

RWANDA: NAPA PROJECT PROFILE

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RWANDA

NAPA PRIORITY PROJECT 1

CONSERVATION AND PROTECTION OF LANDS AGAINST EROSION AND FLOODS AT DISTRICT LEVEL IN VULNERABLE REGIONS

LOCALISATION

Regions vulnerable to erosion, landslides and frequent floods

RATIONALE

This project for conservation and protection of lands and infrastructures against erosion, landslides and frequent floods due to climate change affecting Northern and Western districts of the country and their infrastructures comes to reinforce and support provincial efforts to act locally.

In the current context of low agricultural productivity and food insecurity this project helps at the rehabilitation and preservation of the forestry and agricultural potentials globally participate in the protection of basins and hence in the protection of water resources.

In these regions whose current environment is degraded, this project shall help reduce the vulnerability of the population and help to maintain and restore their mode of existence and shall hence reduce their migration in search for new lands for agriculture and animal husbandry.

INTEGRATION

This project fits well in the policies, strategies, programmes and envisaged actions as described below:

Policy / National Strategy	Objective, Programme / Current planning actions or implementation
Rwanda Vision 2020	Sustainable management of natural resources (lands, water, forests, ecosystems...)
	Increase of protection against erosion rate from 20% to 80 % in 2010 and 90% in 2020
Poverty reduction strategy	Promotion of public works at high intensity of manpower (HIMO)
National land policy	Land development
National agriculture policy	Restoration of soil fertility and conservation
National forestry policy	Reforestation of non agricultural spaces
National strategy and action plan to fight desertification	Anti erosive actions
	Integrated management of basins and fight against reduction of natural water reservoirs

DESCRIPTION

Global objectives

Reduce vulnerability of regions affected by torrential rains, erosion and floods.

Specific objectives

- Stabilise lands at different altitudes and riversides against erosion, landslides through appropriate techniques;
- Improve gradual restoration of vegetal cover adapted to these different altitudes;
- Protect high zones and infrastructures against floods damages through appropriate techniques.

Project components

1. Preparation and implementation of master plan for lands protection of agricultural zones, forestry and riversides threatened by erosion;
2. Preparation and implementation of master plan for the protection of productive lands and vulnerable infrastructures threatened by landslides and floods;
3. Follow up and evaluation.

Expected results

- Intervention measures for lands protection of agricultural and forestry zones as well as riversides vulnerable and threatened by erosion are identified, evaluated and implemented in high zones and average altitudes;
- Gradual restoration of vegetal cover is undergoing and visible;
- Intervention measures for the protection of high zones principal infrastructures of districts through appropriate techniques against damages due to floods are identified, evaluated and implemented;
- Departure of population from those zones in search of new lands is highly reduced;
- Lands loss (ha/year) by hydric erosion is reduced;
- Solid transport (in suspension matters - MES) of water flows is reduced.

Beneficiaries

- Agriculturalists, pastoralists, foresters.
- Managers of water and forests resources.
- Managers of infrastructures.
- Tourism sector.
- Employment sector (HIMO).

Implementing Agencies

- Project coordination.
- MINITERE, MININFRA.
- Districts, Provinces.

Follow-up and evaluation

- Institution: Project team, pilot and steering committees, beneficiaries and donors
- Frequency: Term and annual
- Type: Physical and financial
- Methods: Reports with performance indicators, seminars, field visits

Risks and barriers

1. Adequation between land policy dispositions, actual land occupancy and farming practices risk to be difficult to adopt and set up adequate intervention measures;
2. Current financial and human means are reduced for the preparation of master plans and their implementations;
3. The time allocated for works risks to be short.

Duration

5 years

Period

2007 – 2012

COST

USD 1,450,000

RWANDA

NAPA PRIORITY PROJECT N° 2

MASTERING HYDRO METEOROLOGICAL INFORMATION AND EARLY WARNING SYSTEMS FOR CONTROL OF CLIMATE CHANGE HAZARDS – INSTALLATION AND REHABILITATION OF HYDROLOGICAL AND METEOROLOGICAL STATIONS.

LOCALISATION

Whole country

RATIONALE

Currently, meteorological and hydrological stations that numbered over a hundred in 1989 have been reduced to only one operational station at the Kigali Airport due to effects of the 1994 genocide.

As described in point 2.1 “Current socio-economic and environmental context” of the NAPA, **the present low capacities of observation, description and evaluation** at the same time of hydro meteorological climate stimuli at national, regional, and local scales and their impacts on ecological, social and economic systems do not yet allow a production of data, and enough reliable information for concerned user sectors.

This important level of uncertainty and lack of available hydro meteorological data makes planning exercise much more difficult in Rwanda today. Lack of these data leads various sectoral services to incapacity of prevention, adaptation and resist to extreme phenomena. Reinforcement of surveillance, evaluation and early warning systems of drought and desertification remain insufficient.

In order to respond to these systematic insufficient observations, a project “*Mastering hydro meteorological information and early warning systems for control of climate change hazards – installation and rehabilitation of hydrological and meteorological stations*” is indispensable and urgent so as to identify climate change tendencies throughout the country. These tendencies will help Rwanda in the formulation of appropriate measures of adaptation to prolonged seasonal drought risks or floods due to climate change in different sectors of economic development and at the same time fulfill her commitments to the implementation of UNFCCC concerning the preparation of national communication on the basis of reliable hydro meteorological data and previsions.

INTEGRATION

This project is well integrated in the national policy of disaster and catastrophes management, which aims at the following actions:

- Management of natural catastrophes and evaluation of vulnerability risks by climate change;
- National plan for risks and catastrophes management;
- Development of information and early warning systems;
- Reinforcement of national competences in risks and catastrophes management;
- Integration of risks and catastrophes management in large national programme for poverty reduction, community development and environmental protection;
- Mobilization of resources, training and public awareness, and regular review of plans and programme.

Yet, the prevention and management of catastrophes due to climate change cannot be achieved unless there is reliable data collection from all regions of the country, of their analysis and hydro meteorological previsions.

DESCRIPTION

Objective

Regularly possess historical and current hydraulic and meteorological data useful in all socio-economic sectors including the prevention of disaster and catastrophes due to climate change.

Specific Objectives

- Possess appropriate and functional hydro meteorological services and station.
- Supply information on necessary hydro meteorological provisions to decision makers and different sectoral users so as to prepare in time the fight against dangers of extreme phenomena that may occur.

Components

1. Formulation and preparation of the installation and rehabilitation programme for meteorological and hydrological stations (IRPS-HM);
2. Institutional and organizational reinforcement for optimal implantation of IRPS-HM and its operations;
3. Preparation of invitation to tender documents;
4. Follow up installation and rehabilitation works;
5. Global project follow up and evaluation.

Expected results

Necessary data to the preparation of hydrological provisions and climate tendencies so as to prevent risks of drought and floods is regularly collected and representing the national situation on:

- At least 70 rehabilitated stations and 30 meteorological stations installed;
- 11 hydrological stations are rehabilitated (principal network) and 10 new hydrological stations are to be installed (secondary network).

Beneficiaries

Major beneficiaries are agricultural services, water resource management services, farmers, aeronautical services, research institutions, decision makers, transport and infrastructure services, early warning system and rapid intervention at vulnerable district level.

IMPLEMENTATION

Implementing Agencies

- National Hydro Meteorological Institute (under creation)
- Ministry of Lands, Environment, Forestry, Water and Mines (in charge of climate change project)
- Ministry of Infrastructure
- Ministry of Agriculture and Animal Resources
- Research institutions and agricultural projects
- Decentralized administrative structures (province and districts) for disaster and catastrophes management

Follow-up and evaluation

Institutions: Project coordination, pilot and steering committee, donors (LCDF, OMM, etc);

Frequency: Term and annual

Types: Physical and financial

Methods: Report on activity development with performance indicators;

Half way review seminars;

Field visits.

Risks and Barriers

1. Poor financial capacity, poor material and human resources for current hydrological and meteorological services to carry out the project follow up;
2. Lack of sectoral concertation during the preparation of the programme for installation and rehabilitation of hydro meteorological stations;
3. For hydrological stations: the large volume of related works linked to the restoration and consolidation of riversides can generate major costs;
4. Weak current surveillance means for repair and maintenance of stations.

Project Duration

4 years

Period

2007 – 2011

COST

USD 1,900,000

RWANDA

NAPA PRIORITY PROJECT N° 3

REALISATION OF ROUND IRRIGATION PERIMETERS FROM WATER FLOWS IN VULNERABLE REGIONS.

LOCALISATION

Vulnerable regions of East and South East

RATIONALE

Agro bio climatic regions of the East and South East of the country (Umutara, Kibungo, Bugesera, Mayaga) have been identified as vulnerable from many aspects particularly in relation to frequent droughts, which affect poor population. The realisation of irrigated perimeter project shall contribute to the improvement of adaptation capacity of agro-pastoralists to climate change through the set up of non-pluvial practices.

This project concerns some continuous water flows from which their waters may be exploited by simple methods to irrigate some plots favourable and productive in vulnerable regions of the East and South East.

The introduction of simple and sustainable methods of irrigation in gravity shall create some resilience among rural population in harmony with their environment. This shall help regroup the population in irrigation cooperatives from continuing water flows and encourage Imidugudu.

INTEGRATION

Policy Integration (Policy, strategy, ongoing programme)

Policy / National strategy	Objective, Programme / Ongoing planning action or implementation
Rwanda Vision 2020	Sustainable management of water resources
	Modernization of agriculture
Poverty reduction strategy	Promotion of public works of high manpower intensity (HIMO)
National land policy	Technological improvement of agricultural sector
National agriculture policy	Irrigation especially in arid zones
National strategy and action plan to fight desertification	Management of natural resources
National strategy and action plan for the conservation of biodiversity	Conservation and rational and sustainable utilisation of agro ecosystems and biodiversity

DESCRIPTION

Global Objective

Favour initiative of small farmers and pastoralists to practice agriculture and animal husbandry different from rain-fed practice in small-adapted plots for irrigation by gravity systems.

Specific Objectives

- Identify and improve the potentiality of micro-plots of productive lands downstream perpetual water flow
- Favour and introduce simple and resolving irrigation practices

Project Components

1. Carry out a pedological study of identified areas downstream favourable to irrigation in gravity systems
2. Feasibility study for three pilot plots to be irrigated using simple and sustainable methods has been done
3. Realisation of irrigation and development of the three plots (irrigation – drainage)
4. Follow up and evaluation of the project

Expected Results

- Identified areas are irrigated properly and are productive
- Beneficiary population are less vulnerable to climate change in those zones exposed to frequent droughts
- Grouped habitat and the creation of irrigation cooperatives are stimulated.

Beneficiaries

Farmers and pastoralists at the level areas located downstream perpetual rivers.

IMPLEMENTATION

Implementing Agencies

- Project coordination;
- MINITERE;
- MININFRA;
- Concerned districts;
- REMA.

Follow-up and Evaluation

Institution: Project coordination, pilot and steering committees, beneficiaries and donors

Frequency: Term and annual

Type: Physical and Financial

Methods: Report with performance indicators, seminars, field visit

Risks and Barriers

1. Attribution of favourable plots is complicated
2. Gravity irrigation through simple methods provokes important loss of water
3. Water flows in question gets reduced with time
4. Conflicts of utilisation appear with hydro electrical micro central projects

Project Duration

4 years

Period

2007-2011

COST

USD 750.000

RWANDA

NAPA PRIORITY PROJECT N° 4

ASSISTANCE TO DISTRICTS OF VULNERABLE REGIONS TO PLAN AND IMPLEMENT CONSERVATION MEASURES AND WATER STORAGE

LOCALISATION

Vulnerable regions of East, South East and some zones of the central plateau

RATIONALE

Agro bio climatic regions of the East, South East of the country and certain zones of the central plateau (Umutara, Kibungo, Bugesera, Mayaga, Gitarama) have been identified as vulnerable on many aspects especially in relation to events of frequent droughts affecting poor population.

This project aims at reinforcing district capacities to implement conservation measures and water storage to satisfy irrigation and animal husbandry needs. Districts of these regions shall help to find adequate solutions for rainwater conservation through valleys dams and other adequate systems.

Some zones are producers of superficial water flows and important run-off during rainy seasons and face regular and frequent floods. They could be subject to hydraulic and hydro geological study so as to direct water from those zones so as to stock it in convenient superficial sites or recharge the sheets and utilise them during dry seasons.

At the level of habitat, collecting pluvial water individually or collectively means could also be exploited and reduces the pressure of some rare water points for drinking water use. Through these practices, conflicts of drinking water use, irrigation and water for animals could be reduced in these zones.

INTEGRATION

This planning project is meant for implementation of measures of storage and water conservation in districts of vulnerable regions and responds to objectives and programmes of national policies and strategies. Details on links existing between programmes and this project are developed in the table below:

Policy / National strategy	Objective, Programme / Undertaken planning or for Implementation
Rwanda Vision 2020	Sustainable management of water management
	Modernisation of agriculture
Poverty reduction strategy	Promotion of public works at high manpower intensity (HIMO)
National land policy	Irrigation, especially in zones of aridity tendency
National agriculture policy	Restoration of fertility and conservation of soil
	Realization of valley dams
National strategy and action plan to fight desertification	Realisation of rain water storage for agro pastoral activities

DESCRIPTION

Global Objective

Increase the capacity of the population living in vulnerable regions of East, South East and some zones in central plateau to cope with climate change.

Specific Objectives

- Increase rain water storage capacity and floods in vulnerable districts for irrigation and animal husbandry during dry seasons;
- Reduce the pressure on water points meant for drinking water;
- Reduce conflicts of drinking water utilization in these regions.

Project Components

1. Carry out a hydraulic and hydro geologic study in the central part of Eastern province which gets frequent floods;
2. Analysis of storage of superficial water capacity or the recharge of sheets;
3. Choice and realization of water storage pilot plan;
4. Rehabilitation of existing water points for drinking water and put in place protection areas in East and South East regions;
5. Implementation of protection regulation of these water points.

Expected Results

- A greater proportion of superficial water flows in zones of frequent floods is retained and conveniently stored to satisfy irrigation and animal needs;
- Irrigation and animal husbandry cooperatives through stalling are created;
- Water points (wells and borings) essentially satisfy drinking water needs and are protected;
- Conflicts of safe water utilization are reduced.

Beneficiaries

Small farmers and pastoralists in dry vulnerable zones

IMPLEMENTATION

Implementing Agencies

- Project coordination;
- MINITERE;
- MININFRA;
- Districts;
- REMA.

Follow-up and Evaluation

Institution: Project coordination, pilot and steering committees, beneficiaries and donors.

Frequency: Term and annual.

Type: Physical and financial.

Methods: Reports with performance indicators, seminars, field visits.

Risks and Barriers

1. Hydrological and hydro geological study may not get concrete results and storage sites for surface water or sheets recharging may not exist;
2. Appropriate lands for irrigation are not near storage sites and transport and water pumping may be required and necessary;
3. Risks associated with water-borne transmitted diseases may increase due to bad utilisation of storage water;
4. Low coordination and intersectoral concertation capacity at district level may prolong details of its realisation.

Project Duration

4 years

Period

2007 - 2011

COST

USD 560.000

RWANDA

NAPA PRIORITY PROJECT N° 5

INCREASE THE CAPACITY OF ADAPTATION OF VILLAGES “IMIDUGUDU” IN VULNERABLE REGIONS THROUGH IMPROVEMENT OF DRINKING WATER AND SANITATION AND ALTERNATIVE ENERGY SERVICES AND PROMOTION OF NON-AGRICULTURAL ACTIVITIES

LOCALISATION

Vulnerable regions of the East, South East, North and West

RATIONALE

Prolonged and recurrent droughts on 2 or 3 consecutive years often hit the East and South Eastern regions. On the other hand, Northern and Western regions are particularly exposed to devastating erosion, considerable lands degradation and landslides. In both cases, resulting risks are impoverishment and people migrations in search of new lands for agriculture and animal husbandry, either in protected areas or marginal lands. These migrant populations already present a high level of social and economic vulnerability.

The current effort in the realization of regrouped habitat “Imidugudu” is supposed to answer a triple strategy: Reduce the scattering of rural habitat and pressure on productive lands, improve life conditions of the population through health services, education, access to drinking water, energy supply as well as reducing the pressure on forests and marginal lands.

This effort should be followed and supported by improving life conditions of Imidugudu villages particularly those already installed in vulnerable regions by increasing access to drinking water, sanitation and electricity supply using alternative energy. Furthermore, this effort shall stimulate the regrouping of the population in rural areas due to advantages they find.

To the contrary, in some villages around dense forests and swamps of Akagera national park, Birunga and Nyungwe currently subjected to strict measures of conservation and protection, some families are obliged to leave their agricultural exploitations without getting any other pieces of land due to the exiguity of agricultural lands on the entire territory.

In the integrated project framework, complementary dynamics shall be useful in the promotion of activities (agric-pastoral, crafts industry or HIMO) and non-agricultural employment so as to cater for domestic needs and lead to a gradual and balanced reconversion of activities.

INTEGRATION

This project perfectly finds its integration in national policies, strategies and programme as described below:

Policy / National strategy	Objective, Programme / Ongoing action or implementation
National land policy	National development and application of regrouped habitat policy
Rwanda Vision 2020	National land development and basic infrastructure development
	Sustainable water resources management
	Reduction of the percentage of the use wood energy in the national energy programme from 94% to 60% in 2010 and 50% in the year 2020

	Reduction of the percentage of the population involved in the primary sector of agriculture from 90% to less than 50% in the year 2020
Poverty reduction strategy	Development of socio-economic infrastructures (water, energy, fight against erosion) Promotion of activities (agro-pastoral, craft industry or HIMO)
National energy policy	Strategy to promote alternative energy

DESCRIPTION

Global objective

Stimulate regrouped rural habitat through improved basic services in Imidugudu villages in vulnerable zones and reduce exposure of rural population to climate change.

Specific objective

- Increase access to drinking water and waste water sanitation in Imidugudu villages of vulnerable zones;
- Supply electricity through utilization of alternative energies so as to reduce deforestation of vulnerable zones and the rate of wood energy utilization in the national energy programme;
- Reinforce professional capacities of the population and creation of agricultural and non agricultural employments;
- Creation of a favorable environment to non-agricultural investments.

Project components

- Identification of Imidugudu villages in zones vulnerable to climate change;
- Preparation of a drinking water supply, sanitation and alternative energy project in this villages;
- Preparation of an invitation to tender document for the execution of project in three Imidugudu villages pilot project;
- Follow up of activities in the three pilot villages;
- Training and sensitization of the population on the economic use of water and energy;
- Reinforcement of land preservation capacities, fight against erosion and of irrigation;
- Promotion of activities for support and professional training;
- Global follow up and evaluation of project..

Expected results

- Services of drinking water, sanitation and alternative energy are operational and well maintained in the three villages Imidugudu pilot project and the acquired experience kept;
- The village population increases due to the coming of new families;
- Participating people possess the needed professional competence in different sectors of agricultural and non agricultural and non agricultural activities and have employments;
- The increase of income of the beneficiaries is realised.

Beneficiaries

Population of villages Imidugudu from the East, South East, North and Western regions.

Implementing agencies

- Project coordination;
- MINITERE,
- MININFRA,

- ELECTROGAZ,
- Districts of vulnerable zones,
- RWARRI,
- MINICOM,
- CDF,
- REMA,
- Micro finance institutions.

Follow-up and evaluation

Institution: Project coordination, pilot and steering committees, concerned districts, beneficiaries and donors.

Frequency: Term and annual.

Type: Physical and Financial.

Methods: Reports with performance indicators, seminars, field visits.

Risks and barriers

- Weak capacity of coordination for concerned services in the optional choice of technical solutions and project planning for drinking water installations, sanitation and alternative energy for each village;
- Reception capacity and extension of each village is difficult to evaluate;
- Weak capacity of follow up during the execution of works at the level of the three pilot villages;
- At village level, keeping trained staff for the managing of installations difficult;
- Interest of weak people for the training and reinforcement of professional capacities;
- Difficult access to product market and sale of services.

Duration

4 years

Period

2007 – 2011

Cost

USD 1,650,000

RWANDA

NAPA PRIORITY PROJECT N° 6

INCREASE MODES OF FOOD DISTRIBUTION AND HEALTH SUPPORT TO FACE EXTREME CLIMATE PHENOMENA

LOCALISATION

Vulnerable regions of East, South East, North and West

RATIONALE

The implementation of projects meant to reduce vulnerability and increase the capacity of population adaptation to climate change (including climate variability and extremes) require some time to reach results, hence the need to start them and their emergency to start immediately.

However, uncertainty in the evolution of climate phenomena through their probability of occurrence such as droughts and floods added to the very precarious situation of these rural population vulnerable regions requires a strong attention for the organization of rescue and food products in particular during climate catastrophes.

This project is meant to support national and provincial efforts to increase the modes and means of food distribution and health support during these catastrophes. This project in itself should be considered as a complimentary component at the same time to activities of national risks and catastrophe management service and of the project to be eventually undertaken and which shall concern the implementation of information system and hydro-agro-meteorological alert and rapid intervention.

INTEGRATION

This project is part of the programme planned by risks and catastrophe management policy as well as in the poverty reduction strategy. The link existing between this project and this programme are detailed below:

Policy / National strategy	Objective, Programme / Undergoing actions of planning or implementation
Risks and catastrophe management policy	Risks and catastrophe management national plan
	Development of information and early warning systems
	Integrated management of basins and fight against reduction of natural water reservoirs
Poverty reduction strategy	Identification of major problems facing the community

DESCRIPTION

Global objective

Increase Rwanda's capacity to fight effects on the population from catastrophes due to climate change including climate variability and extremes.

Specific objectives

- Increase national, provincial and district organizational capacity to manage food and medical stocks and manage crisis due to famine for health support;
- Increase national, provincial and district capacity to define and implement best means and modes of food products and medicine distribution in the regions affected by climate catastrophes.

Project components

1. Analyze the current organizational management of food and medical stocks at national, provincial and district levels;
2. Analyze the quality and quantity of current food and medical stocks at different levels;
3. Formulation and implementation of recommendations for the choice of the best organizational means and modes of food products and medicines in the identified vulnerable regions.

Expected results

- Analysis of organizational capacity in the management of food and medical stocks is carried out and recommendations implemented up to the level of districts recognized as vulnerable;
- The implementation of recommendations also centers on communication means, transport and frigorific installations and stocking;
- Intervention plan is set up and regularly tested.

Beneficiaries

Poor and destitute population in vulnerable regions affected by climate catastrophes.

Implementing agencies

- Project coordination;
- MINICOM;
- MINITERE;
- MININFRA;
- Districts, Provinces;
- Decentralized administrative structures (provinces and districts) for risks and Catastrophe management;
- REMA.

Follow-up and evaluation

Institution: Project team, pilot and steering committee, donors

Frequency: Term and annual

Type: Physical and financial

Methods: Reports with performance indicators, seminars, field visits

Risks and barriers

1. The management of recommendations organizational means and management up to the level of vulnerable districts risks to be rejected among other priorities of the country;
2. Lack of financial and human means for installation and frigorific infrastructures and stocking;
3. Lack of means for acquisition and maintenance of communication and transport of food products and medicine.

Duration

2 years

Period

2007 - 2009

COST

USD 850,000

RWANDA

NAPA PRIORITY PROJECT N° 7

PREPARATION AND IMPLEMENTATION OF WOODY COMBUSTIBLE SUBSTITUTION NATIONAL STRATEGY TO COMBAT THE DEFORESTATION AND PUT A BRAKE ON EROSION DUE TO CLIMATE CHANGE

LOCALISATION

Whole country

JUSTIFICATION

In Rwanda, wood energy utilization goes up to 94% of urban and rural families and this rate keep growing due to lack of alternative energies. Apart from domestic needs, forests are overexploited so as to satisfy the growing demand of schools, prisons, industrial and unskilled establishments.

This phenomenon which has a negative impact on ecological equilibrium of the country in general and some terrestrial and forestry ecosystems (Bugesera, PNA, Gishwati, Nyungwe, Mukura, PNV) in particular and private forests has provoked such phenomena as erosion, reduction of lake levels, water flows, as well as their consequences on the production of hydro electrical energy.

Implementation of a project of woody combustible becomes indispensable to break the overexploitation of wood leading to economic and serious ecological crisis, consequence of deforestation and land degradation, which facilitate erosion and floods during torrential rains.

INTEGRATION

Policies, strategies and national programmes underway insist on the necessity to reduce wood energy consumption through utilization of other new and renewable energies in order to protect and conserve terrestrial ecosystems and fresh water against drought risks, erosion and floods. This project is part of energy sector development programmes, but also increases the adaptation capacity to climate change of the Rwandan population. The following table shows the integration of this project in different development programmes.

Policy / National strategy	Objective, Programme / Ongoing planning action or implementation
Rwanda Vision 2020	Sustainable natural resource management
	Reduction of the rate of wood energy utilization in national energy programme from 94% to 60% in 2010 and 50% in 2020
Poverty reduction strategy	Ensure a growing rate of energy consumption near 10% per year and rural electrification rate of 30% leading to 35% of the population in 2015.
	Promotion of public works at high manpower intensity (HIMO)
Energy national policy	Strategies to reduce wood and charcoal consumption
	Strategies to promote alternative energy resources in substitution of wood (solar, Aeolian, methane gas, peat, biogas...)
National strategy and action plan to fight desertification	Reafforestation and rehabilitation of damaged forestry spaces
National strategy and action plan for biodiversity conservation	-Protection and management of protected areas and terrestrial and humid ecosystems;

DESCRIPTION

Objective

The global objective is to reduce the pressure on forests done by rural and urban communities using wood energy.

Specific objectives

- Supply other sources of alternative energies instead of firewood and charcoal;
- Sensitize the public on the utilization of alternative energies to safeguard the forestry cover.

Components

1. Formulation of the strategy for woody combustible in Rwanda;
2. Development and set up of financial support to investment;
3. Reinforce national capacities in the management of the installation of alternative energy production;
4. Promotion of integrated approach of wood combustible substitution;
5. Achievement of four pilot projects for wood combustible substitution;
6. Preparation of application for tender document;
7. Follow up and evaluation of four pilot projects results;
8. Global project follow up and evaluation.

Expected results

- Vision 2020 objectives and those of PRSP I are being achieved;
- The number of families and establishments using alternative energies is growing;
- Economic losses due to lack of energy are reduced;
- Forestry areas are better protected and under gradual recovery;
- Erosion phenomena due to deforestation are reduced.

Beneficiaries

- Rural and urban households.
- Industrial establishments, schools, prisons
- Forest ecosystems

Implementing agencies

Ministries and parastatals: MINITERE, MININFRA, MININTER, ELECTROGAZ, REMA;

Research institutes: KIST, IRST,

Private sector: Individuals and professional associations,

Decentralized structures: Districts and Sectors.

Follow-up and evaluation

Institutions:

- Project coordination,
- Concertation and steering committee,
- Donors (LDCF, GEF, NGO, etc..).

Frequency: Monthly, term, semester and annual follow up.

Type: Physical and financial.

Methods: Performance test, field visit and seminars.

Risks and barriers

1. Low capacity of human and financial resources for the preparation and implementation of a sustainable strategy as early as possible;
2. Risks of focalising the effort only on hydroelectricity energy considering the availability and relative mastering of technology and not adapting mixed solutions;
3. Resistance to change of mentality.

Duration

4 years

Period

2007 – 2011

COST

USD 950,000