat Watershed Development Plans
GS	Gram Sabha
GIS	Geographic Information System
MDT	Multi-disciplinary Teams
M&E	Monitoring & Evaluation
MIS	Management Information System
MoEF	Ministry of Environment and Forests
MoF	Ministry of Finance
MPRs	Monthly Progress Reports
MWS	Micro watershed
NTFPs	Non-Timber Forest Products
RBI	Reserve Bank of India
PDO	Project development objective
PME	Participatory Monitoring evaluation
PRI	Panchayat Raj Institutions
RVC	Revenue Village Committees
SA	Special Account

SHG	Self-Help Groups
SOE	Statement of Expenses
SLEM CPP	Sustainable Land and Ecosystem Management Country Partnership Program
SLM	Sustainable Land Management
SLNA	State Level Nodal Agency
SSC	State Steering Committee
TERI	The Energy and Resources Institute
TFO	Technical Facilitation Organization
UDWDP	Uttarakhand Decentralized Watershed Development Project
VP	Van Panchayat
VGs	Vulnerable Groups
WMD	Watershed Management Directorate
UNDP	United Nations Development Program
FAO	Food and Agriculture Organization

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- Annex B:** Summary of Procurement Assessment
- Annex C:** Summary of Financial Management Assessment
- Annex D:** Governance Accountability Action Plan
- Annex E:** Status of NAIP projects approved up to date

## PROJECT PAPER DATA SHEET

<b>Date:</b> March 3, 2009 <b>Country:</b> India <b>Project Name:</b> Sustainable Land, Water and Biodiversity Conservation and Management for Improved Livelihoods in Uttarakhand Watershed Sector <b>Project ID:</b> P112061	<b>Team Leader:</b> Adriana Damianova <b>Sector Director/Manager:</b> Jack Stein/Adolfo Brizzi <b>Country Director:</b> Roberto Zagha  <b>Environmental Category:</b> 'B' partial assessment				
<b>Borrower:</b> Ministry of Finance, Department of Economic Affairs <b>Responsible:</b> Watershed Management Directorate/Government of Uttarakhand					
Revised estimated disbursements (Bank FY/US\$m)					
FY	2010	2011	2012	2013	
Annual	0.55	2.00	3.00	1.94	
Cumulative	0.55	2.55	5.55	7.49	
<b>Current closing date:</b> March 21, 2012 <b>Revised closing date:</b> <b>[June 30, 2013]</b>					
Does the restructured or scaled-up project require any exceptions from Bank policies? Have these been approved by Bank management? Is approval for any policy exception sought from the Board?					<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> No

**Project development objectives/outcomes.**

The proposed additional financing from GEF of US\$7.49 million aims at scaling-up and mainstreaming the outcome of the activities under Uttarakhand Decentralized Watershed Management Project (UDWDP) and ultimately enhancing their sustainability by restoring and sustaining ecosystem functions and biodiversity while simultaneously enhancing income and livelihood functions, and generating lessons learned in these respects that can be up-scaled and mainstreamed at state and national levels.

This objective is fully consistent with the original objective of the UDWDP. The GEF project is fully integrated in the World Bank supported Uttarakhand Decentralized Watershed Development Project (UDWDP) that in turn draws on the positive experiences from the Integrated Watershed Development Hills-II project that was completed in 2005. The UDWDP is consistent with the World Bank's Country Assistance Strategy that has a priority to "support better management of watersheds, while enhancing the livelihood opportunities of the poor". The project focuses on protection of watersheds, along with community-level capacity building and promotion of livelihoods. The project is spread over an area of around 238,000 ha, ranging from 700 m to 2000 m altitude in 76 selected micro watersheds in the middle Himalayas. About 451 Gram Panchayats (GP) identified in 18 blocks of 11 districts will participate in this project. A total population of 254,000, living in the project area will benefit from these activities.

Activities financed by additional financing will focus on 20 micro watersheds that have high erosion indices, which are left behind in terms of socio-economic and other criteria and are predominantly situated close to the agricultural frontier. With this targeted approach on the most vulnerable areas, the impact of the project will be positive both in socio-economic and environmental terms. The outcome of the additional financing project will be measured against the following performance indicators: (i) Sustainable Watershed Management mainstreamed into 20 local government plans including parts of watersheds for which two or more Gram Panchayats have shared governance responsibility; (ii) Implementation of alternative technologies and approaches for enhancing water availability for agriculture and other domestic use; (iii) reduction in community dependency of forest for fuel wood and entering markets with medicinal and aromatic plants; (iv) improved knowledge of the impact of climate change on mountain ecosystems translated into coping strategies; (v) new and innovative techniques and approaches for sustainable land and ecosystem management up-scaled within the Uttarakhand state. Performance will be monitored periodically through well defined indicators by external specialists.

Does the scaled-up or restructured project trigger any new safeguard policies: No

**For Additional Financing**

Loan    Credit    Grant  
 For Loans/Credits/Grants: (US\$m) 7.49  
 Total Bank financing (US\$m): 7.49  
 Proposed terms: N.A.

**Financing Plan (US\$m.)**

Source	Local	Foreign	Total
GEF	7,490,000	0	7,490,000
Total			7,490,000

## **I. INTRODUCTION**

1. This Project Paper seeks the approval of the Executive Directors to provide an additional Grant financing from the Global Environment Facility in the amount of US\$ 7.49 million for the India Uttarakhand Decentralized Watershed Development Project (UDWDP) ID P078550 which in turn draws on the positive experiences from the Integrated Watershed Development Hills-II project that was completed in 2005.

2. The proposed additional financing aims at scaling-up and mainstreaming the outcome of the activities under Uttarakhand Decentralized Watershed Management Project (UDWDP) and ultimately enhancing their sustainability by restoring and sustaining ecosystem functions and biodiversity while simultaneously enhancing income and livelihood functions, and generating lessons learned in these respects that can be scaled-up and mainstreamed at state and national levels.

3. The proposed GEF Grant for Uttarakhand Decentralized Watershed Development Project has been included in the indicative pipeline of projects under the Sustainable Ecosystem and Land Management Country Partnership Program (SLEM CPP) approved by GEF Council on November 17, 2007. The proposed project has been endorsed by the Ministry of Environment and Forest as the leading agency for SLEM CPP and a letter dated March 31, 2009 issued in this respect. The Uttarakhand Government placed high priority on sustainable land ecosystem management and requested Bank support through GEF to augment the project efforts on sustainable land, water and biodiversity conservation and management. The proposed project is one of the projects included in the India Sustainable Ecosystem and Land Management Partnership Program (SLEM CPP) approved by GEF Council in November 2007. The experiences under the proposed project will be documented and disseminated through the SLEM CPP to other mountainous states in India. Neither the project objectives nor the components will undergo any change as a result of the proposed additional grant financing as the GEF project will be fully blended with the UDWDP; and the expected outcomes envisaged under the project will not only be achieved but enhanced significantly.

## **II. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING**

### **Original Project Objectives and Scope:**

4. The original Credit was approved on April 14, 2004 and became effective on September 10, 2004. The original project development objective (PDO) of Uttarakhand Decentralized Watershed Development Project as defined in the Development Credit Agreement is: *“To improve the productive potential of natural resources and increase incomes of rural inhabitants in selected watersheds through socially inclusive, institutionally and environmentally sustainable approaches.”* A secondary objective is to support policy and institutional development in the state to harmonize watershed development projects and programs across the state in accordance with best practices. The project encompasses three themes: (i) community participation in watershed development and management aimed at integrating land-water use with the objectives of

moisture retention and biomass production, while simultaneously enhancing incomes and livelihood options; (ii) strengthening administrative capacity of Gram Panchayats to manage project financial resources, implement sub-projects, deliver legally mandated service (in the context of natural resources management), and to sustain those services beyond the duration of the project; and (iii) ensuring equitable participation by all groups – especially the landless and women who rely disproportionately on common-resources for fodder, fuel and other forest products.

5. The original project included provisions for the following activities or components: Component 1: Participatory watershed development and management; Component 2: Enhancing livelihood opportunities; and Component 3: Institutional strengthening. Barring this, there is no restructuring of the project and the development objectives remains valid throughout the implementation period. The original objectives and design of the project would remain unchanged in the scaled-up operation.

6. The project focuses on protection of watersheds, along with community-level capacity building and promotion of livelihoods. The mid-Himalayas cover about one third of the state and covers eleven out of thirteen districts of the state. The project is spread over an area of around 238,000 ha, ranging from 700 m to 2000 m altitude in 76 selected micro watersheds in the middle Himalayas. About 451 Gram Panchayats (GP) identified in 18 blocks of 11 districts are participating in this project. A GP is the local government authority at village level with an executive body elected by the villagers and with responsibility for administration, management and development of village resources. A total population of 254,000, living in the project area will benefit from it.

### **Project Performance to Date:**

7. UDWDP has consistently achieved and in some cases exceeded its mid-term review targets (mid-term review conducted November 17-26, 2008). Satisfactory progress has been made towards the achievement of the development objectives. There are also additional special features of the project which while not easily quantifiable are tangible in their contribution towards achieving the PDO:

- Strengthening of the Panchayat Raj Institutions (PRIs) and women integration in the PRI system as vocal decision makers;
- A comprehensive watershed management treatment with a ridge-to-valley approach;
- An integrated monitoring system that combines social audit with GIS technologies;
- An innovative approach to forest protection while using biomass for domestic fuel usage (pine needles pellets); and
- The demonstration of agribusiness private-public partnership models through farmer federations.

8. Key project data is tabulated below:

**Table 1: Key Project Data**

<i>Key Project Data</i>		<i>Key Performance Ratings*</i>		
			Last	Now
Board Date	May 20 <sup>th</sup> , 2004	Development Objective	S	S
Effectiveness date	September 10 <sup>th</sup> , 2004	Implementation Progress	S	MS
Closing date	March 31 <sup>st</sup> , 2012	Financial Management	MS	MS
Project age	50 months	Procurement	S	S
% of project age	~ 56%	Project Management	S	S
Total Credit	SDR 47.40 (US\$77.5M)	Counterpart Funding	S	S
% of credit disbursed	36.6%	M&E	S	S

\* S = Satisfactory, MS = Moderately Satisfactory

### **Participatory Watershed Development and Management**

- Watershed Development and Forestry: About 40% of the arable land has received soil and moisture conservation support including the support for various on farm activities and demonstration of high value crops. Roughly 15% of the non-arable land is treated under the project – mainly through plantation, soil conservation and pasture development.
- Biomass productivity: At mid-term review, 10.1% of the GP area has been treated with conservation/production measures. If this trend continues, the target of increasing by 10% the biomass and vegetative index of the targeted watershed areas is likely to be achieved.

### **Enhancing Livelihood Opportunities**

- Income generation in project villages: The real household income growth in Project village households increased by 7% during project implementation. Since the Project start, the irrigated areas has increased by 10%, cropping intensity has increased by 24%, and crop yields have increase by 7%. The area under high value horticulture has increased by 30% in the project villages.
- Agriculture: The project has promoted demonstration activities for improved agricultural production techniques in 1,355 ha, and compact demonstrations in 1,291 ha.
- Livestock: The project has established 94 Natural breeding centers, constructed 1,976 shelters for VGs' animals, 2,043 mangers, and distributed 264 chaff cutters improving the effective use of fodder and stall feeding.

### **Institutional Strengthening**

- At the village level the Project has developed a sound institutional system. The institutional setup consists of Self-Help Groups (SHG), Farmers Interest Groups

(FIG), and Vulnerable Groups (VG). The extensive community mobilization has led to the formation of several new SHGs in line with GoI guidelines. Over the last 3 years, the project has facilitated formation of approximately 3,000 SHGs which are independent and self-managed.

