



GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

March 6, 2017

Dear LDCF/SCCF Council Member,

I am writing to notify you that we have today posted on the GEF's website at www.TheGEF.org, a Project Identification Form (PIF) for a full-sized project proposal from UNDP entitled ***Nepal: Developing Climate Resilient Livelihoods in the Vulnerable Watershed in Nepal (GEF ID: 6989)***, for funding under the Least Developed Countries Fund (LDCF). This PIF has been posted for Council approval by mail. Council Members are invited to review the PIF and to submit their comments (in Word file) to the GEF Secretariat's program coordination registry at gcoordination@TheGEF.org by April 6, 2017.

Following the streamlined procedures for processing LDCF proposals, Council members are invited to approve the following decision:

*The LDCF/SCCF Council reviewed the PIF entitled **Nepal: Developing Climate Resilient Livelihoods in the Vulnerable Watershed in Nepal (GEF ID: 6989)** (LDCF Project Grant \$7,000,000) (Agency Fee \$665,000), posted on March 07, 2017 and approves it on a no objection basis subject to the comments submitted to the Secretariat by April 6, 2017.*

The Council finds that the PIF (i) is, or would be, consistent with the Instrument and GEF policies and procedures, and (ii) maybe endorsed by the CEO for final approval by the GEF Agency, provided that the final project document fully incorporates and addresses the Council's and the STAP reviewer's comments on the PIF, and that the CEO confirms that the project continues to be consistent with the Instrument and GEF/LDCF/SCCF policies and procedures.

The final project document will be posted on the GEF website for information after CEO endorsement. If the GEF CEO determines that there has been a major change to the present scope and approach since PIF approval, the final project document shall be posted on the web for Council review for four weeks prior to CEO endorsement.

In accordance with this decision, if the Secretariat has not heard from you in writing by April 6, 2017 we will assume that you approve the PIF.

Sincerely,

Naoko Ishii
Chief Executive Officer and Chairperson

Copy to: Country Operational Focal Point, Alternates, GEF Agencies, STAP, Trustee



PROJECT IDENTIFICATION FORM (PIF).

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: Least Developed Countries Fund

For more information about GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title:	Developing climate resilient livelihoods in the vulnerable watershed in Nepal		
Country(ies):	Nepal	GEF Project ID: ¹	6989
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5434
Other Executing Partner(s):	Department of Soil Conservation and Watershed Management, Ministry of Forestry and Soil Conservation	Submission Date:	Oct. 8, 2014
		Resubmission Date:	Nov. 20, 2014
		Resubmission Date:	Dec. 17, 2014
GEF Focal Area(s):	Climate Change	Project Duration (Months)	48
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP	<input type="checkbox"/>
Name of parent program:	[if applicable]	Agency Fee (\$)	665,000

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²:

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
CCA - 3 Integrate climate change adaptation into relevant policies, plans and associated processes	LDCF	1,500,000	16,000,000
CCA - 1 Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change	LDCF	5,500,000	24,000,000
Total Project Cost		7,000,000	40,000,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To develop climate resilient community livelihoods through integrated watershed management practices					
Project Component	Financing Type ³	Project Outcomes	Trust Fund	(in \$)	
				GEF Project Financing	Co-financing
Climate resilient watershed management policy and institutional framework	TA	1. Integrated watershed management framework has been established to address climate change induced floods and droughts.	LDCF	1,170,000	15,400,000
Climate resilient, watershed-based land use and livelihoods	Inv	2. Integrated watershed management practices introduced and scaled up in 3 districts covering 150,000 ha of watershed areas and benefiting 100,000 vulnerable people.	LDCF	5,500,000	24,000,000
Subtotal				6,670,000	39,400,000
Project Management Cost (PMC) ⁴			LDCF	330,000	600,000
Total Project Cost				7,000,000	40,000,000

If Multi-Trust Fund project :PMC in this table should be the total and enter trust fund PMC breakdown here ()

¹ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

² When completing Table A, refer to the GEF Website, [Focal Area Results Framework](#) which is an Excerpt from [GEF-6 Programming Directions](#).

³ Financing type can be either investment or technical assistance.

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Please include confirmed co-financing letters for the project with this form.

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
National Government	Department of Soil Conservation and Watershed Management	Grant	36,000,000
GEF Agency	UNDP Country Office	Grant	4,000,000
Total Cofinancing			40,000,000

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS ^{a)}

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
UNDP	LDCF	Nepal <input type="checkbox"/>	Climate Change	(select as applicable)	7,000,000	665,000	7,655,000
Total GEF Resources					7,000,000	665,000	7,655,000

a) No need to fill this table if it is a single Agency, single Trust Fund, single focal area and single country project.

b) Refer to the [Fee Policy for GEF Partner Agencies](#).

