



REQUEST FOR CEO ENDORSEMENT¹

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: LDCF

PART I: PROJECT INFORMATION

Project Title: Strengthening the adaptive capacity of most vulnerable Sao Tomean's livestock-keeping households			
Country(ies):	Sao Tome and Principe	GEF Project ID: ²	4274
GEF Agency(ies):	AfDB (select) (select)	GEF Agency Project ID:	
Other Executing Partner(s):	Directory of Livestock	Submission Date:	
GEF Focal Area (s):	Climate Change	Project Duration(Months)	36
Name of Parent Program (if applicable): For SFM/REDD+ <input type="checkbox"/>	LDCF	Agency Fee (\$):	198,500

A. FOCAL AREA STRATEGY FRAMEWORK³

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Cofinancing (\$)
CCA-2 (select)	Outcome 2.2: Increased adaptive capacity within relevant development sectors and natural resources	Output 2.2.1: Vulnerable physical, natural and social assets strengthened in response to climate change impacts, including variability Output 2.3.1: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	LDCF	814,000	3,425,000
CCA-2 (select)	Outcome 2.1: Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas	Output 2.1.1: Adaptation measures and necessary budget allocations included in relevant frameworks	LDCF	325,000	1,250,000
CCA-1 (select)	Outcome 1.1: Increased knowledge and understanding of climate variability and change-induced threats at country level and in targeted vulnerable areas	Output 1.1.1: Risk and vulnerability assessments conducted and updated Output 1.2.1: Adaptive capacity of national and regional centers and networks strengthened to rapidly respond to extreme weather events	LDCF	646,000	750,000

¹ It is important to consult the GEF Preparation Guidelines when completing this template

² Project ID number will be assigned by GEFSEC.

³ Refer to the [Focal Area/LDCF/SCCF Results Framework](#) when filling up the table in item A.

		Outcome 1.3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level			
(select)	(select)		(select)		
(select)	(select)		(select)		
(select)	(select)		(select)		
(select)	(select)		(select)		
(select)	(select)		(select)		
(select)	(select)		(select)		
(select)	(select)	Others	(select)		
Subtotal				1,785,000	5,425,000
Project management cost ⁴			LDCF	200,000	775000
Total project costs				1,985,000	6,200,000

B. PROJECT FRAMEWORK

Project Objective: Improve resilience of the livestock systems in support of the productivity of stockbreeding.						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Cofinancing (\$)
1. Strengthen the adaptive capacity of most vulnerable livestock-keeping households	TA	The family systems of breeding are more resilient to better cope with variability and Climate changes, because of the strengthening of the resilience of essential resources at stake	<p>The natural resources on which depend livestock are more resilient to cope with CC and are used in a sustainable way</p> <p>The most adapted animal species are popularized and a climate sensitive sanitary and medical disease prevention program is implemented</p> <p>The breeders are more aware, better trained and more organized to cope with CV and CC</p> <p>The breeding is more profitable and incites the most vulnerable breeders to invest more, through mutual initiatives</p>	LDCF	814,000	3,425,000

⁴ GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately to focal areas based on focal area project grant amount.

2. Mainstreaming adaptation options into livestock national development strategy	TA	Adaptation options are mainstreamed into major livestock development policies at several levels	Adaptation options in livestock are mainstreamed into national documents of strategy and planning Adaptation services for livestock are improved Local development plans that integrate adaptation options are elaborated	LDCF	315,000	1,250,000
3. Knowledge Management through building indigenous capacity in livestock systems adapted to climate change	TA	Knowledge in adaptation about breeding systems in SIDS is generated and disseminated to stockbreeders	A geo-referenced database on the vulnerability of the livestock sector is developed and regularly updated Targeted participatory demonstration projects on livestock - based adaptation projects are conducted in 3 integrated livestock resources centers (north, central and south) Best adaptation practices in breeding sector in the SIDS are documented and disseminated	LDCF	537,846	750,000
4. Monitoring and Evaluation	TA	Most vulnerable livestock - keeping resources become resilient to climate change	Computerized system with M & E data	LDCF	118,154	
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
Subtotal					1,785,000	5,425,000
Project management Cost ⁵				LDCF	200,000	775,000
Total project costs					1985000	6200000

⁵ Same as footnote #4.

C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount (\$)
GEF Agency	African Development Bank	Grant	6,200,000
National Government	Gov of STP and breeders	In-Kind	0
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Co-financing			6,200,000

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

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in \$)		
				Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
AfDB	LDCF	Climate Change	Sao Tome and Principe	1,985,000	198,500	2,183,500
(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				1,985,000	198,500	2,183,500

E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Estimated Person Weeks	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)
Local consultants*	103.00	54,000	100,500	154,500
International consultants*	156.00	216,000	252,000	468,000
Total		270,000	352,500	622,500

* Details to be provided in Annex C.

F. PROJECT MANAGEMENT COST

Cost Items	Total Estimated Person Weeks/Months	Grant Amount (\$)	Co-financing (\$)	Project Total (\$)
Local consultants*	103.00	34,000	100,500	134,500
International consultants*	144.00	120,000	252,000	372,000
Office facilities, equipment, vehicles and communications*			250,000	250,000
Travel*		46,000	150,000	196,000
Others**	Specify "Others" (1)			0
	Specify "Others" (2)			0
Total		200,000	752,500	952,500

* Details to be provided in Annex C.

** For others, to be clearly specified by overwriting fields *(1) and *(2).

G. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No

(If non-grant instruments are used, provide in Annex E an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

H. DESCRIBE THE BUDGETED M & E PLAN:

The monitoring and evaluation of the project will be made according to the procedures established by the Bank and by the GEF. The logical framework gives the performance indicators against which the project will be evaluated and specifies the baseline as well as the objectives to be achieved. The M&E system proposed builds on that of the PADE 2 (Livestock Development Support Project), the baseline project. It describes the main planned activities to be executed in the expanded M&E, reporting and project analysis system.

The M&E Plan (MEP) details the activities of the Monitoring and Evaluation, Reporting and Analysis System (MERAS) and will play a key role in the planning, the management and the implementation of activities of the project. The MERAS is designed to play three main roles: 1) Coordinate the M&E activities of the project; 2) Provide data collected in the appropriate formats for the various stakeholders; and, 3) Store this data / information as well as the other relevant data / information in a computerized system. The total cost of the MEP is estimated at 409,348 USD of which 118,154 USD will be financed by the GEF.

The table below shows a list of potential products of the MERAS, with an indicative calendar for the publication of the diverse products. The project will have to produce and circulate several documents during the first months of implementation. Thereafter certain documents will be produced periodically while the others will be produced on demand.

OUTPUTS	RESPONSIBLE	TIMEFRAME	APPROVAL
Final M&E Plan	Project team	At the beginning of the project	Steering committee (SC) CP, AfDB
Baseline report	Consultants	Within the 1 st quarter of the project	SC
Monthly progress report	Project team	The 5 th of each month	Steering committee (SC)
Quarterly report	Project team Task Manager AfDB	End of each quarter	SC, AfDB, GEF
Mid-term evaluation report	Consultants	At the mid-term of the project	SC, AfDB, GEF
Final evaluation report	Consultants	At the end of each year	SC, AfDB, GEF
Audits Report	External auditors	Annually by 30 th June	SC, AfDB, GEF
Maps, posters, videos, photos, etc...	Project team	Rolling, upon availability	Diverse
Monitoring and field visit report	AfDB	To be determined	SC, AfDB
Total budget			118,154

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 rationale of the intervention of GEF follows the strategic orientations of the LDCF in supporting the implementation of priority projects in the NAPA. With regards to this project it will help support one of three priority projects of adaptation identified in the NAPA, in the Agriculture-Livestock and Forestry sector (Integrated management of Livestock project in the northern part of Sao Tome Island) and more specifically seeks to secure the investments realized in the livestock sub-sector including reducing its vulnerability to climate change. It will also significantly contribute to the implementation of the other priority projects in four other sectors of the NAPA. These projects include; 1) Establishing a climatic warning system, 2) Establishing a geographical information system for ecological monitoring 3) Sustainable management of forest resources; 4) Evaluation and planning of the water resources.

The project will specifically contribute to achieve objectives 1 and 2 (CCA-1 and CCA-2) of the GEF LDCF strategy.

