

SAO TOME E PRINCIPE: NAPA PROJECT PROFILE

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SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 1

FISHERIES SECTOR PROJECT 3

TRAINING AND READAPT PROJECT OF THE NEW NAVIGATION TECHNOLOGIES AND FISHING EQUIPMENT FOR FISHERMEN

JUSTIFICATION

Given the countless occurrences of climate phenomena that happen on the craft fishermen of S.Tomé and Príncipe and considering that for several years and for varied generations these continue traditionally to use the same types of materials and embarkations, that in more than 95% are weak autonomy and without any navigation device, and they go fishing and sometimes impeded of returning to the house. Such situations are frequent and they happen annually when, the fishermen are surprised by storms, tempest lines, fog, strong rains, etc.

The fishermen were served during years of empiric knowledge (experience practices) of navigation, being guided by the moon, stars, the sun or the relief's (picks of S.Tomé and Príncipe) as reference cardinals for to return to the origin beaches. If, for any reason, any climate factor obstruct those traditional coordinates, they are immediately seriously committed and uncertain to return to the beach or, even, be shock by embarkations of great load.

Then the need of they be prepared and equipped in order facet the situations and minimize the constraining effects of the climate factors. It was suggested the present project to focus in this matter. It will be executed by sector of Fishing, in collaboration with NGOs, MARAPA and GIEPPA. During execution, it should count with the collaboration of Institute of Meteorology for preventive information of weather as well as with the "Companhia Santomense" of Telecommunications (CST) in the domain of communication.

The beneficiaries will be selected according with the vulnerability results verified in the inquired communities as Well as in the no inquired but susceptible to CC effects. The number of beneficiaries will be superior to 200 fishermen, distributed geographically by the two Islands and involving al Districts. The cost of the project will be of approximately USD 350,000.

DESCRIPTION

General Objective

Reinforcement of capacity of craft fishermen to minimize the perverse effects of the climate changes.

Specific Objective

- To allow a sustained development of craft sector;
- To improve the capacities of navigation of fishermen, in way to minimize the effects of climate changes, facilitating equipments and materials to subsidized credit (GPS, compasses, embarkations with better capacity, lifejackets and signaling rockets).

Long term potential effects

- Improvement, in more than 60%, the work conditions and income of craft fishermen;
- Reduction, in more than 70%, the accident risks or life loss.

Institutional framework

The project will be executed in partnership with Fisheries sector, NGO, MARAPA and of GIEPPA, with the Coastal Guard's collaboration, and it will be under the protection of the Ministry of Economy.

Risks

Incoherent Selection of target fishermen and vulnerability susceptible.
Impartiality in the attribution of subsidized credit of materials and equipments.

Evaluation and monitoring

| General Objective | Specific Objective | Expected Results | Activities | Indicators | | | Cost (USD) |
|---|---|--|--|--------------|------------------|----------------|----------------|
| | | | | Actual value | Source | Value to reach | |
| Reinforcement of craft fishermen capacity to minimize the effects of CC | Stimulate sustainable development of craft fishing activities. | Fishermen with theoretical and practical knowledge about climatic factors that cause bad effects; Change behavior and improvement of fishing practice face to climate change. | Popularization the effects of climate change on the population; Seminars on the community; Select the focal points to do communication and sensitization systematically. | 50 | Fisheries sector | 1200 | 100,000 |
| | Improve the navigation capacity of fishermen to minimize the effects of climate change. | Fishermen capacity; Fishermen equipped; Decrease the number of disappearance in the sea; Improvement of live level of fishermen and families. | Sensitization and selection of fishermen; Acquisition of equipment; Training of fishermen; Distribution; Monitor and evaluation of action. | 80 | Fisheries sector | 1000 | 250,000 |
| TOTAL | | | | | | | 350,000 |

COST

USD 350,000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 2

INFRASTRUCTURE PROJECT 2

ESTABLISHMENT OF A SYSTEM OF CLIMATE ALERT

Location: (INM) Airport of S.Tomé
Sector: Meteorology
Domain: Economic
Type: Adaptation to the Climate Changes

JUSTIFICATION

The meteorological forecast lacks of infrastructures and modern equipments, distributed by different stations of collects information and to be install for the whole Country. The national meteorological net should be rehabilitated from way to allow a systematic observation of the climate parameters.

The technical and human means available in the institution are insufficients, to allow them to fulfill its function of safeguard of human lives and goods. For the sucess of the established activity in the NAPA, the National Institute of Meteorology should be properly equipped and its staff adquatly trained.

DESCRIPTION

Composition and activities

Disposal of infrastructures, human and technical means that guarantee the supply of information on time, permanently and credible.

To obtain information on the local and regional weather.

Objectives

- To conceive a program in the radio, television and newspapers with permanent information;
- To do meteorological forecasts;
- To prevent the population, through a system of alert via radio or telephone, of the approach of a gale;
- To sensitize the population to contribute in the maintenance of the infrastructures distributed by the several dispersed meteorological stations by the whole Country;
- To give formation to the technicians on the new technologies in the domain.

Activities

- To supply meteorological and credible information to the marine and aerial navigation;
- To participate in events at local, regional and international level, to maintain the staff up dated;
- To do the maintenance of the equipments and other infrastructures;
- The marine and aerial navigation guarantee;
- Forewarned population on any catastrophe, in advance;
- Population sensitized.

Expected results

Equipments and infrastructures protected by the population.
Maintenance guaranteed.

Execution

The National Institute of Meteorology, in together with the Geographical Services, it will look for a land for construction of the central building.

The National Institute of Meteorology (INM) will take charge, together with DOPU, of the coordination and elaboration of the notebooks of responsibilities for work execution.

Institutional Framework

INM will proceed the order of the equipments.

INM will establish protocols in agreement with institutions as ENASA, ENAPORT, Direcção de Aviação Civil (Civil Aviation Direction), Direcção de Transporte e Comunicações, with reciprocal advantages about the air traffic and marine.

To find the wanted financing.

