

DEMOCRATIC REPUBLIC  OF S.TOMÉ AND PRÍNCIPE  
**MINISTRY OF AGRICULTURE, FISHERIES AND RURAL DEVELOPEMENT**  
*(Unity - Discipline - Work)*



# “RESILIENCE AND SUSTAINABLE DEVELOPMENT OF RURAL COMMUNITIES”

**July 2019**

## I. Programme Summary

São Tomé and Príncipe	
<b>Agency</b>	UNDP
Project Title	<u>Sectoral Programme for Adaptation to Climate Change in agricultural sector in São Tomé e Príncipe</u>
Project Code	
Group	Vulnerable Rural Communities (Farmers, breeders and processors)
<b>OBJECTIVES</b>	<p><b><u>General Objective:</u></b></p> <p><i>Promote the management and reduction of climate risks in the face of the adverse effects of climate change, through measures that contribute in a sustainable manner to the improvement of public policies in the area of Food and Nutritional Security in São Tomé and Príncipe.</i></p> <p><b><u>Specific Objectives:</u></b></p> <ul style="list-style-type: none"> <li>✓ Contribute to sustainable development;</li> <li>✓ To utilize, in an integrated and participative way, the natural resources of agroecological zones;</li> <li>✓ Strengthen the capacity of local human and socio-economic capital;</li> <li>✓ Create infrastructure conditions resilient to the effects of climate change.</li> </ul>
Beneficiaries	The program will benefit the entire Santomense population in general (190,000 inhabitants), and in particular the rural communities selected for its implementation. Special attention will be given to individual, collective, and private initiatives..
Implementation Partners	The project will be implemented by the Ministry of Agriculture, Fisheries and Rural Development in Partnership with the United Nations Development Programme (UNDP). The directorates of the Ministry directly involved in the program will be (Rural Development Support Center "CADR", Center for Agronomic and Technological Research "CIAT", Direction of Agriculture and Rural Development "DADR", Center for Technological Improvement Agro-livestock "CATAP", Direction of Studies and Planning "DEP" of MAPDR, national NGOs, agricultural cooperatives, community associations, District Chambers.
Duration of Project	<b>5 Years</b>
Requested Funding:	
Potential Donors:	Global Environmental Fund (GEF) through LDCF
Location	São Tomé e Príncipe
Código de marcador de gênero	

## 2- Context and logic of the intervention (justification)

São Tomé and Príncipe is a small island country especially vulnerable to climate change, and there are already documented signs of this change. Among them the decrease and alteration of the rainfall pattern, the decrease of river flow, prolonged periods of drought, coastal erosion and increase in temperature. In the future, this pattern of climate change may lead to the reduction of arable areas and crop productivity, alteration of soil organic matter and reduction of farmers' income. The change poses the risk of cash crops such as cocoa, coffee, pepper and others becoming unfeasible for farming in certain parts of the country, due to reduced rainfall, the emergence of diseases and pests and other factors that directly influence productive capacity. These changes also affect the entire food production system and alter the ecosystem, causing a negative impact on the way of life and economic activity of rural producers, compromising food and nutritional security, creating social insecurity, and all the resulting problems. Despite frequent rainfall, the country has been going through increasingly long periods of drought, a fact that conditions food production, especially in the northern part of São Tomé Island. Agriculture, and especially cocoa production, continues to be the main economic activity in the country and the largest source of income for rural families, generating 70% of rural employment and around 80% of export revenues. Agriculture with its wide diversity of production systems holds great importance in the country's economy, ensuring the livelihood of many and contributing to the construction of national wealth with 23% of national GDP (according to data from the GOP 2019). Despite its importance for the economy and communities, agriculture is characterized by a very low level of productivity. This is due to the lack of adequate agricultural practices, i.e. good production practices, the poor state of the infrastructure supporting agricultural production (irrigation systems, rural markets, rural tracks, etc.), lack of efficient technical assistance and difficulty in accessing quality agricultural inputs.

