

## PROJECT IDENTIFICATION FORM (PIF)<sup>1</sup> PROJECT TYPE: FULL-SIZED PROJECT

TYPE OF TRUST FUND: LDCF

#### **PART I: PROJECT IDENTIFICATION**

Project Title:		Integrating climate resilience into agricultural and pastoral production for food security in vulnerable rural areas through the Farmers Field School approach				
Country(ies):	Niger	GEF Project ID:2	4702			
GEF Agency(ies):	FAO	GEF Agency Project ID:	613837			
Other Executing Partner(s):	Ministry of Agriculture and Husbandry (MAE) in collaboration with "Conseil National de l'Environnement et du Développement Durable" CNEDD, "Ministere du Plan, de l'Aménagement du Territoire et du Dévelopemment Communautaire", Ministry of Environment (ME) and Secretariat of the Rural Development Strategy (SDR)	Submission Date:	18 June, 2012			
GEF Focal Area (s):	Climate Change	Project Duration (months):	48			
Name of parent program (if applicable): • For SFM		Agency Fee:	380,000			

#### A. FOCAL AREA STRATEGY FRAMEWORK<sup>3</sup>:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co- Financing (\$)
CCA-1	Outcome 1.1: Mainstreamed adaptation in broader development frameworks at country level and in target vulnerable areas	Output 1.1.1 Adaptation measures and necessary budget allocations included in policies, plans, and programs of the Ministries of Agriculture, Environment and Animal Productions in the framework of CNEDD's mandate and SDR's action plan	LDCF	200,000	1,800,000
CCA-2	Outcome 2.2: Strengthened adaptive capacity to reduce risks to climate-induced economic losses	Output 2.2.1: Adaptive capacity of an expanding network of Farmer's Field Schools (FFS) strengthened to rapidly respond to extreme weather events and climate variability  Output 2.2.2: At least 20,000 farmers, agropastoralists and herders covered by adequate risk reduction measures through a minimum of 1000 FFS integrating CCA strategies and practices reach	LDCF	2,300,000	7,960,000
CCA-3	Outcome 3.1: Successful demonstration, deployment, and transfer	Output 3.1.1: FFS participants integrate a growing number of relevant adaptation	LDCF	920,000	3,080,000

GEF 5 PIF Template- A

It is very important to consult the PIF preparation guidelines when completing this template.
 Project ID number will be assigned by GEFSEC.
 Refer to the reference attached on the Focal Area Results Framework when filling up the table in item A.

	of relevant adaptation technology in targeted areas	technologies such as stress- resistant cultivars and varieties, soil conservation and water management, and tree/crops/fodder integration (menu to be developed during PPG)			
CCA-3	Outcome 3.2: Enhanced enabling environment to support adaptation-related technology transfer	Output 3.2.2: the expansion of FFS-based CCA processes are backed by specific rural extension policies and frameworks developed and adopted by rural development line ministries	LDCF	200,000	2,000,000
		Sub-Total		3,620,000	14,840,000
	300000	Project management cost <sup>4</sup>		180,000	360,000
		Total project costs		3,800,000	15,200,000

#### **B. PROJECT FRAMEWORK**

Project Objective: To enhance the capacity of Niger's agricultural and pastoral sectors to cope with climate change, by mainstreaming Climate Change Adaptation (CCA) concerns and strategies into on-going agricultural development initiatives and mainstreaming CCA issues into agricultural policies and programming

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co- financing (\$)
1. Piloting of improved climate-resilient agricultural practices in the framework of CNEDD's mandate and the SRD's action plan, with emphasis on PAC-CR-asssited	TA	1.1. Increased resilience of at least three productions systems in two agro-ecosystems through the adoption of improved CCA strategies, practices and a broader choice of adapted genetic material, in at least 15 municipalities assisted by PAC-CR and other	A. Multi-stakeholders FFS- and DFF-based knowledge building strategy formulated and applied to fostering CCA strategies and practices (following an up-dated mapping of past and current farmers' CCA practices and institutional support initiatives)	LDCF	100,000	
municipalities		partner programs (surface and yields at least maintained in assisted farmers groups).	B. A core of national, regional and departmental managers of at least 6 partner agricultural and pastoral development programs aware of the potential for mainstreaming CCA in rural development using the FFS - GIPD and DFF (Diversity Field Fora) approaches	LDCF	100,000	
b			C.At least 15 municipalities ("communes") assisted by PAC-CR and other partner programs in the Sahelian band and Niger Valley have functional and funded CCA projects which include FFS-based	LDCF	200,000	

<sup>&</sup>lt;sup>4</sup> GEF will finance management cost that is solely linked to GEF financing of the project.

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		extension services  D. Improved soil and crop management practices piloted in two ecosystems (Sahelian band and Niger valley) of at least 15 municipalities including rain fed cereals, legumes-growing agropastoral production systems.  E. A more diverse set of crop varieties chosen from existing climate stress tolerant cultivars/ varieties of cereals, legumes and fodder, piloted in two	LDCF	300,000	
		ecosystems and at least three production			
Sub-total C1		systems	LDCF	900,000	5,000,000
2. Capacity Inv building and promotion of improved	2.1. 20,000 farmers and agropastoralists adopt improved climate resilient practices	A. Training material on CC adaptation best practices developed and integrated into Farmer Field School curricula.	LDCF	300,000	
agricultural practices through Farmer Field Schools (FFS) in the framework of on-going FAO- supported	through 1,000 Farmer Field Schools FFS providing training on CCA strategies and practices	B. 300 FFS facilitators trained in climate change adaptation and ecosystem resilience strategies and practices support CCA in 1,000 FFS	LDCF	1,200,000	
projects and other MA and ME's "projets sous tutelle" (including PAC-CR)		C. At least 100 FFS leaders aware/ informed of options for CCA practices through FFS and Farmers to Farmers exchanges	LDCF	100,000	
		D. 150 FFS-based CCA initiatives supported by a CCA Adaptation Fund, mobilizing complementary financing of at least USD 1,000,000 by year 4	LDCF	300,000	
		E. Weather forecast decision support tools for farmers developed in coordination with UNDP and PAC-CR are adopted by 50% of participating FFS	LDCF	300,000	
Sub-total C2 3. Climate change adaptation strategies mainstreamed into agricultural sector policies and programs in	3.1. Increased institutional capacity and cross-sector coordination lead to the mainstreaming of climate change adaptation strategies into 50% of	A. Knowledge and understanding of CC-induced threats obtained from a growing network of FFS are incorporated into broader	LDCF	2,200,000	6,200,000

conformity with CNEDD's mandate and SDR's action plan		agricultural and pastoral sector policies, programs and planning (30% of operational projects at sector-level programs incorporate budgeted-for CCA components) based on "lessons learned"	assessements conducted under PAC-CR and FAO-WFP emergency assistance platforms.  B. Agricultural policy / capacity assessment - gaps and opportunities - for mainstreaming FFS-based climate change adaptation into the rural development sector policies.	LDCF	50,000	
			C. Mechanisms strengthened for cross- sector coordination in the implementation and monitoring of FFS- based outreach strategies for CCA.	LDCF	100,000	
			D. Good operational practices and "lessons learned" for enhanced adaptation to climate risk of the agricultural sector are developed, disseminated and replicated at national level in support to sound CCA policy making and programming	LDCF	50,000	
			E. Draft investment plan available in support to FFS-based CCA mainstreaming and up-scaling in the agricultural and pastoral sector	LDCF	50,000	
Sub-total C3				LDCF	300,000	3,200,000
4. Project monitoring and evaluation	TA	4.1 Project implementation based on results based management and application of project lessons learned in future operations facilitated	A. Project monitoring system operating providing systematic information on progress in meeting project outcome and output targets B. Timely biannual project progress reports available for adaptive and results based management C. Midterm and final evaluation conducted	LDCF	220,000	440,000
			Sub-Total		3,620,000	14,840,000
-			Project management Cost	LDCF	180,000	360,000
			Total project costs <sup>4</sup>	LDCF	3,800,000	15,200,000