E. PROJECT PREPARATION GRANT (PPG)⁵

Is Project Preparation Grant requested? Yes ☒ No ☐ If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee ⁶ (b)	Total c = a + b
UNDP	LDCF	Nepal <input type="checkbox"/>	Climate Change	(select as applicable)	150,000	14,250	164,250
Total PPG Amount					150,000	14,250	164,250

⁵ PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF upto \$1 mil; \$100k for PF up to \$3 mil; \$150k for PF up to \$6 mil; \$200k for PF up to \$10 mil; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

⁶ PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁷

Provide the expected project targets as appropriate. N/A

PART II: PROJECT JUSTIFICATION

PROJECT OVERVIEW

A.1. Project Description. Briefly describe: 1) the global environmental problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

Among all physiographic regions of Nepal, the mountain regions are the most vulnerable, because warming trends are growing and the impacts are magnified by the extreme changes due to variation in altitude. The Himalayan catchments of Nepal, including watersheds in mountain regions are particularly prone to floods and associated landslides, because the melting snow coincides with the summer monsoon season and any intensification of the monsoon and/or increase in melting, is likely to contribute to flood disasters. Around 85% of rainfall occurs during the four monsoon months of June to September. Reports from Nepal's Ministry of Home Affairs (MoHA) show that over the course of the past 10 years, more than 4,000 people have died from climate-induced disasters and have resulted in accumulated economic losses of US\$5.34 billion (MoHA, 2010). At the other extreme, water scarcity and droughts also pose a threat to livelihood systems. The temporal variability of rainfall and runoff is hence very high, and the problem of excess water during the monsoon and water scarcity during the dry season affects all aspects of life in the country. For example, during the 2008-2009 droughts, there were power cuts lasting up to 16 hours per day in Kathmandu, barley and wheat crop yields dropped, and nearly 2 million people were food insecure. In the same year, floods in the following monsoon destroyed significant areas of growing crops (ICIMOD, 2011).

A heavy reliance on agriculture, largely subsistence and rainfed farming is a significant aspect of vulnerability. Agricultural production comprises 32% of Nepal's gross domestic product (World Bank 2014). Due to the country's extreme geography and abrupt topographical changes, only about 17% of Nepal's total land area is suitable for agriculture, comprising approximately 2.5 million hectares (Mha) with a cropping intensity varying from one to three crops per year, much of which is limited to terracing on high grade hillsides (which limits the cost-effectiveness and reach of man-made irrigation systems). It is, therefore, not surprising that 65% of arable land is rain-fed, with only 24% having access to irrigation systems, mostly in lowlands of Terai. Although investment in irrigation expansion has increased, it is not adequately planned, constructed or maintained. Poor construction standards and maintenance protocols of irrigation network often result in seepages and increase susceptibility to erosion and landslides. Land degradation from unsustainable land use also severely limits crop productivity. Overgrazing and inappropriate farming practices have all contributed to widespread topsoil erosion and nutrient loss, contributing to frequent occurrences of landslides in the hills and floods in the lowlands. The years from 2001 to 2010 saw crop production being affected significantly with losses ranging between 5 to 35 percent; where a total of 14.3 million people were affected by droughts and 2 million by floods and 0.3 by landslides (RIMES, 2013).

A recent study of "Environmental Causes of Displacement," reports that in the past decade water sources in many parts of the country have either already dried up or are drying up rapidly. As a result, the production of cereals and fruits has declined sharply, as has the production of milk and meat. In some places people have even stopped planting paddy rice, Nepal's main grain, because conditions are too dry and in some places farmers have been forced to abandon agricultural land altogether. Recurring water shortages have far and wide reaching social and economic effects as they threaten agriculture-based livelihoods and undermine natural resource base. Women are particularly vulnerable, as they play traditional role of securing water for households.

⁷ Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

Rapid population growth exerts additional pressure on land by agricultural expansion and cultivation in marginal lands. And most importantly, shortage of energy (out of 3914 Village Development Councils – VDCs only 399 are fully electrified; 1077 – partially electrified) and a resultant rampant deforestation (Nepal's deforestation rate of 1.7 percent is well above the Asian average of 1% and the global average of 1.3 per cent), degrade the land, destabilize landscape and disrupt a functional integrity of watersheds.