Risks and obstacles

To succeed in the population sensitization.

To do to arrive the information on the time to the interested populations.

Indicators for Monitoring

Fishermen and other informed navigators about the weather situation, before the accomplishment of their trips.

Entrance of S.Tomé and Príncipe for the group of the Countries of the area that possess, for considerable periods, database the weather.

Duration

12 months

COST

USD 500 000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 3

HEALTH SECTOR PROJECT 2

COMMUNICATION ACTION FOR BEHAVIOR CHANGE

Start date: June 2007

Duration: 5 years

JUSTIFICATION

Some risk behaviors, was verified during the bibliographical revision as in collects the information where the increase of impact and linked vulnerability factors to the climate changes (CC). The linked vulnerabilities to CC have effect on the propagation of the water diseases, vector and other. With view to minimize the negative effects of the linked phenomena to CC, it is conceived the present project seeking to change positively the population behavior.

DESCRIPTION

This project has objective to inform and to sensitize the population for the change behavior as for the prevention of diseases related with water, of vector transmission and other problems of health linked to CC. It will be to purpose to include component counseling of family planning. It will take place advocacy to the decision makers and the population in the sense of the need of construction of safer houses, as one way to minimize Climate Changes consequences. The activities will be organized with emphasis in the priority group-objective, through several communication ways.

Long term Potential Effects

Smaller number of deaths cases for water diseases and vector and poly-traumatized as a consequence of CC effects.

Institutional Framework

The project execution should be in charge of Care Service of Heath Ministry, in collaboration with Meteorology and the Social Communication Sector.

Objective

To contribute for change of people's behavior in STP, in way the best they adapt to possible factors of vulnerability face to CC.

Expected Results

- Formed and informed population for possible vulnerability factors;
- Formed and informed population relatively to personal and environmental hygiene;
- Formed and informed population relatively to linked healthy practices to prevention linked diseases to CC;
- Formed and informed population/decision makers and informed relatively to the need of safe houses construction of safe houses.

Beneficiaries

Students, teachers, political decision makers and target communities

Interventions and Execution strategies

- Accomplishment of CMC actions in the communities, through NGOs;
- Accomplishment CMC actions in schools, through NGOs;
- Broadcasting radio and television program for change

Risk behaviors;

To accomplish advocacy to the decision makers relatively the need of safe houses construction of safe in way to face to CC.

Risks

The costs of communication materials are increasing in a galloping way, what can come to reach unexpected levels, with the consequent decrease of performance and/or the cost preview in the project.

Evaluation and continuation

The project starts with an inquiry to obtain the base data and another in the year 4 of execution. A plan of periodic monitor of activities will be prepared, according to the annual plan of operational execution to be prepared. To begin the project execution, they will be prepared and validated the evaluation and monitor plans.

COST

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|---------------------------|
| <p><i>USD 150,000</i></p> |
|---------------------------|

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 4

FISHERIES SECTOR PROJECT 2

INTEGRATED PROJECT OF CONSTRUCTION AND INSTALLATION OF DEVICE FOR FISH CONCENTRATION (DFC) AND SIGNALING COASTAL ZONE

JUSTIFICATION

Assisting to the characteristics of our platforms, and the archipelago to be volcanic origin and of being very uneven our sea bottom, most of the time the fishing areas are quite distant of the origin beach.

On the other hand, our ZEE disposes of many migratory species. The tunas *Katsuwonus pelamis* ", " *Thunnus albacares* ", locally known by Zudê and Oledê, respectively, they are among other species that move in the coast inside of the 12 miles, in the high sea, in the 200 miles, or still, of north to the south of the continent. Such movement implicates dislocations of fishermen for distant areas, what doesn't rarely provoke accidents and/or sudden deaths, when been hit by fog, strong winds or even torrential rains, the one that associates the physical exhaustion of hours of navigation and the lack of visibility for orientation.

In this conjuncture, if the devices of fish concentration be installed near of the coast, a lot of species will be attracted and consequently an area of close fishing will be constituted and free from great risks for the fishermen, which would be protected of the effects of tempest lines (very strong winds) as well as fogs.

In this circumstance, to facilitate the navigation and to avoid other accidents it would be imperious that these DCP went pre-signaled, even to facilitate theirs destruction for ships of great load.

This project will benefit more than 15 communities, being 10 in S.Tomé and 5 in the Príncipe, and will have a cost of \$250.000 USD, with duration of 24 months. In the end of the project, the communities will be prepared for the appropriation acquired knowledge and the perennity of the actions accomplished by the project.

DESCRIPTION

General Objective

To put to the disposition of craft fishermen profitable and closer fishing areas of the respective beaches.

Specific Objects

- To increase the production and the productivity and to reduce the fishing effort;
- To reinforce the participation and promotion of the Self-construction of DFC for the communities' members;
- Improvement the physical conditions and the incomes of fishermen.

Long term potential effects

- Larger proximity to the coast of the fishing areas;
- Reduction of fishing hours and capture increase for the craft fishermen;
- Reduction in more than 50% the material losses during the fishing;
- Improvement in the family economy and the children's education.

Institutional framework

The project will be executed in partnership of Fishing sector with NGO MARAPA and it will count with the Coasta Guard's collaboration, being under the protection of the Ministry of Economy.

Risks

Attempt of vandalism and destruction of DFC for some fishermen or for foreign embarkations using nets or stands as fishing arts.

