REPUBLIC OF BURUNDI



MINISTRY OF ENVIRONMENT,

AGRICULTURE AND LIVESTOCK THIRD NATIONAL COMMUNICATION ON CLIMATE CHANGE (TNCCC)/EXECUTIVE SUMMARY







BUJUMBURA, OCTOBER 2019



FOREWORD

Burundi as a Party to the United Nations Framework Convention on Climate Change (UNFCCC) is committed to honoring its commitments and complying with the requirements of the said Convention, including those set forth in Articles 4 and 12.

Indeed, a National Climate Change Policy and a Strategy was prepared in 2012, following the submission of its Second National Communication on Climate Change in 2010 and on the eve of its accession to the 2015 Paris Agreement through it the country presented his determined contributions at the national level, to demonstrate his willingness to support the global effort to reduce anthropogenic greenhouse gas emissions and strengthen the climate resilience of its citizens.

Towards the end of 2015, Burundi started the implementation of the project: "Third National Communication on Climate Change" with the technical and financial support of the Global Environment Facility through the United Nations Program for Environment, its Executing Agency. We solemnly express our feelings of deep gratitude. With this national communication, we have just updated the measures that are undertaken in the mitigation of anthropogenic emissions of greenhouse gases and adaptation measures as well as the national needs in clean technologies. We invite the Technical and Financial Partners to support them to reinforce the initiatives already undertaken to address the food insecurity and poverty that have been accentuated by the vagaries of climate.

We commend the tireless efforts of the Government of Burundi, which on the eve of COP 24 held in Katowice has again shown its willingness to contribute to the reduction of anthropogenic greenhouse gas emissions by, among other things, Reforestation program "EWE BURUNDI URAMBAYE.

The Government of Burundi strongly supports solidarity in the fight against climate change and pledges to continue the unconditional measures identified in the form of its Nationally Determined Contributions.

Ultimately, reducing the effects of climate change is an unavoidable challenge, that is why we encourage the international community to reinforce efforts already made to mitigate the anthropogenic greenhouse gas emissions that are at its core. Origins, and to support adaptation efforts for vulnerable countries, including our own.

Dr. Déo Guide RUREMA (PhD) Minister of Environment, Agriculture and Livestock

EXECUTIVE SUMMARY

I. NATIONALES CIRCUMSTANCES

Burundi is a country located on the borders of Central Africa and East Africa. Its surface covers 27,834km² of which 25,000 km² are terrestrial. It extends between 29.00 ° and 30.54 ° East and parallels 2.20 ° and 4.28 ° south. It is surrounded to the north by Rwanda, to the South-East by the United Republic of Tanzania and to the West by the Democratic Republic of Congo. With Gitega, the political capital and Bujumbura, the economic capital, Burundi is 2100 km from the Atlantic Ocean and 1100 km from the Indian Ocean.

Despite its modest size, Burundi is distinguished by its diversity of relief and its landscapes. The miopliocene tectonic revolution is indeed responsible for the strong regional opposition of the large collapse ditch where Lake Tanganyika and the plains of Imbo on one side (774 and 1000 m altitude) are lodged, Mumirwa fault escarpments (1000 to 2000 m) and meridian mountain ranges on the other side (2000 and 2670 m altitude).

The central plateaus, which cover most of the country, are located between 1350 and 2200 m altitude. Finally, the depressions of the East, the Kumoso located between 1200 and 1400 m and the great depression of Bugesera in the Northeast with altitudes between 1350 and 1550 m and extending to neighboring Rwanda. These morpho-structural predispositions already explain the fragility of the entire ecosystem in the face of extreme weather events related to ongoing climate change.

The distribution of large landforms accurately reflects that of the country's climatic diversity, resulting in an uneven distribution of rainfall in the area, despite the modest territorial dimensions of the country. Geographical areas also influence thermal variations. The higher regions experience on average colder temperatures than the lowlands.

In general, in Burundi, the monthly average maximum temperatures are highest at the end of the dry season (September), which varies from 25 ° C (Imbo region) to 15.7 ° C (Mugamba region) while averages Monthly minimum temperatures are lowest during the dry season (July) and range from 23.3 ° C (IMBO region) to 13.9 ° C (Mugamba region).

As for hydrology, Burundi has abundant water resources. It belongs to two major African watersheds namely, the Nile basin with an area of 13,800 km² and the Congo River basin with an area of 14,034 km². In most parts of Burundi, there is a dense network of permanent watercourses and many drainage axes.

Burundi is very rich in natural lakes including Lakes Tanganyika, Cohoha, Rweru and Rwihinda. Lake Tanganyika, located at 774m altitude and 677km long, is the second deepest lake (1470m) in the world, and the largest freshwater reservoir in Africa (18880km3). It is also a reservoir of biodiversity hence its classification as a heritage of humanity.

Regarding demography, the country had 11.2 million inhabitants in 2016; this size of the population makes Burundi one of the most densely populated African countries, with an overall density of 392 inhabitants / km^2 .

The Burundian economy is dominated by the primary sector, which accounts for nearly half of the Gross Domestic Product (GDP) and contributes nearly 80% of export earnings; the secondary sector (industry and crafts) represents only 17 to 18% of GDP while the tertiary

sector represents only about one third of GDP. The current structure of production, dominated by subsistence farming, makes the economy very vulnerable and fragile because it depends on the weather conditions.

On the side of the legal and institutional environment framework, Burundi has a national climate change policy whose overall objective is to promote climate resilient development; with structures enabling it to fulfill its mission of planning and coordinating environmental restoration activities.

II. THE NATIONAL INVENTORY OF GREEN HOUSE GAS

The third green house gas inventory covers the selected years 2005, 2010 and 2015.

Four categories, namely: (1) energy; (2) Industrial Processes and Product Use (PIUP); (3) Agriculture, Forestry and Other Land Uses (AFOLU) and (4) Wastes were considered for this inventory. It takes into account the direct gases namely (i) carbon dioxide (CO_2), (ii) methane (CH_4) and (iii) nitrous oxide (N_2O).

Trends in total emissions by sector

The figure below shows the quantity of aggregate emissions and removals from Burundi between 2005 and 2015. The aggregate emissions without removals were characterized by an increase, while the sink potential decreased. It can also be noted that the peak of emissions without absorptions was observed in 2010 with 2733.0 Gg. of ECO₂. The main cause of the increase in emissions is economic growth, deforestation and the conversion of forest land and grasslands to cultivated land during the 2005-2015 period. Nevertheless, an economic recession was observed in the years close to 2015 resulting in a gradual reduction in total emissions.



Trend in total GHG emissions by sector

With regard to the share of emissions by sector, the AFOLU sector (emissions only) increased from 48% in 2005 to 58% in 2010, then decreased to 45% in 2015. The energy sector is 43% in 2005 and 36% in 2010, then reached 45% in 2015. The waste sector is between 6 and 10%, while the PIUP accounts for less than 1% of total national emissions.



GHG emissions by sector

Trends in gas emissions

The trend in gas emissions indicates that the dominant GHG is CO_2 , ranging from -4 231 Gg of ECO_2 to -1 190 Gg of ECO_2 . The main contribution to CO_2 emissions / sequestration comes from the AFAT sector. Methane (CH₄) is the second gas emitted. Its quantity was 1,044.3 Gg of ECO_2 in 2005, 1,467.6 Gg of ECO_2 in 2010 and 1,178.6 Gg of ECO_2 in 2015. The main contributor to CH4 is AFAT-agriculture, Energy-Other sectors (use of biomass). As a result, the main emitting sector in Burundi is AFAT, followed by the Energy sector. The third gas emitted is N₂O and its main contributions come from waste (treatment and waste disposal) and energy-other sectors (biomass combustion).

The net CO_2 emissions are negative for the entire inventory period, which means that Burundi is a sink from 2005 to 2015. However, Burundi's sink potential has decreased by 40.15% from 2005 to 2010 and then 32.45% from 2010 to 2015. For CH₄, it increased by 40.5% from 2005 to 2010 and then reduced by 19.9% in 2015. Finally for N₂O, it increased by 32% from 2005 to 2010 then 2.6% from 2010 to 2015. It should be noted that the growth of aggregate emissions from 2005 to 2010 is also reflected in the growth of gas emissions by gas during the same



period. As explained above, this combines economic growth and deforestation.

Trends in gas emissions

III: GENERAL DESCRIPTION OF MEASURES TAKEN OR ENVISAGED TO APPLY THE CONVENTION

III.1. PROGRAMS CONTAINING MEASURES TO FACILITATE APPROPRIATE ADAPTATION TO CLIMATE CHANGE

General context of climate change in Burundi and the most vulnerable sectors

At present, climate change has already caused obvious and radical consequences for the socioeconomic life of the populations whose sectors most affected are agriculture, energy, water resources, forest ecosystems and landscapes, the health sector as well as the transport and infrastructure sector. Changing climate patterns such as increased rainfall and heat, as well as catastrophic situations, make Burundi more vulnerable and affect the country's development efforts. They produce such disastrous consequences that materialize in the fall of agricultural and animal production, loss of life, repeated floods and droughts, increased risk of disease, increased food insecurity, malnutrition, soil erosion, pollution of water resources, destruction of human habitat and public and private infrastructure etc.

Priority activities identified to address future climate change in different sectors

In the case of climate change, everyone tries to adapt and the search for solutions is mostly for the modification of practices to try to spread the risks. Given the various impacts of climate hazards, strategic adaptation measures have been proposed in various sectors as shown in the table below:

Strategic adaptation measures in different sectors

Sector	Sous-	Strategic adaptation measures
	secteur/domaine	
Agriculture,	Agriculture	1. Good practices for water and soil conservation in areas
Livestock		highly vulnerable to landslides and erosion
and Fisheries		2. Promote, encourage and support community
		adaptation strategies.
		3. Promotion of the use of organic fertilizer (green
		A Dromotion of concernation corriculture in cross of high
		4. Promotion of conservation agriculture in areas at high risk of drought:
		5 Research on Crops adapted to Climate Change.
		6. Production and availability of quality seeds in seed
		centers;
		7. Development and popularization of technological
		practices appropriate to climatic hazards;
		8. Develop a strategy that would allow the continuous
		supply of marsh water, particularly reforestation and
		contour tracing.
	Livestock	1. Training of breeders and field staff on environmentally
		friendly farming techniques;
		2. Promote the breeding of small ruminants;
		3. Dissemination of Law No1 / 21 of 4 October 2018 on
		"permanent stabling and prohibition of the straying of
		domestic animals and the backyard in Burundi", with a
		view to enabling effective membership;
		4. Develop a regionalization project for farms;
		5. Put in place incentive measures for breeders who want
		to practice modern breeding;
		6. Promote the production of livestock feeds;
	Fisheries	1. Improving the resilience of aquatic and terrestrial
		ecosystems to the impacts of climate change and climate
		variability;
		2. Improvement of knowledge bases and mechanisms for
		monitoring and information management in the fisheries
		sector;

		3. Improve the management of urban water drainage
		systems, watersheds and rivers to avoid pollution of Lake
		Tanganyika:
		4. Strengthen sustainable fisheries management
		mechanisms:
		5 Protection and appropriate management of critical
		habitats including lake huffer zones snawning grounds
		and pelagic areas including the establishment of
		protected areas:
		6 Quantitative study of the current status of biodiversity
		species in lakes to predict their evolution in the face of
		climate variability:
		7 Discominate or strongthon fighering logislation and
		7. Disseminate of strengthen fisheries registration and
Г		conventions and ensure that they are respected.
Energy	-	1. Development of new hydropower plants and
		rehabilitation of existing plants by including flood
		protection systems for these facilities and access roads,
		2. Development of biogas digesters in communities,
		3. Electrification of isolated sites by solar photovoltaic
		systems,
		4. Research on wind and geothermal potentials for the
		production of electrical energy,
		5 Support to produce briquettes from organic waste,
		6. Popularization of improved wood and charcoal
		fireplaces
		7. Capacity building of all stakeholders for good planning
		and monitoring of climate change adaptation projects.
Water	Policy	Integrate climate and environmental issues into water and
resources		sanitation improvement strategies
	Planning	1. Collaboratively establish territorial water and
		sanitation diagnostics that consider climate risks and
		water resources data
		2. Develop and implement risk assessment plans to be
		updated and describe the procedures to be followed in
		case of emergency for service managers, managers and
		users of water and sanitation services
		3. Provide accompanying measures: training of actors on
		the consideration of climate risk, user awareness on the
		promotion of sanitation and water saving
	Works	1. Carry out studies prior to new water and sanitation
		installations about climate requirements.
		2. Introduce incentives to professionals in the sector to
		encourage high-performance companies that take climate
		risks into account.
		3. Doubling the site monitoring systems of a quality
		control system integrating the issue of climate risk for
		the robustness of structures confronted with climatic
		hazards
	1	

Forest	Contribution to	. Valuing lignocellulosic waste for energy purposes
ecosystems	low carbon	2. Promote rational use and energy saving; particularly
and	development	through the dissemination and dissemination of
landscapes		improved stoves;
		3. Promote peat carbonization techniques to enable its
		use in alternative households to wood and charcoal;
		4. Support ongoing reforestation programs by focusing
		on watershed protection and the provision of fuel for the
		population;
		5. Change behaviors to improve energy efficiency and
		enhance the social value of natural ecosystems, such as
		forests, in effect adapting to the reality of climate change.
	Analysis of the	. Identify and disseminate forest species adapted to
	priority actions	climate change;
	of the national	2. Recover and reforest illegally occupied spaces;
	policy forester of	3. Arrange watersheds to control erosion;
	Burundi	4. Spread early and adapted silvicultural varieties to
		climate change;
		5. Promote research in forestry / agroforestry especially
		with respect to species adapted to different agro-
		ecological zones and climate change;
		6. Define the rights and obligations of stakeholders to
		manage forest resources rationally through participatory
		management,
		7. Develop and implement appropriate lumber standards
		for different uses to best value the wood resource and
		produce quality lumber;
		8. Popularize new wood processing techniques;
		9. Make wood by-products and waste products profitable
		for rational use of forest products;
		10. Promote techniques for making brick and tiles that
		consume little wood;
		11. Popularize and disseminate improved stoves;
		12. Discourage unsuitable uses of wood eg Promotion of
		the use of metal scaffolding instead of wooden poles in
		buildings
Climat,		1. Extension, rehabilitation and modernization of
Météorologie		meteorological, climatological and hydrological observation
et		stations
hydrologie		2. Capacity building in weather, climate and hydrological
		modeling,
		5. Capacity building to cover all aspects of agro-
Haalth		1 Develop a joint operational plan for anyironmental
Ticalui	-	health
		Develop a health and environment research program
		2. Develop a health and chylloninent research program
		onvironment including sectoral programs and
		monitoring and evaluation systems:
		monitoring and evaluation systems;

Transport and buildings	Transport	 4. Integrate health and environmental aspects into the poverty reduction strategy framework; 5. Identify global national indicators for monitoring health and environment programs; 6. Develop a specific legal framework for the link between health and the environment, the assessment of the health impact; 7. Establish the health impact study through appropriate tools in the context of environmental and social impact studies; 8. Provide specialized, material and financial human resources to environmental health research structures; 9. Allocate the substantial budget for health and the environment. 1. Protection of access channel and port basin;
	Transport	 Construction of a protective wall between the port basin, Construction of a protective wall between the port basin and the mouth of the Ntahangwa River; Dredging of the basin of the port of Bujumbura; Deflection of the Ntahangwa River back into its original bed at its mouth in Lake Tanganyika; Diversion of the gutter collecting the wastewater from the Buyenzi market and entering the port basin; Development of an annual road maintenance program
		 within the road office; 7. Allocate an enough budget for emergencies that may occur during the year; 8. Put in place effective measures to rehabilitate the existing network in order to adapt transport infrastructures to climate change.
	Buildings	Integration of adaptation measures and specific risks of each building into building projects.

III.2. PROGRAM CONTAINING MEASURES TO MITIGATE CLIMATE CHANGE

The mitigation analysis is specifically targeted at the most appropriate measures according to current and projected national circumstances up to the 2030s, the period covered by this study.

Mitigation measures are identified for each sector in the following lines Energy Sector.

i) Large-scale promotion of improved wood-fuel and charcoal stoves;

- ii) Carbonization of peat to make it usable by households;
- iii) Replacement of biomass boilers with electric boilers;

- iv) Construction of new hydroelectric plants;
- v) Increase in traffic lights that regulate road traffic because they decrease.

The heavy traffic is one of the causes of high fuel consumption.

Agriculture Sector

i) Reduce CH₄ emissions from enteric fermentation by improving animal feed by improving the genetic characteristics of animal reproduction for better animal production efficiency;
ii) Capturing CH₄ from manure management systems to produce energy (Biogas),
iii) Reduce CH₄ through changes in irrigated rice cultivation practices,

iv) Reduce N₂O emissions through improved application of urea fertilizers.Secteur

Land Use change and Forestry

i) activities that avoid the emission of carbon emissions, such as the conservation and protection of forests,

ii) activities that increase carbon stocks, namely reforestation and agroforestry.

iii) sustainable forest management

- through the substitution of this product by other fuels and
- improved equipment used for wood processing and energy production (improved wood and charcoal fireplaces).

Industrials Processes and Products uses Sector

i) Replace old technologies with clean technologies,

ii) Promotion of research and innovation initiatives in the industrial sectorSecteur

Waste Management

- (i) Recycling solid waste into usable products,
- (ii) Methanization of fermentable waste for biogas production,
- (iii) Composting of organic waste
- iv) Treatment and recovery of liquid waste in all urban centers

IV: OTHER RELEVANT INFORMATION TO THE ACHIEVEMENT OF CONVENTION OBJECTIVES

IV.1. STUDY ON THE IDENTIFICATION AND ASSESSMENT OF TECHNOLOGY NEEDS TO FACE UP TO CLIMATE CHANGE

The technology assessment presented in this report focuses on sectors that are considered vulnerable or impacting on climate change. These sectors are: Agriculture, Energy, Water

Resources, Infrastructure (including transport), Human Health, Forests and Woodlands and Waste Management.

Adaptation technologies for the agricultural sector

For effective adaptation to climate change in the agricultural sector, a range of adaptation tools, including behavior modification, management options and technologies, should be considered. This section provides examples of specific technology tools that can be used as part of an integrated adaptation approach, including: (i) increasing crop resilience, (ii) reducing water use and wasting water in agriculture, (iii) enhance adaptation to floods, and (iv) protect livestock from the impact of climate change.

Adaptation technologies for the water resources sector

The impact of climate change on water resources can be divided into three categories: too much water, not enough water and degraded quality. It is expected that most areas will experience extreme dry and wet conditions, forcing the country to cope with floods and droughts. Both extremes can lead to water stress.

Adaptation technologies to reduce the vulnerability of the water resources sector to the impact of climate change are proposed: i) rainwater harvesting, ii) aquifer recharge, iii) doubling reservoirs to reduce infiltration, iv) provide a forest cover to recharge aquifers, v) establish a weather monitoring network, vi) implement an active leak detection program, vii) desalination, viii) wastewater treatment at the point of use, (ix) remedy leaks and ruptures of walls, x) flush waterways and xi) remove flow obstructing materials.

Adaptation technologies for the energy sector

In Burundi the major impacts related to climate change in the energy sector are:

- the more frequent shutdown of some hydroelectric plants in service following the exceeding of the operating thresholds due to rainfall deficit and prolonged drought

- total siltation of some dams as a result of increased erosion due to increased precipitation leading to the total shutdown of some hydroelectric plants

- a larger deficit in the electricity sector leading to real electricity supply problems in the various socio-economic areas of the country;

- a widespread problem of lack of firewood and charcoal due to increased and combined pressure of human activity and increasing temperatures and a change in biomass growth rates.

Thus, the following technologies for adaptation to climate change in the energy sector are proposed: i) low wind speed wind turbines like those with a vertical axis, ii) decentralized production system, iii) photovoltaic systems at the community level and family, iv) Pico hydropower plants, v) improved carbonization furnaces, vi) improved stoves, biomass briquette press, vii) Intelligent control of peak load, viii) low consumption lamps, ix) Intelligent Control devices lighting, x) equipment with low energy consumption etc.

Adaptation technologies for the transport sector and infrastructure.

Extreme events (fires, floods, landslides, mudslides, etc.) and the debris that accompanies them can block roads and bridges permanently or temporarily. Erosion and landslides leading to failure of embankments and foundations will damage and disrupt infrastructure and services.

Transportation technologies for the following mitigation and adaptation to climate change are proposed: cement-based composite, intelligent transportation system, active motion damping system, meteorological network installation, smart transportation systems.

Adaptation technologies for the human health sector

The potential adverse health effects of climate change span a wide range and include more direct effects. These include deaths and injuries resulting from extreme events (eg floods, prolonged heat waves), changes in the extent and seasonality of climate-related health hazards (decreased safety and availability of water and air quality), incidence of water-borne and vector-borne diseases (eg malaria, cholera, etc.).

Human health technologies for climate change mitigation and adaptation include: (i) floodproof drinking water wells, (ii) sanitary flood sanitation, (iii) disease surveillance systems, (iv) sanitary latrines against flooding; (v) mosquito nets with durable insecticides; (vi) disease surveillance systems and rapid diagnostic tests.

Adaptation technologies for the forest resources sector

Climate change presents enormous challenges for forests and people.

Adaptation and mitigation are the two main responses to climate change, mitigation seeking to combat its causes and adaptation to reduce its impacts. In the forestry sector:

- Mitigation strategies include reducing emissions from deforestation; reducing emissions from forest degradation; strengthening the role of forests as carbon sinks; substitution of products, for example the use of wood instead of fossil fuels for energy production, or the use of forest products in place of materials whose manufacture would cause high greenhouse gas emissions;
- Adaptation includes interventions to reduce the vulnerability to climate change of forests and the populations that depend on them.

In general, impacts of climate change on silvicultural production and forest ecosystems vary according to the species in place, the ecological environment, and the responses to adaptation.

So to reduce these impacts, the following technologies are proposed:

i) natural regeneration, ii) assisted reconstitution of natural stands, iii) densification of biomass for the production of briquettes to replace charcoal and firewood, iv) establishment of a seed bank for agroforestry trees, v) planting alignment trees, vii) planting soil-fixing grasses, viii) plant breeding, ix) installing firebreaks

ii) Adaptation technologies for the waste management sector

In Burundi, the population does not have access to a garbage collection service and the service is irregular where it exists as in certain districts of the city of Bujumbura. The Buterere wastewater treatment plant is no longer functioning properly. There is also toxic gas emissions from the decomposition of hazardous, biomedical waste that is usually incinerated in incinerators in hospitals and health centers when they exist.

To address these impacts some solutions are proposed among others:

i) the development of controlled landfills in urban centers and recovery of methane, ii) the biomethanisation of biodegradable waste, iii) the lagooning of wastewater and iv) densification vegetable waste for the production of fuel briquettes.

IV.2. PROGRAM FOR PUBLIC AWARENESS, EDUCATION AND TRAINING ON CLIMATE CHANGE IN BURUNDI

The present program is intended for all Burundians, without any distinction so that he can be informed and know that climate change is a reality and do enormous damage in the world, especially in Africa and Burundi, but that the management of their harmful effects must be a challenge every day.

State of play of public awareness on climate change

According to the survey conducted with the public, the results showed that, on the whole, all the people surveyed are aware of the phenomenon of climate change and its consequences. The population notes the irregularity of the rains and the damage that affects the infrastructures. They indicate that they are very concerned about this phenomenon and that climate change should be a priority in Government projects.

Nevertheless, the interviews made it clear that the public's knowledge is very vague. In general, the public does not understand the causes, indicators and possible coping mechanisms. Groupes cibles de sensibilisation

The first priority is the mobilization of high-level support because the formulation of adequate legislation and its implementation depend on the involvement of the executive and the legislature. Then, it was mentioned the need to sensitize the decision makers of the key ministries, the parliamentarians, the senators but also the administrative ones at all the levels (national, provincial and communal), the private sector, the industrialists, the civil society, the confessions religious. The same goes for journalists who should also be trained in these topics to better address and convey them. It is essential to identify and set up platforms at the hill level to serve as a relay for local and everyday sensitization in rural communities.

Channels of communication and awareness

Sensitization at the highest level of the Government should go through an organization of regular meetings of policy makers and Ministers in sectors vulnerable to climate change, parliamentarians and senators to ensure a greater political weight to these issues but also by

mobilization financial and technical partners both internally and externally for adaptation to climate change.

The staff from different ministries and administrators at different levels should be sensitized including universities, NGOs by promoting high-level scientific and technical research to compare results, approaches and analyzes of options for complementarities and synergies of sectors.

To reach the widest audience, radio remains the most efficient vector in Burundi. They are numerous and widely listened to. Information can also go through strong social and local structures.

PUBLIC AWARENESS PROGRAM ON THE PROBLEMATIC OF CLIMATE CHANGE

The overall objective is to contribute to the reduction of anthropogenic greenhouse gas emissions and the adaptation of Burundian society to the effects of climate change as well as the reduction of damage and losses caused by extreme climate events through improved, systematic information, education and communication.

The main activities of this program will be contained in the following four components:

i) Awareness raising and education on GHG mitigation and climate change adaptation whose main activities are to organize training, sensitization and information sessions for ministry and administrative officials at all levels; mass awareness sessions for the population, organize training sessions for journalists to raise awareness and transmit key messages through the various media

ii) Development of political, legal and institutional bases to promote regular information and awareness-raising meetings for policy-makers, parliamentarians, senators and ministers from sectors vulnerable to climate change so that they know that climate change is a problem common and transversal Development of a Climate-Resilient and Low-Carbon Development Strategy;

iii) Strengthen the capacity of the Ministry of Education to include subject content in education programs

(iv) Capacity building of actors by developing a fund mobilization strategy to operationalize action plans;

V. DIFFICULTIES AND GAPS AND RESOURCES, FINANCIAL, TECHNICAL MEANS AND CAPCITY NEED TO REMEDY TO CLIMTE CHANGE

Technical, institutional, financial and educational gaps and constraints were identified for the different sectors including agriculture, climate and meteorology, energy, transport and infrastructure, water resources, waste management, health and forestry. Measures and solutions to deal with them have been proposed by sectoral experts.