Climate change that exacerbates hydrological volatility is mainly manifested in the following trends: (i) severe water deficits outside of monsoon seasons. Temperature increase with high-altitude area showing an annual increase of 0.120°C. The impact of glacial retreat is felt in the reduced water reserves for dry-season flow in snow-fed rivers; (ii) reduced water yielding capacities of watersheds and reduced groundwater levels; (iii) GLOFs and catastrophic floods are an increasing trend. The rise in temperature has also caused the areas of glacial lakes to increase. Even though precipitation records have not shown any significant change in the overall trend, an analysis of daily precipitation records for past 50 years shows that number of events of precipitation extremes is on the rise (NAPA, 2010). Based on observed trends and projections, current changes in the climate and its variability directly impact the hydrological cycle and increase the risk for a multitude of climate induced hazards, especially frequency and intensity of floods and droughts that threaten life safety and livelihood development opportunities in all physiographic regions of Nepal.

A long term solution to this climate change problem is to rehabilitate and maintain functional integrity of watersheds that have critical functions of water storage and release, infiltration, drainage control, and soil moisture retention. Using watersheds as organizing units for planning and implementation of natural resources management and resilient livelihood development is an approach to effectively tackle an immediate and long term climate risk reduction, in relation to floods and droughts. Watershed management has become an increasingly important issue in many mountainous countries, including in Nepal, as part of the integrated landscape management approach and an innovative option for sustaining ecosystems while improving human welfare. The knowledge and understanding of various risk exposure factors, including drought or flood risk at watershed level are crucial from the perspectives of livelihoods and the degree of vulnerability. The normative solution will therefore demand that: (i) Watershed friendly livelihoods and land use practices that take climate change risks into account are established at a scale necessary for transformational change; (ii) Enabling environment and institutional capacities in place to systematically enforce climate resilient, integrated watershed management practice across various sectoral plans and investments (agriculture, forestry, infrastructure, water management, including irrigation, and overall local development); and (iii) Legal / regulatory incentives and financial mechanisms that take climate change risks into account are devised and operational to deliver both livelihood development and adaptation benefits (win-win solutions).

There are number of barriers however, that prevent this normative solution from being realized.

Policy barrier - Policy and legislative framework is incomplete; watershed management policy is being formulated that yet needs to be translated into acts and rules for enforcement;

The Watershed Management Act, Soil conservation Act, Soil and Watershed Regulation 1982, Master Plan for the forestry sector 1989, Water strategy 2000, Water Plan 2005, Biodiversity Conservation related policies and acts are some of the major policy documents on which watershed management works are guided and regulated. However, they are formulated without climate change impact considerations, which limit their scope of action, especially in the context of upstream and downstream interactions for flood and drought risk management. A five year watershed management plan that is currently being formulated offers a unique opportunity to address this gap.

Institutional barriers - Limited institutional capacity at the watershed department and siloed institutional arrangement;

Department of Soil Conservation and Watershed Management at the Ministry of Forests and Soil Conservation is mandated to promote watershed management approaches across the sectors. However, the issues of institutional capacity and technical skills limit actual enforcement abilities. There is also the challenge of institutional collaboration to overcome. The department invests in priority sub-watersheds and in accordance with its recent

strategy, intends to implement river basin approach through the new programmes. However, it has no working relationship with the Ministry of Irrigation, which also wants to develop river basin programs. Forests and agriculture are also closely linked within any one geographical area, but none of the official programs of these sectors have a common thread that would help build synergy, while addressing climate change. While being nested at the Ministry of Forests, the watershed department carries a sector-specific identity that may preclude broader outreach and cross-sectoral implementation of the watershed-based approaches, as part of the five year watershed management planning that must be cross-sectoral. Furthermore, institutional presence of the department is also limited. At present, District Soil Conservation Offices have been established in 56 out of 75 districts of Nepal. These offices are concentrated mainly in the mid-hills of Nepal, selected by using a criteria of existing watershed conditions. Such limited presence on the ground and often a duplication of efforts with other sectoral ministries limits efficacy of local investments.

Technical capacity and knowledge barrier - Climate change impacts are not factored into the guidelines for watershed management prioritization;

The watershed department has 632 permanent staff members. Due to its institutional mandate to deal with watershed management it requires a broad range of skills in the areas of agriculture, forestry, ecology, remote sensing, geology, water resource engineering and many more. It is difficult to achieve such diversity of expert profiles within one single department. Institutional mechanisms that would enable to draw on the relevant expertise from other sectoral ministries and departments will be an effective solution. At the same time, the new skills in dealing with climate change in the context of watershed management planning process are also missing. Staff is not familiar with climate risk and vulnerability assessment methods essential for informed decisions on upstream and downstream land uses, land and water management solutions.