Evaluation and monitoring

| General Objective | Specific Objective | Expected Results | Activities | Indicators | | | Cost (USD) |
|--|--|--|--|---|------------------------------|---|----------------|
| | | | | Actual value | Source | Value to reach | |
| To put to the disposition of craft fishermen profitable and closer fishing areas of respective beaches | Reinforcement of participation and promote selfconstruction of DFC by the communities members. | -Engaged fishermen to build their own DFC; -DCP constructed and installed in all country. | Sensitization of craft fishermen; Selection of target group and training them; Identification of zones to install DFC; Acquisition of materials, construction and installation of DFC. | Doesn't exist | | 25 Groups. 20 Communities . 25 DFC. | 180,000 |
| | Increase the production and the productivity and reduction of fishing effort. | Increase the quantity and the quality of captured fishes by craft fishermen | Weekly revision of installed DFC; Team group experimental fishing; Improvement and implementation of DFC with some fishing techniques. | Doesn't exist | | 5 DFC Weekly. 10 / Months 3 -10 new techniques/ year. | 35,000 |
| | Improvement of physical conditions and the income of fishermen. | Stimulate socioeconomic activities; Increased the income by embarkation. | Strut ration of other modalities of commercialization of fish; Search of alternative markets in case of great production; Search of alternative markets in case of great production; Evaluation and monitor of actions. | A co-operative of fish commercialization; Dbs 4.166.666/ month | NGO MARAP A Fisheries sector | 3 new fisheries co-operatives; Dbs 8.000.000/ month. | 45,000 |
| Total | | | | | | | 250,000 |

COST

USD 250,000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 5

WATER AND ENERGY SECTORS PROJECT 1

CONSTRUCTION OF TWO SYSTEMS OF DRINKING WATER SUPPLY IN RURAL ZONES

Location: S.Tomé and Prince Two rural systems
Sector: Water

JUSTIFICATION

Great part of santomense population doesn't have drinking water their houses. Some people have systems of holes even, without any appropriate treatment.

Given the easiness of finding courses of water as well as sources, small systems can be built with due treatment, also using renewable energies. Those systems can be managed by the own community properly organized.

DESCRIPTION

General Objective

To supply STP population with drinking water.

Specific Objectives

- To increase the amount of population covering of drinking water;
- To reduce the incidence of the diseases related with water;
- To contribute for the reduction of the infant mortality tax.

Activities

- Construction of systems of water supply with treatment;
- Installation of systems of treatment of water;
- Training of personnel;
- Sensitization of population;
- Creation and attendance of local structures.

Contributions

International organizations, NGOs

Expect results

Systems of water supply functional;

Poverty Reduction in the country, with incidence in the improvement of the conditions of the women's life;

Reduction of diseases related with water.

IMPLEMENTATION

Institutional Framework

Project to be executed by EMAE, autarchies, private sector,

Risks and obstacles

Storms, institutional Obstacles.

Control

DRNE, ministry of Health,

Indicators

Affected population

COST

| |
|----------------------|
| <i>USD 1,000,000</i> |
|----------------------|

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 6

AGRICULTURE-LIVESTOCK AND FOREST SECTOR PROJECT 3

REINFORCEMENT AND DIVERSIFICATION OF AGRICULTURAL PRODUCTION

JUSTIFICATION

The largest embarrassment of natural order in the agricultural sector is above all the lack of water, especially in the communities of central and north areas. The absence of an overhead irrigation make production lowering more and more in the foregoing areas. To this nature embarrassment added the following:

- Lack of political powers;
- Lack of private initiative;
- Aging of the plantations of cocoa and coffee;
- Inflation of prices of agricultural products;
- An insufficient productive lands due to the size of country and to volcanic substratum;
- Very accidental relief.

Institutional framework

The project execution will be in charge of agriculture sector of Ministry of Economy.

The potentials intervening of project execution will be the Cabinet of Environment, NGOs, the Autarchies, the Associations of Small and Medium Farmers.

Risks and obstacles

- Extreme climate Factors (mainly linked to the temperature and the rainy);
- Attacks of curses and plants diseases;
- Erosion and soil with lixiviation;
- Floods;
- Lacks of a coherent agricultural politics;
- Lack of decision maker's engagement.

Evaluation and monitoring

The actions execution enrolled in the present program can be evaluated and following through the following indicators:

- Increase in 50% the agricultural production;
- Increase in 10% the number of existent farmers' associations;
- Improvement of country trade balance;
- Increase in 80% the replanted agricultural surface;
- Increase in 5% the rural tracks;
- Increase in 10% the amount of inputs and distributed vegetable material;
- Multiplication for 25% the structures of economic boxes and credit;
- Increase in 70% the number of beneficiaries supported by the programs;
- Increase in 50% the small farmers' incomes and the entrepreneurs.

COST

USD 1,650,000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 7

AGRICULTURE-LIVESTOCK AND FOREST SECTOR PROJECT 2

INTEGRATED PROJECT OF LIVESTOCK DEVELOPMENT (GOAT AND COWS) IN THE NORTH PART OF SÃO TOMÉ ISLAND

JUSTIFICATION

The conception and implementation of this project is justified because the lack of animal foods in the future, owed to the occurrence of the drought in the country, it can be very larger in the north area (Praia das Conchas, Plancas,...) than in other country areas, since is quite vulnerable (semi-arid climate). It can have cattle losses, just as it happened recently in Kenya. According to the races, the goat is one of the species that more resists to the drought, it can feed with pastures of smaller nutritional value and to rarely drink water, when compared with birds and swine; it can produce milk, cheese and local meat that are products in deficit in the country; also, produces, on the other hand, the fertilizer for land fertilization, reforestation and rehabilitation of the pasture area and production of renewable energies as the biogas.

DESCRIPTION

Potential effects to the long term

The fomentation and increase of goat milk production can contribute to reduce the deficit of this product; the appropriate and rational use of fertilizer as organic fertilizer for the land fertilization; the production of bio-gas will benefit the farmer.

Institutional framework

This project is pilot type and it should be implemented by Livestock sector, through the establishment of dynamic partnerships with Agriculture and Forest, and Environment sectors and the international, bilateral or multilateral technical cooperation, for the area.

After experimentation period, if the result is satisfactory, it can be popularized at the level of the averages local companies and family creators more economic and technically developed. For implementation, it should be encouraging financing at level of the private sector.

Risks and obstacles

The local urbanization is a great risk for the project implementation, because it leads to loss of areas that can be taken advantage for pasture. The lack of the creators' formation, the inadequate management and robbery can commit execution.