This agricultural sector is progressively worsening due to the effects of climate change. The Government's Vision2030 "", and the 2017-2021 National Development Plan, should be adopted as part of a participatory process that mobilizes citizens and all stakeholders in the country's sustainable development. The process aiming to offer quality services at the regional and global levels, by achieving nine aspirations, 5 of them with the greatest impact on the agri-environmental sector are highlighted here: (i) political stability; (ii) sustainable economic growth; (iii) adequate infrastructure to promote national development; (iv) decent jobs; and (v) food and nutrition security to better meet these legitimate aspirations of Sao Tomeans. These axes must be aligned with the Sustainable Development Goals (SDGs) for 2030 aimed at accelerating sustainable growth, creating employment, reducing poverty and promoting food security, through: (i) diversification of the country's economy and broadening of its productive base in order to multiply opportunities for wealth creation; (ii) improvement of the strategic steering of development and management of public finances; (iii) modernisation of economic and social infrastructure; (iv) improvement of land management and environmental preservation. Also, strengthening social cohesion and the external credibility of the country, through: (i) strengthening human capital and governance; (ii) promoting youth, consolidating the family and protecting vulnerable groups; (iii) enhancing national culture, (iv) strengthening local development clusters and promoting decentralisation;

In this context, MAPDR is submitting the proposal for the Sectoral Programme for Adaptation to Climate Change in agricultural sector in São Tomé e Príncipe. The proposal is presented with the general objective to: Strengthen the resilience of rural communities' livelihoods options against the impacts of climate change throughout the country, with special emphasis on the most threatened and vulnerable communities. The initiatives aim to manage and reduce climate risk in the short, medium and long term in the face of the adverse effects of climate change. This is achieved by taking advantage of emerging opportunities, avoiding losses and damage, and building instruments that enable adaptation of natural, human, productive and infrastructure systems.

To this end, the project seeks to intervene in three main components in which each will be related to the expected results recommended: i) Strengthening the capacity of the Ministry of Agriculture, Fisheries and Rural Development, in particular the Directorates of: Agriculture and Rural Development (DADR), Centre for Rural Development (CARD), Centre for Agricultural and Technological Research (CIAT), Directorate for Studies and Planning (DEP) of MAPDR, Centre for Agricultural Technological Improvement (CATAP) as well as local authorities, civil society organizations and community-based organizations. Support will be offered to help the actors contribute to strengthening the resilience of rural communities to the effects of climate change; ii) Reduction of the vulnerability levels of livelihoods through the allocation of production support infrastructures and risk management mechanisms (integrated management of soil, water, biodiversity); iii) Definition of strategies for adaptation and strengthening of resilience in the most vulnerable communities of the CMPLCL districts of São Tomé and Príncipe.

### 3- Theory of Change

[Based on the CPD theory of change – description of the approach that will be applied by the CO. It should clearly show of the change to achieve the objectives will take place, based on the UNDP comparative advantage. The CO should clearly show the assumptions that are being made and how the change will take place. Here we can include the element of capacity development strategies]

### 4- Stakeholder analysis

In order to be successful, this programme must involve various sectors of society. Main stakeholder is the The Ministry of Agriculture, Fisheries and Rural Development (MAPDR) and its Directorates, in particular: Agriculture and Rural Development (DADR), Rural Development Support Centre (CARD), Agricultural and Technological Research Centre (CIAT), Directorate of Studies and Planning (DEP) of MAPDR, Centre for Agricultural Technology Supply (CATAP) all Directorates also being direct actors in the activities of the Programme. The program should also have a strong engagement of the Ministry of Infrastructure, Natural Resources and Environment, through the Directorate General of Environment (DGA). The involvement of the District Chambers, Civil Society Organizations, Community Based Organizations, Private Sector, Youth and Women with business initiatives will also play an important role in the success of all activities planned within the program. The United Nations Development Programme (UNDP), with all its knowledge, leadership capacity and dialogue, will make this proposal a feasible and achievable partner that will have great responsibility in supporting the physical execution of the programme, coordination and articulation with all partners.

## 5- Results and Activities

In view of the objectives set out in this programme, various activities of an infrastructural nature, human capital strengthening, sustainable production, etc. will contribute to strengthening the Community's capacity to provide greater resilience to the effects of climate change.

The main results expected and the activities to be carried out are presented in the following sub-sections.