Poor awareness among communities and developers of essential functions the watershed delivers in flood and drought risk management;

Rural communities and developers have limited access to information and understanding of how their livelihood and sustainable investment returns relate to stable watersheds and their functional integrity. Despite numerous small scale watershed management pilots being successfully implemented across the country, strategic efforts to advocate good practices and win-win solutions are still weak.

Financial barrier - Incentive structures are limited / non-existent to support communities adopt watershed friendly land use and livelihood practices Although similar to Payment for Ecosystem Service mechanisms have been employed in Nepal in relation to hydropower sector and there are some enabling legislative elements, financial incentives have not been duly utilized to facilitate upstream and downstream hydrological correlations during the land use and development decisions.

Baseline Projects:

There are number of government and internationally, including UNDP supported programmes that will form the baseline for the proposed LDCF grant.

Community Forestry, Development and Conservation Programme – Department of Soil Conservation and Watershed Management, Ministry of Forest and Soil Conservation.

US \$ 947,368 (NRS. 90,000,000 Crore) yearly allocation of fiscal year 2013/2014 – until 2020; co-financing: US\$2million

The Participatory Watershed Management and Local Governance programme (PWMLGP) has improved community resource management plans (CRMPs), ward-level annual and sub-watershed management plans. Coordination Committees have been supported to formulate and submit priority watershed management proposals to VDC and DDC budgets. Inventories of the skills and expertise available at DSCWM and DSCOs have been recorded and detailed training plans prepared and implemented. Number of extension teams have been established at the district level to serve to introduce participatory watershed management practices. The follow up Community Forestry programme is structured around these critical results and plans to internalize these practices into 11 districts under the current annual fiscal envelope of US \$ 947,368. The DSCWM plans to continue to replicate these reform measures in total of 25 districts by 2020 with approximately equal distribution of annual allocations. While serving as an important baseline for instilling the essential planning and implementation capacities at the DSCWM and DSCOs for the watershed management, the programme does not consider climate change risks in

the watershed management decisions or associated capacity development of these target institutions. This gap at the baseline will be addressed under the outcome 1.

District Soil Conservation Programme

US \$ 5.7 million (NRs 540,245,000 Crore) per year based on allocation of fiscal year 2013/2014

Co-financing: \$22million

DSCWM serves 73 out of the 75 districts of Nepal through 56 fielded District Soil Conservation Offices (DSCO). DSCWM's annual budget allocation is utilized towards the following main activities across the country at DSCO level: (a) land use planning and implementation, (b) water and sediment management, (c) community based soil conservation activities, bio engineering, gully control, plantations, embankment and river training, spur constructions etc. (d) Community group formation, institutionalization and mobilization and (e) monitoring and evaluation. The annual funding at this baseline is allocated, based on the degree of watershed degradation and social vulnerability. The costing and budgeting do not take account of climate change related risks to functional stability of watersheds and likely negative impacts on local population and their livelihoods. Hence, more robust and integrated solutions are missing from the current scope of support measures. This gap will be addressed under the outcome 1 and outcome 2.

Rastrapati Churia Conservation Programme (RCCP - President's Churia Conservation Programme) US\$ 5,263,157 (NRS. 500,000,000 Crore) yearly allocation of fiscal year 2013/2014

Co-financing: US\$12million

Rastrapati Churia Conservation Programme (RCCP) started in 2010 and during the first fiscal year of 2010/2011 approximately US \$ 2.2 million (NRs. 21 Crore) had been committed across participating departments and Ministries. Similar amounts will be deployed annually at least for the next five years. The major implementing authority appointed for the programme, is the Department of Soil Conservation and Watershed Management (DSCWM) under the Ministry of Forests and Soil Conservation. An overarching goal of this flagship government programme is poverty alleviation through increased land productivity, sustainable land use practices and natural resource management. The two specific objectives of the programme include: (i) integrated land management and conservation of soil, water, forest and biodiversity of Churia region; (ii) sustainable and environmentally friendly land use, physical infrastructure, agriculture sector development and economic diversification. Despite being among the top priority programmes of the government of Nepal, its objectives are broadly defined, lacks geographic focus and funds are distributed thinly across the entire Churia range. The programme in its current construct does not delve on watershed management approaches to land use and livelihood development, neither does it factor climate risks in pursuit of its core objectives. Despite these limitations the programme is an important gateway to enforce climate risk reduction through an integrated watershed management across the sectors and incapacitate the DSCWM to deliver on this through sub-national and national level multi-agency cooperation. Moreover, as the programme issues surpass the mandates of MOFSC, an independent committee has been recently set up as *Rastrapati Churia Terai Madesh Development Committee* (RCTMDC) for the next five years, where the MOFSC maintains a coordination and convening role. The committee will propose a strategic directions at the policy level that will guide the district level investments. This offers a critical platform for integrating climate resilient solutions.