Evaluation and monitoring

The indicators of progress must be select (effect, impact) Of project implementation, to know: Productive Performance (liter of daily milk / annual reproductive / cost, kg cheese / year, kg fertilizes / year, biogas / kw/energy), indicators of births (no. childbirths / year...). Environmental indicators (animal load: no. of effectives/hectare of pastoral area, load..)

The evaluation and the continuation will be to do correct or appropriate adjustments to seek to improve the acting of project and to verify the defined objectives are or not to be reached her.

The project implementation demands however the application of the use of technologies and appropriate, rational practices appropriate, rational, integrated (biogas production, improvement of the forest ecosystem) and diversified (promotion of biodiversity) that seek to increase the production and simultaneously protect environment,

contributing namely to the reduction of pollution and the greenhouse effect, phenomenons that can be exacerbated with the intensification of the production system (implementation risks, aberration erosion for the introduction of other races).

COST

USD 900,000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 8

AGRICULTURE-LIVESTOCK AND FOREST SECTOR PROJECT 1

SUSTAINABLE MANAGEMENT OF FORESTALL RESOURCES

Location: All National Territory
Sector: Forests
Domain: Forest management
Type: Program of Forest Development

JUSTIFICATION

With the implementation of the politics of distribution of lands the small and medium farmers, associated to the demographic increase, started to exercise an enormous pressure on the woody resources, what will have as consequence the decrease of certain drastic species of wood of first quality. This can induce the degradation of the soils, the biodiversity loss, the degradation of the basins hydro-graphics, the progressive decrease of the great capacity of absorption of CO₂ that possess actually the solid ones forest santomenses, all this resulting in the deterioration of the life quality, above all of the rural For this reason, becomes vital that it is rotated in a maintainable way this natural system of stabilization of global climate. It is in this sense that the Government santomense decided to include in development program the sustainable management of the solid ones forest and the reinforcement of capacity of absorption of the country.

SãoTomé and Príncipe needs, for adaptation to the future climate conditions, a fort reinforcement of institutional capacities. The creation of a good base of data national is one of the great priorities, because it Will allow identifying the real needs of the country in terms of attendance.

DESCRIPTION

Long term potential effects

The long term potential effects of implementation program are the following ones:

- The Forests sector qualified to accomplish with their relative attributions to management and application of the politics of the State regarding the forest sector.
- The tax of illegal exploration of wood reduced to minimum;
- Restored the potential of trees producing commercial woods and guaranteed wood the ecological balance of the forest ecosystems;
- Participative and rational managed forest space;
- All the actions developed in the forest sector according to the National Plan of Forest Development;
- Readiness of information and indispensable data for technicians for management and handling the ecosystems and the most important species;
- Lands forest vocation defined and officially recognized;
- Insured and increased the high consuming capacity of CO₂ of the forests santomenses.

Institutional framework

- The Forests sector of Ministry of the Economy will be the responsible for the program execution.
- The intervening potentials in the execution of project will be the Cabinet of Environment, the Services of Intern Order, the Autarchies, the Associations of the Small and Medium Farmers, NGOs whose identifies actions with the program objectives and all economics sector operators.

Risks and obstacles

The circumstances and factors that can come to embarrass the implementation program will probably be the following ones:

- To rise enough funds for financing the program;
- Deficient recognition of the importance of program for specific sector development of economy and for the echo-climate balance;
- Possible apathy of economics operators in the sector to certain components of the program.
- Possible negligence of some institutions as potential intervention in the program execution;
- Weak acting of the national authorities in forest subjects.

Evaluation and monitor

The execution actions enrolled in the present program can be evaluated and following through the improvement verified in management of forest resources, translated by the following indicators:

- Forests sector executing the attributions that are assigned by the Forest Law;
- Significant " reduction of illegal trees cuts and less registration and less cases of illegal apprehensions for the reinforced services and contro of the forest activities;
- Exploration of the shadow forests and secondary in function of the established volumes for the detailed plan of forest exploration;
- Reforestation of the shadow forests and secondary, to evaluate through the number of plants introduced by unit area;
- Knowledge of the productivity of the forests and the real potential of existent wood, through reports of studies;
- A considerable number of forests managed actively for the bordering communities.

COST

USD 2,915,000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 9

INFRASTRUCTURE PROJECT 1

RELOCATION OF LOCAL COMMUNITIES

Localization: Santa Catarina, Malanza, Sundy, Praia Melão, Praia Pesqueira e Ribeira Afonso
Sector: Infra-structures and Public Works
Domain: Adaptation to Climate Change
Type: Community/ Social

JUSTIFICATION

For occasion of torrential rains and invasion of coast and beach at Santa Catarina e Malanza; consequently, it cause floods as the sea level rise. This community of fishermen, farmers that have to stop their activities, and put their family at risk of subsistence.

The poverty level of that local community requires extra interventions in terms of construction of infrastructures, since related with climate change As a case occur at Praia Pesqueira, the house was reached by a ray in March of 2005, this is a good example. Another case occurs at Praia Melão, where many canoes where destroyed, and others should be giving to the owners. At Ribeira Afonso, Praia Melão and Praia Colónia, many houses are in risk of floods and need urgent intervention.

A construction of new homes as well as the communities' displacement, to face the Climate Changes phenomenon is necessary.

DESCRIPTION

Objectives

To introduce measures to allow the local communities to face the phenomenon of climate changes, reducing the exposition of those populations to the marine floods and the rivers full.

Elaboration of notebooks of responsibilities, for:

Equipping the new chosen areas for the construction of new houses.

Activities

Construction and gives the new houses to the identified local communities' residents.

To supply electrical energy and water to the new homes.

Relocation of population at risk of flood.

Expected results

Vulnerable coastal populations put back in protected areas of the consequences of the climate phenomenon.

The communities' compensated of the harmful effects of the climate changes.

Execution

The execution controls of the project will be entrusted to Direcção de Obras Públicas e Urbanismo (D.O.P.U.) - Public Works and Urbanization Cabinet-, that will select the companies after acquisition of responsibility notebooks.