**Rationale for Additional Financing:**

9. Additional financing will be provided through as a grant from GEF following the principles of leveraging IDA co-financing. The additional financing is provided as incremental to the on-going project and is aimed at enhancing the sustainability of the on-going watershed activities. The ongoing project has exhibited that given necessary inputs and financial support, adopting watershed management in the Himalayan mountain region could immensely benefit the local communities. The GEF additional financing will ensure the consolidation of watershed activities in 20 micro-watersheds out of 76 identified micro-watershed in the UDWDP. In addition GEF support will focus on a select number of watersheds that are experiencing intense erosion, low socio-economic status, most of them situated close to the agricultural frontier. These factors combined lead to severe land degradation, high threat to biodiversity and unknown consequences of climate change. The integration of global environmental concerns in successful watershed management practices would add value to the approach which can also be applied to other mountainous states in India.

10. The GEF additional financing will provide additional technical assistance for eliciting community participation in rehabilitation of degraded watersheds, carbon emission reduction, biodiversity conservation and management, development of sustainable livelihoods and adoption of cleaner and energy efficient fuels. The grant funds from the “Piloting an operational approach to adaptation” GEF strategic area will also fund a study to develop an understanding of the impacts of climate change on natural resource base mountain economies and develop climate change adaptation strategies in mountainous regions. Such a study will facilitate behavioral changes among farmers as a result of better understanding of the consequences of climate change such as the ‘agriculture frontier’ moving uphill and affecting the prevalent land use and land management systems in the state.

11. Expected incremental benefits resulting from the integrated approach are protection of ecosystem integrity leading to long-term conservation of biodiversity thus providing resilience to future shocks from increased variability and climate change impacts. It will also include improved management of soil and water leading to enhanced direct use values such as increased availability of surface and groundwater for domestic use, irrigation and livestock, and enhanced indirect values such as increased carbon sequestration, reduction in top soil erosion and reduced vulnerability to flooding and erosion during extreme events. Improved soil and water management will further result in increased production and delivery of high value and environmentally beneficial produce resulting in an enhanced value of the natural resource base that in turn will be reflected in investments in its sustainability and productivity. Improved understanding of the impact of climate change on natural resource based mountain economic systems will allow for preparation of an adaptation strategy in response to those changes.

### III. PROPOSED CHANGES

12. The additional GEF financing does not change anything in the design of UDWDP. Additional global objective will be added to the original UDWDP objective to enhance its sustainability. The proposed additional financing will not change the project management, financial management, procurement and environmental and social arrangements. Consequently, the global environmental objective formulated for the proposed project aims to support the restoration and sustainability of ecosystem functions and biodiversity while simultaneously enhancing income and livelihood functions, and generating lessons learned in these respects that can be up-scaled and mainstreamed at state and national levels. To achieve this objective the project will expand the geographic coverage by including additional 20 micro-watersheds with specific attention of sustainability and resilience of the watershed ecosystem.

13. Participatory watershed development and management will depend heavily on the capacity of village organizations to take account of common property resources in their planning and management. Capacity building of village institutions will thus be crucial as a prerequisite for a successful accomplishment of watershed level planning and implementation. The additional financing targets 20 micro-watersheds that have high erosion indices, left behind in terms of socio-economic and other criteria and are predominantly situated close to the agricultural frontier. With this targeted approach on the most vulnerable areas, the impact of the project will be positive both in socio-economic and environmental terms. The strategy is thus based on two mutually supporting approaches and is fully in line with the strategy that the government of Uttarakhand has adopted for addressing rural poverty and sustainable natural resource management.

14. The GEF additional financing aims to: (i) mainstream sustainable watershed management approaches into Gram Panchayat (GP) watershed development plans. These plans will integrate watersheds lying outside the authority of GPs but under the management of the Forest Department. These plans will be endorsed at all levels of local and state government thereby ensuring proper implementation, resulting in reduction in soil erosion rates, enhancement of biomass and enhanced availability of water in the watershed throughout the year. They will also include appropriate fire management practices, including technological solutions for utilization and conversion of chir pine<sup>1</sup> biomass into briquettes for meeting household and other energy requirements of communities. This innovation will result in a reduction in the incidence of fire in the treated micro watersheds and at the same time reduce dependence on fuel wood. Through the introduction of pine briquettes on the market, they will contribute to diversifying family income and to a sustainable livelihood; (ii) contribute to enhance biodiversity in quantitative and qualitative terms at watershed level through domestication and cultivation of threatened medicinal and aromatic plants; and (iii) enhance the understanding of the impact of variability and climate change impacts on the mountain ecosystems and help devise adaptation and mitigation strategies. All these measures combined, will significantly add to the long-term security of globally threatened, fragile and vulnerable mountain ecosystems. The attached results

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<sup>1</sup> *Pinus roxburghii* (Lat)



framework lists the specific indicators that will be monitored to ensure that the watershed plans deliver the results for which they will be designed.

15. A brief description of the activities to be funded under the proposed additional financing is given below:

- **Activity 1: Watershed planning through community participation:** This component provides technical assistance for watershed planning and community participation. Community participation will be done through the development of participatory decision-making processes at the revenue village, Gram Sabha and Micro Watershed levels. The Gram Panchayat Watershed Development Plans (GPDWP) formulated under ongoing UDWDP will be consolidated into micro-watershed level plans. The various watershed interventions which could not be carried out under the budget envelope of UDWDP will be identified using participatory approaches and consultation with the communities. Geographically contiguous areas of micro watershed, even if outside the Gram Panchayat (GP) but under the Forest Department, will be included in this approach to ensure a holistic approach in the management of watersheds. Apart from the GP, the Van Panchayat (VP), Revenue Village Committee (RVC) and other user groups will also be involved in the development of these watershed development plans. In total 20 micro watershed plans are to be developed for implementation as a part of this project. The planning process will be used to sensitize the communities on the ecosystem degradation and promote incremental measures for sustaining the ecosystem's functions.
- **Activity 2: Controlling land degradation through the SLEM approach at the watershed level:** This component is to reduce soil erosion and enhance biomass and the availability of water in the watershed through the year. The planning process under Component 1 will result in a Micro Watershed (MWS) level watershed treatment plan which will be finalized after consultation with all stakeholders groups. For watershed intervention in areas beyond the boundaries of the GP (inter GP - which will mainly be Reserve Forest area), about 20% of the total budget allocation for the respective MWS will be kept aside. There will also be a component of community contribution towards the cost of each sub-project and they will also be involved with the operation and maintenance of the developed watersheds.
- **Activity 3: Reduce pressure and dependence on the natural resource base through fostering markets for Non-Timber Forest Products (NTFPs):** This component focuses on the identification of new technologies to meet household energy needs, reduce dependence on firewood and to market the produce created through these technologies. The pine briquettes technology piloted successfully under UDWDP will be scaled-up. SHGs and VGs will be encouraged to take up the activity as an income generation activity. Small market infrastructure and linkages to sell the briquettes will be developed. About 15% of the budgetary allocation will be utilized for scaling up pine briquettes model demonstration along with promotion of miscellaneous innovative activities fulfilling the above objectives. 10% will be utilized for creation of small infrastructure facilities for

marketing support and 5% for capacity building and consultancy support for developing market linkages.

- **Activity 4: Enhance biodiversity conservation and management through watershed planning and community participation:** The aim is to qualitatively and quantitatively enhance biodiversity at the watershed level. This will be done through a series of interventions. While there is a planned focus on biodiversity conservation through ongoing programs aimed at identification of sustainability livelihood options, the collection of empirical evidence of increased fauna and flora will contribute for elevating the biodiversity conservation efforts at a more sustainable level. The reduction of soil erosion, reduced pressure on biomass for energy and watershed management will also both directly and indirectly contribute to biodiversity conservation. Following interventions will be taken up under this component: (i) Demonstration of cultivation of aromatic and medicinal plants; (ii) Promotion of IGA by SHGs/ VGs with training and input support; and (iii) Short studies for biodiversity and livelihood assessments. As needed technical assistance for social inclusion of tribal and transhumant populations in project areas will be provided under this cluster of activities.
- **Activity 5: Improve adaptation to Climate Change in natural resource based production systems:** This component is aimed at improving the understanding of the impact of climate change on natural resource based mountain economies by undertaking a State specific study. The results from the study will be used to develop an adaptation strategy for the State of Uttarakhand for identified impacts of climate change. The implications of the study will also be disseminated in other mountainous states of India.
- **Activity 6: Documentation of best (worst) practices and dissemination of within the state as well as nation-wide through the Sustainable Land Management partnership:** The documentation through short studies, publications, short films and documentaries is aimed at enhancing knowledge of SLEM, biodiversity conservation and adaptation to climate change in mountain ecosystems. This documentation activity is not just aimed at good practices but will also identify, analyse and document practices which have not worked well. These will then be disseminated both within the state and also throughout the country. The results of the program through the documentation will help to mainstream sustainable watershed management approaches into GP watershed development plans and will also enhance the understanding of the impacts of climate change on mountain ecosystems to help device appropriate mitigation strategies. The dissemination of the findings will be done by the SLEM CPP through the system and network setup under the Medium Size Project for Policy and Institutional Reform for Mainstreaming and Scaling-up SLEM. There will be a total of 10 practices identified and documented as a part of this component. The documentation is aimed at helping replication and scaling-up of good practices identified through SLEM.
- **Activity 7: Project Management, Monitoring and Capacity Building:** This component will finance hiring of technical and non-technical staff on contractual

basis and other incremental operating cost under the project. For monitoring and evaluation, external consultant will be hired and short studies commissioned from time to time. In addition, the component will also finance the hiring of Financial Review Consultant and capacity building of staff including exposure visit and workshops.

16. A financing plan of activities to be supported under the GEF additional financing, and IDA co-financing is presented in Table 2:

**Table 2: Financing Plan**

No	Activity Category	Total GEF Financing	IDA Co-financing <sup>2</sup>	
		Value (US\$)	Value (US\$)	Total project (US\$)
1	Watershed planning through community participation	70,000	900,000	970,000
2	Controlling land degradation through the SLEM approach at watershed level	2,940,000	37,800,000	40,740,000
3	Fostering markets for non-timber forestry products	2,100,000	27,000,000	29,100,000
4	Biodiversity conservation and management through watershed planning and community participation	1,050,000	13,500,000	14,550,000
5	TA on adaptation to climate change	140,000	1,800,000	1,940,000
6	Documentation and dissemination of project experiences and practices	175,000	2,250,000	2,425,000
7	IMME	280,000	750,000	1,030,000
8	Project management and Capacity building of PM staff	245,000	6,000,000	6,245,000
9	Contingencies	490,000	0	0
	<b>Total</b>	<b>7,490,000</b>	<b>90,000,000</b>	<b>97,490,000</b>

### Impact on Implementation Timeline

17. The project will be implemented over a period of 4 years. The effectiveness of the project is expected during the first quarter of FY 2010, which is the 5th year of the implementation of UDWDP. The additional GEF grant financing will not impact the original implementation schedule of UDWDP activities. The proposed completion date of GEF project is June 30, 2013 which is justified by the seasonal nature of watershed activities and time necessary for completion and preparation of ICR.

<sup>2</sup> The proposed additional financing from GEF will blend with the IDA funding allocated for watershed development.

#### **IV. CONSISTENCY WITH CAS**

18. The project is consistent and will contribute to the Bank's strategic development objectives of the Country Assistance Strategy (CAS) (Report No. 46509-IN). Challenges to sustainable development from the rising demands on already scarce and often degraded natural resources if not addressed would impact negatively human livelihoods and growth prospects. Most environmental indicators exhibit negative trends, suggesting that growth is having a negative impact upon the country's natural resources. There is a danger that resources depleted for current growth jeopardize future development prospects. The proposed project activities are aligned with the objective of two of the CAS pillars: (i) achieving rapid inclusive growth and (ii) ensuring development is sustainable. The project is also will contribute to achieving several goals of the 27 national targets under India's XIth Five Year Plan (2007-2012) linked to all the initiatives that the Government has put in place to further the sustainable development of the natural resource base and in particular the sustainable development of watersheds. The GEF supported project will contribute to the implementation of the World Bank's country assistance strategy (CAS) through accelerating growth and pro-poor rural development based on a sustainable utilization of the natural resource base. Through its link with the UDWDP it will support better management of watersheds, while enhancing the livelihood opportunities of the poor. The project focuses on protection of watersheds, along with community-level capacity building and promotion of livelihoods.