GEF 5 PiF Template- A

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
National Government	SDR Secretariat (UE-funded SDR suport project)	Grant	5,450,000
National Government	Ministère del l'Agriculture et de l'Elevage"	In-kind	300,000
GEF Agency	FAO	In-kind	100,000
GEF Agency	FAO project: Amélioration de la Production de riz en Afrique de l'Ouest en Réponse à la Flambée des Prix des denrées Alimentaires (GCP/RAF/453/SPA) funded by Spain	Grant	1,000,000
GEF Agency	FAO project: Intensification de l'Agriculture par le Renforcement des Boutiques d'Intrants Coopératives (IARBIC) -INTRANTS II (GCP/NER/047/MUL) funded by multi donors	Grant	5,500,000
GEF Agency	FAO project: Amélioration de la sécurité alimentaire des ménages vulnérables par le renforcement de la production et de l'utilisation de semences améliorées (OSRO/NER/006/BEL) funded by Belgium	Grant	2,200,000
GEF Agency	FAO project: CoOPequity - Strengthening Gender Equity and Governance for Effective Producer Organisations and Improved Food Security (under preparation) funded mainly by EU	Grant	650,000
Total Co-financing			15,200,000

#### D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY<sup>1</sup>

	Cour	Country Name/	(in \$)			
GEF Agency	Type of Trust Funds	Focal Area	Global	Project amount (a)	Agency Fee (b)	Total c=a+b
FAO	LDCF	Climate Change	Niger	3,800,000	380,000	4,180,000
Total Grant R	esources					4,180,000

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

#### PART II: PROJECT JUSTIFICATION

#### A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

#### A.1.1. THE GEF FOCAL AREA/LDCF/SCCF STRATEGIES /NPIF INITIATIVE:

The project will directly contribute to the implementation of the SCCF/LDCF adaptation strategy through the integration of climate resilience into agricultural and pastoral production for food security in vulnerable rural areas of Niger through the Farmers Field School approach proposed project will support the objectives CCA-1, CCA-2 and CCA-3. It will also contribute indirectly to LD by strengthening the "Gestion Durable des Terres" (GDT) approach's capacity to more effectively coordinate actions with line ministries of the rural development sector and more fully incorporate CC considerations into GDT's menus.

### A.1.2. FOR PROJECTS FUNDED FROM LDCF/SCCF: THE LDCF/SCCF ELIGIBILITY CRITERIA AND PRIORITIES:

Niger's NAPA was submitted to UNFCCC in July 2006. Consistent with guidance for the LDCF (GEF/C.28/18, May 12, 2006), the present proposal is a NAPA follow up project aiming to address adaptation priorities of the agriculture and agro-pastoral sector. The project will implement an integrated strategy of adaptation-focused interventions with emphasis on the enhancement of rural smallholders and pastoral communities' food security. The project will thereby contribute towards the attainment of the Millennium Development Goal (i.e., eradication of extreme poverty and hunger).

# 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.:

The Project is fully consistent with Niger's NAPA, presented in 2006. All NAPA adaptation measures are in synergy with

the dispositions of post-Rio conventions ratified by Niger: "United Nations Framework Convention on Climate Change" (UNFCCC), "United Nation Convention to Combat Decertification" (UNCCD), and the "United Nation Convention on Biological Diversity" (UNCDB). The project will support CNEDD's mandate (confirmed and extended by Decree 2011-157 - January 27, 2011) as the institution in charge of coordinating and monitoring all activities related to post-Rio Conventions, including climate change. It will strengthen CNEDD's capacities to ensure "the integration of the dimensions of climate change and adaptation into policies, strategies and development programmes" and "the mobilization of financial resources required for the implementation of climate change adaptation activities". The project is also consistent with the "Plan National de l'Environnement pour un Développement Durable" (PNEDD) which now substitutes (Decree 2011-157) and the "Plan d'Action National Environnemental" (PANE). The project will contribute to two rpiority programmes of the PNEDD's: (i) "Programme d'Action National de Lutte Contre la Désertification et de Gestion des Ressources Naturelles"; and (ii) "Programme Changements et Variabilité Climatiques".

The 14 priority adaptation measures (or "options d'adaptation") identified in Niger's NAPA for reducing risks, improving food security and meeting Milenium Development Goals (MDGs) in the face of climate change are mostly for the agricultural and pastoral sectors. The LDCF project will support at least 8 of the 14 key adaptation measures across the agricultural and agro-pastoral areas identified in the NAPA as intimately linked to rural food security, namely: (i) Introduction of fodder species in pastoral environments; (ii) Diversification and intensification of irrigated crops; (iii) Promotion of peri-urban legume growing and animal productions; (iv) Dessimination of agro-meteorological informations; (v) Contribution to the control of climate-sensitive diseases (affecting cropping systems); (vi) Development of soil/water conservation and soil protection/restoration activities; (vii) Promotion of climate-adapted species for animal and vegetal productions; and (viii) Stregthening of technical, material and organizational capacities of rural producers.

Niger has also recently formulated a Strategic Programme for Climate Resilience – SPCR, in the framework of the World Bank – sponsored Pilot Programme for Climate Resilience.

Niger adopted its Poverty Reduction Strategy ("Stratégie de Réduction de la Pauvreté" – SRP) in Juanuary 2002, aiming at reducing the global incidence of poverty from 63% to 50 % by 2015. Among the SRP's specific objectives, the following three specific objectives are directly related to the present project: (i) Improving people's livelihoods, with a focus on rural populations; (ii) fostering the development of productive sectors to ensure food security, while ensuring and integrated management of the natural resources base to preserve the environment; and (iii) strengthening human and institutional capacities, with emphasis on the local level. The Rural Development Strategy ("Stratégie de Développement Rural" – SDR, approved in November 2006) is a sector-specific variation of the SRP. The SRP has been approved by the GoN in November 2003 and is designed to specifically achieve the following Millenium Development Goals (MDGs): (i) Objective 1: Reduction of extreme poverty and hunger; and (ii) Ojective 7: Contribute to a sustainable environment. The SDR's general objective is to "reduce the incidence of rural poverty from 66% to 52% in 2015 through the creation of sustainable economic and social development ensuring food security and the sustainable management of natural resources.