Institutional framework

The technicians of DOPU will elaborate the notebooks of responsibilities and they will drive the contest, release to the evaluation of proposals of the companies and award of the several works.

The national technical personnel's participation will be remunerated properly for execution and control of the project.

The identification of appropriate spaces for construction the group of the infrastructures will constitute task of the Geographical Services - Serviços Geográficos e Cadrastais.

The displacement of fishermen communities will need an appropriate sensitization campaign.

The new places should permit the main everyday activities of the communities' members.

Risks and obstacles

The choice of the models of the houses should have in consideration the lifestyle and the models previous of the communities.

Shortage of water and energy.

Reports presented from the inspectors teams of DOPU.

Monthly fishing campaigns

Indicators for Monitor Regularity in the communities' daily activities.

Duration

6 months

COST

USD 500,000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 10

FISHERIES SECTOR PROJECT 1

CONSTRUCTION OF INFRASTRUCTURES FOR PROTECTION OF VULNERABLE COMMUNITIES

JUSTIFICATION

The effects of coastal erosion, the floods and the invasion for the marine waves have been coming to echo in the reduction of the resources of fishermen and of their families, taking them impoverish every day that passes, the current advantages of this project would allow to overcome the situation. For the effect, the present project interferes in a complementary action to the vast program of Government for the protection of the coastal area of S.Tomé and Príncipe, in peculiar of the fishing affected communities. It is intended with it the gradual construction of harbors and protection barriers, as well as the recovery of the parks of canoes of the communities' of Pantufo, Malanza and Ribeira Afonso.

This action will obey previous multidisciplinary consultancy, to establish of execution plans and methods to proceed for the execution of the project. This will request implantation the specialists' technical support and it should be implemented in narrow collaboration with institutions connoted with the theme, among them the Ministry of Infrastructures, the local autarchies, etc.

DESCRIPTION

General Objective

The protection of coastal areas and target communities of S.Tomé and Príncipe.

Specific objective

- To involve the target groups in the preservation and treatment of the spaces destined to the disembarkation and parking of the canoes;
- To lock or to reduce the progress of degradation of the coast, through the completion and construction of protection barriers;
- To improve the parks of the embarkations of craft fishing and installation of harbors;
- To build bridges for fishing fleets in the degraded areas and to facilitate the permanence of the fishermen in their origin communities.

Long term potential effects

- Reduction the more than 50% of the number of that are dislodged of their origin beaches;
- Development of new economics activities in the communities of fishermen and, consequently, of standard of living of their members, elevating in more than 60% the respective income;
- Increase of the year of life of the canoes.

Institutional framework

The project is framed in the Government's program, particularly in the domain of the fishing and infrastructures, since the group objective is the craft fishermen.

It is treated, on the other hand, of a priority action that it seeks to reduce the poverty.

Risks

Lacks or financing inadequacy

Inadequate control in execution of norms for an effective work conclusion
 Evaluation and continuation

Evaluation and monitoring

| General Objective | Specific Objective | Expected Results | Activities | Indicators | | | Cost (USD) |
|--|---|---|---|---|---------|--|----------------|
| | | | | Actual value | Source | Value to reach | |
| To protect the coast target communities of São Tomé and Príncipe | 1- Develop participative preservation of canoes parks. | Sensitized 60% of communities leaders in the preservation process | -Sensitization - and organization of community -Selection of teams work - Training -Execution of parks management | 2 protected zones exist: one in Príncipe island and other in São Tomé | Inquiry | More 6 zones: 2 in Príncipe and 4 in São Tomé | 60 000 |
| | 2- Reduction of coastal erosion and degradation of embarkations parks | -More than 50% of target zone rehabilitate; -4 barriers constructed. | - Study and map of the zone; -Elaboration of rehabilitation plan and barriers to be constructed | Doesn't exist | | -6 parks rehabilitated; -3 barriers constructed | 130 000 |
| | 3- Improve anchors parks for craft fleets | Anchors constructed and ready to be used by craft fishermen | -Organization of target zones; -Elaboration and approbation of anchors plan; -Execution, monitor of actions; -Monitor final report | Doesn't exist | | More than 10 anchors at all country | 110 000 |
| TOTAL | | | | | | | 300 000 |

COST

| |
|---------------------------|
| <i>USD 300,000</i> |
|---------------------------|

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 11

WATER AND ENERGY SECTORS PROJECT 3

INTRODUCTION OF THE NEW TECHNOLOGIES FOR FIREWOOD USE AND TO MAKE CHARCOAL

Location: The whole country, focusing on rural area
Sector: Energy

JUSTIFICATION

Great part of santomense population uses firewood to cook. The firewood coal is in equal way quite used, due to price in comparison with the other types of energy. Like this, we have been verifying a very irrational consumption of firewood in the whole country, leading to a very inadequate use of forests. It is necessary that new technologies give the population others resources of energy.

DESCRIPTION

Objectives

Reduction of consumption of firewood and better use of the national forests.

Activities

- Construction of improved stoves;
- Introduction of new technologies for manufacture firewood coal;
- Sensitization of the population.

Contributions

Non-governmental organizations -NGOs.

Short term results

Introduction of new technologies;
Poverty reduction.

Expected results

- Reduction of the consumption of firewood;
- Reduction of the gases with greenhouse effect;
- Improvement of the standard of living of poorest populations.

IMPLEMENTATION

Institutional Framework:

Project to be executed by rural communities and NGOs

Risks and obstacles

Resistance to the new technologies; Institutional obstacle

Control

Natural Resources and Energy and Forest Sector

Indicators

Improved stoves

Actual situation

Non-existence of improved stoves.

Source

Group of consultants.

Value to reach

Intends to publicized the use of improved stoves and to introduce modern technologies for manufacture wood coal.

COST

USD 500,000

Contributions

State santomense, private sector and international organizations.