#### **V. APPRAISAL OF SCALED-UP PROJECT ACTIVITIES**

##### **Economic:**

19. The economic and financial analysis of the UDWDP resulted in an estimated economic rate of return of investments of 16.9 percent. This estimate might be somewhat lower for the GEF additionally financed component as it is designed to operate in higher risk areas such as the most eroded watersheds and at the frontier of the agricultural boundary. On the other hand, productivity in these areas are presently lower than for the somewhat better off areas and a successful outcome would therefore yield a higher return on investment as the start is from a lower baseline. The design of the additional component is based on the fact that grant funds have been made available for the somewhat riskier areas and this, in combination with the environmental benefits, local as well as global that can be expected from the GEF funded component, justifies the slightly increased risk that the additional financing component is subject to as compared to the base project. This, in combination with the fact that India now has a strong focus on spreading the economic development to areas that hitherto have been left behind in the development process should be a guarantee for a sustained effort on the objectives defined for the GEF financed additional component. The rigorous M&E system designed to continuously monitor and correct project intervention efforts also maximizes the possibilities for generating a high economic return on this additional investment. For the purposes of the incremental valuation of GEF alternative and financing a qualitative valuation of incremental environmental and socio-economic benefits is presented in the GEF Full project Document for CEO endorsement.

**Technical:**

20. The GEF additional grant funds must, as per the conditions for GEF financing contribute to both local and global environmental benefits. The GEF additional financing has been planned accordingly. Thus, global environmental benefits will be achieved through simultaneously supporting local and state level objectives related to reducing environmental degradation through the watershed approach. Parameters that will be measured to demonstrate progress will include reduction in soil loss, increased water availability throughout the year, increase in biomass in treated landscapes, reduction in forest fire and consequently increase of the carbon stock in treated landscapes. The global benefits with regard to biodiversity will be related to a halt in biodiversity degradation in the highly sensitive mountain environment of northern India. This will be measured through increased presence of key indicator species including their migration uphill as a consequence of climate change. It will also be measured through the frequency in quantity and quality of medicinal and aromatic plants in the wild, as they will be safeguarded by developing sustainable management approaches (including domestication). Through rendering such plants an economic and commercial value, the populations will have an interest in, and motivation for developing sustainable management and harvesting techniques for them. The incremental benefits generated through the additional GEF activities will corroborate through a reversal of the forest degradation trend and regeneration of deforested areas, thus increasing ecosystem health and services rendered. Linkages with institutions and organizations active in both the government and non-governmental sectors will be established to avoid duplication of efforts and to tap their expertise in the areas of medicinal plant cultivation, value addition and marketing.

**Institutional:**

21. There are no major institutional issues with the ongoing UDWDP. The implementation arrangements for the GEF activities will follow the governance and management structure that have been put in place for the on-going project. Box 1 provides a brief description of the institutional framework for project oversight and implementation:

**Box 1: Project Governance Framework**

<p><b>Government of Uttarakhand:</b> At the State Government level, a ‘Secretary Watershed’ is in place to lead watershed developments in the state. A dedicated watershed management directorate is functioning as the nodal agency for watershed development in the state. The Watershed Management Directorate (WMD) under the leadership of a Chief Project Director will be responsible for the overall implementation of the project including GEF funded activities. The main responsibility of WMD will include (amongst others) to ensure: (i) that adequate staffing is provided at all levels to implement the project and achieve its objectives; (ii) the orderly implementation of various components; (iii) ensure that adequate and timely training is provided to all stakeholders, including project staff, to fulfill requirements; (iv) that project accounts are maintained in accordance with the project’s financial regulations; (v) that systems are in place for timely release of funds to the concerned project units and implementing user groups; (vi) that baseline, midterm and end of project reports are delivered as per work plan and schedule; (vii) that physical and financial progress is monitored through the project’s Management Information System (MIS); (viii) that the project is implemented in</p>
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accordance with its work program and comply with its Environment and Social Management Framework (ESMF) and other such requirements as agreed with the World Bank and GEF, and (ix) to ensure regular flow of information on implementation of GEF activities to the SLEM CPP National Steering Committee.

**State Steering Committee:** A state level Steering Committee under the chairmanship of the Principal Secretary and the Forest and Rural development Commissioner is established to provide overall guidance, policy support and to facilitate inter departmental coordination. The Chief Project Director is the secretary of the committee. The committee is composed of representatives from relevant Government departments such as rural development and agriculture. Up to 50% of the committee members are elected representative of PRIs, Zilla Panchayat (local government institutions), NGOs, Academic and technical institutions.

**District/Divisional Level:** Below the Chief Project Director (CPD), the WMD has two Project Directors (PDs), one each for Garhwal and Kumaon region. Below the PD are Deputy PDs (DPDs) each with a number of Multi-disciplinary Teams (MDTs) made up of 4-6 specialists. The MDTs include experts in the areas of horticulture, agriculture, animal husbandry, minor irrigation, forestry and community mobilization. The community mobilizers are being provided with two regional level field NGOs (One each in Garhwal and Kumaon region). The MDTs facilitate interaction with the GPs with regard to community mobilization, participatory appraisals and need assessments to be undertaken at village level. The MDTs are assisted by village motivators who are members of the villages. The MDT is responsible for: (i) dissemination of key messages to the community regarding the project's rules, procedures and terms of participation; (ii) orienting the community on project objectives; (iii) facilitating the formation of Revenue Village Committees (RVC) and other appropriate users groups; (iv) facilitating the preparation of MWS level plans; (v) facilitating general meetings of the Gram Sabha or User groups for approval of plans; (vi) assisting in transmitting the MWS plans to the DPDs for appraisal; (vii) ensuring smooth and timely fund flow; and (viii) ensuring that timely training is provided to all stakeholders requiring such training in order to implement the project in accordance with guidelines.

**Revenue Village Committee and other User Groups:** The Responsibility for preparation of the micro watershed plans at the village level will lie with the revenue village committees and approved by GP. The planning process will be participatory and technical support will be provided by the MDT. GP/RVC and other user group level plans will be consolidated at the micro watershed level by the concerned MDT and subsequently forwarded to DPD for technical and financial appraisal and final endorsement. Actual implementation of the activities as identified in the MWS plans will be carried out by the concerned RVC and other User Groups, Vulnerable groups, Self-Help Groups (SHGs) or individuals. In case all the above mentioned groups express inability to implement any given activity and this is communicated in writing to the DPD concerned, the activity may be carried out departmentally.

### **Reporting Arrangements and M&E Process:**

22. The Watershed Management Directorate (WMD) guides the Monitoring and Evaluation of the ongoing UDWDP. The M&E strategy for the on-going project will be extended to the GEF additional financing. Additional monitoring parameters have been added to respond to the GEF specific indicators and are specified in a results framework specific to the GEF additional component. The following levels of monitoring are being pursued under UDWDP and the GEF additional financing will be included in all of them:

- Internal Monitoring
- External Monitoring
- Participatory Monitoring and Evaluation (PM&E)
- Environmental and Social Safeguard Monitoring and
- Evidence based monitoring

23. Box 2 provides details on the project monitoring arrangements:

### **Box 2: Monitoring and Evaluation of Project Results**

**Internal monitoring:** At WMD, a Deputy Project Director (DPD M&E) heads a six-member team responsible for initiating and coordinating ongoing monitoring of project implementation and for conducting impact studies. The team consists of an economist, a GIS analyst and three assistants for data entry and statistics. From time to time, monitoring teams are constituted with members drawn from various technical wings of the directorate who regularly visit the project area. Progress in relation to the annual work programs will be documented on a monthly basis through Monthly Progress Reports (MPRs) generated at the division level and consolidated at WMD level. The data will be captured in the Management Information System (MIS). A separate module for the GEF component will be designed. Validation of MIS data will be undertaken through validations in the field on quarterly basis. Annual work programs will also include timetables for undertaking regular impact studies that will be derived directly from the result framework. Random field visits, monthly meetings, checklists, brain-storming amidst all stakeholders will be undertaken at district level while at regional level this will occur on a half yearly basis. These visits and various forms of interaction with stakeholders will be an integral part of the M&E plan. At the state level, there is a State Steering Committee under the chairmanship of the Principal Secretary, Government of Uttarakhand. The committee consists of secretaries of concerned line departments and of NGO representatives. Besides ensuring inter-departmental coordination at state level, this committee also has the mandate of monitoring and evaluating the progress of the project and may request periodic targeted studies to feed into the ongoing implementation process or for proposing broader policy changes. A distinct M&E effort to monitor and record impacts of GEF activities will be undertaken for reporting purposes to ICFRE - the technical facilitation organization overseeing the SLEM CPP at national level and to the Bank.

**External Monitoring:** An external agency will carry out a baseline survey, concurrent evaluations and the final evaluation. In order to secure quality monitoring and evaluation of the GEF component, the external monitoring arrangements of UDWDP will be extend to the GEF component. At present The Energy and Resources Institute (TERI) provides the external monitoring consultants for UDWDP. The Terms of Reference of TERI will be modified to include the monitoring arrangements and parameters specific to the GEF initiative. TERI will carry out M&E for the GEF component on a 10% sample basis. At present TERI has collected base line information on 263 attributes from a sample of 100 selected GPs (20% sample basis). The GEF initiative will be implemented in 20 selected MWS. The same baseline information will be collected for the GEF project but, in addition, GEF specific baseline requirements will be included in the survey. The requisite information will be collected through discussions with village communities, through focus groups discussions across different social and income groups and through questionnaire surveys. Subsequent to having established the baseline, external monitoring will be undertaken as of the second year and thereafter on an annual basis. All monitoring reports will be submitted to Ministry of Environmental and Forest, the ICRFE, TFO selected for implementation of SLEM CPP, and the World Bank. During the last year of project implementation, a final impact evaluation will be undertaken by the external consultant.

**Participatory Monitoring (PME):** The annual work programs for the GEF component will include a plan for implementing a process evaluation to assess how the participatory indicators are performing during the implementation phase. The participatory indicators in use for evaluation in UDWDP will be modified to include indicators relevant for the GEF additionality. The PME will be carried out by GP level PME teams constituted in every GP under UDWDP. The PME teams include representatives from all stakeholder groups at GP level. They have the mandate of carrying out participatory monitoring and evaluation of project implementation in respective Gram Panchayat on a half-yearly basis. The project's team of experts from different technical disciplines and for social mobilization will assist in conducting the PME. To ensure maximum community participation, other community members (apart from the designated 15 members of PME team) will also be encouraged to participate in the exercise. Participatory monitoring will be linked to capacity building of community institutions to allow them to monitor the entire process during both implementation and post implementation.

**Environmental and Social Safeguard Monitoring:** This form of monitoring is integrated with the development and implementation of the micro watershed management plans as they are prepared in accordance with the Environmental and Social Management Framework (ESMF). Indicators that will be added to the ESMF in response to the GEF initiative, such as water quantity and quality, soil quality, floral and faunal diversity, employment generated, improved income and changes in labor requirements (of particular interest in relation to women and children) will not only add strength to the evaluation of watershed

interventions but also promote community participation in monitoring for sustainability and equity. There is substantial capacity to use GIS packages within WMD. This capacity will be augmented by provide training on the use of remote sensing images in conjunction with up-to-date GIS software packages and equipment.

**Evidence based monitoring:** The GEF initiative will generate specific lessons learned, case studies and success stories. This body of new knowledge and experience will constitute evidence based monitoring results that will be captured through all the above levels of monitoring. The data base on lessons learned will be shared with ICFRE and used for knowledge dissemination. ICFRE as necessary, in coordination with WMD will undertake field visits to project sites to record good SLEM practices.