Fast tracking Millennium Development Goals (MDG) and Safeguarding Development Gains - UNDP: US\$ 4 million (2014-2016)

UNDP's Fast Tracking Millennium Development Goals (MDG) and Safeguarding Development Gains' initiative, funded by the Republic of Korea (RoK), through its international cooperation agency - KOICA falls under the UNDP's Comprehensive Disaster Risk Management Programme (CDRMP). The programme aims to sustainably increase incomes and food security in high-risk households in 24 VDCs in 2 selected highly degraded sub-watersheds exposed to the risks of natural hazards. The project is designed to address the issues ranging from livelihood development, income diversification and employment. It will facilitate sustainable farming practices and establish the seed banks, support forest user groups, provide financial support to biogas production and sanitation facilities and help revise forest operation plans as part of the local disaster risk management planning.

Additional cost reasoning: Consistent with priority adaptation strategies identified by the NAPA, the proposed project will deliver the following outcomes:

Component 1: integrated watershed management framework has been established to address climate change induced floods and droughts

LDCF funding will be used to undertake comprehensive climate change risk assessments and updates of watershed conditions, especially for most critical, degraded and climate sensitive watersheds. Apart from geophysical and hydrological assessments, institutional, legal (especially land use regulations and decisions for land assignments) and socio-economic conditions will be reviewed. Protecting and strengthening watershed systems and services is one of the main adaptation strategies to address the issues of food security and sustainable livelihoods in Nepal. Tools and methods will be introduced to facilitate climate sensitive integrated watershed management practice across key sectors. Generated data will be used in hydrological and hydro-economic models to facilitate a well-informed, climate responsive sectoral decision-making and policy formulation. Both observation and modeling capacities will be strengthened and/or established at the relevant institutions and departments (e.g. hydromet department, watershed department, and water department). Watershed prioritization guidelines will be modified to include climate change related criteria of watershed sensitivity and vulnerability. Land policies will also be revised, including the land use assignments and resource utilization policies and programmes to embed climate change risk considerations, including the appropriate adaptation measures at a scale of targeted priority watersheds. Infrastructure (roads, irrigation, water supply) development guidelines (both in terms of location and engineering parameters) will be adjusted to fully consider climate change risks within watersheds so as infrastructure investments no longer disrupt watershed functions or exacerbate vulnerability to flood and drought risks. Planning and budgeting framework for integrated adaptive watershed management will be improved, including the enabling mechanisms and legal incentives for Payment for Ecosystems Services (PES). By building on the existing regulatory framework in Nepal that enables such payment for ecosystem services in the context of hydropower sector, will be further elaborated and practicable enforcement mechanisms established. Following international best practices, the PES in the context of hydropower and irrigation sector will be used to financially incentivize local communities to engage in watershed friendly land use and livelihood practices (e.g. agroforestry, fodder production etc). LDCF funds will be used to organise and facilitate consultations and dialogue among the government, private sector and community, as part of the PES design and enforcement process. Such mechanism may compensate to the farming community for not clearing forested slopes for farming, thereby reducing erosion and saving the streams and rivers below from the associated deluge of sedimentation that negatively affects functionality of irrigation networks and hydropower infrastructure. Legal mechanisms and subsidiary legislation will be formulated to enable PES to effectively function as payment for watershed services. PES will serve as financial incentive to promote climate resilient community livelihoods and contribute to adaptive management of watersheds, their functional integrity and stability as part of the climate risk management strategy. The following outputs will be delivered: (i) watershed condition assessments updated and hydrological and hydro-economic model of climate change impacts delivered to underpin watershed management decisions across the sectors; (ii) climate change risks addressed in watershed rehabilitation and management guidelines; (iii) technical skills through specialized trainings, hardware (at least two sets of hydro-meteorological stations and rainfall gauges), software and methods of hydro-economic modeling, trade-off and cost-benefit analysis introduced; (iv) enforcement mechanisms for watershed management and land policies embedding climate change considerations, including legal incentives to enable PES.