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

The Government of Sao Tome and Principe has signed and ratified several important international conventions, protocols and agreements related to climate change and is one of the LDC/SIDS parties to the United Nations Framework Convention on Climate Change (UNFCCC). This project is fully consistent with the LDCF eligibility criteria and priorities as it:

- Supports adaptation priority # 7; *Sustainable livestock management*, determined in the STP's NAPA;
- Is consistent with the livestock national development strategy;
- Integrates and builds on lessons learned and existing scientific guidance;
- Mainstreams adaptation within the African Development Bank's baseline project and Government, bilateral and multilateral actions in the agricultural sector;

- Aims at reducing vulnerability especially of poor smallholders livestock communities who, based on accurate climate information can better adapt themselves and their agricultural activities;
- Is cost-effective as it builds on ongoing projects.

A.1.3 For projects funded from NPIF, relevant eligibility criteria and priorities of the Fund:

N/A

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.:

This project for *Strengthening the Adaptive Capacity of most vulnerable Sao Tomean Livestock-keeping Households* is consistent with the orientations of Government of Sao Tome and Principe's macroeconomic policies reflecting its political determination to implement all development actions capable of generating strong, sustainable and poverty-reducing economic growth; these options ultimately aim at achieving the Reform of public institutions, capacity-building, and promotion of a good governance policy; Accelerated Redistributive Growth; Creation of opportunities to increase and diversify the incomes of the poor; Human resources development and improved access to basic social services.

From an economic development perspective, the project will help to strengthen food security in the country. Enhancing food security is one of the objectives of the Bank's Strategy for the agricultural sector for period 2010-2014, which is aligned with the Poverty Reduction Strategy Paper for Sao Tome and Principe (2000-2015) and the main livestock development plan adopted in 1995. The project will also help achieve the MDGs by supporting some of the lines of action in UNDAF / CPD (2012-2016) of the United Nations System.

From the environmental perspective, this project is in perfect harmony with the strategy of the Government of STP in the field of the adaptation in the Climate Change. It is part of the NAPA by contributing to the implementation of the Integrated Project Management of livestock in the northern part of the Sao Tome Island. It will also contribute significantly to the implementation of the other priority projects in four other sectors of the NAPA.

B. PROJECT OVERVIEW:

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

Context and issues:

The Democratic Republic of Sao Tome and Principe is a small and very vulnerable country to the effects of climate change, due to the fragility of its ecosystem and low level of social-economic development. Increases in temperature and the decrease of rainfall are the country's greatest concerns, because these phenomena can have consequences on decreases in river flow and the amount of the subterranean water. Economically, the negative impacts will be centred in energy production, in agriculture and livestock. Other impacts will be on Human health with the appearance of some diseases and aggravation of others.

The livestock sub-sector accounts for 14% of agricultural production and 3% of the GDP. Out of the 20,000 family farms estimated in 2002, 50% undertake livestock rearing since they have a few head of cattle. The vast majority are backyard breeders (50% of whom are women). Of the 277 agricultural enterprises existing in the country, nearly 40% undertake livestock rearing. In 2005, meat production by species was estimated at 5.8 tons of beef, 2 tons of goat meat, 0.4 tons of ovine meat, 340 tons of pork and 285 tons of poultry meat.

In a country where constraints are hard to control such as those relating to poverty, remoteness, absence of livestock traditions and institutional weakness, the first phase of the livestock sector support project financed by the AfDB showed that short-cycle livestock rearing (small ruminants, pigs and poultry) is an economic opportunity appreciated by small rural producers the majority of whom is made up of women. The return on livestock activities has grown considerably from an average of US\$120 to US\$350 annually. Thus the first phase of the PADE was able to lay the foundation for livestock development which is now a potential source of diversification and improvement of the incomes of the population.

The Livestock Development Support Project, Phase II (PADE II) falls under the strategic policy orientations of the agricultural sector in general and the animal husbandry sub-sector in particular. It falls within the context of the implementation of the PRSP which has identified agriculture, in the broad sense, as a key component for economic growth and production diversification. PADE II stems from pillars of the PRSP relating to “encouragement of diversification of production, support to farmers in extension and input procurement and capacity building”. It aims at pursuing the actions initiated during the first phase. PADE I helped improve the livestock health coverage, put in place an epidemiological surveillance system, introduce a programme of the genetic improvement of local breeds, induce an improvement in the quality of public services provided to stockbreeders (regulatory control, research and extension) to organize the professionals of the sector and notably breeders mainly made up of women and build their capacities as well as introduce a kind and cash credit system. However, it is necessary to consolidate these achievements and maximize their impacts.

Baseline Scenario

Under the baseline scenario a number of Technical and Financial Partners (TFP) are intervening as well under the sector of livestock breeding (PADE 2 / AfDB), environmental protection (Buffer Zone park OBO / IFAD) and adaptation to the climate change (LDCF / WB and AAP / UNDP). Appendix 5 gives a detailed description of the main related projects financed in STP. The activities of the baseline have four main objectives; to reduce the poverty, to reduce the pressure on natural resources and to improve the level of equipment and capacity of STP. The estimation of the baseline for this project, concerns the specific costs of active projects related to livestock breeding and adaptation to climate change.

The PADE II constitutes for the main part, the baseline scenario from which this project is developed and complements it. The PADE II is articulated around the following three components:

- i) Capacity building**, which aims at improving the quality of the services supplied to the operators of the subsector through the livestock farms, the keepers and the private livestock keepers. Support by the project is in the form of rehabilitation and repair of offices, computer hardware and equipments, logistic, training and technical assistance;
- ii) Improving the productivity of farms, processing and marketing of livestock products**, the activities are targeted at genetic improvement of animals, animal feed, animal health, adaptive research, credit, extension, processing and marketing
- iii) Project management**, which supports the Steering committee’s operation expenses and monitoring and evaluation, as well as organization of workshops information/news auditing accounts, establishment of an information system and ensuring gender disaggregation for data and activities. The PADE 2 is aligned to the PRSP, through the support to diversification of production, the support for farmers in extension and acquisition of inputs and capacity building”. This is in line with the continuation of activities during the first phase.

The major outputs of the second phase of the PADE II are as follows: (i) building the capacities of public services and beneficiaries; (ii) support to the organization of operators of the livestock sub-sector; (iii) improvement of conditions and livestock rearing skills (feed, shelters, animal health and local breeds) (iv) support to development-research activities ; and (v) support to the processing and marketing of livestock products.

The project area covers the entire territory of Sao Tome and Principe whose total area is 1,000 km². The Island of Sao Tome is subdivided into 6 districts, namely, Agua Grande, Mé-Zochi, Lobata, Lemba, Cantagalo and Caue. The Island of Principe comprises the autonomous District of Pagué.

The project activities concern the entire country. The direct beneficiaries of the project are mainly the stockbreeders and the various operators in the livestock sub-sector, notably short-cycle livestock breeding (goats, pigs and poultry). Out of about 20,000 farmers estimated in 2002, there are about 12,000 breeders 50% of whom are women (10,900 in Sao Tome and 1,100 in Principe). Most livestock activities are based on the family farm model.

This project will be implemented by the same team as the PADE 2 and complimentary staff. Both projects will be

completely integrated and the new project - takes the title of “Project for the Development of Resilient Animal Husbandry (PDRAH). In an effort to complement the baseline PADEII, the PDRAH will deal with the following issues.

Issue #1: Climate change will severely impact Sao Tomean’s poor livestock keepers which are the most vulnerable to climate variability and climate change. Immediate concrete actions at the grass root level are required to help them cope with the changing climate.

It is under-reported and under-appreciated that declining crop- and rangeland productivity will reduce the amount and quality of already scarce crop by-products with which virtually all Sao Tomean smallholders feed their livestock. Less water will be available to raise farm animals, which typically constitute the prime asset of smallholders. As rising temperatures alter the distribution of parasites and their vectors, allowing them to move into new areas, many communities already in poverty traps will have to cope with new human as well as livestock disease burdens.

All of this will force Sao Tomean’s livestock keepers to make major changes in their production systems. Among the most likely are the keeping of less-productive breeds that tolerate more heat and disease as well as less feed and water; greater reliance on planted forages, crop by-products and common range- and other public lands to feed ruminant animals; and the replacement of cattle with drought-tolerant sheep and goats. Climate change will also impact Sao Tomean’s hundreds of smallholder mixed crop-and-livestock farmers who will be forced to shift, from productive crops to other less lucrative but more drought-tolerant crops. These mixed crop-livestock producers, will also have to rely to ever greater extents on their livestock enterprises to cope with declining crop yields as well as more frequent crop failures, especially in Cacao production the “backbone” of Sao Tome’s agriculture.