### **Linkages with ongoing government M&E:**

24. As mentioned above, there is, at state government level a State Steering Committee (SSC) under the chairmanship of the Principal Secretary, Government of Uttarakhand. The committee consists of secretaries of concerned line departments and of NGO representatives. Besides ensuring inter-departmental coordination at state level, the SSC has the mandate of monitoring and evaluating progress of the project and may request evaluative studies to be undertaken as inputs to understand better the ongoing implementation process or for proposing broader policy changes. The common watershed guidelines of the Government of India came into force on 1st April 2008. As per these guidelines, a state level nodal agency (SLNA) had to be established by September 2008. The SLNA has been mandated with the task of monitoring all watershed projects in the state. After the setting-up of SLNA in the state, the M&E will be linked to the SLNA in order secure continued monitoring post project completion date.

### **Linkage to the SLEM-CPP:**

25. The Sustainable Land, Water and Biodiversity Conservation and Management for Improved Livelihoods in Uttarakhand Watershed Sector Project (the GEF additionality) has been included in the pipeline of the Bank led projects of India SLEM-CPP. National level coordination and oversight of projects under SLEM-CPP will be carried out thorough the established arrangements with MoEF and the Indian Council of Forest Research and Education (ICFRE). ICFRE will be responsible for mainstreaming and facilitation of policy improvement for scaling lessons learned from SLEM CPP pipeline projects including those led by UNDP and FAO. This will include policy advice as well as guidelines and approaches with regard to planning and implementing natural resources based economic activities. A number of different media will be used including, printed material, videos, workshops, seminars and different e-learning techniques for knowledge sharing and outreach. Lessons learned will have a wide audience willing and able to benefit from them to the maximum. In order to allow for this mainstreaming and up-scaling process to proceed efficiently, each project under the SLEM-CPP will submit progress and evaluation reports to ICFRE which will, in turn stay in close contact with each one of them in order to be able to carry out its mandate effectively.



**Procurement:**

26. There are no procurement issues particularly related to the proposed additional GEF grant. The project will follow the established procurement arrangements of the UDWDP, which are being satisfactorily implemented. The GEF activities will be supervised in accordance with the supervision schedule of UDWDP at least twice a year. The semi-annual progress reports will provide information on the implementation of GEF activities in a format and with the level of details required to provide a consistent picture of progress made or implementation deficiencies. The procurement will be undertaken at the GP level with the WMD level procurement accounting for a small portion of project funds. The Project Implementation Manual will be used. A supplemental PIM sections for implementation of the GEF grant provides further guidance on the GEF funded activities. The project will use the qualified procurement staff currently involved in the UDWDP. Should any procurement capacity needs occur to meet the project requirements the GP will be responsible to train Multidisciplinary Teams. The procurement risks for the additional financing have been assessed and rated “moderate”.

**Financial management:**

27. The main project has been effective from 2004 with the financial management system of UDWDP been established and working well in the field, generating timely accounting reports, submitting timely FMR, SOE and audit reports. The FM rating for the project has been consistently “Moderately Satisfactory” for the past two years. The current financial management system of UDWDP is adequate to meet the needs of the proposed additional GEF grant financing. As the implementation arrangements for the GEF additional financing, would be in line with the existing Uttarakhand watershed project, the FM arrangements for the additional financing would also follow the FM arrangements as per the existing project. The overall FM risk rating for this project is Moderate.

28. The funds for the project would flow through the state budget as it is being done for the existing project. The state government would introduce a line item for the GEF grant funding under the existing UKWDP-Gramya project budget head. This budget line would be used by WMD for incurring GEF related expenditure. As this line item will be created under the existing head, the required budget can be transferred from the main head. The project would be required to create the budget line item and would be required to do the budget allocation, once the additional financing is approved by the Board. This would be conformed during the negotiations. Annex C provides details on the flow of grant funds, progress reporting, audit requirements, disbursement categories and agreed actions.

**Environmental and social aspects:**

29. There are no modified, expanded or new activities that will raise concerns of safeguard implications under the proposed additional financing. Therefore, the Environmental and Social Assessment and Management Framework (the Framework) prepared for the UDWDP is applicable. The safeguards category is S2 as more than one

safeguards policy is triggered but effects are limited and institutionally manageable. There will be no new safeguard policies triggered. The project has been classified as a Category 'B' project. Potential environmental and social impacts would arise mainly due to the biophysical and socio-economic characteristic of the project areas, such as soil fragility, poverty and high dependence of population and livestock on the natural resources base. This has led to stressed environmental resources like land, water, grassland and forests. The activities proposed for additional GEF financing do not envisage any significant irreversible impacts due to the small scale of the proposed activities. Conversely, the activities would result in positive environmental and social impacts, overall, if planned, implemented and designed in compliance with the social and environmental provisions of the ESMF. Isolated and temporary effects may arise rather inadvertently due to improper field practices with regard to surface water flow or changes of water availability. It is not possible to foresee this at this stage but the M&E system that has been put in place should capture such situations at an early stage and allow for corrective measures to be taken before any significant negative effects result. The Framework that has been put in place for UDWDP will serve as a template for the additional GEF activities to undertake activity specific environmental and social safeguards assessments. Monitoring safeguards would be effected both through location-based enforcement and project based M&E system.

## **VI. EXPECTED OUTCOMES**

30. The project is expected to provide significant outcomes in technical terms, in terms of policies and guidelines for an ecosystem approach to sustainable land management in a mountainous environment. The specific challenges that such an environment poses will be addressed in terms of climate change, land degradation and biodiversity conservation based on the approach that rendering biodiversity an economic value is the best way of safeguarding its sustainability. The ultimate outcome of the project is therefore a combination of restoring and sustaining ecosystem functions and biodiversity while simultaneously enhancing income and livelihoods, and generating lessons learned in these respects that can be up-scaled and mainstreamed at state and national levels, the latter through the link with the SLEM-CPP up-scaling project.

31. The outcomes have been defined as four distinct products: (i) Sustainable Watershed Management mainstreamed into village level Watershed Development Plans including parts of Micro-watersheds lying outside the boundaries of the village; (ii) reduced soil erosion, increased bio-mass and enhanced availability of water in the watershed throughout the year; (iii) adoption of new technologies, processes and production systems for creation of markets for non-timber forest products; (iv) improved biodiversity in qualitative and quantitative terms at watershed level; (v) enhanced understanding of the impacts of climate change on natural resource based mountain economies.; and (vi) replication and up-scaling of policies, approaches and guidelines for sustainable land and ecosystem management, including biodiversity conservation and adaptation to climate variability and change in mountain ecosystems.

32. These outcomes are supported by several quantifiable outputs, including, but limited to: (i) 20 Participatory Micro watershed management plans completed and under implementation; (ii) improved technologies and approaches for enhancing water availability for agriculture and domestic use demonstrated; (iii) 200 households have reduced their dependence on forest for fuel-wood; (iv) at least five medicinal and/or aromatic plants cultivated by communities in the 20 targeted watersheds; and (v) at least 10 policies, guidelines and approaches for sustainable land and ecosystem management documented and disseminated at state and national level through different forms of media (printed as well as audio-visual).

## VII. BENEFITS AND RISKS:

33. The GEF additional financing will be targeted at well defined initiatives related to watershed management. This will be done in support of a project with a broader agenda that i.e. include substantive support to capacity building at village and other local government levels. The impact of the GEF funds can therefore be maximized both at the local level and watershed level. In addition, through this project's linkage to the SLEM program, the lessons learned will feed into a larger context and be made available for up-scaling and mainstreaming not only within the state of Uttarakhand but also in other states. Technical guidance and application of best practices in sustaining ecosystem functions and biodiversity and enhancing livelihoods will be of particular interest for other mountainous states in India while experiences related to villages and local government level planning and management of watersheds and the natural resource base will be of wider applicability.

### Risk and Risk Mitigation

The risk rating for the proposed additional grant financing is moderate to low. The GAAP prepared for the UDWDP (Annex D) will apply to the proposed GEF project. Details on the implementation and fiduciary risks are included in the table below:

**Table 3: Risk and Mitigation**

Risks	Mitigation Efforts	Risk rating
<p><b>Implementation:</b></p> <p>1. Limited community participation in project activities related to biodiversity conservation and management</p>	<p>Extensive social mobilization will take place to facilitate participatory watershed planning and development processes at the micro-watershed levels through the involvement of all stakeholders in the area. The participatory approach will depend heavily upon building capacities of the local institutions and user groups. The experience gained up to date in participatory watershed planning under the UDWDP is a solid foundation for social mobilization and community participation.</p>	<p>Low</p>
<p>2. Commitment to protecting common property resources such as natural forest and</p>	<p>Special care will be taken to ensure that all the stakeholders are identified, actively involved, and associate themselves in the micro-watershed plan</p>	<p>Moderate</p>

plantation sites varies	development and implementation.	
3. Social conflicts in villages due to conflicting interests of different stakeholder groups	Each stakeholder will be actively involved in the formulation and implementation of the micro-watershed plans. The plans should respond to the needs of the stakeholder groups.	Moderate
4. Limited distribution system for inputs and produce that would slow down the effectiveness of the income generating activities	Products that will be identified and developed under the project will be based upon market research and where necessary, support distribution systems.	High
<b>Sustainability:</b>  1. Limited resources to scale up the SLEM mainstreaming interventions after the withdrawal of the project	The GEF additional financing is part of a larger UDWDP and supports the 11 <sup>th</sup> Five Year Development Plan of the GoI to target marginalized population groups throughout the country. The umbrella SLEM CPP of which this project is part and through the support to Policy and Institutional Reform for Mainstreaming and Upscaling SLEM (Medium size GEF project) will eventually increase the demand for planning resources to support sustainable watershed management programs at national and state level.	Low
2. Natural calamities like earthquakes, landslides due to excessive rain and uncontrolled breakout of fire.	The micro-watershed management plans will address erosion and land degradation issues thereby, minimizing the risk of landslides. The interventions involving the use of chir pine needles will also contribute to the control of forest fires.	Moderate
<b>Safeguards:</b>  ESMF is in place but implementation is inadequate due to capacity constraints at GP level	The institutional arrangements to implement ESMF and ensure coordination and monitoring of the environmental and social aspects among all implementing partners are in place. This includes several MDTs comprising technical officers and facilitators for social mobilization and designated environmental specialist at the Head office at CPD. Safeguards aspects will be monitored during each supervision mission.	Moderate

## VIII. FINANCIAL TERMS AND CONDITIONS FOR THE ADDITIONAL FINANCING

34. The financial terms of the additional grant financing from the Global Environmental Facility will be the standard conditions made by the World Bank for Grants. Project conditionality will remain the same as for the original credit C3907-IN "" in terms of implementation requirements.