Component 2: Integrated adaptive watershed management practices introduced and scaled up in 3 districts covering 150,000 ha of watershed areas and benefiting 100,000 vulnerable people

Three vulnerable sub-watersheds representing the three main physiographic regions of high mountain, mid-range hills and Terai on a vertical alignment will be targeted to scale up land use and livelihood options that protect and reinforce watershed services, critical for flood and drought risk reduction and livelihood development. As an initial step and based on a comprehensive risk and vulnerability assessments, participatory sub-watershed management plans will be developed and / or updated for three target sub-watersheds. Decentralized governance structures, such as District Development Councils, where most sectoral ministries are represented as well as

Village Development Councils will be used to develop a consensus-based, sub-watershed management plans that will include land use assignments, resource utilization programmes, water infrastructure and livelihood support measures that are geared towards the rehabilitation and protection of watershed services. The measures will be adjusted in a way that addresses the underlying issues of land stability. For example, land stability problems in the plain areas of Nepal (Terai) and the Himalayan foot hills (Siwalik) regions are radically different from those of the Mid and High Mountain regions. In the Terai, valley bottoms have serious erosion problems such as flash floods, river bank erosion, deposition of sediments, and rising river beds. Hence watershed-based sediment control options will be important investments. In the Mid and High Mountain regions, the problems are mainly severe surface erosion from poorly managed farms, degraded forests, and denuded grazing lands. The High Mountain region has to contend with severe landslides and mass wasting in addition to the usual surface and gully erosion. Hence these areas will benefit from the land rehabilitation, stabilization, water infiltration for groundwater recharge and drainage control measures. Linked with the PES enabling mechanisms under the component one, the LDCF funding will be used to support community agroforestry, community upland forestry, fodder, fuel-wood production and conservation farming that protect fragile forests, stabilize the land and deliver livelihood and adaptation benefits to the vulnerable communities in the target watershed. Conservation engineering activities such as construction of water harvesting catchment ponds, groundwater recharge channels, irrigation canal improvements, water source protection, river and stream embankments will be implemented with a direct engagement of local communities, VDCs, DDCs, District Soil Conservation Office (DSCO), extension services and other entities. Other watershed friendly and protection oriented land use and livelihood practices, and integrated community stewardship programmes viable for the PES will be identified during the feasibility phase to increase community resilience towards flood and drought risks and improve overall welfare of men and women. The following outputs will be delivered: (i) based on risk and vulnerability assessments, integrated, adaptive sub-watershed management plans developed for three target sub-watersheds to guide investments; (ii) water retention structures and catchment ponds with groundwater recharge, controlled drainage and maintenance systems established; (iii) conservation farming and integrated agro-forestry practices introduced interspersed with fodder and controlled fuel wood production (including efficient stoves) with active involvement of women; (iv) community stewardship programmes established and implemented within the selected sub-watersheds with focus on women and marginal communities (linked with PES).

Adaptation benefits, innovation, sustainability and scalability:

At least 40,000 people, residents of 3 districts will directly benefit from the LDCF funding. The total area of watershed which will be restored, affording increase protection against the effects of climate change, will be at least 7,500 ha. However, climate resilient livelihood measures will reach out over 100,000 beneficiaries in three target districts; and the geographic extent within which the watershed functions will be restored and adaptation benefits delivered can be counted at 150,000 ha. Innovation, sustainability and potential for scaling up of the project is embedded in its comprehensive three pronged strategy of securing knowledge, directing public finance through planning and budgeting framework towards adaptive watershed management as well as private funding to compensate communities for acting as stewards of essential watershed services and thereby promote climate resilient livelihoods residing in vulnerable watersheds. More, specifically the adaptation benefits of watershed protection will include improved water yielding capacities, infiltration, recharged groundwater, drainage and flood control, improved soil moisture and land productivity. These critical functions of healthy watersheds increase livelihood development opportunities, watershed land area stability and less exposure to flood and drought risks. Watershed friendly land use and livelihood options will benefit the communities by raising their income through agroforestry, fodder, fuel-wood production and conservation agriculture (e.g. incomes from horticultural crops, fruits and vegetables). Through PES and other financial incentives (or targeted social programmes) such watershed friendly upstream and downstream land use practices will be promoted and scaled up. Empowering women and relying on their stewardship role will be core to the project strategy and will yield considerable benefits to at least 50,000 women. Installed technical capacity, including series of targeted training of key government personnel, hardware and software will instill necessary knowledge and knowhow for climate resilient, watershed-based flood and drought risk management in Nepal.