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 12

INFRASTRUCTURE PROJECT 3

ESTABLISHING THE AGRO- TOURIST COMPLEXES AT MONTE CAFÉ AND PORTO REAL

Location: Agricultural company Monte Café, in S.Tomé, and Porto Real, in the Príncipe.
Sector: Tourism and Agriculture
Domain: Economic
Type: Poverty Reduction

JUSTIFICATION

The presentation of a new tourist product, based on the agriculture-tourism, innovator and original, tends in view to contribute in the combat against the drought and poverty reduction in the rural area, promising to be a good choice of the National Adaptation Plan of Action (NAPA).

On the other hand, the project will help the Government in the revitalization, rehabilitation and transformation of the agricultural infrastructures and it will build hotel infrastructures in referred companies.

DESCRIPTION

Composition and activities

- To reduce the effects of the drought on the cultures;
- To provide to the tourists a different tourist package, with attraction inserted in the agrarian way and nature motivations out of the common.

Objectives

- To improve the contribution of the agricultural sectors and the tourism in GDP;
- To involve the local population in a new activity type;
- To create new workstations and to reduce the poverty in the rural area;
- To training and inform the population on the drought effects;
- To consider the implantation as a pilot experience, whose success will depend on the existence of futures compounds;
- To rehabilitate the facilities and to adapt them to the actual needs.

Activities

- To sensitize the population for the advantages of the new activity;
- To wake up in the population new energies and to obtain of her suggestions for new activities;
- To create a young nucleus, with creativity, capable to always present new attractions;
- Diversified tourist package and better;
- Contribution of the sectors in increased GDP;
- Larger affluence of tourists.

Expected results

Motivated population and involved.
Reduced of drought in those companies.

Execution

Tourism and Hostelry Sector, together with agricultural companies involved in the process, will proceed to the fittings and constructions judged necessary and constant of notebook of responsibilities to be elaborated under the coordination of two sectors.

Institutional Framework

Tourism and Hostelry will elaborate an appropriate tourist brochure and it will proceed to purpose internal popularization and in the exterior, in way to attract the potentials tourists.

DOPU will be called to grant the construction authorizations and to proceed the control, to define jointly The indifference of the populations can harm the process.

Risks and obstacles

The quality of the popularization can determine the success of the package.

Difficulties in obtaining financing will constitute a blockade to accomplishment.

Satisfied tourists with the quality of the presented services and motivated with the diversification and originality of the tourist offer.

Indicators to Monitor

Frequency of action of the local cultural groups and the increased area.

Drought locked in those tourist areas or agricultural companies.

Duration

9 months

COST

| |
|---------------------------|
| <p><i>USD 600,000</i></p> |
|---------------------------|

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 13

HEALTH SECTOR PROJECT 3

STP - CREATE AN EPIDEMIC DATABASE

Start date: 2007

Duration: 5 years

JUSTIFICATION

During the elaboration of this proposal, we had shortage of base data to illustrate some situations of epidemics and/or outbreaks of certain diseases that happened in country linked to Climate Change (CC). The lack of regular registration of climatologically data was verified, including the variability of these, linked data to catastrophes happened in country as well as inadequacy of systematic epidemic data from decades.

All these situations hinder the crossing and analysis in what respects to the meteorological data, of extreme importance to guide or to draw guidelines for the possible interventions in the area of health, in way they have smallest possible impact the consequences of CC.

To endow the country with these data is the goal of present project.

DESCRIPTION

It is the data base compilation of diseases of vectortransmission, of water origin and another linked to CC. It is proceeded to the subsequent registration and systematic processing data on such diseases and crossing them with the meteorological data as well as of to analyze and to do the possible forecasts. To create a system of epidemic alert that guard against the sanitary institutions so that it can organize to do face to eventual abnormal situations.

On the other hand, this system will supply elements for the monitor and evaluation of effects of some actions foreseen in the extent of other linked projects to CC and to constitute base reference for a more adaptable future planning.

Long term potential Effects

The Country will have a data base for the elaboration of strategies and forecast of epidemic situations that can occur of CC

Institutional Framework

The project execution should be in charge of Cares Health Sector of Ministry of Health, in narrow collaboration with Statistics sector.

Objective

To reinforce the system of epidemic surveillance of health, with emphasis in the diseases linked to CC problem.

Expected Results

Data base installed and functional

Beneficiary:

Ministry of Health. Indirectly will benefit the population.

Interventions Execution strategies

- Acquisition and installation of informatics equipment;
- Organization and definition of tasks for the involved technicians;

- Systematic collection and analysis of the epidemic data;
- Request of meteorological information to the competent institutions;
- Regular diffusion of obtained results to the interested institutions.

Risks

The costs of informatics materials are increasing in a galloping way, with the consequent decrease of the performance a/or covering foreseen in the project.

Evaluation and monitoring

The project will start with an inquiry to know the needs.

It will be prepared an evaluation monitor plan of works equally as well as the collects and data treatment.

COST

USD 22,000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 14

HEALTH SECTOR PROJECT 5

ELABORATION EMERGENCY OF STRATEGIC PLAN FOCUSING ON HEALTH

Start date: June 2007

Duration: 5 years

JUSTIFICATION

This project will face the impacts of the vulnerable factors linked to climate changes, necessary if it turns the elaboration of a strategic and emergency plan and emergency. For the elaboration of which intends in the beginning of the implementation of the necessary actions.

DESCRIPTION

This project includes two components: one of strategic planning and another of preparation of emergency plan. A team work is foreseen that will be devoted to the auscultation, compilation of information and preparation, in a first stage, of the emergency plan and, on the second stage, of the strategic plan in the domain of the health to work with linked problems to CC. It is a participative process that should be validated in each one of their stages.

Long term Potential Effects

The Country will have an elaborated strategic and emergency plan allowing to the technicians to face the negative effects in what concerns to the prevention as to the healing part, in case it happens in STP any catastrophe provoked by climate changes.

Institutional Framework

The execution of this project should be confident to Ministry of Health.

Objective

To reduce the negative impact of the effects that can occur of CC.