### **Expected results**

The programme is expected to achieve the following results:

- ✓ Strengthening the capacity of water collection and storage, as well as its distribution, for agral production in rural areas most vulnerable to the effects of drought. It will be achieved through the introduction of techniques and technologies such as: cisterns, underground dams, and other appropriate means for small communities;
- ✓ **Technical Assistance and Rural Extension**: Trainings to promote adaptation to climate change in vulnerable local communities;
- ✓ Investment in public research for the development of new varieties of food crops, more adapted to situations of climate variation (drought and excessive rainfall);
- ✓ A bank for traditional seeds of food and vegetable crops that are more resistant to pests and diseases caused by climatic effects has been set up and a programme for the production and multiplication of these seeds has been organised for distribution to farmer.;
- ✓ Stable Agro-Silvo-Pastoral Resources, are used in a more sustainable way;
- ✓ Mapping of climate vulnerability in agricultural areas;
- ✓ Developed and implemented techniques and technologies suitable for resilience in the agricultural sector;
- ✓ New technologies have been introduced to manage natural resources (soil, water, forestry, etc.) and to increase the resilience of production systems.;
- ✓ Agro-ecological and agro-silvo-pastoral productive systems developed through public policies and rural credit, supported by the national service of technical assistance and rural extension.;
- ✓ Carried out actions within the scope of food supply and stock management policies;
- ✓ MADPR's technical and technological capacity strengthened;
- ✓ Improved cultivation in sloping areas to preserve and improve soil quality;
- ✓ Infrastructure resilient to the effects of climate change developed;
- ✓ Created and developed the ranks of production of corn, cassava, matabala and dried beans.

### **Activities to be carried out:**

In order to achieve the desired results, the activities should be carried out in coordination and with the involvement of all partners with the monitoring from UNDP and the beneficiaries.

### **Component 1: Institution Building and Technical Assistance - Rural Extension**

**AT1.1-Strengthening of capacities in various areas:** MAPDR, NGOs, Associations and Cooperatives with trained technicians to respond to the major challenges in the agricultural

sector, soil and water management, integrated pest and disease management, good agricultural practices, seed production, production of protected crops, information and data collection. Leadership, cooperativism and associations and inclusion of environmental aspects are necessary for a more active and imperative MAPDR in the future. In this regard, we must improve the existing infrastructure conditions in the CATAP linked to the production and processing of agricultural and livestock products. Helping the Center to make better use of the products and strengthening the capacity of the Centre as a vector and multiplier of modern knowledge of production systems that can respond to the effects of Climate Change. This will enable greater and better training for local technicians and farmers in the process of transferring and adopting new technologies for integrated production and sustainable resilience. In addition to the CATAP, we intend to provide training to farmers using the Field School methodology.

**AT1.2-Production and use of information-** establish basic environmental information systems on currently used technologies and on new technological options that can promote resilience and adaptation to the negative impacts of climate change.

## **Component 2: Climate Change Adaptation Measures**

**AT2.1- Climatic risk agricultural zoning-** to take advantage of the knowledge of the 'agricultural potential chart' and updated soil charts to carry out crop management with a view to greater soil and climate adaptation and consequently greater production.

**AT2.2-Hydro resources and water use in agriculture** - development and/or adaptation of technologies for sustainable water use, thus increasing efficiency in agricultural production systems.

**AT2.3- Recursos e Melhoramento Fitogenéticos e Animal** - Creation of traditional seed banks for food and horticultural crops and development of actions to propose diversity and production alternatives to producers. A greater variety of species, cultivars and breeds should be known, researched, possibly adapted to new climatic circumstances and threats.

**AT2.4-Development of an Early Warning System on Pests and Diseases in plants and animals** - improve the pest risk analysis system to incorporate the prediction of the emergence of new pests and diseases and the dissemination of existing ones (such as the effects of climate change) and offer guidance on their control, taking into account environmental sustainability. This is a process that requires the direct involvement of all stakeholders in the MAS program, with more accountability from CIAT, CADR, and DADR;

## **Component 3: Production Support Infrastructures**

**AT3.1 - Armazenamento e Benefício na produção de produtos perecíveis** - are strategies that adapt agriculture to climate change by creating added value to the products and enabling the storage of perishable products.

**AT3.2 – Agro-Silvo-Pastoral Agroecology-** aim to articulate and implement programs and actions that induce the transition to organic and agroecological-based production.

**AT3.3- Cultivation and Production in a Protected Environments** - With the implementation of this system production throughout the year is guaranteed by optimizing

the space, saving water, reducing the production cost and thus reducing the use of pesticides.

**AT3.4-Sustainable Use of Lands in Sloping Areas (Terraces)** - Improve the system of land use in sloping areas (taking into account the risks of erosion) by construction of terraces and dikes. Introducing good practices of land use to tackle the already existing effects of climate change and create guidelines on its control by taking into account soil sustainability. The Agriculture and Rural Development Directorate and the technicians of the regional delegations will have to respond to this activity.

## **Componente 4: Apoio ao Desenvolvimento de fileiras (micro projetos)**

**AT4.1-Support for the Creation and Profitability of Sustainable Production Rows-Such Rows** may provide short term food to the national market mainly to the National Program for Health and School Feeding (PNASE). This activity will be based on an evaluation of the existing systems in terms of the efficiency, resilience and adaptive capacity of the crops promoted in the face of the effects of climate change.

## **6- Partners**

**UNDP**: with its presence and working experience in capacity building and coordination of country-level actions in various sectors from Health, Agriculture, Sustainable Development, as well as accumulated experience in the management of financing actions and cofinancing, will be responsible for the global and financial coordination, monitoring process and evaluation of the action. UNDP will also be responsible in the implementation of the Programme and implementation of lessons learned, multiplication of the approach, action implementers, facilitators and technical support in liaison with partners and funders.

**National Government**: Represented by MAPDR, it will have to create conditions to strengthen the institutions of its technical staff; develop/implement public policies and intersectoral coordination; facilitate the participation of all relevant actors in the process, including civil society, the private sector and district chambers. For its experience in technical support in the agricultural area, the directorates involved will have to exercise the role of technical coordination of all activities carried out. The two entities will appoint specific coordinators, who will constitute the Monitoring Committee of the Programme together with the other stakeholders who will be appointed later.

The elaboration of the proposal involved and received support from the target groups (family farmers, small and medium entrepreneurs, researchers, young agricultural high school students, higher education teachers, technical staff and leaders of the third sector and government, technical staff and representatives of the main development partners and parliamentarians). All participate, through their representatives, in the governance of the action through regular meetings. They may also partner to propose and implement joint activities supported by the action, thus contributing to the implementation of planned activities.

## **Team and Means of Project execution**

The proposed team for the implementation of the action is as follows: 1 Programme Manager (UNDP); 1 Technical and Field Coordinator (MAPDR); 1 Monitoring and Evaluation Officer (MAPDR/DEP); 1 Administrative and Financial Officer; 1 driver/logistics person.

The action will require the following means for the execution of the action: 4x4 passenger transport vehicle, various office furniture, computers, photocopier, printers, among others.

### **Actors involved in the Project**

The role of the different stakeholders is described below:

**Civil Society Organisations:** Their capacities will be strengthened at various levels and coordination is improved for better use of resources. Mechanisms will be developed to allow greater participation of women in negotiation and decision-making spaces, as well as their participation in all the activities of the Project.

**Producers' Associations, Cooperatives:** capacity building at various levels. The possibility of coordination and expansion of resources and to strengthen partnerships and leadership through activities. Emphasis on the participation of rural women in negotiation and decision-making spaces. To strengthen productive resources and advocacy participation in all activities of the Project.

**Development partners (EU, AfDB, IFAD, and others):** improved articulation and coordination, increased effectiveness of their actions and reduction of incoherence, allowing for increased transparency in decision-making.

**STP population:** they are direct beneficiaries (producers) and indirect beneficiaries (global population); producers, particularly women and young people, will consolidate their capacities; they will be involved in all activities and directly benefit from some, representing more than half of the participants.

## **7- Monitoring and Evaluation**

### **Monitoring and Evaluation Activities**

Follow-up, monitoring and evaluation (M&E) is a continuous and participatory process throughout the programme. Although the production and/or availability of relevant, reliable and quality information is a responsibility shared by all (UNDP/MAPDR) as well as the implementation partners, the Ministry of Agriculture, Fisheries and Rural Development (MAPDR) will be responsible for coordinating and managing the M&E system of the Programme through the Directorate of Studies and Planning (DEP). They will follow a plan developed at the beginning of the Programme and adjusted when necessary. All partners are responsible for producing and/or providing relevant information.

**The Programme provides an exit strategy that allows for the sustainability of the implemented actions and a multiplication of the results of the action.** However, at the end of the Programme, the team will organise technical and financial closing tasks, appropriate



reporting and in accordance with the rules applicable to the contract, delivery of equipment and participatory return of results to beneficiaries, partners and relevant actors.

## 8 – Risks and hypothesis

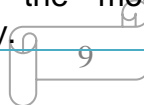
### Risk analysis and contingency plan

The success of the Action is based on a number of basic assumptions, the absence of which cannot be countered by the means available and within the Action:

- Political Stability
- Absence of military conflict
- Political authorities collaborate with the programme
- Civil society in general collaborates with the programme

There are, however, risks inherent to the implementation of the project that are likely to jeopardise its success, but against which preventive and/or contingency measures may be adopted to a greater or lesser extent:

Riscos	Medidas Preventivas e/ou de Contingência
Weak involvement of state entities	<ul style="list-style-type: none"> <li>▪ Participatory approach, to promote ownership of plans</li> <li>▪ Advocacy</li> </ul>
Lack of commitment and demotivation of civil society organizations a priori	<ul style="list-style-type: none"> <li>▪ Use of DRP techniques and pedagogical tools that favor identification with the purposes of the process.</li> <li>▪ Participatory approach, to promote ownership of concepts</li> </ul>
Insufficient capacity of beneficiary CSOs to implement grants	<ul style="list-style-type: none"> <li>▪ Strict and judicious grant award procedure</li> <li>▪ Initial training programme</li> <li>▪ Permanent technical assistance</li> </ul>
Delays in the publication of studies due to difficulties of consultants	<ul style="list-style-type: none"> <li>▪ Providing for preventive measures in service contracts with penalties and an appropriate timetable</li> </ul>
Inability of the Management Unit to manage and coordinate the programme	<ul style="list-style-type: none"> <li>▪ A management model for the Program will be proposed, based on the models already functional in the country.</li> </ul>





## 9- Estimated budget (USD)

### Component 1: Institution Building and Technical Assistance - Rural Extension

AT1.1- Capacity building in various fields	Nacional	MAPDR e PNUD	DEP	Documentos	12	10	22	Unidade	600.000		
AT1.2- Production and use of information	Nacional	MAPDR /PNUD	GEF/PNUD/MAP DR	Relatórios, TDR's					150.000		
<b>Sub total</b>									<b>750.000</b>		
<b>Component 2: Climate Change Adaptation Measures</b>									<i>Origem dos Recursos</i>		
AT2.1- Zonamento Agrícola de Risco Climático									200.000		
AT2.2- Water Resources and Water Use in Agriculture									500.000		
AT2.3- Recursos e Melhoramento Fitogenéticos e Animal									500.000		
AT2.4- Development of an Early Warning System on Pests and Diseases in plants and animals									350.000		
<b>Sub total</b>									<b>1 500.000</b>		
<b>Componente 3: Infraestruturas de Apoio à Produção</b>									<i>Origem dos Recursos</i>		

AT3.1-Armazenamento e Benefício na produção de produtos perecíveis									350.000		
AT3.2- Agroecology and Agro-Silvo-Pastoral Production									250.000		
AT3.3- Crop Production in a Protected Environment									350.000		
AT3.4- Sustainable Use of Lands in Sloping Areas (Terraces)									400.000		
Sub total									1 350.000		
<b>Componente 4: Apoio ao Desenvolvimento de fileiras (micro projetos)</b>									<b><i>Origem dos Recursos</i></b>		
AT4.1-Apoio a Criação e Rentabilização de Fileiras de Produção sustentáveis									2.500.000		
Sub total									2.500.000		
<b>Grand total</b>									<b>6.150.000,00</b>		