Environmental and Social Screening

Following the application of UNDP's Environmental and Social Screening guidance at the PIF formulation stage, the project idea has been assigned a category 3b, in an initial screening for Environmental and Social Impacts. This means that impacts and risks can be identified with a reasonable degree of certainty and can be handled through application of standard best practice. These risks will require targeted review and assessment during the preparatory phase to identify and detail it further for a full environmental and social assessment. The UNDP Initiation Plan for the PPG phase, which governs the preparatory activities to be undertaken to develop the LDCF project document, will include activities and appropriate resources to further investigate likely environmental and social impacts of the project. Results of this assessment will inform project design and measures to minimize environmental and social risks will be outlined in the project document.

A.2. *Stakeholders*. Will project design include the participation of relevant stakeholders from civil society and indigenous people? (yes ☒ /no ☐) If yes, identify key stakeholders and briefly describe how they will be engaged in project design/preparation:

STAKEHOLDER	RELEVANT ROLES
Ministry of Forests and Soil Conservation (MOFSC)	MOFSC will have a coordinating role in this project and will support on policy level interventions.
Ministry of Science, Technology and Environment (MOSTE)	MOSTE will have a cooperating and coordinating role in this project and will provide policy level guidance during the project formulation and implementation.
Department of Soil Conservation and Watershed Management (DSCWM)	The DSCWM will be implementing agency for the proposed project. DSWCM will have an executive role in the Project Executive Board Meeting (PEB) and as the main implementing agency.
Ministry of Federal Affairs and Local Development (MOFALD)	The MOFALD is a focal agency for promoting local development and decentralization. The proposed project plans to work closely with the local level bodies during the implementation process. MOFALD will be one of the implementing partners for this project and will be a member of the PEB.
District Development Authorities	District level authorities are essential stakeholders for this project. These agencies will systematically coordinate and link with their respective central level agencies; and represent the contributions and interests of their agencies in context of this project. District Soil Conversation Office will have a designated implementing role at the district and local level under the guidance of the DSCWM.
Ministry of Agriculture Development (MOAD)	MOAD will be one of the implementing partners of this project and will be a member of the PEB.
Ministry of Irrigation (MOI)	MOI will be one of the responsible parties of this project and will be a member of the PEB
Development partners	The project will be closely coordinated with WB and ADB, the partners of the Strategic Programme on Climate Resilience, especially under the watershed programme in the far western regions of the country. Lessons from National Climate Change Support Programme implemented by UNDP in coordination with MOSTE and DFID at the baseline will be used as an approach for implementing local adaptation actions at the community level.
Other UN Organisations	UN FAO currently is developing a LDCF project, do you think we need to include this?
International NGOs	The project will closely cooperate with WWF Nepal, IUCN and Care Nepal. The former has valuable experience in the area of EBA and the latter in the area of community based adaptation and participatory risk and vulnerability assessments.
National NGOs	Federation of Community Forestry Users Nepal – FECOFUN will be involved in supporting the stewardship programme, agroforestry and PES mechanism design of the project, particularly women's groups.

Local Communities	UNDP's MDG and disaster risk management programme at the baseline will be used as a mechanism for a community outreach and mobilisation, particularly or women.
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A.3. Gender Considerations. Are gender considerations taken into account? (yes ☐ /no ☐). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.

The project develops climate resilient livelihoods in the fragile mountainous regions that heavily rely on subsistence farming and fuel wood. More than 80 percent of people living in the rural areas of Nepal depend on traditional fuel for fulfilling their household's energy requirements, which is primarily managed by women. In rural mountain areas, women wake up around 4 am and still walk four to five hours to collect a bundle of firewood. In such circumstances, women's roles in managing the household energy system cannot be underestimated. Agroforestry, community forestry and stewardship programmes will specifically target women groups, opening additional revenue streams as well as lifting the heavy household burden related to heating and cooking tasks. As such, the project will deliver direct benefits to women, especially under the outcome 2 (outputs 2.3. and 2.4.)

A.4 Risk. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable):

Risk	Level	Mitigation
Institutional – Watershed management requires engagement and close coordination of a divergent groups of stakeholders with different interests and mandates which may preclude consensual decision-making.	M	Identification of appropriate government agencies, implementing partners, project implementation arrangements and utilization of existing coordination mechanisms will be conducive to stakeholder engagement and coordination.
Financial – identification of financial resources and incentives to employ PES mechanism for watershed protection;	M	Review the country experience and successful PES practices, especially in the sector of hydropower to closely consider for the PES that targets the main water users (hydropower, irrigation, tourism etc).
Organisational – communities may not be willing to adopt new land use practices	L	Mapping/assessment of community workforce and initiate community based work modalities in target sites prior to the inception
Unexpected flood during the project implementation stage may cause serious damage of the watershed and challenge the activities of the project towards relief and restoration	M	Geographic spread of the project should allow a range of alternative coverage to deliver on the project results.
Typical of all fragile states, risks of political instability and security situation may emerge halting the project implementation progress	M	Defining project implementation arrangements which enable efficient project implementation in unstable political conditions. Ensure appropriate budgeting and safety/contingency plans for staff and community workforce security
High turnover of staff at the central and district level	M	Diversified group of stakeholders engaged in the project at central and sub-national levels will minimize the negative impacts of staff turnover.