Expected Results

Emergency plan, Health sector, for preparation of action face to the consequences of the phenomenon of CC.
Strategic plan, health sector, for prevent/minimize, the current consequences of the phenomena of CC at long and medium terms.

Beneficiary

Ministry of Health. Indirectly will benefit the population.

Interventions / Execution strategies

- Creation of multidisciplinary team work;
- Collect and analysis of the information;
- Presentation and discussion of the plans;
- Validation of the plans;
- Mobilization of resources for implementation.

COST

USD 36.000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 16

HEALTH SECTOR PROJECT 1

TRAINING (DOCTORS, NURSES, VOLUNTEERS, HELPERS STUDENTS, ETC..) FOR EMERGENCY NEEDS AND STUDY VISITS

Start date: 2007

Duration: 5 years

JUSTIFICATION

Some catastrophe situations that can happen, the country technicians are not prepared to do face the negative consequences that can occur of a natural catastrophe. In order to minimize this linked phenomena's to CC, the present project is prepared to face the situation.

DESCRIPTION

There will be preparation of didactics material and several training (professionals of health and others) related to CC effects (extreme phenomena and others). the initial training of trainers will allow the subsequent training at several levels, being used for the effect and whenever possible, the human resources of the own institution. It will be prepared equally and trained the largest number of people possible, in order to help the massive intervention and in adverse situation, a catastrophe, always seeking the domain of the health and the articulation with the civil protection. In the project third year, the people's recycling will be accomplished previously formed.

In this regards, they are in equal way foreseen study visitsto countries with identical situation and more advanced preparation, with the objective of exchanging experiences in that domain.

Potential long term effects

Technicians of health, Agents and Volunteers formed inemergency intervention in cases of catastrophe, above all the ones that can occur of climate changes.

Institutional Framework

The project execution should be making by Cares Service from Health of Ministry, in collaboration with Statistics Sector.

Objective

To qualify about 500 men and women for interventions in combat to problems of health linked to CC, emphasis in emergency situations provoked by any catastrophe.

Expected Results

- 500 men and women formed:
- Technicians of health formed and ready for emergency;
- Volunteers formed ad ready for casual emergency;
- Civil protection formed and ready to helps in cases of natural catastrophes.

Beneficiary

Professionals of health, volunteers, elements of the civil protection.

Interventions / Execution strategies

- Accomplishment of training actions (theoretical and Practical);
- Use of some acquired equipments for the accomplishment of the clinical practice;

- Accomplishment of study visits to countries with larger experience or in catastrophe situation.

COST

USD 22,000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 17

WATER AND ENERGY SECTORS PROJECT 4

SUSTAINABLE MANAGEMENT OF WATER AND ENERGY

Location: The whole country.
Sector: Energy and Water.

JUSTIFICATION

The water, the electricity and the firewood are very badly managed in STP. Relatively to the water, a great waste exists, namely in the public fountains. As for the electricity, a lot of fraud exists. Regarding to firewood, that is the type of older energy, it is wasted. Therefore, the use of new technologies and the improvement of management will allow sustainable management of those resources.

DESCRIPTION

Objective

Reduction of wastes and better use of the available resources.

Activities

Collect and treatment of data; Technological innovations and sensitization of population.

Contributions

State santomense, NGOs, civil society, international organizations.

Short term results

Reduction of losses. Reduction of consumption of that fossil fuel in the electricity production.

Expected results

Profitability of country resources.

IMPLEMENTATION

Institutional Framework

Project to be managed by DRNE, EMAE and Forests sector.

Risks and obstacles:

Institutional obstacles.

Control

DRNE, Forests sector.

Indicators

Losses

Actual value

The existent losses, only in public systems of water supply and energy, is approximately 40%. as for firewood, it is ignored the value of the losses.

Source

EMAE.data

Value to reach

To reach values of 10-15% of total losses in the distribution of drinking water and energy.

COST

USD 300,000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 18

HEALTH SECTOR PROJECT 4

GEOGRAPHICAL INFORMATION SYSTEM (GIS) FOR THE ENVIRONMENTAL SURVEILLANCE AS REGARDS TO HEALTH

Start date: 2007

Duration: 5 years

JUSTIFICATION

The need of systematized data, to decide, to monitor and to evaluate conveniently is a reality. At this time, the endemic malaria, face to the impact of varied interventions in course and, particularly, the intra-domiciliary pulverization with insecticide, tends to pass to epidemic malaria. In this situation, the forecast of risks is crucial for minimize human lives losses. STP, through the present project, can benefit of other country experience, the one that would allow save stages.

DESCRIPTION

A service of GIS will be developed in health that will integrate the existent information's/ systems, using the available data base through the project MARA/OMS for control malaria in Africa. It will be installed a central structure and other outlying ones that will work with the indispensable support of computer sciences structures and the Web. The installation process and the national technicians' training will count with support of international experts. To Complement the actions, periodic visits of study during three of the five years of project. They will be compiled and introduced all of published information and no published concerning the vector diseases linked to CC, particularly the malaria, the way to foresee the space risk in each district or area. It will be equally systematize the risk level disease linked to CC. This project has related with the project of Creation of Data Epidemic Base.

Long Term Potential Effects

Larger capacity of STP to prepare for a potential epidemic, particularly of malaria, and consequently prevent/minimize human lives losses.

Institutional Framework

The project execution should be Cares Services (Epidemiologic Department) of Ministry of Health, in narrow and indispensable collaboration with the Endemic National Centre.

Objective

To develop the national system of environmental surveillance as regards to health, with emphasis in the malaria, the one that will allow foresee the risks, in agreement with to inhabited geographical areas for the populations.

Expected Results

Installed system and functional of geographical information (GIS) for the environmental surveillance as regards to health, particularly for evaluation of the risks, in agreement with the inhabited geographical areas for the populations.

Beneficiary

Ministry of Health. Indirectly will benefit the opulation.

Interventions / Execution strategies

- Installation of the service GIS;

- Training the country personnel's, with the support of international technical support and accomplished through study visits;
- Map of the space risks (geographical) of the malaria;
- Collect and analysis of information;
- Generalize the information to the concerning structures.
- Accomplishment study visits to countries with larger experience or in catastrophe situation.

Risks

It depends on the international partners' collaboration, particularly of Project MARA/OMS for malaria control in Africa, being verified the need of a larger precision in the space forecast, for the fact of STP to be disposal just of 1001km² of surface. However, this project will focus on control of the malaria in Africa, to minimize the risk.

Evaluation and continuation

As a project starting, there will be an initial rising with the support of the international technical, that it will be to delineate the compatible plan of monitor and evaluation during the five years of Project.

COST

USD 22,000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 19

WATER AND ENERGY SECTORS PROJECT 6

INTRODUCTION OF RENEWABLE ENERGIES (SOLAR, WIND AND BIOMASS)

Location: Rural places where supply of electric energy doesn't exist.

Sector: Energy.

JUSTIFICATION

STP has potentialities at the level of solar energy, eventually of the eolic and of the biomass. Because, to the moment, certainly for ignorance, the country has not been removing advantage of those types of energy. It's necessary to know about it that is the purpose of this project proposal.

DESCRIPTION

Objective

Effective utilization of renewable energy.

Activities

- Rising of the data;
- Creation of services;
- Installation of measure equipments;
- Personnel's formation at several levels;
- Projects elaboration and execution.

Contributions

State santomense, NGOs, international Organizations.

Short term results

Improvement of life of poorest populations.

Expected results

Use of national resources; Reduction of gases with Greenhouse effect; Rural development;

IMPLEMENTATION

Institutional Framework

The project will be in charge of Natural Resources and Energy and the Forests sectors.

Risks and obstacles:

Current institutional obstacles because it's a subject less Known and need a multidisciplinary involvement.

Control

DRNE.

Indicator 1

Training human resources

Actual value

Doesn't exist anymore training in this domain

Value to reach

Training human resources in different fields: solar, eolic and biomass energy

Indicator 2:

Installed equipments

Actual value

Only 8 small solar systems that supply the system of radio communication.

Source:

Consultants teams.

Value to reach

To introduce, specially, in the rural areas, systems of production of alternatives energy for school, hospital, small industry, etc..

COST

USD 500,000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 20

WATER AND ENERGY SECTORS PROJECT 5

CONSTRUCTION OF TWO HYDRO POWER-STATIONS.

Location: Bernardo and Claudino Faro
Sector: Energy

JUSTIFICATION

STP possess great potentialities for hydro-electricity. This type of energy contributes to the decrease of the emission of gases and it allows taking the electricity to the poorest.

DESCRIPTION

Objective

Electrification of the rural area.

Activities

- Study of the environmental impact;
- Electrification of the rural area, using clean energies;
- Construction of hydro-power-station using technologies relatively simple.

Contributions

International organizations, NGOs.

Short term results

Electrification of all STP, especially the rural area.

Expected results

Rationalization of the water resources;
Rural development;
Decrease of population exodus for the cities.

IMPLEMENTATION

Institutional Framework

Project to be executed by the communities, with the support of DRNE, EMAE and private.

Risks and obstacles

Institutional obstacles.

Control

Natural Resources and Energy sector.

Indicator n° 1

Hydro-power-station constructed

Actual value

They exist in the country only 4 power-stations in operation.

Source

Study of the Potential Hydro-electric of S.Tomé and Príncipe. INDES - RDSTP - May of 1996.

Value to reach

To build, in the rural areas, 2 power-station with potency among 50 KW to 300 KW.

Indicators nº2

Installed potency.

Actual value

1.500

Source

Study of the Potential Hydro-electric of S.Tomé and Príncipe. INDES - RDSTP - May of 1996.

Value to reach

10 000 Kw

COST

USD 500,000

SAO TOME E PRINCIPE

NAPA PRIORITY PROJECT NO. 21

WATER AND ENERGY SECTORS PROJECT 2

EVALUATION AND PLANNING THE HYDRO RESOURCES

Location: The whole country, Democratic Republic of S.Tomé and Príncipe
Sector: Water

JUSTIFICATION

STP has a high number of courses of water, having been formerly identified about 223 courses of water and 116 basins hydro-graphics, data that lack of an actualization in terms of the amount and quality, as could be verify in the inquiries. Relatively to the underground waters, measurements don't exist and they still didn't have any research rehearsals for a trustworthy evaluation of that resource. It is necessary that we know what we have to plan the use for the several needs, as they are the supply of drinking water, the supply of water for the agriculture, the livestock and the production of electrical energy, the use for industrial needs and of services rendered. Such knowledge also impose because of the effects of climate alterations in the process of water management in the country.

DESCRIPTION

Objectives

- To evaluate the readiness of the natural resources;
- To protect its quality;
- To plan its use;
- To develop national competences for the integrated management of the water resources;
- To institute a national system of management of water resources.

Activities

Collect of existent information. Acquisition and nstallation of hydro-metric equipments, reinforcement of the attendance services and improvement of management, elaboration of codes, training and up dated for human resources, creation of a database and improvement of the knowledge on impact of climate changes in the water resources

Contributions

State Santomense and international organizations

Expected results

- Structures that allow researches hydrological and hydro-geologic properly installed and in operation;
- Implementation of a national system of information and of monitor relatively to the water resources;
- Elaborate and implement legislation and regulation, with practical modalities of application very defined;
- Institutionalization of management system, with the purpose of putting in practice the national politics of the water resources.

Short term results

Management improvement of the water resources.

IMPLEMENTATION

Institutional Framework

Implementation of local and regional structures that make possible the application of the politics in the whole country.

Risks and obstacles

Disastrous climate Factors, institutional Obstacles.

Control

Supervision of DRNE.

Indicators

- Elaboration of the Legislation;
- Rining and specialization of personnel;
- Hydro-metric equipments installed.

COST

USD 400,000