The Democratic Republic of Sao Tome and Principe (STP) as a member of the international community and very well aware at the governmental level about the need for action to face climate changes ratified, on May 30 1998, the United Nations Framework Convention on Climate Change (UNFCCC). STP regularly reports on climate change issues through national communications, has developed its National Action Plan for Adaptation to Climate Changes (NAPA), and participated in a number of other capacity building and planning activities at the central level. However, there is still a great and urgent need for concrete actions to be implemented at the grass root level to help smallholder livestock keepers cope with climate change.

Issue #2: Sao Tome and Principe has not mainstreamed climate change into national or district policy documents, and has very limited technical ability on climate change and variability.

Institutional gaps exist in accessing and transferring knowledge from the international level to national and district levels. There is a need for greater leadership development on climate change as well as much wider stakeholder engagement on climate change with respect to mitigation as well as adaptation; though clearly adaptation is more pressing for the population. The newly formed Committee on Sustainable Development for STP has no formal power and is not widely known across the ministries. Capacity strengthening is a priority in government at national planning levels. At local and district levels no projects have been initiated that deal centrally with issues of climate change.

In 1995 the African Development Bank financed the Livestock Development Master Plan in Sao Tome and Principe. This led to the formulation and implementation of the Livestock Development Support Project (PADE I). The project, which was financed by the Bank, was implemented from 1998 to 2003. The completion report prepared in 2005 concluded that it was executed satisfactorily. The report drew operational lessons for future interventions and recommended the pursuit of support to the sub-sector in order to consolidate the achievements and improve the incomes of economic actors sustainably. The project was classified as environmental category II in view of the limited negative impacts which can be mitigated through appropriate measures. But no mention is made about climate change impacts on this subsector and subsequently the project design does not integrate any adaptation measures.

Issue # 3: Despite the central importance of farm animals to Sao Tome’s poor and the magnitude of the changes expected in this sub sector, little is known about how climate interacts with other drivers of change in livestock production systems in Small Island States.

The sciences of climate change, particularly modeling levels of human vulnerability to its impacts, are developing

fast. To keep up, organizations working to mitigate the impacts of climate change on the poor will need to embrace change as earnestly as the farming communities they are working to help. The complexity of both modern science and local farming systems demands collective action, and that livestock-keeping communities for whom and with whom research is conducted, take part in the work from the beginning and take centre stage in conducting vulnerability analyses and testing adaptation strategies.

There is lack of analytical frameworks and tools with which to conduct such studies, and also a lack of indigenous research and technical capacity to address livestock adaptation issues impinging on Sao Tome's poor. In any case it will be strategic to develop research work on livestock-adaptations based on existing agricultural projects. Targeted research to increase ability of famers to adapt to climate change with regards to livestock, should include the following issues: targeting hotspots of change; quantifying climate change impacts on ecosystems and livestock communities; putting information to use; assessing adaptive responses; and building capacity.

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

The GEF incremental financing will cover the costs of developing, testing and demonstrating integrated livestock climate change adaptation models in selected sites, in support of activities that would not be undertaken in the baseline scenario. The GEF increment will also lift barriers to sustainable livestock management specifically by strengthening the resilience of livestock systems.

Expected adaptation benefits from the project include improved management of livestock in changing climate and sustainable use of biodiversity, such as conservation of endemic livestock. Apart from reduced vulnerability to climate change, climate variability, national benefits will come from advancing the implementation of the NAPA, mainstreaming of climate change adaptation into the Poverty Reduction Strategy and improving productive capacity of livestock, thereby reducing economic vulnerability of those dependent on these activities and contributing to poverty reduction.

The table below summarizes baseline technical option used under the PADE 2, with respect to those additionally proposed as alternative to be financed by the GEF. A detailed incremental cost analysis is available in the AfDB appraisal report.

Baseline scenario with PADE 2 (Without GEF intervention)	GEF adaptive alternative scenario (With GEF intervention)
<p><u>Socio-economic approach to the development of breeding at STP</u></p> <p>The main interventions contribute to strengthening the food security for STP, including improvement of the productivity in the livestock sector. However the serious threats that climate change poses to the sub-sector sector could undermine all the efforts and the gains made so far.</p>	<p><u>Socioeconomic approach to the development of breeding at STP</u></p> <p>An approach that integrates priority adaptation options as outlined in the NAPA and strengthens the resilience of more vulnerable pastoralist families and the poorest breeders, will significantly enhance the sustainability of the impacts generated by the diverse interventions to strengthen the food and nutritional security of STP and increase household incomes of agro-pastoralist.</p>
<p><u>Improved security in the livestock system</u></p> <p>In the baseline scenario, the Government of the DRSTP imports live animals (40 oxen, 5000 Poultry and rabbits). The livestock executive offices are rehabilitated, the laboratory research centre is built and equipped, breeding is done in the laboratory including artificial insemination. Natural resources are addressed incidentally, from</p>	<p><u>Improved security in the livestock system</u></p> <p>Under the GEF alternative, natural resources will be protected and sustainably managed so as to improve the ecosystem for livestock. The ecosystem approach will be used.</p> <p>Selected activities similar to those already planned will be conducted jointly under the project baseline, but oriented towards the specific needs of livestock.</p>

the perspective of mitigating the project's impacts on the environment as daily management	Genetic improvement is mainly the work of farmers, who will be trained in the basics of genetics, to enable them, at their own pace and according to their needs and demands of the environment, to guide the selection they make themselves. A qualitative study of inventory and characterization of existing breeds will be conducted to assess if the genetic potential exists because of the numerous animal imports. Eventually the Government of the RDSTP should reduce to a minimum the importation of live animals to reduce inbreeding and preserve the more endemic livestock
<p><u>Strengthening the legal framework</u></p> <p>In the baseline scenario the main framework for adaptation planning is the NAPA the blueprint of livestock development. An annual capital budget in the livestock sector is developed but does not include options for adaptation to climate change.</p>	<p><u>Strengthening the legal framework</u></p> <p>In the alternative scenario, we will seek to integrate the priority adaptation options in the legal instruments of planning and programming, in particular to the budget. Policy makers will be sensitized on the need to "secure" investments by the government through accompanying measures of adaptation.</p>
<p><u>Knowledge Management</u></p> <p>Knowledge management is mainly done through the traditional activities of projects including those relating to the components" coordination and project management" and specifically in the monitoring and evaluation section. Documentation and dissemination of experiences and best practices on adaptation remain marginal.</p>	<p><u>Knowledge Management</u></p> <p>The management of the knowledge is a full component because of the lack of climatic information. The experiences of the AAP project and that of the World Bank project will be strengthened and applied to the domain of the livestock breeding whenever possible. The experiences and the improved breeding practices in tropical island environment will be documented and disseminated through communication channels</p>

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/NPIF) or adaptation benefits (LDCF/SCCF). As a background information, read [Mainstreaming Gender at the GEF.](#):

The project will be implemented on the whole archipelago of Sao Tome and Principe, in 4 zones covering 6 districts of the Sao Tome Island and the autonomous region of Principe. Four big climatological zones of the country are the North zone, the central zone, the South zone and the principal island. This classification is essentially based on the rainfall quantities that each zone receives. This quantity varies between 1000 mm in the extreme North and 7000 mm in the extreme South and on the highlands. From the point of view of the vegetation, the Center and the South zones are the densest and characterized by the presence of the diversified forests. However, these two zones are very vulnerable in the disappearance of vegetation. The rough landscape is very sensitive to erosion.

The survey conducted during the preparatory phase of the project, showed that in a general way there is a big concentration of cattle in the center and the South of the country while the small ruminants are rather to the north of the country. As regards the poultry, the biggest concentration is around the capital Sao Tome which absorbs almost totally the production in eggs and in poultry meat. Pigs are practically distributed on all the territory. This geographical distribution, is dependent at the same time on the abundance of natural resources especially for the big and the small ruminants and the market for selling the products of breeding.

The direct beneficiaries of the project are mainly the breeders and the various operators involved in the sector of breeding in particularly short cycle breeding (goat, pigs, poultry). Of approximately 20.000 farmers estimated in 2002, 12.000 are breeders among whom 50 % are women (10.900 in Sao Tome and

1.100 in Principle). Certain political decision-makers, in particular members of parliament are also targeted. This project will contribute to strengthening the social aspects including gender aspects already taken care of by the PADE 2 which constitutes the baseline project. The improvement of production will increase local supply and raise the level of consumption of animal protein. The project will enable over 10,000 stockbreeding families to integrate the economy better. The capitalization of livestock on the basis of short-cycle species enables small animal breeders to have assets that generate rapid gains and reduce poverty. The actions of the project will have an overall positive impact insofar as there will be an increase in net annual operating margins. The project will improve the quality and value added of livestock products through the acquisition of four processing units for the benefit of the associations of women. The construction of 5 small productive livestock demonstration units, training of 300 breeders, literacy training for 3,000 breeders will ensure better assimilation of livestock techniques. It will contribute to generating employment through the creation of new livestock farms (establishment of at least 100 new breeders), production of livestock feed (three youth associations for the production of salt blocks and five youth associations for the operation of drying units), labour intensive works (development of pastures, construction of a feeder road).

The majority of indicators of this project include the concerns of the poorest including women. Moreover it will contribute to strengthening the solidarity between breeders' families through the strengthening of organizational capacities of cooperatives.

The sustainability of the project primarily stems from the fact that it was designed on the basis of a participatory approach that saw the active involvement of all the stakeholders and, especially, the stockbreeders in the various stages of its preparation. Ownership of the project by the beneficiaries will be given concrete expression also by their information, awareness and involvement in the various stages of the project implementation. The training of farmers, local operators and community associations will generate a know-how that will be disseminated through a snowball effect in the project area and will also be transmitted to future generations. The building of the capacities of the technical services will enhance their business planning and management skills and methods that will in turn improve the effectiveness and efficiency of their services to the livestock breeders. The project entails specific actions in favour of women all the more because they are already present at all stages of the meat subsector. These combined actions will have a significant impact on the know-how of women, their level of education, their empowerment and decision making capacity, their income and their social promotion. This is all the more significant as over 30% of Sao Tomean households are headed by women.

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:

With the exception of risks related to governance and sustainability of the project; natural disasters remain a major threat to the effective implementation of the project in the field. In addition to adaptation which is strongly advocated for in this project, the Government of STP has established a contingency plan to manage natural disasters that may occur during project implementation. In this light, a National Committee of Prevention of Environmental Hazards and Climate (CONPREC) has been established to be responsible for implementing the contingency plan when necessary. The Directorate on Environment, which is a member of CONPREC and serves on the steering committee of the project will ensure the link between both entities.

There are other social conflicts as well relating to stray animals, the usurpation of land, cattle raids, or the abuse/exploitation of natural resources. The initial opportunity to raise awareness was undertaken during the consultation at the community level when the project was being formulated. The project will also engage cooperatives in training; and also through established community

radio stations that will largely sensitize the community members to prevent all kinds of social conflicts. In addition, participatory development plans will be outlined to mitigate such risks.

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:

The implementation of the project will be based on a partnership which will involve many stakeholders , selected according to the principle of the subsidiarity. The most important are the following:

- *The Government of Sao Tome e Principe and its decentralized structures*, in particular represented by of the Department of Livestock which is the administrator of the project. The Ministry of the public works and the Environment, the Ministry of the Decentralization, as well as the Department of Meteorology are represented in the steering committee of the project.

- *The scientific Institutes* such as the National Institute of the Meteorology (NIM), the Polytechnic Higher Institute will be involved in the training, the processing and the broadcasting of the climatic information.

- *A Civil Society Organization (CSO)* had already been identified in the baseline project (PADE 2), the NGO ZATONA-ADIL. It was created in 1995 and aims at providing technical support to rural and peri-urban communities in the training and consolidation of their human resources for the establishment of useful and sustainable services, based on the rational use of existing natural resources without prejudice for the environment. ZATONA-ADIL will continue to provide assistance in the training of the rural communities under this project.

- *Community basic organizations (CBO)* essentially represented by the cooperatives of the breeders, are the main beneficiaries of the project. The capacity building activities will strengthen these organisations and also contribute to their sustainability.

B.6. Explain how cost-effectiveness is reflected in the project design:

The option to implement this project in conjunction with that of the PADE-2, is to ensure the efficient use of financial resources and prevent any duplication of envisaged activities. The flow chart in Appendix 2 of the appraisal report clearly indicates the additional costs of funding from GEF. A new project team will not be recruited, but rather staff to complement the existing team; in addition to this all the equipments as well as the logistics of the project have already been acquired during the baseline (PADE 2).

Furthermore, the fact that the PADE 2 project is currently under implementation will allow the activities funded by the GEF to start immediately to save costs often required to launch new projects. The acquisition of the equipment for collecting and processing climate data by the Department of Meteorology, AAP Project and the adaptation project of the World Bank in the coastal zone also contributes to the cost effectiveness.

The targeting of the beneficiaries was carefully thought out in the project design to deliver the services required in a cost effective way using existing institutions and Government agencies that have worked with the livestock owners and have developed a rapport with them in service delivery. The targeting of the local level organisations for the livestock owners reduces the costs related to logistics of conducting capacity building sessions and the adoption of new ideas and technologies.

B.7. Outline the coordination with other related initiatives:

The development assistance is coordinated by the Government of STP via the coordination and aid management cabinet, under the supervision of the Ministry of Foreign Affairs, the Cooperation and Communities, and the Ministry of the Planning and Finance. The partners in the development of Sao Tome and Principe, are collectively organized and meet regularly under the coordination of the UNDP and the AfDB is represented by a national program officer.

Regarding the specific interventions on the environment, the GEF is the largest donor and is involved in the development of STP through various implementing agencies in particular the World Bank, the IFAD and the UNDP. The coordinated at various levels in the project cycle 1)At the initial stage the GEF Operational Focal Point STP endorses all PIFs; 2)the detailed development stage of the project document (Phase PPG); and 3) Before approval by the President and Chief Executive Officer by circulating the document.

From the operational perspective, the coordination will be primarily through the steering committee of the project which gathers all stakeholders and meets regularly. In the design of the project attention was paid to ongoing projects that the PDRAH will complement that are detailed below.

The African Adaptation Programme (AAP) in the course of implementation on the whole territory of STP, constitutes an important source of lessons learnt and experience on which the project has been developed. UNDP components of the project will address climate change risks under the five AAP Global Project outputs, focusing on strengthening: (1) adaptive long term planning capacities, including baseline meteorological and population vulnerability measurement (2) institutional and human resource capacities at all levels (3) policies and measures, with a focus on the already degraded area of northern São Tomé for pilot activities in developing community Climate Change Adaptation strategies and improving livelihood resilience in priority sectors. World Bank funded components will focus primarily on coastal areas. The project will strengthen adaptation and lead to improved resilience to climate change at local, district and national levels.

More specifically, 4 meteo stations acquired within the framework of the AAP project will be installed in zones of interest for the livestock breeding and the delegates of zones will be equipped with laptops to regularly collect and record data. In addition to the AAP project a number of climatic (maps) will be used as a basis of geographic referencing of certain data related to livestock. The common objectives of both adaptation projects will be jointly strengthened and implemented. In addition, the AAP is part of a big knowledge management platform on which the project is largely going to build.

The World Bank adaptation project on coastal zones aims to strengthen the adaptive capacity of the STP population and to reduce their vulnerability to the adverse effects of climate variability and change -. It is implemented through two operational components:

Component 1: Coastal Early Warning System: This component focuses on Priorities 1, 2 and 15 of the NAPA. Investments would help artisanal fishermen adapt to the adverse impacts of climate variability and change by reducing loss of canoes, fishing equipment, reducing the number of accidents and lowering the risk of death caused by storms, fogs and strong winds. The project would therefore distribute safety equipment (such as simple radar reflectors and life vests), provide training on safety at sea, establish an early warning system for dissemination of meteorological forecasts to fishermen and coastal communities, and reinforce contingency plans and coastal emergency preparedness. Such investments are expected to strengthen the safety of fishers and fishing equipment against extreme weather conditions, and avoid loss of lives. They will provide additional adaptation financing for the Government of STP's fisheries support program aimed at improving the working conditions of artisanal fishermen and the System for Climatic and Sea Information to Support the Sustainable Development of São Tomé and Príncipe (SICLIMAD).

Component 2: Coastal Protection for Vulnerable Communities: This component would focus on Priorities 3, 9 and 10 of the NAPA and on one of the most visible effects of climate change in the country: coastal erosion. Angolares villages are built very close to the coastline, and have therefore suffered from high rates of coastal inundation and erosion. In several villages of S. Tome – Pantufo, Ribeira Afonso and Malanza – fishermen need better shelters for their canoes to prevent continuing losses of fishing equipment during storms. Ribeira Afonso, Malanza and Sta. Catarina are also amongst the villages which need urgent coastal adaptation solutions to safeguard the most vulnerable houses threatened by mounting seas.

The interest of this project holds essentially as a result of the fact that the increase in catches is directly going to benefit the rapidly growing poultry farming, which uses the fish meal as the key input manufacturing of food. The climatic information system (SICLIMAD) which will be used for the coastal zone adaptation project, will be adopted by this livestock adaptation project on one hand for financial efficiency and on the other hand harmonization in the collection and processing of the climatic information.

C. GEF AGENCY INFORMATION:

C.1 Confirm the co-financing amount the GEF agency brings to the project:

The co-financing from the African Development Bank is from the ongoing PADE II project with a cost of USD 6 million. The fact that the project is ongoing confirms the commitment made by the AfDB to this project.

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 is aligned with the AfDB's Agriculture Sector Strategy (AgSS 2010-2014) that provides the framework for interventions in the agriculture sector. The AgSS aims to effectively contribute to a broader development of greater agricultural productivity, food security and poverty reduction while promoting the conservation of the natural resource base. The interventions will ensure the sustainability and resilience of agricultural infrastructure investments to climate variability and protect the natural resource base. These efforts will indirectly lead to more food production, better food security and overall poverty reduction. The project to enhance the resilience of the livestock keeping households will therefore protect the investment made in the baseline project, Support to Livestock Development in Sao Tome. The enhancing resilience project is also inline with the Bank's Climate Change Action plan (2011 -2015) that places particular emphasis on the climate change adaptation activities in the economic sectors in the Bank's Regional Member Countries, which include Sao Tome and Principe. The Bank's operations in STP are defined in the Country Strategy Paper that recognises climate change adaptation as a cross cutting issue to be integrated in all investments particularly in the economic sectors that the country depends on.

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. INSTITUTIONAL ARRANGEMENT:

At the level of the Bank the project will be monitored by the division responsible for the West Africa portfolio in the Agriculture and Agro-Industry Department (OSAN.2). All the additional expenses incurred during the implementation of this GEF project will be financed from the received overhead (10 % of the total cost of the GEF project) by the Bank for this purpose. To avoid confusion in the designation of 'components' this new integrated project, it was recommended to come up with the title: Project for the Development of a Resilient Animal Husbandry; PDRAH as the acronym.

B. PROJECT IMPLEMENTATION ARRANGEMENT:

This project will be implemented by the Department of Livestock, the breeding and project implementation unit of the project PADE II. This project will also be implemented (operated) through the same institutional processes/arrangements as the PADE II. However, it will be supplemented by an additional staff to handle the required new skills in adaptation related issues. In view of this the profile of the project technical assistant (currently a zoo technician) will be replaced by an agro-environmentalist. Four environment technicians/ DC will be recruited to provide technical support to the delegates in the areas of the PADE II. The Management Committee will be expanded to include representatives of the Departments of Meteorology, Environment and Decentralization. A Climate Change expert will also join the team.

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

There are fundamentally no major changes between the PIF and the CEO endorsement project document for the first two components. The findings of the studies and the consultations during the PPG phase, as well as the need to keep the logic of the approach led to the reformulation / precision of some outcomes and outputs. As a result the costs did not change significantly.

Component 3 was redefined more in the sense of knowledge management rather than the research-action indicated in the PIF. The table below lists and explains all the discrepancies between the PIF and the CEO endorsement document.

CRITERIA	AT PIF LEVEL	AT CEO ENDORSEMENT LEVEL	EXPLANATION OF DIFFERENCES
Title of project	Strengthening The Adaptive Capacity Of Most Vulnerable Sao Tomean's Livestock-	Support project for the Development of a resilient livestock (PADER is the	To avoid giving the impression that the GEF component is another and standalone new project, it was agreed

CRITERIA	AT PIF LEVEL	AT CEO ENDORSEMENT LEVEL	EXPLANATION OF DIFFERENCES
	Keeping Households	French acronym)	during the national formulation workshop of the project during the PPG phase "to merge" the titles of the project PADE 2 and that of the GEF into one.
Objective	Improve resilience of the livestock systems in support of the productivity of stockbreeding.	Improve resilience of the livestock systems in support of the productivity of stockbreeding.	No change
<u>Component 1 :</u> - Title:	Strengthen the adaptive capacity of most vulnerable livestock-keeping households	Strengthen the adaptive capacity of most vulnerable livestock-keeping households	No change
- Cost	LDCF: 950 000 USD Cofinancing: 3 674 000 USD Total: 4 624 000 USD	LDCF: 814 000 USD Cofinancing: 3 704 000 USD Total: 4 518 000 USD	Readjusted for better delivery of new outputs
- Outcomes	Local stockbreeders strengthened to effectively cope with climate change and variability.	Family farming systems are more resilient to cope with climate variability and change due to their improved resilience	The scope of the capacity building was widened to the systems of breeding which fully integrates the breeders
- Outputs	1.1. A system of access to credit-in-kind is operational and enables the stock breeders to acquire resilient breeds to CC 1.2. Effective models for community based management of endemic livestock and their habitat are reestablished 1.3. Skills of feed conservation for dry season supplements are imparted into smallholder farmers 1.4. The adaptive capacities of beneficiaries in terms of organization, production, processing and marketing are strengthened	1.1 : Natural resources on which livestock depend are more resilient to climate change and are exploited sustainably 1.2 : Animals that are most adapted are promoted (disseminated) and a climate sensitive sensitization and preventive medical programme is implemented 1.3 : Farmers are more aware, better trained and organized to cope with climate variability and climate change 1.4 : Farming is more profitable and encourages the most vulnerable farmers to invest more in mutually benefiting initiatives	New outputs are more relevant to findings of PPG's activities. They take into account important resources for the livestock subsector that are vulnerable to CC. This includes natural, animal, human, social and financial resources.
<u>Component 2 :</u> - Title :	Mainstreaming adaptation options into livestock national development strategy	Promotion of enabling legal political and institutional environment for the adoption of best adaptation practices.	The title of the component has been reformulated more accurately

CRITERIA	AT PIF LEVEL	AT CEO ENDORSEMENT LEVEL	EXPLANATION OF DIFFERENCES
- Cost	LDCF: 410 000 USD Co-financing: 3 159 000 USD Total: 3 569 000 USD	LDCF: 315 000 USD Co-financing: 1 372 000 USD Total: 1 687 000 USD	Readjusted to improve delivery of outputs
- Outcomes	Knowledge on adjusting national development processes to fully incorporate livestock's climate change risks and opportunities generated and mainstreamed across all levels	Adaptation options are mainstreamed into major livestock development policies at various levels	The outcome was reformulated more accurately to highlight mainstreaming approaches and thus avoid confusion with knowledge management
- Outputs	2.1. A functional CC sub-committee is set-up in the Department of animal husbandry 2.2. A geo-referenced database on livestock vulnerability to CC is developed and regularly updated 2.3. A sectoral climate resilient policy in livestock developed for decision making use 2.4. Awareness and understanding on the need for integrating CC in livestock strategy are enhanced at local and central levels	2.1 : The livestock adaptation options are mainstreamed into national strategic planning documents 2.2 : Climate services offer of livestock institutional sector has improved 2.3 : Local development plans that integrates adaptation options are developed	The 2.2 outputs that is more relevant to knowledge management was transferred to the component 3. Others have been reformulated more accurately
<u>Component 3 :</u>			
- Title :	Building indigenous research capacity on livestock systems adaptations to climate change	Knowledge Management through building indigenous capacity in livestock systems adapted to climate change	Reformulated to focus more on knowledge management
- Cost	LDCF: 550 000 USD Co-financing: 0 USD Total: 550 000 USD	LDCF: 537,846 USD Co-financing: 804 000 USD Total: 1 341, 846 USD	Readjusted to improve delivery of outputs
- Outcomes	Stockbreeders most vulnerable to climate change are able to take central stage in research to enhance their long-term capacity for adaptation	Knowledge in adaptation about breeding systems in SIDS is generated and disseminated to stockbreeders	The outcome was revised to focus more on knowledge management
- Outputs	3.1. Targeted participatory research on livestock-based adaptation is conducted 3.2. Findings and lessons learned are documented and	3.1 : A geo-referenced database on the vulnerability of the livestock sector is developed and regularly updated 3.2 : Targeted participatory demonstration projects on	The outputs have been reviewed to take into consideration the need for collection, processing, use and dissemination of climate information

CRITERIA	AT PIF LEVEL	AT CEO ENDORSEMENT LEVEL	EXPLANATION OF DIFFERENCES
	disseminated 3.3. Knowledge is put into action through experimentation /Demonstration activities	livestock - based adaptation projects are conducted in 3 integrated livestock resources centers (north, central and south) 3.3 : Best practices on livestock adaptation in SIDS are documented and disseminated	
<u>Project coordination</u> - Title - Costs	Project management LDCF: 75 000 USD Cofinancing: 1 425 000 USD Total: 1 500 000 USD	Project management LDCF: 200 000 USD Cofinancing: 795,000 USD Total: 1,195 000 USD	Readjusted to improve delivery of outputs
<u>Project financing</u>	LDCF 1 985 000 USD Cofin t 8 258 000 USD Total 10 243 000 USD	LDCF 1 985 000 USD Cofin 6 675,000 USD Total 8,660,000 USD	Accordingly revised with above changes

PART V: 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 [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Lourenco MONTEIRO DE JESUS	GEF Operational Focal Point	COUNSELLOR, MINISTRY OF PUBLIC EQUIPMENT AND ENVIRONMENT	

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Ignacio Soto TORINO, AfDB			Souleye Kitane	+221 33 869 75 44	S.KITANE@afdb.org

ANNEX A-1: PROJECT RESULTS FRAMEWORK

COUNTRY AND PROJECT TITLE : SAO TOME ET PRINCIPE, Strengthening the adaptive Capacity building project to the impacts of climate change for herders in Sao Tome Principe					
Project Objective: Improve resilience of the livestock systems in support of the productivity of stockbreeding.					
RESULTS	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS AND MEASURES OF MITIGATION
	INDICATOR	BASELINE	TARGET		
IMPACT	The vulnerability index of the livestock sector to climate change is reduced	The rate of reduction in livestock production lost due to climate change impact	Current rate of production losses due to climate impacts is 10%	The vulnerability of important resources(natural, human and social, animal, financial and infrastructural) for breeding is reduced by 7% in 2014	National communications report , Studies of national directorate of meteorology Survey <u>Risks :</u> - Political and /or institutional instability - climate risks <u>Mitigation measures</u> - Implementation of reform measures with Breton Wood partners - Participatory Approach - Establishment of CONPREC
OUTCOMES	<p>Outcome 1 : The family systems of breeding are more resilient to better cope with variability and Climate changes, because of the strengthening of the resilience of essential resources at stake</p> <p>Outcome 2 : Adaptation options are mainstreamed into major livestock development policies at several levels</p> <p>Outcome 3 : Knowledge in adaptation about breeding systems in SIDS is generated and disseminated</p>	<p>Increased level of production (cattle, goats, pigs, sheep and poultry)</p> <p>Improved biomass in targeted agro-pastoral areas.</p> <p>Level of consistency in national policies with the generation of Rio conventions.</p> <p>Increase rate of budget allocation to support resilience of priority sectors for economic development of STP</p> <p>Level of accuracy in weather forecasting</p>	<p><u>Current production in tons</u> - Goats / Sheep: 161.2 t - Pigs: 741.4 t - Poultry: 155.4 t</p> <p>BD loss rate: 19%</p> <p>NAPA adopted</p> <p>Adaptation option not included in national policies</p> <p>General and approximate current assessments of vulnerability of the livestock sector to climate variability and change</p>	<p><u>Additional production:</u> 228.3 t 181.9 t in 2014 and in 2013 including: in 2014 (sheep / goats: 32.8 t; pigs: 161 t and poultry: 34.4)</p> <p><u>Adequate national policies integrating adaptation are adopted by the Government and implemented in 2013</u></p> <p>A budget line for financing adaptation actions is created</p> <p>The vulnerability of animal production systems and the resilience of livelihoods are better known</p>	<p>Midterm and final evaluation reports</p> <p>Monitoring reports of the project : income survey</p> <p>Monitoring reports of the project : Survey by sampling tracking productivity parameters and carcass yield</p> <p>Policy documents adopted</p> <p>Finance Acts 2013 and 2014</p> <p>Maps and vulnerability study reports</p> <p><u>Risks</u> - Land tenure - Institutional and political instability <u>Mitigation measures</u> - Awareness among stakeholders - Establishment of development committees <u>Risks:</u> - Weak political will - Restriction of international development assistance <u>Mitigation Measures:</u> - Awareness for better economic governance</p>

OUTPUTS	<p>Output.1.1 : The natural resources on which depend livestock are more resilient to cope with CC and are used in a sustainable way</p> <p>Output 1.2: The most adapted animal species are popularized and a climate sensitive sanitary and medical disease prevention program is implemented</p> <p>Output 1.3: The breeders are more aware, better trained and more organized to cope with CV and CC</p> <p>Output 1.4: The breeding is more profitable and incites the most vulnerable breeders to invest more, through mutual initiatives</p>	<p>Number of hectares of agro-forestry-pastoral zone restored</p> <p>Number of farmers (disaggregated in % women and % youth) receiving potentially suitable species</p> <p>Amount of alternative additional food products</p> <p>Number of farmers (disaggregated in % women and % youth) who adopt best adaptation practices</p> <p>Number of innovative livestock financing mechanism that integrates climate risks</p> <p>Number of professional breeders (disaggregated in % women and % youth)</p>	<p>100 ha currently developed under AAP</p> <p>The breedings are composite because of import of various races</p> <p>Food formulae from byproducts agriculture are currently been studied</p> <p>0</p> <p>0</p> <p>There are few professional breeders with profiles and number will be determined during the characterization of study scheduled</p>	<p><u>Improving the resilience of natural resources</u></p> <p>400 ha reforested in local species adapted local lanyards among which 300 at the mid-term</p> <p>400 ha of Soil Restored by 2014 which 300 ha at mid-term</p> <p>4 000 ha of pasture rangelands regarnis among which 3000 ha mid-term</p> <p>10 natural sources of water restored and protected among which 5 at mid-term</p> <p><u>Improving the adaptation capacity of farmers</u></p> <p>- The organizational and management capacities of 50 farmer associations among which 30% of women's associations are reinforced at the end of project</p> <p>-750 agro-pastoralists among which 35% of women are trained in best practices of adaptation, among which 500 at mid-term</p> <p>- Adaptation of best practices are disseminated to 1800 farmers among which 35% were female and 1300 to the mid-term</p> <p>- 200 breeders are trained in food supplementation among which 50 women</p>	<p>Reports of the forestry department</p> <p>AAP Progress reports</p> <p>Inventory and survey</p> <p>M&E Reports</p> <p>Reports of activities of providers and monitoring reports of project</p> <p>Survey on the quality of services to members</p>	<p><u>Risks:</u></p> <p>Reluctance of land owners</p> <p><u>Mitigation Measures:</u> Information, Education, Awareness (IEC) Incentives for the establishment and maintenance Organization of beneficiaries committees</p> <p><u>Risks</u> Low motivation for individual</p> <p><u>Mitigation measures :</u> Increase of IEC activities</p>

OUTPUTS	Output 2.1: Adaptation options in livestock are mainstreamed into national documents of strategy and planning	Number Country Strategy Papers that integrate adaptation measures related to the livestock sector	0	<u>Intégration des mesures d'adaptation de l'élevage dans les documents de stratégie</u>	Validation workshop of reports	<u>Risks :</u> Political/institutional instability
		Number of laws and regulations adopted in favor of the adoption of adaptation measures in livestock	0	- The PRSP and the blueprint for breeding are reviewed and options for adaptation to climate are integrated - The legal and regulatory framework is adapted to the generation Rio of conventions	Bill on the adopted document by the government	<u>Mitigation measures :</u> Lobbying decision makers
	Output 2.2: Adaptation services for livestock are improved	Number of NGOs and livestock technicians of services trained in the use of climate data	80 livestock auxiliaries trained in first aid techniques	- 80 livestock auxiliaries are recycled and equipped. - 100 officers and husbandry techniques of agriculture and NGOs including 20% of women are trained in the use of climate data, among which 70 in the mid-term	Training report	Training of decision makers, parliamentarians and members of the government
	Output 2.3: Local development plans that integrate adaptation options are elaborated	Number of farmers (including women and youth) that received support from mentoring services	The Technical Services Officers and NGOs have a poor understanding of climate adaptation concepts		Local planning documents	
		Number of local development plans developed resilient	The existing seven (7) districts have no local committees and no local development plans	Seven (7) local plans are developed at district and local levels which have benefited from alternative support through the Fund established		

OUTPUTS	<p>Output 3.1: A geo-referenced database on the vulnerability of the livestock sector is developed and regularly updated</p>	Number of functional database developed	Number of climate stations used in the national communications and climate studies, reduced to 2 units at the airport.	A geo-referenced database is developed and available to all applicants in 2012.	Rapports de réception des équipements et des logiciels Rapport sur le nombre d'utilisateurs de la base et leurs appréciations	<p><u>Risks</u> :</p> <p>Lack of staff at the weather stations and adequate means of monitoring</p>
	<p>Output 3.2: National capacities in weather forecasting are improved</p>	<p>Number and level of accuracy of the climatic forecasts related to the breeding issued with monthly then weekly frequency</p> <p>Number of productions (audio, video and publication) made and disseminated by sms, radio, tv and websites.</p>	A decadal (1960-1970) agro-meteorology bulletin is available, a GTP agricultural works in (1990-1995, with support from WMO and UNDP, but was interrupted since 1996.	Reliable weather information is produced and made available in 2013	Reports reception for equipment and software, Report on the number of database users	<p><u>Mitigation measures</u> :</p> <p>Four officers to support data collection in intervention areas</p> <p>Establishment of multidisciplinary technical group and development of synergies with the AAP</p>
	<p>Output 3.3: Best adaptation practices in breeding sector in the SIDS are documented and disseminated</p>	Number of case studies (demonstration) conducted to document impact of climate change on livestock and identify successful adaptation measures	Case study and impact of the climate on the breeding were realized but are not easily accessible, a local knowledge exists but is not valued, experiences of adaptation in similar environments are available, but not exploited.	40% of farmers have access to weather information by 2014 among which 30% in 2013 and were better able to adapt to extreme weather		

Component 1 : Strengthen the adaptive capacity of most vulnerable livestock-keeping households

Output 1.1 : The natural resources on which depend livestock are more resilient to cope with CC and are used in a sustainable way

- 1.1.1. Reforestation
- 1.1.2. Defense and restoration of soil
- 1.1.3. Implementation of alternative food production units

Output 1.2: The most adapted animal species are popularized and a climate sensitive sanitary and medical disease prevention program is implemented

- 1.2.1. Inventory and selection of the species to serve as basis for research-action
- 1.2.2. Capacity building in Genetic for the members of cooperatives (Prevention consanguinity)
- 1.2.3. Implementation of a community program of selection of adapted species
- 1.2.4. Development and implementation of a national climate sensitive sanitary and medical disease program

Output 1.3: The breeders are more aware, better trained and more organized to cope with CV and CC.

- 1.3.1. Information and raising awareness of vulnerable the household's breeders
- 1.3.2. Strengthening of the capacities of organization, management and the structuring of the breeders
- 1.3.3. Training of the breeders and supporting staff in the best practices of adaptation
- 1.3.4. Vulgarization of the best practices of adaptation

Output 1.4: The breeding is more profitable and incites the most vulnerable breeders to invest more, through mutual initiatives

- 1.4.1. Identification, and training of initiators of resilient project
- 1.4.2. Support for accessing to financial services
- 1.4.3. Implementation of mutualistic initiative that prevents vulnerability of livestock

Component 2 : Mainstreaming adaptation options into livestock national development strategy

Output 2.1: Adaptation options in livestock are mainstreamed into national documents of strategy and planning

- 2.1.1. Setting up of a multidisciplinary working group
- 2.1.2. Analysis of the legal framework of STP with regard to the UNFCCC
- 2.1.3. Raising awareness of the political decision-makers on the necessity of legislating on CC
- 2.1.4. Support for the consideration of the adaptation in the new PRSP in the course of finalization
- 2.1.5. Revision of the main development plan of the breeding
- 2.1.6. Integration of the adaptation in the investment plan of the direction of livestock

Output 2.2: Adaptation services for livestock are improved

- 2.2.1. Training in the exploitation and in the use of the climatic data, for the NGOs, the technical services, the breeders and the farmers
- 2.2.2. Development of didactic supports in adaptation of the breeding to the CC
- 2.2.3. Support to the decentralized bodies that supports breeders

Output 2.3: Local development plans that integrate adaptation options are elaborated

- 2.3.1. Elaboration of local development plans
- 2.3.2. Fund raising in support for implementation of local development plans (round tables, project designs, etc...)

	<p>Component 3 : Knowledge Management</p> <p>Output 3.1: A geo-referenced database on the vulnerability of the livestock sector is developed and regularly updated</p> <p>3.1.1. Development of architecture data base</p> <p>3.1.2. Down scaling existing climate forecasting models</p> <p>3.1.3 Integration of climate sensitive stressors</p> <p>3.1.3. Training of potential users of the database</p> <p>Output 3.2: Targeted participatory demonstration projects on livestock - based adaptation projects are conducted in 3 integrated livestock resources centers (north, central and south)</p> <p>3.2.1 1 integrated adaptation project is conceptualized, set up and test it based on the comparative advantage of every livestock resources center</p> <p>Output 3.3: Best adaptation practices in breeding sector in the SIDS are documented and disseminated</p> <p>3.3.1. Case studies</p> <p>3.3.2. Edition and publication</p> <p>Project management : The project is well managed and delivers expected outputs</p> <ul style="list-style-type: none"> Personnel Logistic Fonctionnement International travels Monitoring and Evaluation Financial fees 	
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ANNEX A-2: Incremental cost matrix

AXES D'INTERVENTION	BASELINE (B)	ALTERNATIVE (A)	INCREMENT (A-B)
Approach to the socio-economic development of livestock in STP projects	<p><u>Projects: PADE2, AAP,WB,IFAD, Coop Taiwan</u></p> <p>The interventions of the main PFT contribute to strengthen the food security for STP including improving productivity in the livestock sector. However the serious threats that climate change poses on the livestock sector could destroy all the efforts and achievements made so far. .</p>	<p><u>Capacity building project for pastoralist families</u></p> <p>An approach which integrates the priority adaptation options into the NAPA and strengthens the resilience of the poorest pastoralist families and most vulnerable, will significantly ensure sustainability of the various interventions to strengthen food security in the STP</p>	<p><u>Specific new and additional activities to fund this project</u></p> <ol style="list-style-type: none"> 1. Building capacities of most vulnerable families 2. Promotion of a more enabling legal environment for the implementation of the priority adaptation options 3. Better management of the knowledge on adaptation on farming systems in tropical island environment
At component level			
Improved livestock security and systems	<p>In the baseline scenario, the Government of the RDSTP imports alive animals (40 oxen, 5000 Poultry and rabbits). The executive offices of livestock rehabilitated, the laboratory's research center and equipped. The breeding is done in the laboratory including artificial insemination.</p> <p>Natural resources are addressed more in the perspective of "to mitigating the impacts of the projects on the environment, as a real management</p>	<p>In the alternative scenario, natural resources will be protected and sustainably managed in a so as to improve the services of the ecosystems for the livestock, the ecosystem approach is used. The ecosystemic approach will be used.</p> <p>Selected activities will conducted with those of the same nature schedules under the project baseline within but directed to the specific needs of the breeding.</p> <p>Genetic improvement is mainly the work of herders, who will be trained in basic genetic concepts at their own pace according to their needs and demands. Previously a qualitative study of inventory of existing breeds conducted to assess the genetic potential of many livestock imports. Eventually the Government of the RDSTP</p>	<p>Component 1</p> <p>- GEF Financing: 814,000 USD</p> <p>- Co-financing : 3 704,000 USD</p> <hr/> <p>Total comp 1 : 4,518,000 USD</p>

AXES D'INTERVENTION	BASELINE (B)	ALTERNATIVE (A)	INCREMENT (A-B)
		should reduce to the bare minimum the import of live animals at the only need to reduce the consanguinity.	
Strengthening the legal framework	In the baseline scenario the main framework for adaptation planning is the NAPA and the blue print of livestock An annual capital budget in the livestock sector is developed but does not include the options of adaptation to climate change.	In the alternative scenario, it will be necessary to integrate the adaptation priority options into the legal planning instruments planning Particularly in Budget. Policy -makers will be made sensitive on the need to secure f government investment by means accompanying measures of adaptation.	Component 2 - GEF Financing: 325 000 USD - Co-financing : 1 372,000 USD <hr/> Total comp : 1 697,000 USD
Knowledge management	Knowledge management is an important component of the project and specifically on monitoring and evaluation sections. Documentation and dissemination of experiences remain marginal. A Climatic number of information systems already exist (AAP and Coastal zone)	The management of the knowledge is an integral component because of the lack of climatic information. The experiences of the project AAP and that of the World Bank in the field of animal husbandry whenever possible The experiences and best practices animal husbandry in the tropical island environment will be documented and disseminated through various communication channels.	Component 3 - GEF Financing: 646,000 USD - Co-financing : 804 000 USD <hr/> Total comp : 1 450 000 USD
Management and Coordination of project	Under this scenario, the PADE 2 is coordinated by the Directorate of Livestock whose staff receives extra pay for their support. All 3-vehicles and 6 motorcycles were acquired. Offices are provided by the Government and were renovated and equipped by the project. Besides the head office of the project, 4 other local coordinating offices are opened with a one employee (Delegated by zone). One international technical advisor is recruited. The team does not have an environmental specialist on climate change.	In the alternative scenario, the project is going to be managed by the same team to complement staff dedicated issues on climate change adaptation. The position of the advisor will e maintained with few amendments (agro-environmentalist with knowledge in procedures GEF procedures) with its salary paid in shared costs 50 % between PADE 2 and the GEF. An additional delegate technician from each area	Project management - GEF Financing: 200,000 USD - Co-financing : 795,000 USD <hr/> Total comp PM : 1,195,000 USD

AXES D'INTERVENTION	BASELINE (B)	ALTERNATIVE (A)	INCREMENT (A-B)
		specialized in environment and climate change issues will be paid 100 % to speak about GEF. The steering committee will be activities will be extended to cover weather reports. Office equipments and logistics of the zones will be completed	
COUT TOTAL Total Cost			GEF : \$ 1,985,000 Co-finance : \$ 6,675,000 <hr/> Total : 8, 660 ,000

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT USING GEF/LDCF/SCCF/NPIF RESOURCES

<i>Position Titles</i>	<i>\$/ Person Week*</i>	<i>Estimated Person Weeks**</i>	<i>Tasks To Be Performed</i>
For Project Management			
Local			
Livestock Breeding Specialist	1,500	24	Inventory and selection of farms to serve as base for action in the on-farm adaptive research Characterization and selection of breeding (cattle, goats, sheep and pigs) Capacity-building in genetic improvement at the level of associations/associations (preventing inbreeding, etc.) Establishment of a Community programme of cross-breeding with local breeders selected including 35% of women farmers Near zoo-sanitary monitoring Support to the Organization of fairs for livestock
Food technology specialist	1,500	12	Identify the farmers to be trained Develop training manuals Select sites to conduct training sessions to ensure inclusiveness Conduct the training at specified localities in rationing and fodder conservation and food supplementation
International			
Animal Health specialist/ Vetinarian	3,000	24	Training of production assistants Establishment and equipping for village pharmacy Development and monitoring of a calendar of prophylaxis taking into account climate-sensitive diseases
Livestock economist	3,000	12	Support the professionalisation of the sector Identification and training of 30 implementers of resilient and sustainable projects including 30% of women) Provide assistance to access to financing Undertake a study and implementation of a mutual insurance system and risk
Community Development specialist	3,000	24	Support the development of local development plans incorporating adaptation options Support for the establishment of local committees of the districts development Realization of participatory diagnosis / preparation of local development plans

			integrating adaptation options Support for financing of local development plans (round table and project development) Creation of a fund to support the financing of alternative local adaptation projects
Justification for travel, if any:			
For Technical Assistance			
Local			
Agro-environmentalist	1,500	24	Information dissemination and awareness raising of the households (mass media and others) Strengthening organizational capacity and management of 50 farmers including 30% women's associations Assessment of Status of current capabilities, support renewals of instances and the updating of the regulations (Administrative and financial training of the agro-eleveurs) Training of 750 agro-eleveurs including at least 35% of women and 50 officers to support Council best practices for adaptation Dissemination of best practices for adaptation to 1,800 farmers 30% of women
Meteorologist	1,500	12	Down-scaling of prediction models Liaison with regional meteorology centre Acquisition of climate models Acquisition of workstation Integration of the sensitive climate stressors for farming
International			
Climate Change Adaptation Expert	3,000	24	Conduct an analysis and propose measures in accordance with the legal framework in relation to the convention on climate change Awareness raising and building capacities of policy makers in adaptation to CC Provide support for integration of adaption measures into the DRSP3 Revision of the management plan of farming in coherence with the CC adaptation options Organisation of national workshops of validation and adoption of the Government Contribute to the creation of a budget line

			for adaptation to the CC in the livestock sector investment plan
Zoo-technician	3,000	24	Training of 100 technical services officers of agriculture and livestock and NGOs in the operation and use of climate data including 20% of women Development of the training materials in adaptation of farming to the CC Provide support to the decentralized district structures
Research Scientist (Livestock)	3,000	24	Developing best practices for adaptation of livestock in SIDS Selection of case study Edition and publication of case study findings Implementation and operation of GTP climate/animal husbandry and environment
Justification for travel, if any:			

* Provide dollar rate per person week. ** Total person weeks needed to carry out the tasks.

ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS**A. EXPLAIN IF THE PPG OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PPG ACTIVITIES UNDERTAKEN.**

THE OBJECTIVE OF THE PPG WAS TO ACHIEVE A CONSENSUS, AS BROAD AS POSSIBLE, AMONG ALL PARTIES ON THE ACTUAL PROJECT AND RELATED ACTIVITIES, ON THE SYMPTOMS, IMPACTS, UNDERLYING CAUSES AND SUSTAINABLE SOLUTIONS TO LIVESTOCK'S VULNERABILITY TO CLIMATE CHANGE IN SAO TOME AND PRINCIPE. THE OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PARTICIPATORY PROCESS FOLLOWED DURING THE DESIGN OF THE PDRAH. THE PROJECT DOCUMENT PRESENTED PROVIDES THE RESULTS OF THE ANALYSIS CONDUCTED DURING PROJECT DESIGN AND THE PROJECT ACTIVITIES PROVIDE MEANS TO ADDRESS THE LIVESTOCK VULNERABILITY IN SUSTIANBLE MANNER.

B. DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY:**C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS IN THE TABLE BELOW:**

<i>Project Preparation Activities Approved</i>	<i>Implementation Status</i>	<i>GEF/LDCF/SCCF/NPIF Amount (\$)</i>				<i>Cofinancing (\$)</i>
		<i>Amount Approved</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>	<i>Uncommitted Amount*</i>	
Establishment of a Steering Committee	Completed	0	0	0	0	0
Functioning Coordinating Committee	Completed	26,000	26,000	20,000	6,000	30,000
Project Design	Completed	90,250	90,250	37,338	46,750	30,000
Search for additional funds	Yet to complete	9,000	9,000	9,000	0	5,000
Project Management	Completed	0	0	0	0	60,000
	(Select)					
	(Select)					
	(Select)					
Total		125,250	125,250	66,338	52,750	125,000

* Any uncommitted amounts should be returned to the GEF Trust Fund. This is not a physical transfer of money, but achieved through reporting and netting out from disbursement request to Trustee. Please indicate expected date of refund transaction to Trustee.

ANNEX E: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)

N/A

ANNEX F: Appraisal report, Volume 1

(Separate document)