The adaptation activities to be carried out under the LCDF project will be undertaken in close synergy with the Action Plan for the implementation of the SDR This program approach to rural development mentions adaptation activities such as the use of local and improved pastures species, rehabilitation of grasslands and improved conservation practices, aiming at reducing households vulnerability and at maintaining/restoring key natural assets. Regional Action Plans (PAR) are currently being elaborated and implemented in various of Niger's regions, which will constitute the decentralized framework for a more coherent and coordinated support by Niger's Technical and Financial Partners in the field of Rural Development. The proposed LDCF project is fully compatible with SDR's three main strategic orientations ("axes stratégiques"): (i) Facilitate the access of rural population to economic activities; (ii) Prevent risks, improve food security and manage natural resources in a sustainable manner, and (iii) Strengthen the capacities of public institutions and rural organizations to improve the management of the rural development sector. The project will also be instrumental in supporting the forthcoming process of revision and up-dating of the SDR, in which Climate Change Adaptation issues will be incorporated transversally into SDR's programs and action plan.

#### **B. PROJECT OVERVIEW:**

#### B.1. DESCRIBE THE BASELINE PROJECT AND THE PROBLEM THAT IT SEEKS TO ADDRESS:

As a land-locked country, Niger's economy is very fragile and is affected by internal and external isolation, a strong population growth (3,3%), severe environmental constraints and by extreme poverty. According to UNDP (2005) Niger ranks 177<sup>th</sup> on 177 countries in terms of Human Development Index (0,281) while the Human Poverty Index is 64,4%. Estimations from 2003 (SDR) indicate that 83,7% of Niger's population [11.060.291 habitants (RGP/H, 2001)] depend on agriculture, animal husbandry and other land-based activities, and that the contribution of those activities to national GDP and exports is 38,1% and 27,2% respectively (Source: INS/ME/F, 2005). 15 million hectares are considered as having an agricultural potential, which represent less than 12% of Niger's total land mass. Most of those soils support low productivity levels and are very sensible to water and wind erosion. Land suitable for irrigation cover only 270,000 ha, of which 140,000 ha are located on a narrow band along the Niger valley, which is considered as a strategic natural asset for food security.

Niger's climate is characterized by strong inter-annual rainfall variability. Since 1968, there has been an enhanced recurrence of dry years and prolonged drought which have caused severe negative effects on livelihood. The last episode has been the 2009-2010 food crisis, followed by favorable precipitation in the 2010-2011 cropping season. This has contributed to increased vulnerability of rural people and has further caused the deterioration of the fragile ecosystems upon which they depend. Climate change projections for 2025 indicate that Niger may face a hotter and drier future. According to Niger's NAPA, rain patterns anomalies (based on observations from 59 stations from 1961 to 2004, have increased, with seven major drought years and three episodes (1969-1974, 1981-1988 and 1995-1999). The downward trend since 1970 has resulted in a southwards migration of isohyets. Climate predictions based on the MAGICC/SCENGEN model (version 2.4 - Mai 2000) do not indicate a general reduction in total precipitation for 2025, except around Niamey and Tillabéri. However, the precipitation regime is reported to be increasingly variable, with consequences in terms of unexpected flash floods, delays in the establishment of the rainy season and episodes of reduced precipitations during the planting season. Additionally, the climatic model clearly indicates that a significant increase in average summer temperature (around 3,0°C) is expected in the Sahelian band, with direct consequences in terms of increased evapo-transpiration and stress on crops.

It is recognized that Niger's agricultural and pastoral sector are likely to be severely affected by climate change and both crop and forage yields. Small farmers and pastoralists are especially vulnerable because of their limited knowledge and capacity to adapt to climate variability and change, and there is a need to build their capacity in adopting drought resilient agro-pastoral and agroforestry practices to counter the adverse effects of climate variability. The recent 2009-2010 crisis has had severe consequences for the food security and livelihood of small farmers and pastoralists who have limited capacity to adapt to climate variability and change. Despite the fact that climatic variability has always been considered in rural development policies, programs and field activities, farmers and agro-pastoralists are now subject to increased risks due to climate and environment changes. A recent World Bank study on food security in Niger (World Bank 2009) found that more than 50 % of the population still suffers food insecurity, with 22 % of the population chronically extremely food insecure. The failure of the 2009 harvest has created a situation of severe food insecurity, and the longer-term and chronic problem that faces Niger in terms of vulnerability to climate-related natural disasters persists, in spite of the important investments made in the agropastoral sector in the last decades - which did not systematically integrate CCA concerns and/or were not specifically designed to aim at it.

#### Baseline scenario

Non climate-driven problems such as unsuited agricultural management practices (regarding crop and variety selection, water and soil management, and rangeland management), increasing population pressures leading to expansion of agriculture into fragile ecosystems and increasing competition between herders and agriculturalists, as well as lack of capital investment and positive incentives for sustainable rural development, are likely to be greatly aggravated by climate change. Adaptation of the agricultural sector is therefore not an end in itself but a means to address the development objectives of Niger. Niger will have to adapt agricultural and pastoral systems to a hotter and likely drier future and react to the risk of decreasing yields and degrading the natural resource-bases (soils, biodiversity). A mix of technical solutions (such as more diverse sets of crop varieties to minimize risks, different planting patterns and a better integration between the crops, livestock and tree elements of small holders productions systems) as well as institutional solutions are necessary to support the rural communities, in an integrated way. In Niger there are traditional and improved sets of varieties of sorghum, millet, groundnuts, cowpea, and others that are grown to minimize the risk of crop loss to climate variability. However, without LDCF intervention, their adoption by farmers and pastoralists will remain limited.

NAPA follow-up to date have been focusing on creating basic institutional and awareness conditions for better addressing CCA issues, and on generating localized field experiences in 8 of the most vulnerable communities, one in each of Niger's regions. In parallel, FAO with partners such as the World Food Program (WFP), Biodiversity International and others, has also recurrently supported the Niger government in coping with repeated food crises, and is interested in supporting a shift from a reactive to a more proactive approach linking food security, disaster risk management (DRM) and CCA.

Consulted PAC-RC technical documentation indicates clearly that "the Government of Niger and its development partners have invested more than US \$ 400 million over last 3 decades in programmes promoting sustainable land management and other activities aimed at rehabilitating fragile lands. Overall, more than 50 programmes have incorporated activities related to Sustainable Land Management (SLM) such as the promotion of measures for water collection and surface water conservation, tree planting and other measures to rehabilitate lands, etc. Reported results of such investments include increased vegetation, reduced erosion, rehabilitation and greater utilization of degraded lands, improved agricultural yields, increased forage for herds, greater availability of water, improved food security and well-being for vulnerable groups, and the reduction of poverty, among other things". While it is recognized that Niger has over the course of these past decades, gained considerable experience in land recuperation for agro-sylvo-pastoral production, it is also noted that coverage has been limited and focused in areas of more favorable agro-climatic conditions and market access. Less than 8 percent of villages in Niger, and particularly those in the regions of Dosso, Tillabery and Tahoua, have participated in the major SLWM programmes. It is also recognized that "these projects and programmes have already brought together a critical mass of experiences on adaptation to climate change" and that it is now imperative "to scale them up and use them as part of a massive effort of environmental restoration".