A.5. Coordination. Outline the coordination with other relevant GEF-financed and other initiatives:

The project will closely coordinate with the LDCF funded project - *the Community based Flood and Glacier Lake Outburst Project*. This project is of high relevance and addresses risks of GLOF and floods, flashfloods and landslides of observed frequency and intensity that threaten local rural infrastructure and livelihoods. The coordinated action will be particularly necessary in relation to climate risk data management as well as other aspects of institutional and technical capacity development for climate risk assessment and response.

ADB supported project on *Climate Change Vulnerability Mapping in Watersheds in Middle and High Mountains of Nepal* assesses and identifies the most vulnerable watersheds in the country, especially in the western regions.

Coordination and synergies will be opportune in the areas of risk assessment and modeling methods and approaches. Through UNDP's *Climate Change Support Programme for Nepal*, with financial contributions from the government, UNDP and DFID capacities are developed to cost, budget and implement priority adaptation measures as part of the Local Adaptation Planning Process (LAPA). Through its decentralized set up of implementation this initiative offers a broad scope of cooperation, especially at the sub-national level through targeted VDCs and DDCs

DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 IS THE PROJECT CONSISTENT WITH THE NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSEMENTS UNDER RELEVANT CONVENTIONS? (YES ☒ /NO ☐). IF YES, WHICH ONES AND HOW: NAPAs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, ETC.:

The proposed project is consistent with the following: The project is aligned with NAPA priority on strengthening institutional capacity and human resources, as per Nepal's National Adaptation Programme of Action (2010). More specifically it fully responds to a number one priority on promoting community-based adaptation through integrated management of agriculture, water, forest and biodiversity sector. Under this specific combined profile, the proposed LDCF project will address: (i) Ensuring ecosystem and community adaptation to climate change through integrated watershed management; (ii) Initiating on-farm soil and water conservation activities to support hill and mountain communities vulnerable to climate change; (iii) Promoting water management in river basin areas at municipal level; and (iv) Reducing the vulnerability of communities and increasing their adaptive capacity through flood management.

THE PROJECT IS ALSO CONSISTENT WITH AND RESPONDS TO THE FOLLOWING STRATEGIC PLANS AND POLICIES

A 25-year **National Water Resources Strategy 2002** (NWRS) recognizes increased vulnerability to water induced disasters, emphasizes on flood, landslide and hazard management at watershed level based on integrated watershed management principle. Likewise the recent **Watershed management policy (draft 2014)** emphasizes on the flood, landslides and hazard mitigation, at catchment scale with a special focus on water management (both quality and quantity) by maintaining the watershed health and integrity. The **Three Year Plan (2007/8-2010/11)** for Nepal emphasizes the objectives of human security and protection of livelihood assets from natural disasters through sustainable, environment-friendly and results-oriented development. It demands strengthened 'no regrets' disaster management practices, which are efficient, effective and able to reduce vulnerability in a changing climate. The Government of Nepal (GoN) has recently issued the Three Year Plan (TYP) Approach Paper (2010/11-2013/14), which has the objectives of promoting green and climate responsive development, The key expected outcomes of the current TYP (2010/11-2013/14) are to prepare and implement a national framework on climate change adaptation and mitigation, disaster risk reduction, poverty reduction and poverty environment initiatives.


PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. Record of Endorsement⁸ of GEF Operational Focal Point (S) on Behalf of the Government(s): (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [SGP OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr. Madhu Kumar Marasini	GEF Operation Focal Point, Joint Secretary	Ministry of Finance, Foreign Aid Coordination Division	9/29/2014

B. GEF Agency(ies) Certification

This request has been prepared in accordance with GEF policies⁹ and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Adriana Dinu, Executive Coordinator, UNDP, GEF		Dec. 17, 2014	Keti Chachibaia (Green-LECRDS)	+66 (2) 304 9100 ext 5091	keti.chachibaia@undp.org

C. Additional GEF Project Agency Certification (*Applicable Only to newly accredited GEF Project Agencies*)
For newly accredited GEF Project Agencies, please download and fill up the required **GEF Project Agency Certification of Ceiling Information Template** to be attached as an annex to the PIF.

⁸ For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

⁹ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF