



PROJECT IDENTIFICATION FORM (PIF)¹

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: LDCF

PART I: PROJECT IDENTIFICATION

Project Title:	Strengthening the adaptive capacity and resilience of rural communities using micro watershed approaches to climate change and variability to attain sustainable food security in Cambodia		
Country(ies):	Cambodia	GEF Project ID: ²	4434
GEF Agency(ies):	FAO (select) (select)	GEF Agency Project ID:	612634
Other Executing Partner(s):	Ministry of Agriculture Forests and Fisheries (MAFF) and Ministry of Environment in collaboration with Ministry of Water Resources Management (MoWRAM)	Submission Date:	2011-08-12
GEF Focal Area (s):	(select)	Project Duration (Months)	60 months
Name of parent program (if applicable): > For SFM/REDD+ <input type="checkbox"/>		Agency Fee (\$):	509,800

A. FOCAL AREA STRATEGY FRAMEWORK³:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
CCA-1 (select)	Outcome 1.1. Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas	Output 1.1.1 Adaptation mainstreamed into national agriculture and food security policies	LDCF	443,100	1,382,060
CCA-1 (select)	Outcome 1.3: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	Output 1.3.1 Alternative livelihood/income generating activities targeted at women piloted.	LDCF	1,100,000	3,195,240
CCA-2 (select)	Outcome 2.1: Increased knowledge and understanding of climate variability and change – induced threats	Output 2.1.1 Assessment of climate impacts on agricultural land-use suitability. Suitability for at least three main food crops mapped and information available to relevant stakeholders. Output 2.1.2 Stakeholders trained on climate change risks and adaptation in agriculture and natural resource management.	LDCF	600,000	1,780,255
CCA-3 (select)	Outcome 3.1: Successful demonstration, deployment, and transfer of relevant adaptation technology in targeted areas	Output 3.1.1 Integrated micro-watershed management and climate smart agricultural technologies targeting farming communities in 10 pilot watersheds promoted and adopted.	LDCF	2,700,000	10,614,470

¹ It is very important to consult the PIF preparation guidelines when completing this template.

² Project ID number will be assigned by GEFSEC.

³ Refer to the reference attached on the Focal Area Results Framework when filling up the table in item A.

(select)	(select)		(select)		
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(select)	(select)		(select)		
(select)	(select)		(select)		
(select)	(select)		(select)		
(select)	(select)	Others	(select)		
Sub-Total				4,843,100	16,972,025
Project Management Cost ⁴			LDCF	254,900	1,833,370
Total Project Cost				5,098,000	18,805,395

B. PROJECT FRAMEWORK

Project Objective: to build adaptive capacity of rural communities and reduce their vulnerability to climate change and variability through integrated micro watershed management and climate resilient agriculture practices to ensure food security in Cambodia.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Cofinancing (\$)
1. Integrating climate change adaptation into agricultural and food security policies and planning.	TA	<p>1.1 Increased knowledge and understanding of impacts of climate change on agriculture and natural resources.</p> <p>1.2. Climate change adaptation mainstreamed into national agriculture, food security policies.</p>	<p>a) Assessment of impacts of climate change and variability (including droughts and floods) on agricultural land suitability. Suitability for at least three main food crops mapped and information available through existing decision-support systems e.g. Cambodia atlas system.</p> <p>b) At least 100 stakeholders from government, universities, non-governmental organizations trained on climate change risks and best adaptation practices in agriculture and natural resource management. (Capacity building will include incorporation of climate change adaptation into university curriculum).</p> <p>c) Gaps and opportunities for mainstreaming climate adaptation into agriculture, food security and related policies identified in consultation with decision-makers. Draft policies submitted to the Government for adoption.</p>	LDCF	1,010,000	3,858,520

⁴ GEF will finance management cost that is solely linked to GEF financing of the project.