Niger has recently moved from a "development without adaptation" to a "development with adaptation" scenario, with its inclusion in the WB-sponsored Pilot Programme for Climate Resilience (PPCR), and the recent approval of the

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"Programme d'Action Communautaire – Résilience Climatique" – PAC-RC (2012-2016 – Loan US\$ 28 million; Grant US\$ 35 million).

The SPCR (and PAC-RC) would aim to support the current process of incorporating climate resilience into development strategies and plans, to scaling up and strengthening lessons learned from programmes and projects, to use existing participatory, demand driven processes, and to enhance successful experiments favoring resilience of agro-sylvo-pastoral systems and disseminating them all over the country.

While PAC-RC, which will represent a key collaborating programme as described in section B.6, will more specifically support the implementation of the SPCR, a specific EU-funded project ("Projet d'appui au démarrage de l'approche programme dans le secteur du développement rural au Niger" - 2010-2014 - 7,5 million Euros) is currently supporting the consolidation of the SDR, and offers a window of opportunity for mainstreaming CCA into current and future SDR-related projects and programmes. It should be noted that 29 of PAC-RC's 38 selected communes are located in the the Sahelian band of the regions of Tillaberi, Dosso, Tahoua, Maradi and Zinder, where FAO is currently working with FFS, which will ensure a good geographical overlap both with FAO activities and with the proposed area of intervention of the LDCF project. The Eu-funded SDR support projet has a pilot omponenet of regionalization of the SDR in the region of Tahoua.

FAO is currently supporting the Government of Niger through several projects that aim at reinforcing farmer's capacities and to provide the required capacity building. These projects are based in participative education developed with the FFS approach. At the core of the FFS approach lies a participatory process involving groups of farmers, actively engaged in testing and experimenting adapted solutions to changing environmental- and marketing -environments, allowing for sustainable intensification and land restoration. The FFS are "grass-roots labs" in which farmers build and expand their knowledge basis, evaluate technical options and are better equipped to adapt to changing conditions. Funding for FFS in Niger is more recent and still more limited than in other Sahelian countries, and the FFS approach is supported by the following projects, all aiming at integrated long-term development and to the poverty reduction in rural areas: i) the multi-focal GEF program "Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management"; ii) GCP /NER/047/MUL "Intensification de Agriculture par le Renforcement des Boutiques d'Intrants Coopératives (IARBIC) - INTRANTS II"; and GCP /RAF/453/SPA "Amélioration de la Production de riz en Afrique de l'Ouest en Réponse à la Flambée des Prix des denrées Alimentaires". The projects are located in the most productive agricultural areas of the country, along the Niger valley and along the Sahelian band in the regions of Tillaberi, Dosso, Tahoua, Maradi and Zinder. To date, capacity building tools in Niger have been developed and applied through the FFS-based integrated crop management system (GIPD) for irrigated rice and vegetables production. 82 FFS are being supported in 2010-2011 and targets for 2013 are a consolidated number of 1350 FFS (850 on vegetable production and 500 on irrigated rice fields), benefiting up to 28,000 farmers). Additionally, FAO is executing post-emergency operations following the repeated food crisis, such as OSRO/NER/006/BEL "Amélioration de la sécurité alimentaire des ménages vulnérables par le renforcement de la production et de l'utilisation de semences améliorées". In addition, FAO is planning activities to reinforce food security and nutrition governance. The CoOPequity Project (Strengthening Gender Equity and Governance for Effective Producer Organisations and Improved Food Security) will contribute to the Improved Global Governance for Hunger Reduction Programme (GCP/INT/130/EC), which is designed to improve coordinated and informed food security and nutrition governance at global, regional and national levels. The CoOPequity Project, aiming at reinforcing farmers organizations, will focus on strengthening self-reliance and empowerment of producers' organization members, including increased management, entrepreneurship, leadership skills and knowledge related to access to markets in a gender sensitive, equitable and economically sustainable way. Nonetheless, the project does not support CCA approaches.

#### Shortcomings / vulnerabilities of the new baseline scenario

In November 2011 a FAO technical mission analyzed and identified with PAC-RC and SDR staff potential shortcomings in the current "baseline scenario":

- 1. The UE-funded SDR support project will contribute significantly to both the development of internal management capacities of programme approaches within the SDR Secretariat, and its ability to ensure more efficient cross-sector coordination among rural development institutions. This is expected to contribute to increased levels of financing for rural development. However, the EU-funded SDR-support project will neither specifically address the challenges of CCA at this stage, nor will it contribute to the integration of proven and cost-efficient extension approaches within the SDR methods and tool boxes.
- 2. While the MAE/FAO-led baseline projects are developing a knowledge management and technology deployment platform through a growing FFS network, they do not yet systematically integrate CCA concerns.

Both the PAC-RC and SDR consulted staff, as well as officials from the Ministry of Agriculture, consider that those shortcomings constitute a strong vulnerability of this "baseline scenario". Both PAC-RC and SDR could benefit from the additional value that FAO could bring by developing a concrete FFS-based CCA approach and capacity on the basis of its unique experience in the field of participatory learning and extension. New investments will require a proven and tested outreach platform for up-scaling and farmer's adoption of CCA practices in the field and would gain from the FFS-approach of the proposed FAO/LDCF project.

The proposed LDCF intervention is needed to boost the adoption of agricultural tools and practices, expand the scope of the FFS approach, increase capacity building, and support policies and programs (with the support of the CoOPequity Project) to shift from a reactive response towards a pro-active preparedness approach to climate events. In particular, the LDCF project will allow for the establishment or strengthening of cost-efficient synergies between FAO/MAE's FFS program, the PAC-CR and the SDR-program. Its additional value relates to its capacity to:

- Facilitate the integration of CCA aspects into FAO/MAE growing network of FFS;
- Provide a proven outreach platform for up-scaling farmers and pastoralists adoption of CCA practices in the framework of PAC-RC;
- Enrich the methodological tool-box of the SDR to include FFS-based CCA extension strategies and approaches, thus facilitating the mainstreaming of CCA into the current and new generation of SDR-related projects.

The additional costs financed by LDCF will allow for this adoption of practices and technologies at farm level to happen sustained by the needed capacity building in farmers' abilities to understand and adapt to climate change impacts through FFS. Once verified and tested how this model best works and developed the required human resources and institutional capacities for up-scaling, funding from PAC-PC and other SDR programmes will insure the up-scaling.

#### Baseline projects and programs providing co-financing to the proposed project

The following baseline projects will provide co-financing to the proposed project:

The SDR UE-funded project «Support to the launching of the program approach in the rural development sector in Niger» (EUR 7.5 million budget) will provide USD 5.4 million in co-financing from its Institutional support component. This specific co-financing will be partly dedicated to the achievement of the LDCF's component3: «Climate change adaptation strategies mainstreamed into agricultural sector policies and programs in conformity with CNEDD's mandate and SDR's action plan» and partly to the achievement of the LDCF's Component 1: «Piloting of improved climate-resilient agricultural practices in the framework of CNEDD's mandate and the SRD's action plan, with emphasis on PAC-CR-assisted municipalities».

FAO will also provide co-financing from the following three projects:

- (i) The FAO implemented regional project GCP /RAF/453/SPA "Amélioration de la Production de riz en Afrique de l'Ouest en Réponse à la Flambée des Prix des denrées Alimentaires" (currently 2010-2012) has a total budget of USD 5.8 million (an an estimated USD 1.0 million for Niger). It is actively engaged in expanding the FFS network in rice producing areas. It will provide USD 2,800,000 in cofinancing in support to components 1 and 2 of the LDCF project, contributing to expand the FFS-base on which the proposed project will build to incorporate CCA strategies and practices.
- (ii) The FAO implemented national project GCP /NER/047/MUL "Intensification de l'Agriculture par le Renforcement des Boutiques d'Intrants Coopératives (IARBIC) -INTRANTS II" (2008-2013) has a budget of USD 7.0 million. The USD 4.5 million co-financing from this project will contribute both to the expansion of the FFS network and to the provision of agricultural inputs for FFS assisted by FAO (component 2 of the LDCF and Component 1 Output D "Improved soil and crop management practices piloted in two ecosystems").
- (iii) The FAO-implemented national post-emergency project OSRO/NER/006/BEL "Amélioration de la sécurité alimentaire des ménages vulnérables par le renforcement de la production et de l'utilisation de semences améliorées" (2010 2013) has a budget of USD 3,3 million, and will contribute USD 2,200,000 in cofinancing. It will specifically support Component 1 Output E "A more diverse set of crop varieties chosen from existing climate stress tolerant cultivars/ varieties of cereals, legumes and fodder, piloted in two ecosystems and at least three production systems" and component 2 Output A. "Training material on CC adaptation best practices developed and integrated into Farmer Field School curricula" in relation to reproduction and selection of adated genetic material.
- (iv) The FAO-implemented regional project "CoOPequity Strengthening Gender Equity and Governance for Effective Producer Organisations and Improved Food Security" (expected 2012–2016), funded mainly by EU for a total of USD 2 million, will contribute with USD 650,000 co-finacing to Component 3 activities including: (a) improving policies, laws and institutional frameworks that are conducive to gender equitable, inclusion and strengthening effective producers organizations and development and growth of cooperatives'; and (b) ensuring that the project's participating organizations understand agricultural policy issues in relevant priority areas, actively engage in local, national and regional policy forums and collaborate with policy-makers to support the needs and interests of their members.

Finally, FAO will contribute 100,000 USD in kind though its national office in Niger, bringing a total level of cofinancing by the agency to USD 2.1 million. The GoN's in-kind contribution through the "Ministère del l'Agriculture et de l'Elevage" and the "Ministère de l'Eau, de l'Environnement et de la Lutte contre la Désertification" is estimated at USD 300,000.

All FAO implemented projects considered as part of the baseline and contributing to cofinancing work in the regions and 2 ecosystems (along the Niger valley and in the Sahelian band in the regions of Tillaberi, Dosso, Tahoua, Maradi and

Zinder) in which the LDCF project will be implemented, thus ensuring additionality of the LDCF investment. There is also a regional overlap with both PAC-RC, which will concentrate on vulnerable municipalities of the Sahelian band, and with the EU-funded SRD Support project, which will support a pilot exercise of regionalization of the SDR in the region of Tahoua.

#### Project approach

The proposed LDCF project will address the need for developping proven and cost-effective outreach and extension approaches and methods in order to allow for an effective up-scaling of CCA strategies and practices, required to ensure increased climate resilience of Niger's key agricultural and agropastoral production systems, and lessen the vulnerability to climate change of on-going and future investments in the agropastoral sector. The SPCR and PAC-RC assessments of past investiments in the agropastoral sector in the last three decades (USD 400 million investment) is that the lack of an adequate outreach platform has led to only 8% of villages in Niger benefiting from technical assistance, to continuing vulnerability of the rural population (particularly the poorest segment of this population) to food insecutity and malnutrition; and to the lack of adoption on a significant scale of locally adequate LD and CCA on the basis of existing successful experiences.

The adaptation objective of the LDCF project is to lessen the impact of climate variability and change on vulnerable farmers and pastoral groups, through lessening impacts on natural resources that are critical to sustain agriculture production and food security. Specifically, the project interventions will take place in a) the Sahelian band where most of the more vulnerable communes identified in the NAPA are situated, and b) in the Soudano-sahelian area south of Niamey (Niger valley), which is critical for national food security. The project will focus on at least three different production systems: i) dry cereals including non irrigated rice; ii) vegetable-growing practiced mostly by women groups; and iii) mixed crop/livestock systems. The project is articulated into the following four components: (i) Piloting of improved climate-resilient agricultural practices in the framework of CNEDD's mandate and the SRD's action plan, with empasis on PAC-CR-assisted municipalities; (ii) Capacity building and promotion of improved agricultural practices through Farmer Field Schools (FFS) in the framework of on-going FAO-supported projects and other partner projects"; (iii) Climate change adaptation strategies mainstreamed into agricultural sector policies and programs in conformity with CNEDD's mandate and SDR's action plan; and (iv)Project monitoring and evaluation. The project will also play an important role in catalyzing and assisting Niger in transferring lessons learned from other GEF-funded projects in Niger as well as from neighbouring countries such as Burkina Faso, Benin and Mali (a similar project has been launched in Mali at the beginning of 2012).

The project approach is adapted to Niger's recent move from a "development without adaptation" to a "development with adaptation" baseline scenario, with its inclusion in the WB-sponsored Pilot Programme for Climate Resilience (PPCR) and its adoption of a national Strategic Programme for Climate Resilience. It will contribute to triangulating three key baseline investments over the 2013-2016 period: (i) the FAO/MAE-led process of expansion of an FFS network as a platform for efficient outreach, extension and training at farmer's level; (ii) PAC-RC's support to increasing capacities at decentralized (municipal) level to effectively manage CCA programmes, and (iii) the EU-sponsored process of structuring a cross-sectors programme approach to rural development at national and regional levels.

The sustainability of the expected project outcomes is built into the project approach as follows:

- (i) FAO will initiate filed activities by focusing first on those areas covered by its current FFS programme, building on already established FFS. This will allow for the development and testing of the FFS-based CCA technical and methodological model, in close collaboration and communication with other partner projects.
- (ii) During 2012 and 2013 FAO's on-going FFS baseline projects will concentrate their support to new FFS activities in selected municipalities covered by PAC-CR as much as possible, thus increasing complementarity and ensuring that LDCF' principle of additionality is fully respected
- (iii) The FAO/LDCF project will in the meantime work closely with PAC-RC in accompanying the development of municipal CCA management capacities and will contribute to familiarization of municipal program managers with the FFS-CCA approach.
- (iv) Once the FFS-CCA approach / methods have been fully tested through FAO baseline projects, the fine-tuned FFS-CCA model will be made available to municipalities, which will contract FFS-based technical assistance and ensure the necessary investments in establishing new FFS with their own program budgets in accordance to PAC-RC rules of operation. This phase will allow for testing the operational and administrative mechanisms for linking farmer's demand and the offer of CCA municipal support programmes. Lessons-learnt will be key for future mainstreaming through the SDR.
- (v) In parallel, the LDCF project will work closely with the EU-sponsored SDR Support project and with PAC-CR in ensuring that the FFS-CCA extension model is being mainstreamed into the SDR methods and tool boxes, both at national level and in the pilot SDR regionalization process in the region of Tahoua.
- (vi) Finally, it is expected that the fully-tested model (technical and methodological testing through the FAO baseline projects, followed by operational and administrative testing through PAC-CR supported municipal CCA programmes) will be fully incorporated into the SDR programme framework, and adopted for subsequent up-scaling by the new generation of SDR-inscribed investment programs and projects.

Special attention will be given during PPG, in maximizing the potential for geographical overlap between the baseline projects making the most of FAO projects' flexibility in directing new FFS investments towards specific PAC-RC and UE-SDR chosen regions and communes. This will contribute to maximizing the additionality of the LDCF contribution. It is also expected that by fine-tuning the overlap analysis, additional co-financing may also be identified during PPG.

# B. 2. <u>INCREMENTAL / ADDITIONAL COST REASONING</u>: DESCRIBE THE INCREMENTAL (GEF TRUST FUND) OR ADDITIONAL (LDCF/SCCF) ACTIVITIES REQUESTED FOR GEF/LDCF/SCCF FINANCING AND THE ASSOCIATED <u>GLOBAL ENVIRONMENTAL BENEFITS</u> (GEF TRUST FUND) OR ASSOCIATED ADAPTATION BENEFITS (LDCF/SCCF) TO BE DELIVERED BY THE PROJECT:

With the additional financing from the LDCF, the proposed LDCF intervention will expand the scope of the activities carried out in the country related to increase resilience of agricultural sector to climatic changes and contribute to decrease the vulnerability of small-farmers and pastoralists who depend on agriculture. The interventions measures that this project will provide include: (i) piloting of climate resilient improved agricultural practices that better manage risk through increasing crop variation and pastoral diversity, through linking to a growing network of institutional partnerships; (ii) provision of tools and training for 20,000 farmers and agro-pastoralists to improve their adaptive capacity to adapt to climate change; (iii) complementing ongoing and planned projects and programs by developing decision making tools for farmers and by developing extension curricula for climate change adaptation; (iv) mainstreaming climate change into agriculture policies and programs. The project marks a shift from earlier PANA follow-up initiatives (focused on very localized pilot projects in the most vulnerable communities) by choosing to implement an up-scaling / mainstreaming strategy based on a recognized, cost-efficient and expanding training and extension approach building on the Farmers Field Schools (FFS) and Diversity Field Forum (DFF) concepts. While capitalizing on the results on the early PANA implementation initiatives, the proposed LCDF project will work through the establishment of partnerships with on-going initiatives for incorporating the FFS-CCA approach in existing program frameworks such as the SDR and associated projects, thus contributing to fill the gap in terms of required increased adaptive capacity of the agricultural sector for food security. Furthermore, the CoOPequity Project will support gender sensitive and inclusive processes in the preparation of relevant institutional frameworks. The adaptation scenario will allow for both the expansion of the FFS approach and the integration of CCA considerations and practices in FFS curricula. The Adaptation scenario will lead to a more coherent intervention which will include the following production systems mentioned in SDR's priority programs:

- (i) Dry-cereals and pastures: the major effort will be put on expanding FFS for more climate resilient and sustainable production of dry cereals and better integrating the crops / livestock / tree components of production systems which are particularly exposed to climate variability.
- (ii) Irrigated rice: the FFS will focus on a sustainable GIPD-based intensification strategy, including water management and climate variability mitigation practices, in support to existing and on-going investment in rice perimeters, particularly along the Niger valley.
- (iii) Vegetable production: the FFS will focus on soil and water management practices (including incorporation of organic matter, increased water retention, cultivars selection, better distribution in time of production cycles leading to higher earnings), allowing for increased income generation for vulnerable producers, in particular women groups.

The specific additional value of the proposed LDCF project is three-fold. The LDCF funding will allow for: (i) the development of FFS-based CC adaptation models using on-going FFS projects as baseline; (ii) a first level of up-scaling of the developed and tested FFS-CCA models into co-financing projects; and (iii) the mainstreaming of the approach /models through the EU-sponsored SDR support project and future SDR-liked projects and programmes (third element of the baseline) as well as through the CoOPequity Project.

Adaptation benefits: The FDCF project is expected to generate the following adaptation benefits: (i) Increased knowledge and understanding of CC-induced threats generated by other initiatives (UNDP/GEF; PAC-CR) are channeled in an effective and efficient manner trough an expanding network of FFS; (ii) Resilient varieties and cultivars and sound CCA practices are adopted in dry crop cereals x livestock-based production systems (surfaces and yields are at least maintained in two agro-ecosystems/ strategic natural assets); (iii) 20,000 farmers and agropastoralists adopt improved climate resilient practices through FFS training; (iv) concrete adaptive capacity at farmers and herders level is strengthened through a growing network of at least 1,000 Farmer Field Schools fully integrating CCA strategies and practices; (v) 150 FFS-based CCA initiatives are supported by a CCA Adaptation Fund, contributing to eliminate financing bottle necks in the adaptation pathways; (vi) Climate change adaptation strategies mainstreamed into agricultural sector policies, programs and planning based on "lessons learned"; (vi) Effective and recurrent mechanisms are in place for cross-sector coordination in the implementation of FFS-based outreach strategies for CCA.

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 proposed project will improve socio-economic conditions of small-scale farmers and herders, rural families and subsistence economies in vulnerable and key productive areas of the soudano-sahelian band by: i) ensuring resilient agriculture production and food security, and allowing rural populations to adapt and expand their traditional knowledge base and practices to CC impacts; ii) reducing social tensions between agriculturalists, agro-pastoralists, herders and other NR users through a better integration of the crops x livestock and tree components of productions systems; (iii) reducing the impacts of climate change on the most vulnerable groups, including rural women. Since poor rural women have both production and reproduction roles - by collecting water and wood, raising small animals, laboring land for family subsistence and cash crops such as vegetable plots, and bearing children - they are the most affected by CC.

Rural population knowing and applying good management practices will help reduce LD and prevent competitive pressures on NR and risks of desertification (indirect global environmental benefits). As well, the project will reduce their vulnerability and enhance their adaptive capacity to prevent climate-induced economic losses (direct adaptation benefit). A further socioeconomic analysis will be conducted during project preparation to explore linkages and identify win-win solutions for local socio-economic benefits and adaptation benefits.

# 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:

While the strong interest of key government stakeholders in the project approach has been verified during project identification through a broad "tour de table institutionnel", some institutional adjustments may take place following the end of the political transition period. The situation will be reassessed during PPG. Partnership building capacities to ensure mainstreaming into on-going initiatives may constitute a challenge. However, LDCF-funded activities and management will be partly blended with the ongoing MAE/DNA-based and GEF-funded FAO FFS-GIPD program, and will benefit from its partnership experience. Exchanges with neighbouring Mali will be organized at the beginning of the project cycle to benefit from its broader experience in terms "institutionalization" of the FFS-CCA approach. Finally, climate change shocks and/or pest and diseases outbreaks may cause seeds shortages that may negatively influence new varieties distribution. The project will address this risk by fostering community-level field observation capacities to reduce seed multiplication failures, and by linking with on-going FAO-led initiatives such as IARBIC and various postemergency projects working on seed production and inputs distribution schemes.

Sustaining outcomes of the project beyond its termination could also be considered as a limited risk. Since the project will not directly facilitate access to markets, credit and long term extension services, it will rely on other projects and programmes to sustain and scale-up the adaptation measures it proposes. The strategy related to partnership-building with FAO-led FFS and inputs provision projects, as well as with PAC-RC, SDR and its associated projects is detailed in the description of the project approach (section B1, p.10) and will contribute to mitigate this risk. However, the reliance on other initiatives can also be considered as an opportunity more than a risk: the establishment of partnerships is the precondition for up-scaling and mainstreaming, making the most of a limited LDCF budgets. Outcomes C (Mechanisms strengthened for cross-sector coordination in the implementation and monitoring of FFS-based outreach strategies for CCA) and E (Draft investment plan available in support to FFS-based CCA mainstreaming and up-scaling in the agricultural and pastoral sector) of component 3 will specifically contribute to mitigate this risk. Finally, the experience of neighboring Mali – where most of the more than 4,000 FFS in place in 2011 are being mainly funded not by FAO but by national and international public and private partner institutions – will be used to design a clear exit strategy for the project and limit the risk of limited sustainability of project results.

# B.5 IDENTIFY KEY STAKEHOLDERS INVOLVED IN THE PROJECT INCLUDING THE PRIVATE SECTOR, NGOS, CIVIL SOCIETY ORGANIZATIONS, LOCAL AND INDIGENOUS COMMUNITIES, AND THEIR RESPECTIVE ROLES, AS APPLICABLE:

FAO and the Ministère de l'Agriculture et de l'Elevage (MAE) will be the main co-partners for project execution. However, the LDCF project will be inscribed in the general framework of the SDR, and will support the mandate of the Conseil National de l'Environnement et du Développement Durable (CNEDD). The project will also work very closely with the WB-funded PAC-RC, based at the "Ministere du Plan, de l'Aménagement du Territoire et du Dévelopemment Communautaire". The inscription of the project within the frameworks / mandates of both the SDR and CNEDD will allow for effective liaison with MAE-associated institutions such has DNA (Direction Nationale de l'Agriculture), INRA (Institut Nationale de Recherche Agronomique), DPV (Département de Protection des Végétaux), the Ministry of Environnement (Secrétariat Géneral and Direction Nationale de l'Environnement et des Eaux et Forêts), the Direction Nationale de la Météorologie, and with projects implemented by those institutions. Special emphasis will be put on developing partnerships with related public/private regional development agencies or "filières"-support agencies, farmers organization and women groups, some of which already involved in FFS. A more detailed stakeholder analysis will be undertaken during project preparation.

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#### B.6. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

The project draws on lessons learned, tools, and predictions from a number of FAO-led projects and initiatives in Niger and in neighboring countries: (i) First, it builds on the technical capacities and growing experience of FAO in the Farmers Field School Approach in Niger through the FAO-GEF regional GIPD project, the National IARBIC project and the regional project GCP /RAF/453/SPA "Amélioration de la Production de riz en Afrique de l'Ouest en Réponse à la Flambée des Prix des denrées Alimentaires"; (ii) Second, it will integrate lessons learnt from no less than 9 national emergency assistance projects funded by 7 donors.

The project will also benefit from FAO's broader experience in the application and mainstreaming of the FFS approach in neighbouring countries such as Burkina Faso, Benin and specially Mali where a strong FFS institutionalization process is underway and will be supported by a similar LDCF project supporting the integration of CCA considerations into the FFS approach, as well as from other FAO-ongoing initiatives such as the international project FBPP/GLO/002/BEL "Capitalisation des Outils en Matière de Sécurité Alimentaire et Genre".

The inscription of the LDCF project, both within the mandate of the CNEDD and the broader framework of the SDR will facilitate the build-up of synergies and partnerships between the LDCF project and a broad range of "projets sous tutelle" of both the Secrétariat Général de l'Agriculture (SGA) and the Secrétariat General de l'Environnement (SGE) in the fields of agriculture, agro-pastoral development and land management/restoration. The fact that the Plan of Action of the SDR is a program approach incorporating both agro-pastoral and environmental management initiatives and projects will also allow for effective coordination with a number of projects and initiatives. Though various major SDR-inscribed projects are currently approaching termination, it is expected that the flow of financing will resume throughout the LCDF project cycle since Niger is currently exiting its political transition period after the early 2011 elections. The LDCF project will be closely coordinated with the EU-funded "Projet d'appui au démarrage de l'approche Programme dans le secteur du développement rural au Niger", which gives institutional support to the SDR Secretariat (see Section B1).

As described in section B.1, Niger has recently moved from a "development without adaptation" to a "development with adaptation" scenario. The Programme d'Action Communautaire – Résilience Climatique (PAC-RC) would have the objectives of supporting the inclusion of climate resilience concepts and tools into development strategies and plans, scaling up and strengthening lessons learned from various programmes and projects, using existing participatory processes to establish demand-driven climate-resilient development support procedures, and enhancing successful experiments favouring resilience of agro-sylvo-pastoral systems and disseminating them all over the country.

The PAC-RC should set the basis for a new generation of agricultural and pastoral programmes in which both land rehabilitation and CCA should be more closely intertwined with productive and socio-economic development targets. This new generation of projects and investments will benefit from and reinforce an increasingly coherent programme approach centered on both the SPCR and the SDR. The PAC-RC clearly aims at integrating climate resilience in 38 selected vulnerable municipalities ("communes"), and strengthening the capacities of those municipalities to address CCA and manage CCA-related investments at local level. However, the PAC-CR proposes no specific proven methodologies or approaches to allow the "communes" to effectively reach farmers. Under PAC-RC, municipalities will have to contract (or establish agreements and partnerships for) technical assistance to be provided to farmers in order to up-scale the adoption of CCA practices. Both FAO and PAC-RC recognize that there is a strong risk that farmer's demands – in particular those of the poorest and most vulnerable ones, including women – cannot be met given the current limited public and private rural extension structures and capabilities. Increasingly structured farmers' demands and growing CCA-related municipal management capacities will need to be met by an equally growing capacity to provide technical support to actually implement adaptation practices and technologies at farm level. If those are missing, it will continue to leave the people most needing support for adaptation highly vulnerable. The collaboration between FAO and PAC-RC will be based on two of the three PAC-RC components:

- The Component 1 « Incorporating climate resilience into national and local development strategies », sub-component 1.1 «Incorporating climate change and variability into sector-level policies and local development planning» will collaborate with Component 1 output C of the LDCF project: "At least 15 municipalities ("communes") assisted by PAC-CR and other partner programmes in the Sahelian band and Niger Valley have functional and funded CCA projects, which include FFS-based extension services"; as well as to Component 3 Output B of the LDCF project: "Agricultural policy/capacity assessment gaps and opportunities for mainstreaming FFS-based climate change adaptation into the rural development sector policies".
- The PAC-RC sub-component 1.2 «Communication strategy and knowledge management» will collaborate with the proposed LDCF's Component 1: (i) Output A. Multi-stakeholders FFS- and DFF-based knowledge building strategy formulated and applied to fostering CCA strategies and practices; and (ii) Output B. A core of national, regional and departmental managers of at least 6 partner agricultural and pastoral development programmes aware of the potential for mainstreaming CCA in rural development using the FFS-GIPD and DFF (Diversity Field Fora) approaches. It will also contribute to the achievement of Component 3 Output A. Knowledge and understanding of CC-induced threats obtained from a growing network of FFS are incorporated into broader assessments conducted under PAC-CR and FAO-WFP emergency assistance platforms; and Output D. Good operational practices and "lessons learned" for enhanced adaptation to climate risk of the

agricultural sector are developed, disseminated and replicated at national level in support to sound CCA policy making and programming of the proposed LDCF project.

The PAC\_RC Component 2 «Integrating climate—resilient practices into agro-silvo-pastoral systems and social protection measures for local populations», sub-component 2.1 «Increasing resilience of agro-sylvo-pastoral systems» will collaborate with the following outputs of LDCF's Component 1: (i) Output D. «Improved soil and crop management practices piloted in two ecosystems (Sahelian band and Niger Valley) of at least 15 municipalities including rainfed cereals, legume-growing agropastoral production systems»; and (ii) Output E. «A more diverse set of crop varieties chosen from existing climate-stress-tolerant cultivars varieties of cereals, legumes and fodder, piloted in two ecosystems and at least three production systems». It will also provide the bulk of the co-financing requested for Component 2 of the LDCF project: «Capacity building and promotion of improved agricultural practices through Farmer Field Schools (FFS) in the framework of ongoing FAO-supported projects and other partner projects».

The proposed LDCF project will be coordinated with various projects focusing specifically on climate resilience in the rural development sector: (i) the UNDP-implemented and LDCF-funded PANA follow-up project "Implementing NAPA Priority Interventions to Build Resilience and Adaptive Capacity of the Agriculture Sector to Climate Change", currently under implementation, which concentrates its actions on one pilot vulnerable community in each of Niger's 8 administrative regions; (ii) the pilot Niger Community Action Project for Climate Resilience (PAC-RC) recently approved, which will contribute to: a) building institutional capacities and policy frameworks, b) support the adoption of climate resilience measures in comunity action plans, and c) Knowledge management and sharing and; (iii) the IFAD/Biodiversity International subregional initiative (Mali, Burkina Faso and Niger) "Reducing the risk of crop failure for poor farmers through enhancing traditional seed systems in Sahekian West Africa", which is expanding the FAO-sponsored FFS approach in Niger through a network of Diversified Field Forum. The linkages with the WB-funded PAC-RC are discussed in details in section B1.

All project components presented in this proposal are complementary and do not duplicate the components presented under the UNDP LDCF PANA follow-up project "Implementing NAPA Priority Interventions to Build Resilience and Adaptive Capacity of the Agriculture Sector to Climate Change", currently under implementation, which concentrates its actions on one pilot vulnerable community in each of Niger's 8 administrative regions. In particular, component 2 of the proposed project's will incorporate UNDP LDCF's results in terms of lessons-learnt, validated CCA menus, agrometeorological information systems, and will disseminate them through a growing network of FFS. FAO's approach is complementary since it focuses not on pilot sites but on up-scaling through institutional partnerships for incorporating CCA strategies and practices through an expanding FFS network. FAO will work closely with CNEDD-based monitoring and evaluation unit during PPG to ensure both complementarity and coherence between both initiatives.

Finally, the project will support and be coordinated with the Great Green Wall Initiative (GGWI) and the related GEF/WB programme recently cleared by the GEF Secretariat. In particular, the proposed project will bring a specific contribution towards the achievement of Focal Area Objective CCA-3 "Promote transfer and adoption of adaptation technology.

#### C. DESCRIBE YOUR AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

The proposed project is aligned with FAO's comparative advantage in the area of capacity building, providing technical analysis and assessments in relevant areas such as sustainable crop production and land management, policy support, use of biodiversity. FAO has considerable technical experience and many field projects in a number of areas covered under this project (agriculture production and food security, climate change, agro-biodiversity, capacity building, development of community based capabilities and rural development, forage production and grassland management). The proposed project is also supporting the up-scaling of the FFS approach that has been endorsed at national level by various governments in the region and that will be used for all capacity building activities. The FAO has been supporting Niger's efforts both to develop a National Food Security Strategy, and to react to recurrent drought-driven food crisis episodes. FAO's Department of Agriculture and Consumer Protection's is launching a review of 20 years of FFS experience, which will lead to the elaboration of a FFS-efficiency Monitoring System and facilitate the access to additional funding for FFS-based activities under a result-based framework. FAO currently has a significant project portfolio in Niger with a major focus on food security and post-emergency operations.

#### C.1 INDICATE THE CO-FINANCING AMOUNT THE AGENCY IS BRINGING TO THE PROJECT:

FAO might provide USD 100 000 in grant / in-kind resources for to project preparation and USD 100 000 in-kind for project implementation, in addition to an estimated USD 2,0 million in grant resources from various donor-funded projects (see Part 1, Table C and Part II, section B6).

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:

The project addresses FAO's strategic objective A (Sustainable Crop production Intensification) and B (Sustainable Livestock production intensification) and F (Natural Resource management and climate change). In particular, Components 1 and 2 fit into SOA OR 1, 3, 4 related to crop intensification through an ecosystem approach; IPM (Integrated Pest Management Programme); and sustainable use of genetic resources; and into SOB OR 1, 4 related to sustainable use of environmental resources for sustainable livestock production; and use and maintenance of animal genetic resources; Component 3 in addition to SOA addresses SOF E 05 related to adaptation in agricultural systems. Furthermore, under UNDAF 2009-2013 for Niger, FAO has been assigned USD 23,2 million, of which 21,3 million are directly related to Effect 1 "By 2013, vulnerable populations improve their food security. Contribute to sustainable management of their natural resources, and diversify their sources of income". UNDAF Niger designs FAO as the lead agency, in partnership with the WFP, to strengthen synergies among agencies and ensure an increased coordination of their interventions for Effect 1 (USD 353.5 million). The design of the proposed LDCF fits precisely within FAO's UNDAF-defined mandate in Niger, both in terms of thematic intervention and synergies-building role in support to Effet1. The FAO Representation in Niger is staffed with technical and operational staff and can mobilize complementary national and international technical expertise within the pool of project it manages and provide in-country support for the execution of the proposed project.

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### 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 country endorsement letter(s) or regional endorsement letter(s) with this template).

NAME	POSITION	MINISTRY	DATE (Month, day, year)
Boubaca sanda	LE DIRECTEUR	MINISTERE DU	DECEMBER, 8, 2011
	GENERAL	PLAN DE	
		L'AMENAGEMENT	
		DU TERRITOIRE ET	
		DU	
		DEVELOPPEMENT	
		COMMUNAUTAIRE	
		DIRECTION	
		GENERALE DU	
		PLAN	

#### 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 (Month, day, year)	Project Contact Person	Telephone	Email Address
Garry Smith Officer in Charge, Investment Centre Division Technical Cooperation Department FAO Viale delle Terme di Caracalla 00153, Rome, Italy	3	June 18, 2012	William Settle, Project Manager, Plan Production and Protection Division, FAO Rome	+39 06 5705 6039	William.Settle@f ao.org
Barbara Cooney FAO GEF Coordinator Email: Barbara.Cooney@fao.org Tel: +3906 5705 5478					