REPUBLIC OF RWANDA

MINISTRY OF FINANCE AND ECONOMIC PLANNING

RWANDA VISION 2020

Table of Contents

FOREWORD	Error! Bookmark not defined.
1. Introduction	3
2. Current situation and the challenges	4
2.1. Historical Perspective	
2.2. Major challenges facing Rwanda today	5
3. Major Objectives of Vision 2020	9
3.1. The Short Term: Promotion of macroeconomic stability	and wealth creation to9
reduce aid dependency	
3.2. The Medium Term: Transforming from an agrarian to a	knowledge-based economy 9
3.3. Long Term: Creating a productive middle class and fos	tering entrepreneurship 11
4. The Pillars of Vision 2020	11
4.1. Good Governance and a Capable State	12
4.2. Human Resource Development and a Knowledge-based	d economy13
4.3. Private Sector-led Development	
4.4. Infrastructure Development	
4.5. Productive high value and market oriented agriculture	
4.6. Regional and International Integration	
5. Cross-cutting issues of VISION 2020	
5.1. Gender Equality	
5.2. Natural Resources and the environment	
5.3. Science, Technology and ICT	
6. The Road Map	21
6.1. Rwanda's Planning Process and the realisation of VISI	ON 202021
6.2. Financing of Vision 2020: Macroeconomic assumption	s and projections23
Conclusion	25
Annexes	25
Annex 1: Key indicators of the Rwandan Vision 2020	25
Annex 2: The role of the State in Rwanda in a historical per	

1. Introduction

How do Rwandans envisage their future? What kind of society do they want to become? How can they construct a united and inclusive Rwandan identity? What are the transformations needed to emerge from a deeply unsatisfactory social and economic situation? These are the main questions Rwanda Vision 2020 addresses.

This Vision is a result of a national consultative process that took place in Village Urugwiro in 1998-99. There was broad consensus on the necessity for Rwandans to clearly define the future of the country. This process provided the basis upon which this Vision was developed.

Today, Rwanda finds itself at a crossroads, moving from the humanitarian assistance phase associated with the 1994 genocide into one of sustainable development. Since 1994, the Government of Rwanda has stabilised the political situation, whilst putting the economy back on track with considerable assistance from development partners. However, the challenges remain daunting.

The Rwandan population is expected to double to around 16 million by 2020¹. Given that the major aspiration of Vision 2020 is to transform Rwanda's economy into a middle income country (per capita income of about 900 USD per year, from 290 USD today), this will require an annual growth rate of at least 7%. This will not be achieved unless we transform from a subsistence agriculture economy to a knowledge-based society, with high levels of savings and private investment, thereby reducing the country's dependence on external aid.

Economic growth, alone, is not sufficient to bring about the necessary rise in the standard of living of the population. To vanquish hunger and poverty, growth must be Pro-Poor, giving all Rwandan's the chance to gain from the new economic opportunities. Vision 2020 aspires for Rwanda to become a modern, strong and united nation, proud of its fundamental values, politically stable and without discrimination amongst its citizens.

In view of the aspirations and challenges outlined above, it is important to develop a new Vision for Rwanda and translate it into an achievable program based on the following pillars:

- * Reconstruction of the nation and its social capital anchored on good governance, underpinned by a capable state;
- ❖ Transformation of agriculture into a productive, high value, market oriented sector, with forward linkages to other sectors;
- ❖ Development of an efficient private sector spearheaded by competitiveness and entrepreneurship;

¹ Unless family planning improves, in which case the population is projected to reach 13 million.

- ❖ Comprehensive human resources development, encompassing education, health, and ICT skills. aimed at public sector, private sector and civil society. To be integrated with demographic, health and gender issues;
- ❖ Infrastructural development, entailing improved transport links, energy and water supplies and ICT networks;
- Promotion of regional economic integration and cooperation.

At all times, these will be affected by a number of cross-cutting issues including, gender equality and sustainable environmental and natural resource management

Vision 2020 is to be achieved in a spirit of social cohesion and equity, underpinned by a capable state. Rwanda's ongoing development will have, at its core, the Nation's principal asset - its people.

2. Current situation and the challenges

2.1. Historical Perspective

Although Rwanda has made significant progress from the devastated nation that emerged from the 1994 genocide, it still remains a severely under-developed, agrarian based economy with around 60% of the population living under the poverty line. In order to fully understand the present situation, it is important to appreciate Rwanda in a historical perspective.

Since the 11th century, Rwanda existed as a nation founded on a common history of its people, shared values, a single language and culture, extending well beyond the current boarders of the country. The unity of the Rwandan nation was also based on the clan groups and common rites with no discrimination based on ethnicity.

The colonial power, based on an ideology of racial superiority and in collaboration with some religious organisations, exploited the subtle social differences and institutionalized discrimination. These actions distorted the harmonious social structure, creating a false ethnic division with disastrous consequences.

The recent history of Rwanda can be summarised by the following key events:

- The 1884 Berlin Conference placed the Kingdom of Rwanda under German rule as part of Deutsch Ostafrica (German East Africa);
- During the subsequent partition of Africa in 1910, a big part of Rwanda was annexed to neighbouring countries. This caused the loss of 1/3 of the Rwandan internal market and a large part of its natural resources;
- Following the 1st World War and the defeat of Germany, Rwanda was given to Belgium as a trustee territory under the authority of the League of Nations;

- After the 2nd World War, the League of Nations became the United Nations and Rwanda became a UN Mandate trust territory, under Belgian administration, until 1962;
- During the colonial period, the Belgian administration applied contemporary Darwinian theories, thereby deeply dividing the people of Rwanda. This unfortunate development can be seen as laying the foundations for periodic mass killings even after independence was gained in 1962, culminating in the 1994 genocide.
- The RPF put an end to the 1994 genocide and thereafter formed the Government of National Unity (GNU) and the Transitional National Assembly (TNA) in coalition with other political parties to define a new future for Rwanda through democratic institutions.

This historical legacy goes some way to explain the challenges that Rwanda faces today. These will be examined individually in the following section.

2.2. Major challenges facing Rwanda today

The economy of Rwanda is currently characterized by internal (budget deficit) and external (Balance of Payments) macroeconomic disequilibria, alongside low savings and investment rates and high unemployment and underemployment (table 1). In addition, Rwanda's exports, composed mainly of tea and coffee – whose prices are subject to fluctuations on the international market – have not been able to cover export needs.

Table 1: Rwanda's Macro-economic indicators from 1995 to 2001

Indicators		1995	1996	1997	1998	1999	2000	2001	ASS (1999)
Inflation Rate (%)	CPI	48.2	13.3	11.7	6.8	-2.4	3.9	3.4	
	GDP deflator	50.4	10.2	15.6	2.0	-5.2	1.3	0.7	12
Savings less investments	(In % of GDP)	-19.0	-19.2	-17.4	-17	-16.7	-16.3	-16.4	-2.6
	(in 10 RwF)	-64.4	-81.9	-97.1	-105.6	-107.7	-115.0	-123.7	
Internal absorption (% of GDP)		122.8	120.3	124.6	120.4	118.7	113.7	-113.9	102.6
Global fiscal deficit (% of GDP)	Grant excluded	-13.7	-13.2	-9.2	-8.3	-9.7	-8.9	-9.5	-5.6
	Grant included	-2.4	-5.8	-2.5	-30	-3.8	0.1	-1.1	-4.5
Current deficit balance (% of GDP)		-20.5	-19.2	-17.3	-16.8	-17.1	-16.9	-16.3	
		4.5	-0.2	-3.2	-9.4	-7.6	-5.1	6.5	
GDP per capita (USD)							227	263	470
Debt servicing (% of exports)			20	14	17	26	25		10

Source: 2001 Rwanda development indicators: Africa database 2001.

This overall situation can be best explained by reviewing a number of individual challenges.

(i) Diminishing agricultural productivity and arable land distribution

Agriculture, accounts for more than 90% of the labour force, yet remains unproductive and largely on a subsistence level. Distribution of arable land now stands at one hectare for every 9 Rwandans and is diminishing due to high birth rates. The obvious consequence is that a substantial number of rural families who subsist on agriculture own less than 1 hectare, which is too small to earn a living. Available pastureland is 350,000 hectares most of which is of poor quality. This results in intense exploitation of the land, with no simultaneous application of corrective measures, most notably through fertilizer use. The net result has been a decline in land productivity and massive environmental degradation, contributing to rampant malnutrition amongst the Rwandan population. Rwandans can no longer subsist on land and ways and means need to be devised to move the economy into the secondary and tertiary sectors.

(ii) Natural Barriers to trade

Rwanda is land-locked, with long distances from ocean ports; a factor that raises transportation costs for both exports and imports. The country lacks a link to regional railway networks, which means most trade is conducted by road. Poor road quality creates high transportation costs leading to inflated prices of domestically manufactured products, as raw materials used for manufacturing need to be imported. These natural barriers to trade hinder industrial and other forms of development.

(iii) Narrow economic base

It is clear that increases in the productivity and exports of Coffee and Tea alone, will not be sufficient to build the Rwandan economy. Therefore efforts need to be made to expand the economic base and especially exports. Although there are small pockets of various high value minerals in Rwanda, there is no single natural resource of sufficient quantity that will kick-start the economy. For several decades, the mining sector was largely based on the extraction and export of Cassiterite from several mines and numerous surface operations. Deposits of other minerals such as Wolfram, Colombo-tantalite and Gold do exist, but total reserves are not known. The country does have estimated reserves of 60 billion cubic metres of natural gas in Lake Kivu, but this sector has lacked investments both for effective exploration and profitable exploitation.

(iv) Weak institutional capacity

Governance, including the management of public resources remains insufficient due to lack of sound institutions and competent personnel. Rather than develop sound systems themselves, past governments continued to rely on foreign technical assistance that was both costly, largely indifferent to domestic long term needs and failed to build local capacities. Although great progress has been made on this front, it still represents a significant hindrance to effective governance.

(v) Low level of human resource development

The severe shortage of professional personnel constitutes an obstacle to the development of all sectors. Lack of adequately trained people in agriculture and animal husbandry hampers modernisation of this sector, whilst a shortage technicians and competent managers severely constrains the expansion of the secondary and tertiary sectors. Illiteracy is rampant both amongst the urban and the rural population with 48% of Rwandans unable to read and write. Addressing this situation is made more difficult by the prevalence of major diseases, such as malaria and HIV/AIDS, which together with malnutrition reduce the productivity of the population.

(vi) Public debt

Rwanda's public debt constitutes a major obstacle to its economic development. Public debt stands at about US\$ 1.5 billion and is larger than current national GDP of US \$ 1.3 billion (2000 data). About 75% of public debt is owed to the World Bank and other multilateral lenders. This has been accumulating at a rate higher than the country's capacity to generate wealth to service the debt. A return to sustainable level of debt, where existing debt can be serviced comfortably without jeopardising the country's growth prospects, is envisaged for 2015. However, continued debt relief and grant financing by donors will still be needed, at least in the medium term and a significant rise in export earnings is vital to avoid returning to the current situation.

(vii) Social and Economic Consequences of the Genocide

The 1994 Genocide devastated the Rwandan economy as well as its population. GDP was halved in a single year, eighty percent of the population was plunged into poverty and vast tracts of land and livestock were destroyed. The genocide also exacerbated a number of development constraints, which existed before 1994. The already poorly developed productive infrastructure was completely destroyed and the nation was robbed of a generation of trained teachers, doctors, public servants and private entrepreneurs. Thus, the consequences of genocide have devastated Rwanda's social, political and economic fabric. Without successful reconciliation, political stability and security, private investors will not develop confidence in the country.

3. Major Objectives of Vision 2020

The VISION seeks to fundamentally transform Rwanda into a middle-income country by the year 2020. This will require achieving annual per capita income of US\$ 900 (US\$ 290 today), a poverty rate of 30% (64% today) and an average life expectance of 55 years (49 years today). Appendix 1 shows, in more detail, the transformation we hope to achieve.

Taking into account Rwanda's extremely scarce resources, prioritisation and sequencing will be crucial. This section shows prioritisation in the short, medium and long run. It acknowledges the interdependencies and complementarities between different policies and developments. For example, industry and service sector development cannot be realised without a competitive stock of skills, infrastructure and financial services.

In the short run the key issues of stabilizing the economy, reducing aid dependency and developing exports will be vital. The following section will discuss these in detail.

3.1. The Short Term: Promotion of macroeconomic stability and wealth creation to reduce aid dependency

Rwanda will put into place macroeconomic stabilization policies that are conducive for private sector development. This, together with expanding the domestic resource base and increasing exports, is the only way to lessen aid dependence.

The imbalances highlighted in Table1 have been a source of macroeconomic instability and have led to an unsustainable debt burden and dependency on foreign aid. To reduce this dependency it will be crucial to develop effective strategies to expand the tax base, attract foreign investors and address the debt situation. Also, diversification and the development of non-traditional exports need to be promoted, as well as addressing the anti-export bias in public policies.

Envisaged policies, some of which are already being formulated and implemented include trade liberalisation, privatisation, tax reforms, competitive exchange rates and market driven interest rates. Government will desist from providing services that the private sector can deliver more efficiently and competitively. With these policies in place the economy will be able to take up the challenge of transforming from an agrarian subsistence economy into a sophisticated knowledge-based society.

3.2. The Medium Term: Transforming from an agrarian to a knowledge-based economy

Even if Rwanda's agriculture is transformed into a high value/high productivity sector, it will not, on its own, become a satisfactory engine of growth. There has to be an exit strategy from reliance on agriculture into secondary and tertiary sectors. The issue, however, is not simply one of a strategy based on agriculture, industry or services, but rather, identifying Rwanda's

comparative advantage and concentrating strategies towards it. For instance there is a plentiful supply of cheap labour, a large multi-lingual population, a strategic location as the gateway between East and Central Africa as well as its small size, making it easy to build infrastructure (resources permitting). The industries established would need to address basic needs, for which there is a readily available market, as these products can satisfy local demand and even move towards export.

As for services, in the medium to long term, this sector will become the most important engine of Rwanda's economy. Since Rwanda is landlocked and has limited natural resources, the Government should take a lead role in designing policies geared towards encouraging investment in services, to acquire and maintain a competitive edge in the region.

It should be noted that the elaboration of such policies will not be sufficient to achieve a knowledge based economy. Major infrastructural investment will be required in the areas of energy, water, telecommunication and transport to reduce costs, whilst increasing their quality and reliability. Improvements in education and health standards will be crucial for providing an efficient and productive workforce.

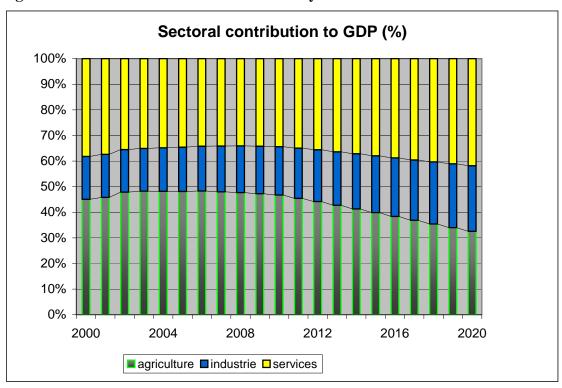


Figure 1: Transformation of economic activity 2000-2020

3.3. Long Term: Creating a productive middle class and fostering entrepreneurship

The developmental process and capital formation cannot – in the long run – be achieved by the state or by donor funds alone. While both of these must contribute, the backbone of the process should be a middle class of Rwandan entrepreneurs. Productive entrepreneurship must be fostered to perform its traditional role of creating wealth, employment and vital innovations through opportunities for profit.

Stimulating the private sector, particularly with regard to the promotion of exports and competitiveness is not achievable without broadening and deepening the financial sector such as banking, insurance and the application of information technology. Provision of high quality educational services in sciences and technology will be necessary for consolidating development gains made in the short and medium term. Rwanda should also aim to find a niche market in the region, for example, becoming a telecommunications hub.

It is envisaged that with these reforms, Rwanda will transform from a subsistence agricultural economy to a knowledge-based society, with a vibrant class of entrepreneurs. The following section outlines the major stages of this transition.

4. The Pillars of Vision 2020

Whereas section three focussed more on the timing of activities, we will now identify the key aspects of VISION 2020 that have been discussed so far and address them individually. The aspirations of VISION 2020 will be realised around six "Pillars" and will be interwoven with three cross-cutting issues. This section will examine the Pillars, whilst section 5 will address the cross-cutting issues.

Table 3: Pillars of the VISION 2020 and its crosscutting areas

Pillars of the VISION 2020	Cross-cutting areas of VISION 2020
Good governance and a capable state	Gender equality
2. Human resource development and a knowledge	2. Protection of environment and
based economy	sustainable natural resource
3. A private sector-led economy	management
4. Infrastructure development	3. Science and technology, including ICT
5. Productive and Market Oriented Agriculture	
6. Regional and International Economic integration.	

4.1. Good Governance and a Capable State

Rwanda will become a modern, united and prosperous nation founded on the positive values of its culture. The nation will be open to the world, including its own Diaspora. Rwandans will be a people, sharing the same vision for the future and ready to contribute to social cohesion, equity and equality of opportunity.

The country is committed to being a capable state, characterised by the rule of law that supports and protects all its citizens without discrimination. The state is dedicated to the rights, unity and well-being of its people and will ensure the consolidation of the nation and its security.

Social and economic transformation is as much about states as markets. In effect, the role of the state is indispensable for wealth-creation and development. However, currently in Rwanda the low capacity of the state hinders this transformation. This situation calls for rapid development and deployment of public sector skilled human resources, who grasp the needs of other sectors – in particular the private sector – and can translate them into sound policies and strategies. In short, we need a small but effective, flexible public sector that can lay the foundations for Rwanda to be competitive in the modern international economy.

The State will ensure good governance, which can be understood as accountability, transparency and efficiency in deploying scarce resources. But it also means a State respectful of democratic structures and processes and committed to the rule of law and the protection human rights in particular.

People's participation at the grassroots level will be promoted through the decentralisation process, whereby local communities will be empowered in the decision making process, enabling them to address the issues, which affect them, the most.

A reconstruction of the nation of Rwanda and its social capital, anchored on good governance and an effective and capable state is considered a minimal condition to stimulate a harmonious development of other pillars².

² It cannot be stressed enough however that the 6 pillars and 3 cross-cutting areas have to be developed in tandem – indeed that was the main message of section 3.

4.2. Human Resource Development and a Knowledge-based economy

Apart from raising the general welfare of the population, improvements in education and health services can be used to build a productive and efficient workforce. This will be essential for Rwanda to become a sophisticated knowledge-based economy.

(i) Education

Rwanda is committed to reaching "Universal Education for All", which is one of the most important Millennium Development Goals. However, there is clearly a need to educate and train people at all levels: primary, secondary and tertiary, with special attention paid to the quality of education. This has been declining, due in a large part to low calibre teaching staff and therefore, the government will organise intensive teacher training programs.

Major emphasis will be placed on vocational and technical training in the fields of technology, engineering and management. This will be targeted at secondary school leavers, as well as various sections of society (with particular emphasis on youth and women). To encourage skills development, micro-credit schemes will be promoted specifically to extend finance to self-employed young technicians. Special emphasis will be given to innovative, small-scale entrepreneurs. To promote efficiency and continuous upgrading of skills, appropriate programs will be launched in the national institutions aimed at on-the-job-training, in-service training and distant learning.

Rwanda lags behind in professional training, with the most acute deficiency being apparent in the fields of applied and natural sciences and ICT. Although the country will continue to rely on imported technology from advanced countries, well-trained, specialised nationals will be essential to run as well as maintain technological systems ranging from medicine and agriculture to industry and telecommunications.

Absolutely crucial for achieving VISION 2020 will be to properly link education policies, with sector development and labour policies. It is crucial to understand that the investment needed for the development of the secondary and tertiary sectors, will not be effective without a skilled labour force.

(ii) Health and population

The Rwandan population is estimated at 8.2 million people with one of the highest population densities in Africa (340 inhabitants/km) and a high population growth rate (3.2% per annum). This demographic trend is one of the major causes of the depletion of natural resources and the subsequent poverty and hunger. The demographic dynamic is the result of a number of factors: (1) the high fertility rate of women, itself linked to (2) a pro-birth culture (3) low child

death rates and (4) the relatively low general mortality rate, due to a climate and topography unfavourable to diseases.

Rwanda considers its population as its fundamental resource and banks on it for its future development. With the success of current and future population policies, Rwanda projects to reduce the fertility rate within 20 years from 6.5 to 4.5 children and the population growth rate to 2.2%.

Table 4: Population projection (in 1000's) by major age brackets.

Age bracket	1997	2002	2007	2012	2017	2020
00-04	1177	1456	1529	1519	1694	1889
05-09	1121	1110	1384	1462	1630	1818
10-14	611	1102	1093	1365	1522	1697
15-19	474	1052	1082	1077	1201	1338
20-24	445	865	1027	1059	1181	1317
25-64	2044	2340	2951	3693	4117	4590
65+	248	238	234	245	272	305
Total	6120	8163	9299	10420	11617	12954

Source: - 3rd General Census of Population and Housing, 2002; - ONAPO, SEDS, 1996

Although the state of health of the Rwandan population has improved significantly over recent years, it is still inadequate. The prevalence of malaria (40% of hospital consultations in health centers) and of HIV-AIDS (11.2% of the total population) is high and constitutes a major economic problem.

The objectives to be attained in the field of health within the next 20 years include: a reduction in the infant mortality rate from 107 to 50 per 1000 and the maternal mortality rate from 1070 to 200 per 100.000. Life expectancy will have increased from 49 to 55 years, malaria and other potential epidemic diseases will have been controlled and the AIDS prevalence will have been reduced from 11.2% to 8%.

To achieve these improvements, health policies must be targeted at the poorest members of the population to improve access to healthcare, the quality of that healthcare and to reduce its cost. Family planning is crucial for reducing both birth rates and the prevalence of HIV/AIDS. Envisaged and current population policies should go hand in hand with strategies to overcome problems in the health sector. Indeed, poverty remains a major cause of poor health and vice versa.

4.3. Private Sector-led Development.

For Rwanda's development the emergence of a viable private sector that can take over as the principle growth engine of the economy, is absolutely key. Not only will such a development be conducive for economic growth, but it will also ensure the emergence of a vibrant middle class of entrepreneurs, which will help develop and embed the principles of democracy. Although foreign direct investment will be encouraged, a local-based business class remains a crucial component of development.

The Government of Rwanda will not be involved in providing services and products that can be delivered more efficiently by the private sector. It is, therefore, committed towards a comprehensive privatisation policy that will help reduce costs and prices and widen consumer choice. The State will only act as a catalyst; ensuring that infrastructure, human resources and legal frameworks are geared towards stimulating economic activity and private investment.

The development of the financial sector will be crucial, as it is currently underdeveloped and poorly adapted to the economic needs of the country. The financial sector must be able to provide the necessary capital for private sector development. The government will also promote local business through the introduction of export processing zones, in which foreign operators could have local partners.

The development of Rwanda's private sector will not limit itself to the formal sector. The informal sector will also be developed, in such area as retail trade, repair workshops and garages, handicrafts and metal works.

Particular attention will be paid to the labour market. During the 40 years of colonialism, the Rwandan economy has been able to generate only 200,000 jobs outside agriculture. If family planning services improve, the population is still projected to reach 13 million by 2020, of which 7 million people will be earning a living on off-farm activities. Therefore, it will be necessary to create 1,4 million jobs outside agriculture. Given the trends of the Rwandan economy over the past decades, this is clearly a huge challenge, in which the private sector needs to play a pivotal role.

4.4. Infrastructure Development

The rehabilitation and development of infrastructure is a crucial aspect in lowering the costs of doing business in Rwanda, which will attract domestic and foreign investment.

(i) Land use management

Land use management is a fundamental tool in development. As Rwanda is characterized by acute land shortage, a land use plan is needed to ensure its optimal utilization in urban and

rural development. Currently, Rwanda's land resources are utilized in an inefficient and unsustainable manner, which limits the profitability of land and infrastructure, whilst aggravating the national capacity to retain rainwater. To address this, a modern land law providing security of tenure and freedom of exchange will be instituted.

Rwanda will pursue a harmonious policy of grouped settlements based on economic activity. Rural settlements organized into active development centres will be equipped with basic infrastructure and services. This system of settlement will serve as an entry point into the development of non-agricultural income generating activities. Land will be reorganized and consolidated so as to create adequate space for modern and viable farming.

(ii) Urban development

Rwanda is characterized by low but accelerating urbanization. This has happened in a rapid and uncoordinated manner, meaning that social services and employment opportunities are lagging behind. From now until 2010, each town will have regularly updated urban master plans and specific land management plans. The country will develop basic infrastructure in urban centres and in other development poles, enabling the decongestion of agricultural zones. The proportion of those living in towns and cities will increase from 12% to 30%, (from 5% in 1995). The income differential between towns and rural areas should remain within reasonable proportions, due to the decentralization of economic activities to the country.

(iii) Transport

Rwanda is landlocked with high transport costs to the ocean ports of Kenyan and Tanzania. Therefore, it is imperative to develop, alternative lower costs of transport to the sea, notably through a regional rail extension to Isaka, Tanzania and an extension to the Ugandan Railway system. A combined rail and water system that can link to the Banguela Railway will be considered. Furthermore, a second airport capable of serving, as a regional hub for the great lakes region will be developed. For the internal market, Rwanda has a reliable and safe transport network of feeder roads, however, this will continue to be extended and improved.

(iv) Communication & ICT

Telecommunication coverage in Rwanda is very low. The communication policy will take advantage of the small size of the country, its high population density and the single local language to attract investors so that the sector can be liberalised. By 2020, Rwanda projects to have internet access at all administrative levels, for all secondary schools and for a large number of primary schools. Telephone services will be widespread in rural areas and efficiency of public services will have increased through the application of e-government principles.

(v) Energy

Inadequate and expensive electricity supply constitutes a limiting factor to development. Wood is the source of energy for 99 % of the population, which leads to massive deforestation and soil destruction. Imported petroleum products consume more than 40% of foreign exchange. Rwanda will therefore increase energy production and diversify into alternative energy sources.

To achieve this, Rwanda has considerable hydroelectric potential, in addition to large deposits of renewable methane gas in Lake Kivu, estimated at 60 billion cubic metres. In rural areas direct solar energy or photovoltaic energy can be used, whilst up to 1/3 of 155 million tons of peat deposit is currently exploitable. Rwanda projects that by 2020, at least 35 % of the population will be connected to electricity (up from the current 6%) and the consumption of wood will decrease from the current 94% to 50% of national energy consumption.

(vi) Water

Only 52% of Rwandans have access to clean water. Daily consumption of water is estimated at 8.15 litres per person in rural areas, far below the international standard of 20 litres. The country is endowed with reserves that could provide enough water for both consumption and agricultural purposes. These include substantial rainfall (between 900 & 1800 mm per year) and the abundance of lakes, streams and watercourses. Furthermore, there is an abundant supply of high altitude water in the western part of the country, which may be used in providing water by gravity to the southern and southeastern regions of the country that face water shortages.

In order to achieve the goals for water set out in VISION 2020, the country will have to increase the rate of access to potable water by 2.5 percentage points, annually from the current rate of 52% so that the whole of the Rwandan population will have access to drinkable water by 2020.

(vii) Waste management

Access to drainage and sewage disposal services is 85% of the population, whilst 64% of latrines do not meet the required hygienic standards. Consumption of dirty and unsafe water is at the origin of various water-borne diseases. The unplanned and disorganized construction of towns without a suitable drainage system exacerbates sanitary problems. Sewerage and rainwater can destroy public roads or stagnate, creating ideal breeding grounds for both human and animal diseases. Since most houses are situated on the summit and on the slopes of hills, water sources are in constant danger of pollution by domestic sewerage and other human activities carried by the stream of water. The environmental impact of deficient waste management is barely taken into account by human settlements and industrial installations

By 2020, the rural and urban areas are to have sufficient sewerage and disposal systems. Each town is to be endowed with an adequate unit for treating and compressing solid wastes for disposal. Households will have mastered and be practicing measures of hygiene and waste disposal.

4.5. Productive high value and market oriented agriculture

Rwanda's economic policies since independence are said to have targeted agriculture as the main engine of economic growth. However, the agricultural sector has continued to perform poorly, with consistently declining productivity. It will be necessary to formulate and implement realistic developmental policies that move beyond past delusions of viable subsistence-based agriculture.

Contrary to conventional wisdom, the most important issue retarding Rwanda's agricultural development is not land size, but low productivity associated with traditional peasant-based subsistence farming. Agricultural policy orientation will have to be overhauled, promoting intensification so as to increase productivity and achieve growth rates of 4.5 % to 5% per year. This can only happen through the production of high value crops and modern livestock management. The vision aims to replace subsistence farming by a fully monetized, commercial agricultural sector by 2020.

The key policy areas that need urgent attention to bring about this transformation include the following:

- ❖ Institutional and legal reforms to ensure security of land ownership;
- Development of a market in land assets;
- Extensive research and extension services;
- Investment in rural infrastructures;
- Use of high yielding varieties and intensive input use, especially fertilisers;
- Promotion of agro-based manufacturing;
- Environmental control measures to halt the decline in soil fertility;
- * Rural Financing Schemes and Markets

As mentioned above, a viable economic strategy for Rwanda requires diversification away from the agricultural sector. Agriculture will have to be developed to permit spin-off effects, beginning with the development of agro-businesses that can then provide spill-overs into other sectors of the economy. Furthermore, it can be very much expected that the above priority policy areas will not only be supportive to agriculture, but will also benefit the whole of the rural economy.

4.6. Regional and International Integration

Rwanda considers regional economic integration as one of the crucial elements of achieving Vision 2020. To this end, it will be necessary to pursue an open, liberal trade regime, minimizing barriers to trade as well as implementing policies to encourage foreign direct investment. Furthermore, the need to adopt policies to promote competitive enterprises, exports and entrepreneurship rather than protecting failing industries cannot be overemphasised. Economic zones for ICT based production will be crucial for enhancing competitiveness of Rwandan firms.

The vision of accessing larger regional markets will be accompanied through a program of investing in infrastructure to promote Rwanda as a communication and telecommunication hub. Furthermore, taking advantage of Rwanda's comparative strategic position should be exploited in terms of entrepot functions in trade and commerce. Export processing zones, coupled with the industrial reforms noted above, will enable the country to consolidate its niche in services and communication sectors and take advantage of growing regional cooperation in the Great Lakes/ Eastern African Region.

5. Cross-cutting issues of VISION 2020

Next to the 6 pillars, there are the three cross-cutting areas of gender, natural resources & environment and culture, science & technology. These issues will not only be affected by the economic transformation but will also play an important role in achieving the VISION's development goals.

5.1. Gender Equality

Women make up 53% of the population and participate in subsistence agriculture more than men. They usually feed and provide care for the children and ensure their fundamental education. But until recently, girls were the minority in secondary schools, women had little access to the opportunities available to men and they were poorly represented in decision-making positions.

In order to achieve gender equality and equity, Rwanda will continuously update and adapt its laws on gender. It will support education for all, eradicate all forms of discrimination, fight against poverty and practice a positive discrimination policy in favour of women. Gender will be integrated as a cross-cutting issue in all development policies and strategies.

5.2. Natural Resources and the environment

The major problem in the field of environmental protection in Rwanda is the imbalance between the population and the natural resources (land, water, flora and fauna and nonrenewable resources, which have been degrading for decades). This degradation is observed through massive deforestation, the depletion of bio-diversity, erosion and land slides, pollution of waterways and the degradation of fragile ecosystems, such as swamps and wetlands.

The average population growth of 3% per annum during the 80's to 90's period was faster than that of agricultural production, estimated at 2.2%. This has led to the occupation of more and more marginal areas and to the rapid and continuous soil degradation of the fragile ecosystems of the country. These environmental problems are exacerbated by the poor location of industries and the direct evacuation of their waste, without any treatment, into waterways and lakes. In order to ensure sustainable development, Rwanda will implement adequate land and water management techniques, coupled with a sound biodiversity policy.

5.3. Science, Technology and ICT

Rwandans are rightly proud of their cultural roots and the government will ensure that it takes advantage of this heritage in all facets of the development process. However, for this development process to be a success, Rwanda must embrace the future and exploit innovations in Science and technology to complement its cultural strengths.

In Rwanda, the rate of adoption and integration of science and technology in socio-economic life is very low and the shortage of technically qualified professionals is visible at all levels. From now until 2020, Rwanda projects to have adequate, highly skilled scientists and technicians to satisfy the needs of the national economy. There is a need to generate, disseminate and acquire scientific skills as well as technological innovations, in addition to integrating them into the social and economic development drive, detailed above.

In order for Rwanda to achieve this objective, it will have to develop the teaching of science and technology at secondary and university levels. It will facilitate the creation of high and intermediate technology enterprises and develop access to ICT down to the administrative sector level, in accordance with the national ICT plan.

6. The Road Map

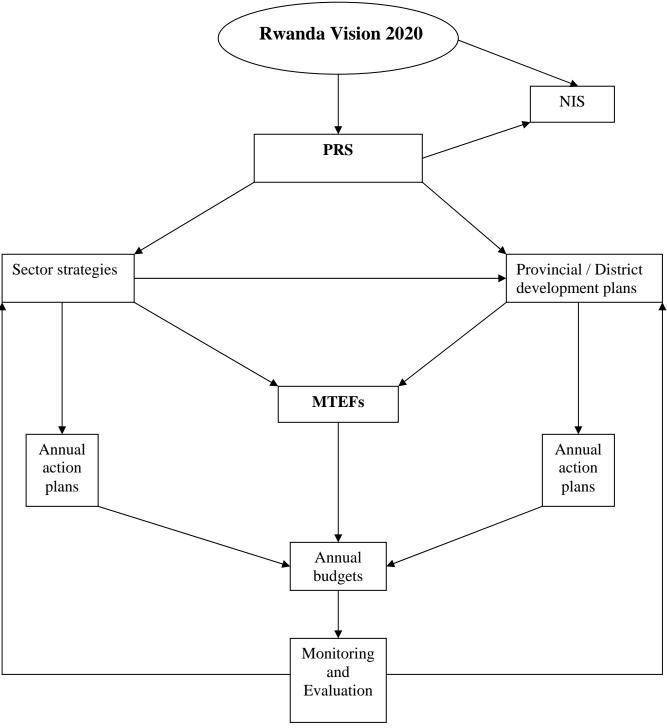
This road map lays out how the Rwanda Vision 2020 will be realized through the country's planning process. It also establishes a set of yardsticks against which we can measure our progress towards achieving the targets. Macroeconomic projections and the underlying assumptions clearly showing the financing requirements to realize the Vision are also made.

6.1. Rwanda's Planning Process and the realisation of VISION 2020

To ensure smooth implementation of the Vision 2020 and achievement of the aspirations described above, it will have to be reflected in the whole planning process and, particularly, medium and short-term instruments. Therefore, the long-term aspirations of the Vision will translate into medium-term programmes of the National Poverty Reduction Strategy (PRS) as well as the National Investment Strategy (NIS).

The PRS is operationalised through medium-term sector strategies that will inform provincial and district development plans. The sector strategies and the decentralised development plans will be implemented through the Medium-Term Expenditure Framework (MTEF); three-year fully integrated budgets that mainstream the Public Investment Programmes (PIP) of these agencies and translate into concrete action plans costed through annual budgets. The poverty reduction achieved through the MTEF will be monitored and will feed back into the elaboration of sector and provincial plans. See the chart below.

Figure 2: Converting Vision 2020 into a reality



6.2. Financing of Vision 2020: Macroeconomic assumptions and projections

The implementation of the Vision 2020 takes into account the necessity to achieve aspirations of the Rwandans. The assumptions for the macroeconomic perspectives over the period until 2020 can be summarised as follows:

- (1) The population growth rate is assumed to average 2.7% until 2020;
- (2) To transform into a middle income country with per capita income of about 900 USD-Rwanda will need to achieve above 7% GDP annual growth rate over the period,
- (3) Based on the ICOR approach, the country needs to annually invest 30% of GDP in order to achieve the targeted economic growth of 7%;
- (4) Initially, agriculture is the major engine of growth representing more than 45% of GDP until 2010 whilst industry and services represent 20% and 37% respectively. Afterwards, the industrial and services sectors take over so that by 2020, services will contribute 42%, industry 26% and agriculture 33% of GDP.
- (5) Private investment would account for an average of 20% of GDP and public investment 8%;
- (6) The public capital expenditure is assumed to increase to Rwf 605 billion.

Table 5: Key economic variables of the Vision 2020

	2005	2010	2015	2020
Population (Million)	8.65	9.88	11.29	12.90
Population growth rate	2.7%	2.7%	2.7%	2.7%
Nominal GDP (Billion)	1,218.75	2,147.85	3,957.28	7,291.04
GDP Growth Rate	7%	8%	9%	9%
GDP per Capita (Rwf)	140,915.87	217,369.10	350,540.18	565,298.46
GDP per Capita (USD)	231.39	336.48	542.63	875.08
Agriculture(billion)	560.63	923.58	1,582.91	2,376.88
Agriculture (%of GDP)	46%	43%	40%	33%
Services (Billion)	439	795	1,504	3,048
Services (% of GDP)	36%	37%	38%	42%
Industry (Billion)	219	430	871	1,867
Industry (% of GDP)	18%	20%	22%	26%
Gross Domestic Investment (GDI)	321.75	614.29	1,131.78	2,085.24
Public	124.19	163.26	314.35	605.25
Private	197.56	451.02	817.44	1,479.99
Gross Domestic Investment (GDI) % of GDP)	26%	29%	29%	29%
Public	10%	8%	8%	8%
Private	16%	21%	21%	20%
Total Capital Expenditure	124.19	163.26	314.35	605.25

Figure 3: Contribution of Sectors in GDP (2000-2020)

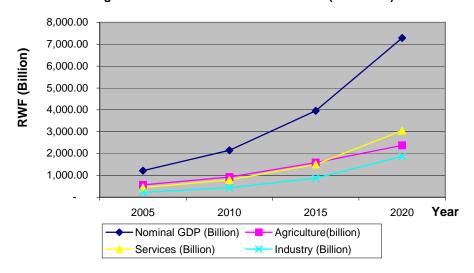
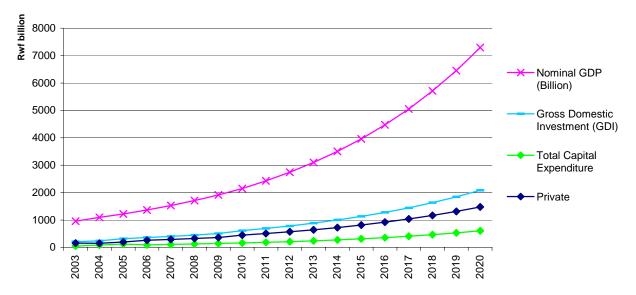


Figure 4: GDP and Investment Projections for Vision 2020



This road map highlights the challenges, which Rwanda will face in realising the targets set out in VISION 2020. Specifically, we will have to streamline planning process' so that the Vision is translated into implementable plans, with strong linkages between set priorities and the allocation of resources. It also requires a mobilisation of a substantial amount of financial resources from the state, the donor community and the private sector. If these resources can be efficiently allocated through the planning process, the goals set in this VISION will become attainable.

Conclusion

VISION 2020 represents an ambitious plan to raise the people of Rwanda out of poverty and transform the country into a middle-income economy. Some will say that this is too ambitious and that we are not being realistic when we set this goal. Others say that it is a dream. But, what choice does Rwanda have? To remain in the current situation is simply unacceptable for the Rwandan people. Therefore, there is a need to devise and implement policies as well as mobilize resources to bring about the necessary transformation to achieve the Vision. This is realistic based on the fact that countries with similar unfavourable initial conditions have succeeded. The development experience of the East Asian 'Tigers' proves that this dream could be a reality.

Annexes

Annex 1: Key indicators of the Rwandan Vision 2020

Indicators	Situation In 2000	Target in 2010	Target in 2020	Inter- national level
Rwandan population	7,700,000	10,200,000	13,000,000	
2. Literacy level	48	80	100	100
3. Life expectancy (years)	49	50	55	
4. Women fertility rate	6.5	5.5	4.5	
5. Infant mortality rate (0/00)	107	80	50	
6. Maternal mortality rate (0/00.000)	1070	600	200	
7. Child Malnutrition (Insufficiency in %)	30	20	10	
8. Population Growth rate (%)	2.9	2.3	2.2	
9. Net primary school enrolment (%)	72	100	100	100
10. Growth secondary school enrolment (%)		100	100	
11. Secondary school transitional rate (%)	42	60	80	
12. Growth Secondary school enrolment (%)	7	40	60	
13. Rate of qualification of teachers (%)	20	100	100	100
14. Professional and technical training centers		50	106	
15. The rate of admission in tertiary education. (0/00)	1	4	6	
16. Gender equality in tertiary education (F %)	30	40	50	50
17. Gender equality in decision-making positions (% of	10	30	40	
females)				
18. HIV/AIDS prevalence rate (%)	13	11	8	0
19. Malaria-related mortality (%)	51	30	25	
20. Doctors per 100,000 inhabitants	1.5	5	10	10
21. Population in a good hygienic condition (%)	20	40	60	
22. Nurses per 100,000 inhabitants	16	18	20	20
23. Laboratory technicians per 100,000 inhabitants	2	5	5	
24. Poverty (%< 1 US \$/day)	64	40	30	
25. Average GDP growth rate (%)	6.2	8	8	
26. Growth rate of the agricultural sector (%)	9	8	6	
27. Growth rate of the industry sector (%)	7	9	12	
28. Growth rate of the service sector (%)	7	9	11	
29. Ginni Coefficient (income disparity)	0.454	0.400	0.350	
30. Growth national savings (% of GDP)	1	4	6	
31. Growth national investment (% of GDP)	18	23	30	30
32. GDP per capita in US \$	220	400	900	

Indicators	Situation In 2000	Target in 2010	Target in 2020	Inter- national
				level
33. Urban population (%)	10	20	30	
34. Agricultural population (%)	90	75	50	
35. Modernized agricultural land (%)	3	20	50	
36. Use of fertilizers (Kg/ha/year)	0.5	8	15	
37. Financial credits to the agricultural sector (%)	1	15	20	
38. Access to clear water (%)	52	80	100	100
39. Agricultural production (kcal/day/person (% needs)	1612	2000	2200	
40. Availability of proteins/person/day (% of needs)	35	55	65	70
41. Road network (km/km2)	0.54	0.56	0.60	
42. Annual electricity consumption (Khw/inhabitants)	30	60	100	
43. Access to electric energy (% of population.)	2	25	35	
44. Land portion against soil erosion (%)	20	80	90	
45. Level of reforestation (ha)				
46. Wood energy in the national energy consumption	94	50	50	
(%)				
47. Non-agricultural jobs	200.000	500.000	1.400.000	

Annex 2: The role of the State in Rwanda in a historical perspective

The role of the state	Pre-colonial era	Colonial era	From independence up to 1994	Post-genocide period
Internal peace and security	-Generally well ensured by the King's authority, -Periods of conflict expansion and relations with some neighbouring kingdoms	-Less regional wars, following the demarcation of colonial boundaries and the installation of the colonial administration.	-Pogroms caused by the ethnic divisions, -Permanent climate of insecurity.	-Fight against the 1996-2000 insurgency, -High level of internal security, -Pacification of the Great Lakes Region in process.
Nation Unity	-No internal problems and everybody contributed to defend the nation. However, there used to be voluntary exile by individuals or groups who had defied the royal authorityThe Rucunshu succession war in 1896 that resulted in the weakening of the royal regime.	Cracks in the social fabric of the nation: a) Exclusive schools for the chiefs' children in Nyanza in 1918 and Astrida in 1929 operated by white Fathers; b) Destitution of Hutu, modest Tutsi and Twa by the Belgians in 1926,	Development of divisive ethnic ideologies. Total disintegration of the social fabric following the 1990-1994 genocide.	-explicit political will and efforts for reconciliation, -National Commission for Unity and Reconciliation -anti-segregation legal framework including abolishment of ethnicity cards.
Justice				Efforts to separate the three powers, -Gacaca reconciliatory justice.
Human Rights	Poorly respected	Poorly respected	Not respected	Progress towards the rule of law
Decentralization	-Hierarchical and centralized policies.	The President concentrated the political powers in his hands, -Beginning of the concentration of the national economy into the hands of	-Highly centralized economic and political powers.	Progressive decentralization of the political and economic powers, promotion of the private sector Establishment of a Common

The role of the state	Pre-colonial era	Colonial era	From independence up to 1994	Post-genocide period
		the State.		Development Fund for Decentralisation
Governance and democracy	-Low level of social equityall the leaders were nominated, -possibility of expression and questioning the authority	-loss of a third of the national territory following the 1910 partition, -Low level of social equityno democracy but state control and coercion	-poor governance by the state party, -poor level of social equity -state party dictatorship	-progressive improvement of popular participation, -strategy to fight poverty, -Ombudsman institutionalizedmultipartism institutionalized, -law liberalizing the press, -consultation on National Constitution.
Regional and International Integration	-limited exchange with neighboring kingdoms, -no exchange with foreign countries (external world)	-opening of the country's boarders, -contacts with the world via the colonial state Belgium, -commodity products.	-further opening to international cooperation, -periodic problems with neighboring countries due to personal relations between the ruling classes.	-free entry and exit of citizens, -efforts to pacify the Great Lakes Region and for the policy of good neighborliness, -efforts towards multilingualism, -policy of regional integration and of openness.
Management of State (Public) affairs	-monarchy.	-efficient but coercive	-progressive improvement, -high level of corruption	-reforms and organs aimed at improving transparency, -fighting corruption.
Diaspora	-limited	 -exacerbation of waves of emigrants running away from the colonial yoke and ruthless rule, -close monitoring of indigenous administration. 	-negative role of the State in the forced emigration, -destabilization of the Diaspora in host countries.	-double citizenship, -efforts towards good relations and contact, -easy entry and exit, -participatory approach and generalized consultation.