<p>2. Participatory integrated micro watershed management to reduce climate impacts on natural resources and agriculture</p>	<p>Inv</p>	<p>2.1 Reduced impacts of seasonal floods and improved water availability in drier months through adoption of integrated micro watershed management practices which incorporate climate risks</p>	<p>a) 10 pilot micro watersheds representing high climate risk areas identified and participatory micro watershed management plans developed by communities.</p> <p>b) Micro watershed treatments in upstream forest areas carried out in 15,000 ha using conservation and assisted natural regeneration methods and designating these areas as community forest areas.</p> <p>c) 50 small check dams, 100 percolation spring wells established for harvesting water for small holders to irrigate at least 200 ha's of agricultural land in the drier months.</p> <p>d) Integrated micro watershed management field manual developed and at least 100 government, NGOs and extension staff trained.</p> <p>e) Best practices documented and disseminated.</p>	<p>LDCF</p>	<p>1,740,000</p>	<p>3,357,870</p>
<p>3. Demonstrating and promoting climate resilient agricultural practices through farmer field schools (FFS)</p>	<p>TA</p>	<p>3.1 Farmers participating in FFS are aware of climate change risks and impacts on agriculture and at least 400 farmers have adopted climate resilient agricultural practices.</p> <p>3.2 25% Improvement in productivity – for farmers participating in FFS.</p>	<p>a) 500 farmers in pilot watershed communities organized into FFS and at least 100 extension staff/FFS facilitators trained on climate resilient agricultural practices.</p> <p>b) At least 5 climate resilient farming systems (conservation agriculture, small holder irrigation, multi-cropping, integrated farming, agro forestry) demonstrated and adopted by at least 400 farmers participating in FFS.</p> <p>c) 10 climate resilient crop varieties (rice, legumes, vegetables etc) promoted through FFS.</p> <p>d) mobile-phone based</p>	<p>LDCF</p>	<p>1,000,000</p>	<p>5,580,515</p>

			climate information dissemination piloted in 10 micro watershed communities. e) Best practices documented and disseminated.			
4. Piloting climate-resilient alternative livelihood options targeted at women	TA	4.1 Livelihoods of women and families (including children and the elderly) in pilot watershed communities enhance and resilient to climate variability and change through alternative income generating activities.	a) 10 agricultural land and community forestry title deeds jointly owned by women in pilot watershed communities. b) At least 200 women in pilot watershed communities organized into women "farmer field school" groups, saving/credit groups, and enterprise clusters. c) Alternative livelihoods/income generating activities selected from a range of options (e.g. improved horticulture and kitchen gardening using climate-resilient crop varieties; improved livestock management and introduction of biogas digesters; food and non-timber forest products processing; aquaculture) and implemented. d) At least 100 women trained and their entrepreneurial skills improved through women "farmer field school" groups. e) Best practices documented and disseminated	LDCF	1,093,100	4,175,120
	(select)			(select)		
	(select)			(select)		
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	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
				Sub-Total	4,843,100	16,972,025
				Project Management Cost ⁵	LDCF 254,900	1,833,370
				Total Project Costs	5,098,000	18,805,395

⁵ Same as footnote #3.

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
National Government	Ministry of Agriculture Forests and Fisheries (MAFF)	In-kind	1,000,000
Other Multilateral Agency (ies)	EU (through FAO)	Grant	11,118,808
Bilateral Aid Agency (ies)	Spain (through FAO)	Grant	3,352,787
Bilateral Aid Agency (ies)	Italy (through FAO)	Grant	462,000
GEF Agency	FAO	Grant	1,267,800
GEF Agency	FAO	In-kind	304,000
Other Multilateral Agency (ies)	through the UNREDD Programme	Grant	1,300,000
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Cofinancing			18,805,395

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
FAO	LDCF	(select)	Cambodia	5,098,000	509,800	5,607,800
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Grant Resources				5,098,000	509,800	5,607,800

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

² Please indicate fees related to this project.

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1 the GEF focal area/LDCF/SCCF strategies:

A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:

Cambodia is a LDC Party to the UNFCCC and has completed its National Adaptation Program of Action to Climate Change (NAPA). The NAPA was endorsed by the Council of Ministers on 20 October 2006 and has been submitted to the UNFCCC. The proposed project consists of the priorities related to strengthening community capacities for managing climate risk in agriculture and natural resources to attain food security. The project will contribute to the achievement of the three adaptation objectives CCA-1 "Reducing vulnerability", CCA-2 "Increasing adaptive capacity" and CCA-3 "Adaptation technology transfer". The contribution will be primarily through the promotion and adoption of climate resilient agricultural technologies/practices, and incorporation of adaptation into agricultural and food security policies and planning.

A.2. national strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

In its first national communication to the UNFCCC, the Royal Government of Cambodia (RGC) clearly recognizes risks induced by climate change on subsistence livelihoods, socio-economic development, agriculture and other sectors. Cambodia is emerging from a tragic past followed by a civil war and it has the least amount of resources and limited capacities to adapt to climate change and variability. Through the NAPA, Cambodia has identified 20 high priority actions to its urgent and immediate and adaptation needs. Among the high NAPA priority actions, 12 are related to agriculture and water resources indicating that agriculture and food security is of paramount importance. In building the adaptive capacity and resilience in agriculture and natural resources (particularly water) the project is consistent with the NAPA priorities 1, 2, 3 and 4.

The project is consistent with goals and priorities set in various national and sectoral strategies and plans including: the Rectangular Strategy, the National Strategic Development Plan, the Strategy for Agriculture and Water, and the Strategic Framework for Food Security and Nutrition. The Rectangular Strategy II (adopted in 2008), which defines the overall action of the Government of Cambodia, and the related Strategy for Agriculture and Water Sector (SAW), place top priority on improving agricultural productivity and diversification. The overarching goal of the SAW is to contribute to poverty reduction, food security and economic growth through enhancing agricultural productivity and diversification and improving water resources development and management. To achieve this goal, focus will be placed on: (i) increasing food security and income of rural communities and households; (ii) reducing vulnerability of rural communities and households; (iii) increasing surpluses of agricultural products for processing and export; and (iv) sustainable management and development of the nations land and water resources. Cambodia recognizes climate change as one of the main challenges in achieving the SAW goal and other development goals as stated in "Achieving Cambodia's Millennium Development Goals" document. To address this challenge, the Government of Cambodia through the Ministry of Environment has envisaged a number of actions including mainstreaming climate change in concerned sectors, implementation and update of the NAPA, educating and informing the public on climate change and others. The project will directly contribute to the implementation of these actions.

B. PROJECT OVERVIEW:

B.1. Describe the baseline project and the problem that it seeks to address:

Cambodia has huge endowments of natural resources land, water and geographic location offering potential comparative advantage for development in agriculture, livestock, forestry and fisheries. Agriculture is the mainstay of the economy, accounting for 34% of GDP. Over 60% of the population directly and indirectly depends on incomes generated in the sector. Growth in agriculture has been volatile, with annual growth rates of 5-5.5% for the period 2006-2008. This growth mostly comes from increases in paddy rice production, which dominates the sector.

Despite recent improvements, the sector faces many constraints. The first is related to the fact that agriculture is supported by fragile subsistence rain-fed systems. Only 15% of the rice production is covered by irrigation and the rest is rain-fed. The irrigation structures require high investments in maintenance and the seasonal rain fed production is affected by climate extremes including droughts and floods and by pest attacks. The majority of

farmers are smallholders with average farm sizes of 0.5 to 1.5 ha, that mostly cultivate only one crop. These farmers suffer from low productivity due to inadequate access and management of land and water resources, low inputs and technology, poor farming skills, and limited infrastructures including for irrigation, electricity, roads and processing facilities.

Due of the high reliance on agriculture and the constraints affecting agricultural production, poverty rates in Cambodia are significantly high. The highland tribal groups, living mostly in forested uplands of Ratana Kiri, Mondul Kiri, Kratie and Stung Treng, are the poorest among ethnic minorities with 52% poverty rates. The poverty rate of the Tonle Sap region accounts for 43% and that of the lower plain regions is around 32%. Cambodia also has some of the highest malnutrition rates in Asia. 21% of the population is malnourished, consuming less than the minimum dietary energy requirement of 1715 kcal/person/day with a fairly large number of children under five found stunted (39.5%), underweight (28.8%) and wasted (8.9%)⁶. Recently, the situation of the poor and food insecure groups has deteriorated further due to the impact of soaring food prices and agricultural input prices. Women in Cambodia play a major role in all components of food security – including food production, household income/budgeting, caretaking or marketing. This is severely hampered by issues such as poor health, nutritional status (e.g. very high maternal mortality rates and iron-deficiency anemia) and lack of education and knowledge. These problems perpetuate into poverty traps leading to chronic food insecurity particularly among women and children.

The problems are worsened by climate variability and extreme events. Successive droughts and floods have resulted in a significant number of fatalities and considerable economic losses. Losses arising from floods have been further exacerbated by deforestation. Cambodia has one of the highest annual deforestation rates losing 0.5% or 75,000 ha of its forests, which are crucial watersheds of the lower Mekong region, due to land conversion, forest clearance, shifting cultivation etc. The deforestation and degradation cascade into soil erosion, landslides and flash floods devastating downstream agrarian communities and affecting their small holder production systems. Floods alone accounted for 70% of rice production losses between 1998 and 2002, while drought accounted for 20% of the losses. Under climate change the frequency and intensity of floods and droughts are expected to increase. Marginal development gains attained during this decade in rural areas, after a turbulent past can be wiped out by climate change and variability. Farming communities in the rural areas whose capacity to deal with even the current climate variability is low will be mostly affected. Therefore there is an urgent need to build their currently low capacity to adapt to climate change and variability in order to ensure food security.

Baseline project

FAO is currently supporting the Royal Government of Cambodia through a number of sectoral development projects in agriculture, food security, livestock, forestry and fisheries to achieve food security. The agriculture sector baseline projects include: the European Union Food Facility project “Improve the food security of farming families affected by volatile food prices” which aims to provide farm inputs to 50,000 vulnerable farmers in 10 provinces of Cambodia; the European Community (EC) funded regional project “Support to the EC programme on linking information and decision making to improve food security for selected Greater Mekong Sub-regional countries” in which Cambodia is one of the participating country; the joint EU/FAO project “Micro and small enterprise development to achieve food security, food safety and self reliance for urban poor in Phnom Penh”; the Spanish-funded One UN MDG project on food security and nutrition component. In forestry, the baseline projects include: the Spanish funded “Enhancing community-based forest management and utilization for the improvement of rural livelihoods in Cambodia”; “Reducing Emissions from deforestation and forest degradation (REDD+) the UN REDD programme”; and the FAO managed multi-donor national forest programme facility (NFP). In the livestock and fisheries sectors baseline activities include: “Collaborative Sub Regional, environmental animal health management initiative for enhanced small holder production”; and the “Capacity building to enhance fish quality control and standardization services and contribute to poverty alleviation” project. The proposed LDCF project will complement these ongoing projects by mainstreaming climate change adaptation into policies at the national level and piloting climate-resilient agricultural measures at the community level.

⁶ Cambodia Anthropometric Survey, 2008

B.2. incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

Baseline Scenario: Cambodia is a least developed country vulnerable to climate variability and change and currently has very low capacity to adapt (at local and national levels). Although there is growing recognition that climate change poses a significant threat to agriculture and food security, and that certain measures have to be taken to address the risk (as identified in the NAPA), without financial and technical support urgent needs to adapt will remain unaddressed. The “business as usual” development activities, such as those outlined above, will continue but the institutional capacity to deal with climate risks and incorporate these into policies and activities will remain limited. Ultimately, this will hinder progress in addressing poverty and food insecurity in Cambodia.

Adaptation Scenario: The proposed LDCF project will demonstrate the role of various watershed techniques to reduce climate risks. It will also demonstrate climate resilient agricultural practices for increased productivity, and livelihoods diversification through alternative income generating activities. Focused support will be provided to women, in order to strengthen their resilience and improve their livelihoods. The LDCF financing will support the following additional activities organized into 4 technical components:

Component 1:

The objectives of component 1 are to: (i) increase the knowledge and understanding of impacts of climate change on agriculture; and (ii) to mainstream climate change adaptation into agriculture, food security and related policies. These two objectives are linked in that once there is availability of information and understanding of potential climate change impacts then appropriate planning and decision-making could be done to address the impacts. The first objective will be achieved through an assessment of climate impacts on agricultural land suitability for major crops in the country. This assessment will be based on climate change and deforestation/ land-use change predictions. The challenge in carrying out this type of assessments is the availability of data – especially in Cambodia where there is a big data deficiency due to the civil war. And this is why information from the UN-REDD programme is important for the assessment. (The LDCF resources will not cover the acquisition of information from the UN-REDD programme, will be supported through cofinancing).

The assessment will be based on a combination of the following: 1) Climate change predictions from a high resolution regional climate model (RCM) - and statistically downscaled if possible; 2) Past deforestation and predicted deforestation in Cambodia. The data used to develop historical trends of forest cover and cover changes correspond to past satellite imagery or aerial photographs and data on the drivers of deforestation and forest degradation. This data is harmonized and integrated to produce deforestation and forest degradation predictions; 3) Mekong water level data in order to calibrate the models linking deforestation, precipitation and temperature, and water level; and 4) soil inventory data available through the Cambodia Atlas information system. These will be the main data used to model land/crop suitability.

The results will be integrated into a decision support system. The ultimate output will be static maps providing information on land and crop suitability based on future land use and climate change predictions. It is envisaged that this information will be made available through existing information dissemination systems such as the Cambodia online atlas. The Cambodia atlas GIS database (www.cambodiaatlas.com/map) was compiled by DANIDA in 2006, to facilitate planning and decision-making. The present database and maps are widely used by stakeholders but there is a lack climate change related information. Therefore this component will contribute to addressing this lack by incorporating climate change adaptation and crop suitability information into the atlas information system. The information will support various stakeholders to incorporate climate risks in their planning.

Capacity building activities for decision makers and other stakeholders (from government, universities, non-governmental organizations) will be implemented to enhance their awareness and knowledge of climate change risks and best adaptation practices in agriculture and natural resource management. As part of capacity building, climate change adaptation will be incorporated into university curriculum. Gaps and opportunities for mainstreaming adaptation into agriculture and food security policies will be identified, through consultation with decision-makers, and revision of existing policies and/or new policies proposed for adoption by the Government.

The component builds on the EC funded project on linking information and decision making to improve food security countries in which Cambodia is one of the participating countries. The project, whose implementation is supported by FAO, aims to: enhance national and regional capacities to provide timely information and analysis for impending food and agricultural crises; improve understanding of potential impacts of climate change and

variability on food security; and address effective policies, strategies and/or interventions for hunger and vulnerability reduction.

Component 2: The objective of component 2 is to reduce the impacts of floods and improve water availability in dry months through the adoption of integrated watershed management practices. 10 pilot micro watersheds, representing climatic disaster prone areas in various agro-ecological zones, will be selected during project preparation. Communities in these pilot watersheds will be organized into watershed communities and trained to develop integrated micro-watershed plans for implementation. The plans will detail specific watershed interventions such as contour trenches and soil works to stabilize slopes to ensure sufficient soil moisture content in topsoil. The upstream micro watershed treatment component will adopt a sustainable landscape and forest management approach to improve upstream ecosystem services to reduce floods, droughts and erosion. Through community forestry approaches from the ongoing community forestry project, the healthy upstream will be managed and degraded areas will be rehabilitated using assisted natural regeneration (ANR) methods. Using locally available materials gully plugs, partial gabion structures will be built by communities to reduce the intensity of run offs to avoid flash floods and inundation and to space water availability downstream through percolation. Earthen check dams and percolation spring wells can extend the water availability further into dry season. Additionally, upstream forest resource management can provide non timber forest resources for food and supplementary incomes. The above mentioned watershed treatment menus and options are only indicative adaptation options, which will be prioritized during project preparation and detailed further during the participatory watershed management planning. This component contributes to NAPA priorities 3a) vegetation planting for flood and windstorm protection; 4c): community based agricultural soil conservation; and 4a): development and improvement of community irrigation systems.

Component 3: The objective of this component is to raise farmers' awareness of climate change risks and impacts on agriculture and promote the adoption of climate-resilient agricultural practices in order to reduce the risks. FAO in Cambodia, through many food security and agriculture projects, has introduced the farmer field school (FFS) approach which has been very effectively in building the capacity of farmers.. This approach will be adopted to promote climate -resilient agricultural practices. Core trainers, who will lead the FFS, will be selected from extension services staff and farmers will be trained. Lead FFS groups will evaluate improved farming methods selected from a number of systems such as conservation agriculture, small holder irrigation practices, multi-cropping, integrated farming, agro-forestry, to suits their local climatic conditions and adopt the best to achieve resilient productivity. Based on crop suitability information from component 1, climate resilient crop varieties (e.g. rice, legumes, vegetables etc) will also be tested and promoted. To support these activities, a mobile-based information system to provide climate information to farmers will be piloted. This component addresses NAPA priority 3f: Promotion of household integrated farming.

Component 3 builds on the EC-FAO supported project "Improve the food security of farming families affected by volatile food prices", which aims to increase the food production and farm productivity of 50 000 households through the provision of quality agricultural inputs, sustainable crop production technologies and capacity building.

Component 4: The objective of this component is to contribute to the enhancement of livelihoods of women and their households thereby building their resilience to climate change and variability. This will be achieved through piloting selected alternative livelihoods/income generating activities in 10 watersheds communities. This component is proposed based on lessons learnt from past projects. Although women play an important role in agriculture and food security, specifically, and in development in general, their participation in development projects is passive and they have marginalized access to common property resources. This component will ensure that they participate and benefit from project. In each pilot community, support will be provided to establish women "farmer field school" groups including enterprise clusters and savings/credit groups. To ensure women's access to resources is on par with men, joint deeds for land and forest will be provided. Income generating activities to be piloted will be selected from a range of options including: improved horticulture production and kitchen gardening using climate-resilient crop varieties; improved livestock management and introduction of biogas digesters; food and non-timber forest products (NTFP) processing; and aquaculture. The women groups will be trained, through an approach similar to the farmer field schools, to improve their entrepreneurial skills.

This project component builds upon the EU funded project on micro food enterprises, which focuses on enabling communities including women to improve the quality of the food produced, food processing and safe handling using a micro enterprise approach. The component also builds on the Italian funded livestock improvement project and the Spanish funded children food security project and community forestry project for NTFP enterprise promotion.

B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF). As a background information, read Mainstreaming Gender at the GEF.":

The project will deliver direct quantifiable socio-economic benefits to poor and vulnerable communities in 10 selected watersheds. Integrated community watershed management techniques will be implemented to reduce the impacts of seasonal floods and improve water availability for agriculture in drier months. The project will promote and train farmers in agricultural practices and farming systems such as conservation agriculture and agro-forestry and also promote climate resilient crop varieties to help the communities adapt to climate change and variability. These will contribute to enhanced agricultural productivity and food security of the communities living in and around the watersheds.

As mentioned in the previous section, the project will have a component specifically targeted at women to ensure that both men and women benefit from the project. By introducing alternative/income generating activities and providing training to women to build their entrepreneurial skills, the project will lead to improved access to food and contribute to resilience to climate risks. Ultimately, given the important role women play in sustaining their households, this component will deliver benefits to entire households including the elderly and children. As participation of both men and women is crucial in all components, women participation will not be confined to just one component. Measures to ensure active participation of both women and men will be considered during project preparation and implementation.

B.4 Indicate risks, including climate change 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:

<i>Risk</i>	<i>Rating</i>	<i>Mitigation</i>
1. Vulnerable farmers may not be willing to change their known subsistence farming methods.	Low	The project will employ participatory approaches in the promotion of climate-resilient practices. The farmer field schools approach, in particular, has been very effective in mobilizing community participation in other initiatives, hence it will be used in the proposed project. The project will also involve local NGOs and civil society organizations to mitigate the risk.
2. Low participation of women in project activities. In Cambodia, women have marginalized access to common property resources such as forest, land and water, and are passive in participating in development activities as most resources in agriculture are dominated by men.	High	A specific component that focuses on women has been proposed to ensure women's participation in project activities. Women participation in other components will also be very important and measures to enhance their overall participation in the project will be considered during project preparation.
3. Extreme climate events - floods and droughts - that could disrupt project activities	Medium	The project is aiming to build the capacity of farmers and communities to better deal with the current climate variability including extremes and future climate change through adaptation practices. Mitigating the risk is central to the project.

<i>Risk</i>	<i>Rating</i>	<i>Mitigation</i>
4. Low private sector participation	Medium	Private sector participation in rural areas is low due to limited prospects of growth and lack of infrastructure. As the participation will be important particularly for alternative income generating activities, the project intends to overcome the risk through a combination of measures which include grouping producers into clusters of focus production groups to make it attractive for private sector entrepreneurs to consider establishing primary processing facilities. Others measures will be carefully identified during project preparation and implementation.

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

Key stakeholders and their respective roles will be further defined during project preparation.

<i>Key Stakeholders</i>	<i>Roles</i>
National Climate Change Committee (NCCC)	The high-level inter-ministerial National Climate Change Committee, established to provide policy guidance and coordination of climate change activities, will play a key role in the coordination of the proposed project with the UNDP and UNEP-led LDCF projects and other related ongoing activities in the country. The NCCC will also have an important role in facilitating the mainstreaming of adaptation into agriculture, food security and related sectors (component 1).
Ministry of Environment	As the country GEF operational focal point the Ministry of Environment will review and endorse the project. As the secretariat of the NCCC, through the Climate Change Department, the Ministry will also facilitate coordination with the UNDP and UNEP-led LDCF projects and with other related activities in the country.
Ministry of Agriculture Forests and Fisheries (MAFF)	Lead the preparation and implementation of the project. Ensure collaboration with other Ministries and stakeholders.
Ministry of Water Resources	Provide support in the implementation of the project.
National Committee on Disaster Management (NCDM)	The NCDM is a high level inter-ministerial coordination committee which oversees all disaster preparedness planning, rescue and relief operations in Cambodia. The committee will provide support in the implementation of the project, particularly for policy- related activities.
Local and indigenous communities	These will be the main stakeholders and target beneficiaries. The communities will participate in the project mostly through Farmer Field School, integrated watershed management and alternative livelihood activities.
NGOs, local civil-society organizations, universities/research institutions	Support the implementation of field activities. Facilitate active participation of communities in adaptation activities.

<i>Key Stakeholders</i>	<i>Roles</i>
Private Sector	Support the piloting of the mobile-phone based climate information system and of alternative livelihood/income generating activities. Agriculture and forestry related private sector stakeholders will be involved in food products marketing, food processing and non-wood forest product enterprises.

B.6. Outline the coordination with other related initiatives:

The proposed project will coordinate closely with the ongoing UNDP-led LDCF project on “Promoting Climate Resilient Water Management and Agricultural Practices in Rural Cambodia” which is targeting 2 districts in 2 provinces. The proposed project will closely liaise with the UNDP project through the coordination mechanisms that will be established during project preparation to ensure that there is no duplication, and both projects benefit from exchange of experience and best practices. Preliminary discussions with the UNDP Project Management Unit team have already been held in the preparation of this PIF. Although the objectives of the two projects are related in that they are promoting climate-resilient agricultural practices, care has been taken in the preparation of the PIF to ensure complementarity between project components. For instance, component 2 of the UNDP project on improving irrigation systems is focused at downstream interventions while component 2 of the proposed project uses a watershed approach comprehensively covering upstream and downstream and aspects of natural resource linkages to ensure sustained water availability to achieve food security in downstream communities. In addition the proposed project is using the successful farmer field school approach to build the capacity of farmers (men and women) and promote climate resilient crop varieties and improved farming practices

The proposed project will establish linkages with the World Bank’s Pilot Program for Climate Resilience (PPCR). PPCR in Cambodia, as in other pilot countries, is implemented in two phases. The first phase, which is the preparatory phase initiated at the end of 2010, focuses on building the capacity of key ministries in mainstreaming climate change concerns into their planning and programmes. This will be an important base for the FAO-led project, specifically for the subcomponent dealing with agriculture and food security-related policies (under component 1). It will be important for the project to take the PPCR results into consideration and also for PPCR, in preparing for the second phase of the programme, to take account of activities proposed in the FAO-led project. FAO and the PPCR World Bank and Asian Development Bank team will facilitate collaboration between the LDCF project and PPCR. Discussions to see how this could be done effectively have been initiated.

The project will also take advantage of existing mechanisms in the country. Cambodia already has an inter-ministerial National Climate Change Committee (NCCC), established to provide policy guidance and coordination of climate change activities in the country. The Ministry of Environment (MoE) which is coordinating the implementation of PPCR, serves as the the Secretariat to this Committee. It is foreseen that MoE will play an important role, as the GEF focal point as well, in the LDCF project. This will help ensure close linkages between PPCR and the project.

Links with the UNEP-led project “Vulnerability Assessment and Adaptation Programme for Climate Change within the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems” which focuses on the coastal zone will also be established to facilitate exchange of knowledge and best practices.

Institutional arrangements and opportunities for collaboration with all the above-mentioned projects and other relevant initiatives in the country will be further explored and confirmed during project preparation.

C. DESCRIBE THE GEF AGENCY’S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

FAO is the global lead technical agency for Agriculture, Forestry and Fisheries with six decades of accumulated global knowledge through its hands-on work experience at all levels from the community to multilateral levels. It is the main UN Agency for collecting and disseminating relevant information utilized worldwide in these sectors. FAO has spearheaded the provision of technical support for food security policy analysis of information through various information systems - regional and national food security information systems, vulnerability and early warning systems, emergency needs assessments, crop forecasting, market information systems etc – to support informed decision-making in its member countries. FAO’s Agriculture, Natural Resources and Forestry Departments have been implementing participatory watershed projects in many countries over the last three decades building the capacity for improved agricultural practices to ensure food security. FAO was one among the first UN agencies that

started its operations in Cambodia after Khmer Rouge in 1979, under emergency relief in the form of rice seeds and fertilizers. In 1994, the FAO office became a full representation, and since 1995 FAO has implemented over 115 projects to a total of USD 39 549 573, covering a number of areas: agriculture, including food and agriculture policy; livestock management, fisheries and aquaculture, sustainable forest management, natural resources management, etc. FAO also has extensive experience in implementation of the Farmer's Field School (FFS) approach proposed in this project for promoting climate-resilient agricultural practices.

C.1 Indicate the co-financing amount the GEF agency is bringing to the project:

FAO will provide the following indicative co-financing: USD 1,267,800 grant from the FAO Technical Cooperation Programme Facility and USD 304 000 in-kind.

C.2 How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

Part of FAO's work focuses on adaptation and mitigation in agriculture. The project is fully consistent with FAO's Strategic Framework 2010-2019, in which climate change adaptation is particularly emphasized given that it is a vital component for reducing vulnerability, increasing the resilience of production and livelihoods systems, and achieving food security. The project also fits well within the priorities identified in the National Medium-Term Priority Framework (NMTPF 2011-2015) for Cambodia, which guides FAO assistance in the country and is consistent with UNDAF. The project is particularly well linked to priority area 5: climate change mitigation and adaptation, and disaster risk management. Three outputs are expected under this priority area and these include: (i) national capacities to respond to climate change with mitigation and adaptation measures in agriculture, forestry, fisheries, water resources and coastal zones enhanced; (ii) national capacity established to develop forestry-related carbon market, opportunities to reduce emissions from deforestation and forest degradation (REDD); and (iii) capacity for emergency preparedness and disaster risk reduction management for impending food, agricultural crises, and climate related hazards is enhanced. With regard to the 2011 – 2015 UNDAF, the proposed project contributes directly to the outcome "by 2015, more people living in Cambodia benefit from, and participate in, increasingly equitable, green, diversified economic growth" with four main results: 1) a sustainably developed agricultural sector promoting equitable physical economic access to an increased number of safe and nutritious food and agricultural products; 2) national, local authorities and private sector institutions better able to ensure the sustainable use of natural resources (fisheries, forestry, mangrove, land and protected areas), cleaner technologies and responsiveness to climate change; 3) a more diversified economy in Cambodia, with increased pro-poor investment, trade and private sector development due to strengthened national and local capacity; 4) increased employability, productive and decent employment opportunities, particularly for youth and women, through diversified local economic development in urban and rural areas. It also contributes to the third outcome on gender equality "by 2015, all women, girls, men and boys are experiencing a reduction in gender disparities and progressively enjoying and exercising equal rights".

FAO Cambodia has 79 staff which consists of 10 international and 49 national technical personnel with expertise in agriculture, forestry, livestock, fisheries, economics, natural resource management, climate change etc, and 20 national administrative support staff. Additional technical support to project implementation will be provided by FAO staff from the Regional Office for Asia and the Pacific in Bangkok and FAO headquarters.

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

A. RECORD OF ENDORSEMENT 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 OPF endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Dr. Long Heal	Director General	MINISTRY OF ENVIRONMENT	10/27/2010

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Charles Riemenschneider Director, Investment Centre Division Technical Cooperation Department FAO Viale delle Terme di Caracalla 00153, Rome, Italy		08/12/2011	Patrick Durst Senior Forestry Officer FAO Regional Office for Asia and the Pacific	+6626974000	Patrick.durst@fao.org
Barbara Cooney FAO GEF Coordinator Email: Barbara.Cooney@fao.org Tel: +3906 5705 5478			Jeevanandhan Duraisamy Climate Change Officer FAO Representation in Cambodia	+85512802948	Jeevanandhan.duraisamy@fao.org