## **List of Annexes**

**Annex A:** Project Results Framework

**Annex B:** Summary of Procurement Assessment

**Annex C:** Summary of Financial Management Assessment

**Annex D:** Governance Accountability Action Plan

**ANNEX A: PROJECT RESULTS FRAMEWORK**  
**Sustainable Land, Water and Biodiversity Conservation and Management for Improved Livelihoods in Uttarakhand Watershed Sector**

<b>Project Development Objective</b>	<b>Result/Outcome Indicators</b>	<b>Use of Result Information</b>
<ul style="list-style-type: none"> <li>To restore and sustain ecosystem functions and biodiversity while simultaneously enhancing income and livelihood functions, and generating lessons learned in these respects that can be up-scaled and mainstreamed at state and national levels;</li> </ul>	<ul style="list-style-type: none"> <li>20 number of Micro watershed management plans completed and under implementation</li> <li>10% increase in livelihood opportunities in treated areas;</li> </ul>	<ul style="list-style-type: none"> <li>At supervisory and mid-term assessments, review performance of project planning and implementation and make recommendations for future interventions</li> </ul>
<b>Intermediate Results</b>	<b>Results Indicators for Each Component</b>	<b>Use of Outcome Monitoring</b>
Community participatory watershed planning expanded with an additional focus on local benefits of sustainable land and ecosystem management	<ul style="list-style-type: none"> <li>Sustainable Watershed Management mainstreamed into 20 GP plans including parts of watersheds for which two or more GPs have shared governance responsibility;</li> </ul>	Measure progress at regular supervision and yearly monitoring and data collection occasions and adjust intervention practices according to need.
Controlling land degradation through the SLEM approach at watershed level	<ul style="list-style-type: none"> <li>20-30% of the area in selected MWS under improved SLEM techniques;</li> <li>Increase in availability of water in the dry season by 5% in the treated MWS</li> <li>10% increase in tree and other vegetative cover in the 20 MWS.</li> <li>Implementation of 5 to 10 alternative technologies and approaches for enhancing water availability for agriculture and other domestic use</li> </ul>	Measure progress at regular supervision and yearly monitoring and data collection occasions and adjust intervention practices according to need.
Reduce pressure and dependence on the natural resource base through fostering Markets for NTFPs	<ul style="list-style-type: none"> <li>Reduction in dependency of 2000 households on forest for fuel wood.</li> <li>At least 20% of targeted households enter market with pine briquettes (produced from pine needles).</li> <li>10% increase in opportunities for sustainable alternative livelihoods (Non farm based livelihood options)</li> </ul>	Measure progress at regular supervision and yearly monitoring and data collection occasions and adjust intervention practices according to need.
Enhance biodiversity conservation and management through watershed planning and community participation	<ul style="list-style-type: none"> <li>Increase in direct and indirect evidence of presence of key species of flora and fauna in 20 MWS.</li> <li>50% reduction in incidence of fire in treated MWS</li> <li>Cultivation of at least 5 local medicinal and aromatic plants by communities in 20 micro watersheds.</li> </ul>	Measure progress at regular supervision and yearly monitoring and data collection occasions and adjust intervention practices according to need

<p>Improve adaptation to climate change in natural resource based production systems</p>	<ul style="list-style-type: none"> <li>Improved knowledge of the impact of climate change on mountain ecosystems documented and translated into coping strategy.</li> </ul>	<p>Measure progress at regular supervision and yearly monitoring and data collection occasions and adjust intervention practices according to need</p>
<p>Documentation of Best (Worst) practices to share within the state as well as nation-wide through the SLEM program</p>	<ul style="list-style-type: none"> <li>At least 5 to 10 new and innovative techniques and approaches documented, disseminated and up-scaled within the Uttarakhand state</li> </ul>	<p>At supervisory and mid-term assessments, review effectiveness of SLEM approaches and techniques and make recommendations for future interventions</p>

**Arrangements for Results Monitoring for the Project**  
**Sustainable Land, Water and Biodiversity Conservation and Management for Improved Livelihoods in Uttarakhand Watershed Sector**

Outcome Indicators	Target Values				Data Collection and Reporting		
	Baseline YR 1	YR2	YR3	YR4	Frequency of Reports	Data Collection Instruments	Responsibility for Data Collection
<b>Project Development Objective</b>							
20 number of Micro watershed management plans completed and under implementation	Identification of target groups and land; definition of proposed interventions and initiation of interventions	Increase to 20% of target value	Increase to 60% of target value	Increase to 100% of target value	Baseline, annual and final evaluation report	Evaluation protocols and through field surveys	External consultants under super vision of WMD
10% increase in livelihood opportunities in treated areas	Baseline available	Not Measured	5% increase over baseline	10% increase over baseline	Baseline, interim reports year 3 and 4 and final impact evaluation	Evaluation protocols and through field surveys	External consultants under super vision of WMD
Watershed planning through community participation							
Result/Outcome Indicators	Baseline YR 1	YR2	YR3	YR4	Frequency of Reports	Data Collection Instruments	Responsibility for Data Collection
Sustainable Watershed Management mainstreamed into 20 MWS plans including parts of watersheds for which two or more GPs have shared governance responsibility;	100 % plans finalized at the end of YR1	20 % implementation of MWS plans completed	60 % implementation of MWS plans completed	100 % implementation of MWS plans completed	Annual reports	Evaluation Protocols prepared by contracted consultants	External consultants in sample villages under super vision of WMD
Controlling land degradation through the SLEM approach at watershed level							
Result/Outcome Indicators	Baseline YR 1	YR2	YR3	YR4	Frequency of Reports	Data Collection Instruments	Responsibility for Data Collection
20-30% increase of area in targeted MWSs under improved SLEM techniques	Identification of interventions and target group and initiations of activities	Increase to 20% of target value	Increase to 60% of target value	Increase to 100% of target value	Baseline, annual reports and final evaluation report	Evaluation protocols and through field surveys	External consultants in sample villages under super vision of WMD



Increase in vegetative cover by 10% in the treated 20 MWS	Establish baseline	Increase to 20% of target value	Increase to 60% of target value	Increase to 100% of target value	Baseline, annual reports and final evaluation report	Evaluation protocols and through field surveys	External consultants in sample villages under super vision of WMD
Implementation of 5 to 10 alternative technologies and approaches for enhancing water availability for agriculture and other domestic use	Identification of interventions and target group and initiations of activities	At least 2 techniques and approaches under upscaling	At least 5 techniques and approaches under upscaling	5 to 10 techniques and approaches under upscaling	Annual monitoring review	Evaluation protocols and reports	Project Team in cooperation with WMD
<b>Fostering Markets for NTFPs</b>							
<b>Result/Outcome Indicators</b>	<b>Baseline YR 1</b>	<b>YR2</b>	<b>YR3</b>	<b>YR4</b>	<b>Frequency of Reports</b>	<b>Data Collection Instruments</b>	<b>Responsibility for Data Collection</b>
Reduction in dependency of 2000 households on forest for fuel wood	Not measured because MWS plans will be under preparation	Reduction in dependency of 20% households	Reduction in dependency of 60% households	Reduction in dependency of 100% households	Baseline, annual reports and final evaluation report	Evaluation protocols and through field surveys	External consultants in sample villages under super vision of WMD
At least 20% of targeted households enter market with pine briquettes (produced from pine needles).	Not measured because MWS plans will be under preparation	5% of targeted households enter market	10% of targeted households enter market	20% of targeted households enter market	Baseline, annual reports and final evaluation report	Evaluation protocols and through field surveys	External consultants in sample villages under super vision of WMD
10% increase in opportunities for sustainable alternative livelihoods (Non farm based livelihood options)	Establish baseline	Not measured	5% increase over baseline	10% increase over baseline	Baseline and final impact evaluation	Evaluation Protocols prepared by contracted consultants	External consultants in sample villages under super vision of WMD
<b>Biodiversity conservation and management through watershed planning and community participation</b>							
<b>Result/Outcome Indicators</b>	<b>Baseline YR 1</b>	<b>YR2</b>	<b>YR3</b>	<b>YR4</b>	<b>Frequency of Reports</b>	<b>Data Collection Instruments</b>	<b>Responsibility for Data Collection</b>
Increase in direct and indirect evidence of	Establish baseline through selection of	Not measured	5 % increase over baseline	10 % increase over baseline	Baseline, annual reports and final	Evaluation Protocols prepared	External consultants in sample villages

presence of key species of flora and fauna in 20 MWS.	key indicator species				impact evaluation	by contracted consultants	under super vision of WMD
20% reduction in incidence of fire in treated MWS	Establish baseline	Not measured	60% of target value reached	100% of target value reached	Annual status reports and final evaluation report		
Cultivation of at least 5 local medicinal and aromatic plants by communities in 20 micro watersheds	Not measured because MWS plans will be under preparation	20% of target value reached	60% of target value reached	100% of target value reached	Annual status reports and final evaluation report		
Adaptation to Climate Change							
<b>Result/Outcome Indicators</b>	<b>Baseline YR 1</b>	<b>YR2</b>	<b>YR3</b>	<b>YR4</b>	<b>Frequency of Reports</b>	<b>Data Collection Instruments</b>	<b>Responsibility for Data Collection</b>
Study on impact of climate change on mountain ecosystems completed.	Preparations for study completed	Study initiated	Study ongoing	Study completed	Annual monitoring review	Status reports	WMD and institution/ consultant conducting the study
Formulation of strategy for managing impact of climate change in mountain ecosystems at the end of the project			Formulation of strategy initiated	Strategy completed	Annual monitoring review	Status reports	WMD and institution/ consultant conducting the study
Documentation of Best (Worst) practices to share within the state as well as nation-wide through the SLEM program							
<b>Result/Outcome Indicators</b>	<b>Baseline YR 1</b>	<b>YR2</b>	<b>YR3</b>	<b>YR4</b>	<b>Frequency of Reports</b>	<b>Data Collection Instruments</b>	<b>Responsibility for Data Collection</b>
At least 5 to 10 improved and innovative techniques and approaches documented, disseminated and up-scaled within the Uttarakhand state	Initiation of documentation and coordination with Uttarakhand state	Continued documentation and coordination with Uttarakhand state. At least 2 techniques and approaches under upscaling	Continued documentation and coordination with Uttarakhand state. At least 5 techniques and approaches under upscaling	Continued documentation and coordination with Uttarakhand state. 5 to 10 techniques and approaches under upscaling	Annual monitoring review	Status reports and documentation through print, audio and video	Project Team in cooperation with WMD

## ANNEX B: PROCUREMENT ARRANGEMENTS

### A. General

1. Procurement for the proposed project would be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated May 2004; revised October. 2006 and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, revised October. 2006 and the provisions stipulated in the Legal Agreement. Procurement under different components is described below. For each contract to be financed by the GEF Grant, different procurement methods, consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame are agreed between the Borrower and the Bank and stipulated in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.
2. **Procurement:** The GEF activities are grouped in the following components: (i) Watershed planning through community participation (ii) Controlling land degradation through the SLEM approach at watershed level (iii) Fostering markets for NTFPs (iv) Biodiversity conservation and management through watershed planning and community participation (v) Adoption to Climate Change and (vi) Documentation of Best (Worst) practices to share within the state as well as nationwide through the SLEM program and (vii) Project Management.
  - 2.1.1 **Watershed planning through community participation Component:** This component provides technical assistance for watershed planning and community participation. Community participation will be done through the development of participatory decision making process at the revenue village, Gram Sabha [GS] and Micro Watershed [MWS] levels. The Gram Panchayats Watershed Development Plans [GPDWP] formulated under ongoing UDWDP will be consolidated into Micro Watershed Level Plans. In total 20 Micro Watershed Plans will be developed for implementation as a part of this GEF Project. The planning process will be used to sensitize the communities on the ecosystem degradation and promote incremental measures for sustaining the ecosystems' function. This component envisages small civil work through sub-project carried out by the communities, hiring of consultant services to carry out studies and conduct workshops to sensitize the communities on the ecosystem degradation.
  - 2.1.2 **Controlling Land Degradation through the SLEM approach at the Watershed Level:** This component is to reduce soil erosion and enhance biomass and the availability of water in the Watershed through the year. There will also be a component of community contribution towards the cost of each sub-project and they will also be involved with the operation and maintenance of the developed watersheds. This component envisages hiring of few NGOs, consultancy services, and small civil works through sub-projects.

- 2.1.3 **Fostering Markets for Non-Timber Forest Products [NTFPS]:** This component focuses on the identification of new technologies to meet household energy needs, reduce dependency on firewood and to market the produce created through these technologies. Small market infrastructure and linkages to sell the briquettes will be developed. This component envisages capacity building and consultancy support for developing market linkages, creation of small infrastructure facilities for market support, consultancy services for conducting workshops and training.
- 2.1.4 **Biodiversity Conservation and Management through Watershed Planning and Community Participation:** This component aims to qualitatively and quantitatively enhance biodiversity at the Watershed level. This will be done through a series of interventions. The reduction of soil erosion reduced pressure on biomass for energy and watershed management will also both directly and indirectly contribute to biodiversity conservation. This component envisages hiring of NGOs, consultancy and conducting workshops.
- 2.1.5 **Adaptation to Climate Change:** This component is aimed at improving the understanding of the impact of climate change on natural resource based mountain economies by undertaking a State specific study. The result from the Study will be used for the State of Uttarakhand for identified impacts of climate change. This component envisages hiring of consultancy services and workshops.
- 2.1.6 **Documentation and Dissemination of Good Practices with regards to Decentralized Watershed Planning and Management as well as with regards to Biodiversity Conservation:** The documentation through short studies, publication, short films and documentaries is aimed at enhancing knowledge of SLEM, biodiversity conservation and adaptation to climate change in mountain ecosystems. These will then be disseminated both within the State and also throughout the Country. The dissemination of the findings will be done through SLEM CPP system, network setup under the medium size project for policy and institutional reform for mainstreaming and up-scaling SLEM. This component envisages hiring of consultancy services, printing of publication and conducting workshops.
- 2.1.7 **Project Management:** This component aims at project management, monitoring and capacity building. This component envisages hiring of technical and non-technical on contractual basis and other incremental operating costs under the project. There is a provision to hire Financial Review Consultant and capacity building of staff including exposure visit and workshop.
- 2.2 **Procurement of Works:** Small civil works is envisaged under this project through sub-project by communities.
- 2.3 **Procurement of Goods:** Goods procured under this project would include: purchase of office equipment, data collection and data analysis, office furniture, seeds, seedling, fertilizers, small tools, machines adopting DGS&D rate contract or shopping method or direct contracting depending upon the value of the contract.

- 2.4 **Direct Contracting:** Any Direct Contracting under this Project such as proprietary items valuing less than US\$5,000 will be with the prior concurrence of the Bank as per the provisions contain in Para 3.6 of the procurement guidelines. Any petty off the shelf items such as seeds, seedlings, planting materials etc. valuing US\$500 will be purchased under direct contracting method.
- 2.5 **Selection of Consultants:** Selection of Consultant would include hiring of International Consulting firms, national consultants and individual consultants for implementing all components. Short lists of consultant firms for services estimated to cost less than \$ 500,000 or equivalent per contract may comprise entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines. NGOs services required to implement component two of the project is to be hired following Bank's procurement guidelines.
- 2.6 **Non-Consulting Services:** This procurement will be carried out using Bank's SBD as agreed or acceptable to Bank.
- 2.7 **Training and Workshop:** Training will basically cover dissemination of information and knowledge sharing to communities and project stakeholders.
- 2.8 **Operating Cost:** This will mainly include incremental and operating cost for hiring of vehicles, purchase of consumables, repairs of equipments, purchase of stationery, publication, production of short films and documentaries, meeting cost etc.
- 2.9 The procurement procedures and Standard Bidding Documents to be used for each procurement method, as well as model contracts for works and goods procured, and its steps are presented in the Project Implementation Manual.

**B. Assessment of the agency's capacity to implement procurement**

- 3.1 This Project will follow the established Procurement arrangements of the UDWDP, which are being satisfactorily implemented. The GEF activities will be supervised in accordance with the supervision schedule of at least twice a year. The semi annual progress reports will provide information on the implementation of GEF activities in a format and with the level of details required to provide a consistent picture of progress made or implementation deficiencies. The procurement will be undertaken at the GP level with the WMD level procurement accounting for a small portion of Project funds. The Project Implementation Manual of UDWDP will provide further guidance on how to use the simplified procedures and processes as they may apply. The Project will use the trained procurement staff currently involved in the UDWDP. If any procurement capacity needs occur to meet the project requirements, the GP will be responsible to train Multi Disciplinary Teams [MDT]. To ensure that procurement of GEF activities is carried out in accordance with Bank's Procurement Guidelines and in a time manner, the GP staff will be trained.

3.2 **Procurement Risks and Mitigation Measures:** Bulk of the procurement under the project falls and will be undertaken by the UDWDP, GP and the value of the procurement also very small and the project is already implementing the UDWDP projects following Bank’s Procurement Guidelines. The staffs handling the procurement are already well trained in Bank procurement procedures. As such the project does not carry a significant risk related to procurement carried out by UDWDP and GP.

3.1.3 The UDWDP will also publish information of contracts entered into by it and costing above INR1,000,000(US\$25,000 approximately) on its website to bring about transparency in decision making. UDWDP will maintain all records relating to procurement for up to 2 years after the close of the project. ICFRE will also maintain a separate record relating to complaints and their redressal.

3.4 **Risks related to procurement and Mitigation Plan**

The following table lists perceived procurement related risks and the mitigation plan.

Perceived Risk	Action Completion	Mitigation measures
1. No uniform procurement procedure and SBD’s across the country.	1. During project implementation phase	1. Bank Procurement Guidelines, SBD’s will be used by all the implementing/procuring agencies to have uniformity in procurement under the project. Also for uniformity and capacity building guidelines, templates, standard bidding documents, standard evaluation reports shall be prepared and shared with the PIUs.
2 Documentation Maintenance	2. During project implementation phase	2. At the beginning of the project a brief over view of the documents to be maintained and filed would be discussed with PIU. Subsequently during project implementation, the record keeping and documentation regarding procurement will be monitored.
3. Probability of staff handling procurements being transferred	3. During project implementation phase	3. Agree with the PIA that the trained procurement staff will normally not to be transferred during the project period
4. Capacity Building & training	4. During project implementation phase	4. Joint project launch workshop which covers review of procurement plans and responsibilities and periodical training as a capacity building measures by the Bank.
5. Contract Management	5. Every quarter after the project is declared effective.	Joint project launch workshop which covers review of procurement plans and responsibilities and periodical training as a capacity building measures by the Bank Provide Procurement staff with training (e.g. at NIFM, ASCI etc) and follow up with refreshers if required..
6. Establish a Complaint redressal mechanism.	6. Every quarter after the project is declared effective	5. A quarterly report of all the ongoing contracts a detailed status report including contract management issues such as delays, payment, etc will be submitted to the Project Director and reviewed by him. and also submitted to the Bank
		6. A quarterly report of all complaints received and action taken will be submitted to the Project Director and reviewed by him and submitted to the Bank

## 4. **PROCUREMENT PROCEDURES, DOCUMENTATION AND REVIEW**

### 4.1 **Gram Panchayats and Community Sub-projects**

#### 4.1.1 General:

At the community level, the GPs will procure goods, works and services using the procedures and forms detailed in the CPM that has been prepared specifically for this project and agreed with the Bank. MDTs of the WMD will be the key facilitators and would provide project related information to the GPs and the communities facilitate planning within the framework of the project and provide technical guidance and oversight during implementation.

The following modalities shall be followed in selecting who will be chosen to carry out the works: (i) first preference would be for the individual landholders in whose property part (or all) of the concerned work falls; (ii) if such individuals do not accept to carry out their portion of the work, or if the works fall primarily on common lands, then the GP will first explore the option of awarding the works to eligible user groups, such as RVCs, VPs, SHGs, etc., who will be responsible for providing all the required labor and material inputs; failing which, (iii) the GPs may elect to carry out the complete work themselves by mobilizing and providing the labor inputs, and also procuring the required materials themselves, or by contracting out the labor to local groups or petty contractors but procuring and supplying the required materials themselves; and, where such technical capacities do not exist in the previous three options, as a last option, (iv) the GPs may contract out the work to local contractors through competitive procedures (Shopping or National Competitive Bidding (NCB)).

The CPM contains procedures, thresholds, forms and formats for all types of procurement at this level.

#### 4.1.2 The following is a summary of those procedures and procurement thresholds:

##### 4.1.2.1 **Works:**

###### a) Procedures:

All contracts for small works or labor supply estimated to cost less than US\$2,000 equivalent may be procured through direct purchase or direct contracting. Contracts for works below US\$50,000 equivalent may be procured through shopping by soliciting three sealed quotations. GPs may, however, elect to award works/contracts estimated to cost less than US\$50,000 equivalent directly to eligible local user groups, such as RVCs, VPs, SHGs, etc. The forms and documents contained in the CPM shall be used for such procurement.

All contracts exceeding US\$50,000 shall be procured through NCB procedures using the appropriate country specific bid documents agreed between GO1 and the World Bank.

b) Prior Review:

To reduce the number of reviews and appraisals of procurement actions related to sub-projects by the concerned district based DPD of the WMD, and to allocate more responsibility to the beneficiary GPs, only contracts estimated to cost above US\$30,000 equivalent shall be prior reviewed and cleared by the concerned district unit of the WMD.

4.1.2.2 **Goods:**

a) Procedures:

All goods contracts estimated to cost less than US\$500 equivalent may be procured through direct purchasing. Contracts exceeding US\$500 equivalent and below US\$30,000 equivalent shall be procured through local shopping by soliciting three quotations. Items (such as, seeds, saplings, pesticides, semen, fertilizer and livestock) valued up to US\$ 5,000 equivalent may be procured through direct purchase.

All items estimated to cost above US\$30,000 equivalent shall be procured through NCB using the country specific bid documents agreed between GO1 and the World Bank.

b) Review:

To reduce the number of reviews and appraisals of procurement actions related to sub-projects by the concerned district based DPD of the WMD, and to allocate more responsibility to the beneficiary GPs, only goods contracts estimated to cost above US\$20,000 equivalent would be required to be reviewed and cleared by the concerned DPD of the WMD.

4.1.2.3 **Consultants:**

The GPs may require employing services of NGOs, SHGs or other user groups for training, demonstrations, etc. No contract is estimated to exceed US\$1,000 equivalent, and these may be procured through single source. Prior review by the WMD shall be required for any contract estimated to cost more than US\$1,000 equivalent.

4.2 **Watershed Management Directorate**

4.2.1 General:

Procurement at WMD will consist of: (i) works (construction of small works such as the rehabilitation/repair/construction of staff quarters, office buildings, etc., at the district level); (ii) goods (office equipment such as computers, furniture, supplies, vehicles, communications equipment, etc); (iii) consultant services and NGOs that support the



three project components; (iv) PNGOs and FNGOs; and (v) the employment of agencies to conduct independent review of project progress and achievements.

All project activities to be financed under the Credit would be procured in accordance with the procedures in the World Bank's Guidelines for Procurement under IBRD Loans and IDA Credits (May 2004, Revised October 2006) and Guidelines for Selection and Employment of Consultants (May 2004, Revised October 2006). For NCB the following will also apply:

- (a) Only the model bidding documents for NCB agreed with the GO1 Task Force, as amended from time to time, shall be used;
- (b) Invitation for bids shall be advertised in at least one widely circulated national newspaper, at least 30 days prior to the deadline for bid submission;
- (c) No special preference will be accorded to any bidder, either for price or for any other terms and conditions when competing with foreign bidders, state owned enterprises, small scale enterprises or enterprises from any given state;
- (d) Except with the prior concurrence of IDA, there shall be no negotiation of price with the bidders, even with the lowest evaluated bidder;
- (e) Extension of bid validity will not be allowed without the prior concurrence of IDA (a) for the first request for extension if it is longer than eight weeks and (b) for all subsequent requests for extension irrespective of the period (such concurrence will be considered by IDA only in cases of Force Majeure and circumstances beyond the control of the Purchaser or Employer.);
- (f) Re-bidding shall not be carried out without the prior concurrence of IDA. The system of rejecting bids outside a predetermined margin or "bracket" of prices shall not be used;
- (g) Rate contracts entered into by Directorate General of Supplies and Disposals will not be acceptable as a substitute for NCB procedures. Such rate contracts will be acceptable for any procurement under National Shopping;
- (h) The two or three envelope system will not be used.
- (i) The Contractor/supplier/consultant shall permit the Bank and/or persons appointed by the Bank to inspect the Supplier's offices and/or the accounts and records of the Supplier and its sub-contractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Bank if required by the Bank

#### 4.2.2 **Works**

##### 4.2.2.1 Procedures:

No contract is expected to exceed US\$500,000 equivalent, and the work is therefore not amenable for packaging into a large contract. Hence no ICB is foreseen.

All contracts estimated to cost above US\$30,000 equivalent shall be procured through NCB in accordance to the provisions of the World Bank's Procurement Guidelines (May 2004, Revised October 2006) and using the India specific standard bid documents for Small Works. Contracts estimated to cost below US\$30,000 equivalent may be procured through National Shopping.

#### 4.2.2.2 Review:

All contracts estimated to cost above US\$300,000 equivalent shall be subject to the World Bank's prior review.

#### 4.2.3 **Goods**

##### 4.2.3.1 Procedures:

- [i] **ICB:** All other contracts estimated to cost the equivalent of more than US\$200,000 equivalent shall be procured through ICB procedures. Domestic preference will be available in ICB.
- [ii] **NCB:** Contracts estimated to cost more than US\$30,000 equivalent but less than the US\$200,000 equivalent per contract would be procured following NCB procedures as defined in the Guidelines.
- [iii] **Shopping:** Goods (including vehicles) estimated to cost less than US\$30,000 equivalent per contract would be procured using National Shopping procedures in accordance with paragraphs 3.5 and 3.6 of the guidelines.
- [iv] **Direct Contracting:** Proprietary items estimated to cost below US\$5,000 equivalent may be procured through direct purchase.

#### 4.2.4 **Review:**

All ICB procurement shall require the Bank's prior review.

### 5. **Training and Consultancies**

Training and consultancy services includes the hiring of PNGOs, FNGOs, other NGOs, government institutions, training institutions, individual consultants and firms. About 60 percent of training expenditures would be for the training and capacity building of GPs and User Groups. About 40 percent of training expenditures would be for the training of WMD staff and facilitators.

#### 5.1 Procedures:

Consultancies and studies would be contracted by WMD on Terms and Conditions which are in accordance with IDA Guidelines for the use of Consultants (May 2004, Revised October 2006). Unless otherwise stated, technical assistance and consultancy services would be procured using QCBS procedures. For contracts with consulting firms/institutions valued below US\$100,000 equivalent per contract, procurement may either follow QCBS, or methods based on consultant's qualifications or Single Source Selection - depending upon the appropriateness of the procedures relevant to the requirements. The method of procurement for services of NGOs would be either Consultant's Qualifications or Single Source Selection. These services are estimated to cost less than US\$100,000 equivalent per contract. For individual consultants, this threshold would be US\$25,000 equivalent per contract. The Standard Request for Proposals and Conditions of Contract would be used for all contracts. For consultancies estimated to cost US\$200,000 equivalent or less, the shortlist can comprise entirely national consultants with the following exception:

The WMD will hire the services of PNGOs and FNGOs. PNGOs will be responsible for implementing the project in two districts on behalf of WMD and in the same manner as would be done by DPDs and MDTs (except for financial transfers to GPs). FNGOs would be hired to provide community mobilizers who will be placed in MDTs and will form part of those teams. Both the PNGOs and FNGOs would be hired for the project duration, but with a contractual provision that allows review of performance on an annual basis, and continuation of the contract based on meeting predetermined performance criteria. Though each of these contracts are expected to cost a total of US\$1 million equivalent, the shortlist would comprise entirely of national NGOs.

## 5.2 Review

- [i] Firms NGOs: (a) Contracts of value of more than US\$100,000 equivalent - Full Prior Review; and (b) Contracts of value between US\$50,000 and US\$100,000 equivalent - only TORs and Shortlists to be Prior Reviewed.
  - [ii] Individuals: Contracts of value of more than US\$25,000 equivalent - prior review. For critical assignments of estimated cost less than the prior review threshold, the generic TORs and shortlists for may be first submitted to the World Bank for its review and clearance.
6. **Post Review:** All contracts not covered under prior review will be subject to post award review. For this review, a sample of the contracts awarded shall be selected annually on a random basis and post award review conducted by the Bank or its representatives. The post review contracts to be reviewed will be 15% of the total post review contracts concluded during the given period of time. The TOR for the independent auditors, to be engaged by GoUA would also include procurement review of selected contracts.
7. **Others:** The UDWDP shall ensure that the Project is carried out in accordance with the provisions of the World Bank Guidelines on Preventing and Combating Fraud and

Corruption in Projects Financed by IBRD Loans and IDA Credits (revised October 2006).

The Contractor/Supplier/Consultant shall permit the Bank and or persons appointed by the Bank to inspect the supplier's offices and /or the accounts and records of the Supplier and its sub-contractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Bank, if so required by the Bank.

8. **Complaint handling mechanism:** The Procurement Manual also includes provision for complaint handling mechanism.

C. **Procurement Plan**

9. At the time of Project appraisal, it has been agreed with the Grant beneficiaries to develop an overall procurement plan for project implementation which includes the inputs provided by UDWDP with in a month of implementation and submitted to the bank for approval and will be available at the websites of UDWDP, Dehradun. It will also be available in the project's database and in the Bank's external website. The Procurement Plan will be updated in agreement with the Project Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

D. **Frequency of Procurement Supervision**

10. In addition to the prior review to be carried out by Bank, general review of procurement will be undertaken during full fledged [bi-annual] supervision missions.
11. The residual project risk for procurement is MODERATE.

E. **Details of the Procurement Arrangements Involving International Competition**

11.1 **Goods, Works, and Non Consulting Services [**

- (a) List of contract packages to be procured following ICB and direct contracting:

Not applicable.

11.2 **Consulting Services**

- (a) List of consulting assignments with short-list of international firms.

Sl. No.	Package Number	Description of Services	Estimated Cost Incl Cont. & Taxes (in 000 US\$)	Procurement Method	Proposals to be Received by the Project	Evaluation to be Finalised	No Objection by the Bank

					<b>Authorities</b>		
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>11</b>	<b>12</b>	<b>13</b>
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- (b) Consultancy services estimated to cost above US\$100,000, per contract and single source selection of consultants (firms) for assignments estimated to cost above US\$30,000 will be subject to prior review by the Bank.
- (c) Short lists composed entirely of national consultants: Short lists of consultants for services estimated to cost less than US\$ 500,000 or equivalent per contract may comprise entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

**ANNEX C: SUMMARY OF FINANCIAL MANAGEMENT ASSESSMENT AND PROJECT FINANCIAL  
MANAGEMENT ARRANGEMENTS**

The existing project has been effective from 2004, the financial management system of UDWDP has been established and working satisfactory in the field, generating timely accounting reports, submitting timely FMR, SOE and audit reports. The FM rating for the project has been consistently rated “Moderately Satisfactory” for the past two years. The current financial management system of UDWDP is adequate to meet the needs of the proposed additional GEF grant financing. As the implementation arrangements for the GEF additional financing, would be in line with the existing UDWDP, the FM arrangements for the additional financing would also follow the FM arrangements as per the existing project. The existing system in terms of the key components is summarized in the table below.

<b>FM components</b>	<b>Existing system for UDWDP</b>	<b>Proposed system for GEF project</b>	<b>Residual Risk Rating</b>
Budgeting	The project has designated budget head in the state budget. This budget head is operated by WMD for carrying out the expenditure under the project	For the GEF project a specific budget line item under the existing project head would be created. This would be used by the WMD for carrying out the expenditure under the project. The budget line item needs to be created.	M
Fund Flow	The amount for the PMU and DPD office are drawn through the budget. The funds for the GP and other implementing agencies are given in cheques/drafts based on the AWP and the sub project agreement. They would be operating separate bank accounts and maintain separate books of account for the funds.	The same procedure would be followed. DPD, GP as well as other implementing agencies would be required to maintain separate cash books and bank account for the GEF component of the project.	M
Accounting	The accounting books and other records are being maintained manually at DPD level. Based on the manual records, formats are updated which is finally updated in FMIS (MIS software) which is operational in HO, PD and the DPD offices and currently this software is being used by the project for preparing the claims and FMR. The project has been maintaining up to date records and has been submitting SOE on a monthly basis.	The same system would be followed. In all the WMD offices separate cash book would be maintained for the GEF portion. The GP and other implementing agencies receiving GEF fund would maintain separate cash book and account for the expenditure. This expenditure would be collated and then entered in the FMIS which would be consolidated and reported to the bank. The project is required to redesign the computerized accounting system within 3 months from project effectiveness.	S*(Due to number of entities)
Reporting	Reporting is done as per the agreed formats in the FM manual. The software is used as the basis of reporting. The project has been submitting FMR and audit reports on time.	The same procedure would be followed. Reports similar to the agreed reports in the FM manual would be designed and agreed for GEF component.	M
External Audit	CAG carries out the audit for the existing project. Mostly the audit reports have been submitted on time and there are no major audit issues identified so far.	CAG would be the auditor for the GEF component also. One consolidated audit report would be received from the project for both the existing and GEF project. The ToR for this enhanced scope needs to be agreed with the AG within three months of effectiveness.	M
Internal control and audit	The WMD has set and procedures and rules from which internal control are derived by the project. Also the	The same procedure would be adopted. The Operational manual which has been agreed for the existing project would be	M

FM components	Existing system for UDWDP	Proposed system for GEF project	Residual Risk Rating
	operational manual lays down the policies and procedures for the entire project which is followed. Apart from the above internal audit is being done by a CA firm and no major issues have been identified. Also GP audits are conducted every year by the project through CA firms which augments the control for the project.	adopted for this additional financing project also. The Internal audit ToR would be enhanced to cover the GEF portion of the project also. GP audits would be conducted for those GPs which are getting funded under the GEF portion in line with the overall project.	
Staffing	The project is handled by senior accounts and finance officer from the Government of Uttarakhand.	To augment the capacity at the PMU, commerce graduates would be hired on the contract basis as a part of this GEF project. This needs to be conformed by negotiation.	M
Overall risk rating			M

As the entity is already executing the existing project and the GEF grant would be an additional financing, the overall inherent risk in terms of entity level risk and project level risk is pegged as “Moderate” (M). The overall project risk which encompasses both inherent and control risk for the project is also Moderate (M).

The GEF grant funds would flow through the state budget as it is being done for the existing project. The state government would introduce a line item for the GEF funding under the existing UDWDP-Gramya project budget head. This budget line would be used by WMD for incurring GEF related expenditure. As this line item will be created under the existing head, the required budget can be transferred from the main head. The project would be required to create the budget line item and would be required to do the budget allocation, once the additional financing is approved by the Board. This would be confirmed during the negotiations.

The WMD which is the PMU for the UDWDP would maintain the accounts and reports for the GEF grant in line with the accounting and reporting system agreed and implemented for the existing project. The UDWDP has an operation manual to which a supplemental project manual for GEF activities has been developed by WMD. The financial manual for the existing project would be used for the GEF activities. The project would maintain an assisted cash book (separate cash book) at all levels within WMD for tracking GEF expenditure. The expenditure for the GEF portion of the project would be accounted separately in the books of accounts which would facilitate accounting and reporting for the GEF component separately. In case of sub-projects<sup>3</sup>, depending on the activity the funds would flow to GP; in case of watershed activities and

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<sup>3</sup> Sub-project are those projects where the following conditions are met:

- There must be a financing agreement signed between the beneficiary and the project (WMD)
- There must be beneficiary contribution whether in cash or kind towards the cost of the sub-project
- Details of agreed disbursement schedules and procurement procedures
- A list of goods, works and services to be financed
- An undertaking on the part of the beneficiary to execute the subproject with due diligence and upon its completion to provide for its O&M.

forestry activities to VP. Release of GEF funds to GPs/VPs as installments would be against approved work plans and specific activities as outlined in the main OM. Whenever amounts are transferred by WMD to other entities like GP/VP, WMD will account for the same GP/VP wise in their books of account so that transfers and expenditure reporting can be traced. When any entity like GP/VP, receives money from the project, it would be required to maintain separate bank account and account books for the GEF portion. An initial advance of 10% would be provided to such entities as in the case of main project and then the project would reimburse based on running bills/UC. The accounting and reporting requirements would be as per the FM manual and would be monitored by WMD on a regular basis. In case of demonstration activities WMD as the spending entity would be responsible for accounting and reporting on the expenditure. However, if any money is transferred to FIG/SHG, these entities would be required to sign an MOU with WMD and provide a work plan based on which funds would be transferred. Consequently FIG/SHG would be required to maintain separate bank accounts and accounting records for the funds received from WMD and the expenditure carried out.

WMD will prepare monthly, quarterly and annual reports as outlined in the FM manual. Within 3 months from the date of effectiveness the project would be required to modify the computerized accounting system to ensure that the GEF accounting and reporting system is established in the main module of the accounting system.

The audit for the GEF component would be carried out by CAG as the auditor for the existing project also. There would be one consolidated audit report for both the existing IDA funds and GEF funds. However the audit report would clearly demarcate the sources and use of funds from the respective financier. The ToR for the additional work needs to be agreed with the AG. The audit report is required to be submitted within 6 months of the end of the financial year. Also the scope of work of the internal audit which is being currently done by a CA firm for the existing project would need to be extended to cover the activities funded by the GEF project.

The following audit reports will be monitored in the Audit Reports Compliance System (ARCS):

<b>Implementing Agency</b>	<b>Audit</b>	<b>Auditors</b>	<b>Audit Due Date</b>
UDWDP	Project SOE statement (including GEF statement)	CAG	6 months after the end of each fiscal year (March 31 <sup>st</sup> )
DEA/GOI	Designated account	CAG	6 months after the end of each fiscal year (March 31 <sup>st</sup> )

One area of strengthening required in the existing project is the staffing at the PMU level in terms of accounts and finance department. It is envisaged that the PMU would hire commerce graduates at the PMU for accounts maintenance and reporting. This needs to be agreed and confirmed by negotiations. Disbursements from the grant will be made using SOE basis which is being followed for the existing project (reimbursement with full documentation and against SOE). This needs to be agreed and confirmed by negotiations. A Designated Account (DA) will be maintained in the RBI and will be operated by the Department of Economic Affairs, Ministry of Finance. An initial advance of [US\$ 700,000] would be made to the DA from the GEF grant. The DA will be operated in accordance with the Bank's operational policies.



The major Disbursement categories for the project would be as follows:

Category	Description	Amount in US\$ million
1	Goods works services under sub-project	2.94
2	Goods, works, services, consultancies and incremental cost other than sub-project	4.06
3	Unallocated	0.49
	<b>Total</b>	7.49

**Supervision of the GEF activities project:** The supervision will be limited to half-yearly supervision as the risk level of the additional financing is ‘Moderate’. The field visits would be combined along with the supervisory mission of UDWDP missions. Further if any future requirements arise in the field to strengthen the FM/reporting arrangements then field visits would be carried out based on the facts and issues.

**Actions to be completed:**

- Create the budget line item and make budget allocation once project is approved by the Board;
- Agree with the State AG for the audit within 3 months from effectiveness;
- Augment finance and accounts staff at the PMU within 3 months from effectiveness;
- Adjust computerized accounting system to facilitate accounting and reporting of GEF expenditure within 3 months from effectiveness.
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**Legal covenants** (apart from general conditions):

- Appointing external auditor within 3 months of project effectiveness
- Make adjustments in the computerized accounting system within 3 months of project effectiveness to accommodate distinct accounting of GEF grant resources and maintain thereafter through out the project period;

## **ANNEX D: GOVERNANCE ACCOUNTABILITY ACTION PLAN<sup>4</sup>**

The GAAP developed during the supervision of UDWDP will apply to the activities proposed for additional GEF grant financing. The institutional establishment supporting the implementation of GEF activities has been found comprehensive and adequate to support the implementation of GAAP actions. The additional GEF project has strong linkages with the umbrella SLEM CPP which will take the transparency and accountability and overall implementation oversight during project implementation at a higher level. The outreach and learning events organized on an annual basis under the SLEM Country Partnership coordination mechanism will serve as additional venue for communication of project outcomes.

One of the underlying project principles is implementation through community participation and wide involvement of project stakeholders which includes arrangements for access to information. This principle will be adopted for GEF activities to ensure that the principles governing project implementation are not subverted at any level by any individual. Accordingly, the project is aligned with the Suo-moto disclosure of information as its guiding principle in its endeavor is to ensure transparency and inclusion. Hence it is in line with the requirements of the Right to Information (RTI) Act 2005, and has to provide on-demand information as prescribed by law. Experience shows that success of a project is very closely associated with an efficient and responsive grievance redressal mechanism which is based on a responsive administration. The project intends to implement a responsive grievance handling mechanism at various levels by putting in place specific persons who shall be entrusted the responsibility for the same, with provisions of online tracking and monitoring of the deliverance on this score. The entire objective of the GAAP is to put in place systems which are transparent in functioning, information that is accessible by all, and above all a governance mechanism which delivers as per the design principles of the project

### **Risk Assessment and Mitigation Plan**

As the implementation of watershed activities has certain elements of risks involved in it, albeit at a small scale, the project has identified some of the elements which can have an adverse bearing on the success of the project. The list below is not necessarily a comprehensive one and it is likely that some more may be encountered as implementation progresses. The table below is developed on the premise that elements of fiduciary risks project has been specified in the corresponding sections of the project paper, including actions at any level of implementing partners which subverts the principles of implementation as designed in the PIP.

The key elements which can have an adverse bearing on the motivational level of the stakeholders, and thereby on ensuring participation which has a direct bearing on the success of the project fall in two main categories:

- i. Issues that arise from the complexity and planning aspects of watershed activities and the definition of GEF activities which specifically contribute to the global

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<sup>4</sup> The GAAP used for the additional grant financing follows the format and content of the GAAP prepared for the parent project (UDWDP) and agreed with the Borrower during 2008 supervision.

objective and may result in some difficulties during implementation to monitor outcomes;

- ii. Issues that arise from the capacity of implementing agencies, and project decision making framework to ensure sufficient level of communication between the project implementing agencies and key stakeholders and may result in delays and more processing time of project milestones and the implementation of internal controls and financial management and procurement requirements.

Therefore the emphasis during project implementation will be to ensure that governance issues are duly considered, implemented and monitored in the areas outlined in the table below:

RISK	OBSERVATION	RATING	TIMELINE/ monitoring frequency	RISK MITIGATION
<b>Accountability &amp; Governance</b>				
Staffing & Deployment	<ul style="list-style-type: none"> <li>• Approximately 30% of the total budgeted staff position in the project remains vacant, including few critical senior positions. This might pose a serious risk the ability of the project to implement at the agreed scale.</li> <li>• 4 JDs, few financial officers, JEs, at GPWD level (94/509 are vacant), and other vacant positions at the unit level contributes to a reduced effectiveness of the overall project management. Multi tasking capacity of the staff has shown appropriate results so far, but this may not be sustainable in the long run in view of: (i) the number of vacancies, (ii) the continued work overload of staff, and (iii) the consequent pressure on staff.</li> </ul>	H	During first six months of Year 1 and thereafter during supervision	<ul style="list-style-type: none"> <li>• Implementation of immediate recruitment as per the requisite staff budgeted in the Project implementation.</li> <li>• Retention of the staff in key position till all the recruitment is completed. This will ensure the sustenance of the ongoing speed-progress of the Project.</li> </ul>
Communication & Information	<ul style="list-style-type: none"> <li>• While the project has a wide range of communication products and a comprehensive strategy for the various stakeholders, the lack of information and consequently support of the project at policy and political level might constitute a risk for the project, which may be</li> </ul>	M	<ul style="list-style-type: none"> <li>• Monitor implementation of project communication Strategy and use various outreach activities to disseminate information</li> </ul>	<ul style="list-style-type: none"> <li>• The preparation of a dedicated strategy to inform government and political actors at division and state level is needed.</li> <li>• DPD/NGO/PNGO should (i) ensure a timely dissemination of</li> </ul>

	<p>affected by the lack of political support.</p> <ul style="list-style-type: none"> <li>At grassroots level the effectiveness of the communication products might have reduced in the GPs where implementation started first.</li> </ul>		<p>regarding outcomes of GEF activities</p> <ul style="list-style-type: none"> <li>At mid-term assess the effectiveness of communication with ICFRE (SLEM CPP)</li> </ul>	<p>the relevant communication products at the GP Level, improving the integration of IEC in the community mobilization process; and (ii) strengthen the mainstreaming of communication messages emerging from the PME exercise into social mobilization process.</p> <ul style="list-style-type: none"> <li>Interact regularly with ICFRE ( SLEM CPP) to disseminate best practice notes the projects activities</li> </ul>
Grievance & Complaints mechanism	<ul style="list-style-type: none"> <li>Grievance cells in certain GPs are partially functional as quite a few villagers are not aware of complaint box provisions available for them. This might affect the vigilance and accountability processes.</li> <li>While the redress mechanisms are in place, weaknesses were observed in few GPs.</li> </ul>	M	Year 1 and each year thereafter	<ul style="list-style-type: none"> <li>PMU/DPD, to monitor half yearly the divisional functioning of the cell and grievances received &amp; suggest a way to resolve. In addition compliance mechanism envisaged under the State RTI Act should also be incorporated.</li> </ul>
Procurement & the disbursement cycle at the GP level	<ul style="list-style-type: none"> <li>The disbursement from DPD to the GP takes place as per the procurement plan. However the inter GP disbursement from GP&gt;RVC&gt;VP&gt;Beneficiary is time consuming and sometimes it takes more than three months for the beneficiary to receive resources in its account. Such delay in Bank transaction can be perceived as a risk for the overall sustainability of the Fund Management at the GP Level.</li> <li>Such long disbursement cycle could be demoralizing and can weaken the farmer/user groups at operational levels.</li> </ul>	L	<p>Year 1 and onwards</p> <p>Monitor specific risk mitigation measures during regular supervision missions</p>	<ul style="list-style-type: none"> <li>The possibility of allowing GP/VP procuring directly instead of going through RVC may be explored so as to reduce the cycle of disbursement.</li> <li>Such alternative mechanism should also be discussed in Gram Sabha, for reducing the transaction time.</li> </ul>

<p>Micro Plan incorporation into GPWDP Plan</p>	<ul style="list-style-type: none"> <li>The primary purpose of the micro plan is to develop a comprehensive NRM base plan incorporating local socio- economic requirements. Thus making it comprehensive plan for all development activities undertaken by different line departments. At the same time it should also establish synergies between different development projects. However such synergies are yet to be established through the existing micro-plans.</li> <li>At present, the existing micro plan is perceived as the plan for the watershed project alone.</li> </ul>	<p>L</p>	<p>Year 1 and onwards</p>	<ul style="list-style-type: none"> <li>Considering the quality of the micro plan, it will be appropriate to identify few critical micro watershed areas, where the synergy could be established, by improving the existing micro plan concerned.</li> <li>Such revision of the micro plan should involve line department stakeholders from the beginning of the preparation.</li> </ul>
<p>GP Election &amp; Interim Administrative arrangement</p>	<ul style="list-style-type: none"> <li>In light of the GP election, there may be significant delay in the procurements at GP Level.</li> </ul>	<p>L</p>	<p>Year 1 (first six months) which coincide with GP elections -- carry out a verification of administrative arrangement in place</p>	<ul style="list-style-type: none"> <li>All DWC must ensure that all the GP Plans are ready by the end of August, before the code of conduct comes into the play.</li> </ul>
<p style="text-align: center;">OVERALL RISK LOW –MEDIUM</p>				