# THE REPUBLIC OF RWANDA



# MINISTRY OF INFRASTRUCTURE

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ANNUAL REPORT 2014/2015

**AUGUST 2015** 

### **FOREWORD**

It is with great pleasure that the Ministry of Infrastructure presents its Annual Report for the fiscal year 2014/2015. This report highlights the Ministry's key achievements against the annual targets in the sectors of Transport, Energy, Water and Sanitation, and Urbanization and human settlement.

In general, positive strides were made in all the infrastructure sectors: In transport a number of achievements were landed in the areas of roads rehabilitation, upgrading, maintenance and studies. This fiscal year also engaged numerous efforts in promoting air transport infrastructure that saw the renovation of KIA and the resurfacing of Kamembe airport runaway that facilitated resuming of flights to Kigali-Kambe, laying of boundaries for Bugesera International Airport completed and expropriation works done at 97%. Furthermore, the continuous efforts on demarcation of light of way and compensation of the affected population were achieved at a significant level.

Water and Sanitation continue to be central in the economic development and wellbeing of Rwandans; various developments were embarked to continue bolster access to clean safe water and improved sanitation facilities. This is reflected in the efforts engaged to ensure optimization of water treatment plants and the implementation of different water supply projects countrywide. Sanitation development projects were also instigated to advance access on improved sanitation facilities; these projects included Kigali centralized sewerage system, Sanitation master plan of Musanze town, Lake Victoria Water and Sanitation Program Phase II, National Water Supply and Sanitation Programs, PNEARII and Water, Sanitation and Hygiene (WASH) Project, etc.

In the energy sector, continuous developments to develop energy sector in Rwanda is critical to meet the energy demands that is sensibly paramount to the development of private sector. The 2014/2015 fiscal year registered number of initiatives to increase power generation and accessibility in both on-grid and offgrid. These developments are embedded in completion and operationalization of Nyabarongo power plant, Giggawatt Solar power plant, Diesel power plants and rehabilitation and extension of transmission lines. In the call to reduce the consumption of Biomass, infrastructure sector stepped-up continuous promotion and use of household & institutional biogas and improved cook stoves.

In improving Urbanization and human settlement, various achievements were that included the elaboration and approval of different policies and programs (Ministerial order on Urban Planning and Housing, National Housing Policy and Affordable housing instructions), settlement of households in the viable and planned villages, development of Integrated Development Villages, plots servicing in secondary cities and CoK, sports infrastructure upgrading and renovation, as well as availing land for affordable housing to investors. People living in High risk zones were reallocated towards planned and viable settlement thus ensuring safety and wellbeing of the implicated population.

These impeccable achievements registered in fiscal year 2014/2015, should not be the basis for relaxing, but rather serve as a benchmark for incessant inspiration and platform for stamping more remarkable achievements, to guarantee the realization of the overall objective of transforming Rwanda into a middle-income country by the year 2020, through putting in place competitive and feasible infrastructure developments.



# **CONTENTS**

FOREWORD	i
LIST OF TABLES	v
ABBREVIATIONS AND GLOSSARY	. vi
EXECUTIVE SUMMARY	.vii
I. INTRODUCTION	1
1.1. Rationale	1
1.2. Objectives and Scope	1
1.3. Methodology	1
2. INFRASTRUCTURE SECTOR DEVELOPMENT	2
2.1. THE ENERGY SECTOR	2
2.1.1. Energy generation	2
2.1.2. Operation and maintenance of power plants and other infrastructur	
2.1.3. Electricity Distribution and transmission	5
2.1.4. Enhance road security through street lighting	
2.1.5. Biogas and Improved cook stoves	7
2.1.6. Petroleum storage facilities	
2.1.7. Energy Investment activities	8
2.1.8. Laws, Policies and strategies elaborated	8
2.2. WATER AND SANITATION SECTOR	9
2.2.1. Water and Sanitation Development projects	
2.2.2. Water supply projects in critical areas	10
2.2.3. Water production achievements	12
2.2.4. Sanitation development projects	14
2.2.5. Water Tariffs	14
2.2.6. Performance Improvement Programme" (PIP)	14
2.2.7. Revenue collection and billing system	14
2.3. TRANSPORT SECTOR	16
2.3.1. Roads construction and rehabilitation	16
2.3.2. Revenue collection (RMF, RCAA and Rwandair)	17

	2.3.3.	Air transport development, capacity building and safety	. 18
	2.3.4.	Inland water infrastructure development	. 20
	2.3.5.	Transport trade infrastructure development	21
	2.3.6.	Rural and urban interconnectivity	21
	2.3.7.	Laws, Policies and strategies for the Transport sector	21
2	.4. HC	OUSING AND URBANIZATION SECTOR	. 22
	2.4.1.	Plots servicing and affordable housing development	. 22
	2.4.2.	Rural and urban development planning	. 23
	2.4.3.	Rural settlement development	. 24
	2.4.4.	Public assets rehabilitation and management	. 24
	2.4.5.	Asbestos removal status	. 26
	2.4.6.	Laws, Policies and strategies	. 26
3.	CHALL	ENGES ENCOUNTERED	. 28
4.	LESSC	NS LEARNED	. 30
5.	RECO	MMENDATIONS FORMULATED	31
6.	CONC	LUSION	. 33
		The second of the Livery of the second	
	- 19		

# LIST OF TABLES

Table 1: Productive areas connected	6
Table 5: Water production projects status	13
Table 6: WASAC revenue collection	15
Table 7: Non revenue water status	15
Table 8: Plot servicing works general statistical data for 2014/2015 fis	scal year . 22
Table 9: Government assets inventory	25



### ABBREVIATIONS AND GLOSSARY

7YGP: Seven Year Government Program BASA: Bilateral Air Service Agreement

CACRO: Customer Accounts Conformity and Recovery Operation **CHAN** African Nations Championship (Championnat d'Afrique des

Nations)

CoK: City of Kigali

COMESA: Common Market for Eastern and Southern Africa

EDPRS: Economic Development and Poverty Reduction Strategy

GoN: Government of Netherlands GoR: Government of Rwanda

HPP: Hydro Power Plant

IATA: International Air Transport Association

IDP: Integrated Development plan IOSA: IATA Operational Safety Audits

KIA: Kigali International Airport

MIFOTRA: Ministry of Public Service and Labor

MINALOC: Ministry of Local Government MININTER: Ministry of Internal Security MoU: Memorandum of Understanding

MW: Mega Watt

NRW: Non-Revenue Water OSBP: One Stop Border Post

National Water Supply and Sanitation Program PNEARII:

Rwanda Education Board REB: RMF: Rwanda Maintenance Fund

SREP: Scaling up Renewable Energy Program

SWG: Sector Working Group

UNICEF: United Nations Children's Fund

WASH: Water and Sanitation Hygiene Project

WTP: Water Treatment Plant

### **EXECUTIVE SUMMARY**

This report presents the Ministry's 2014/15 achievements that interweave the performances of four sectors: Transport, Energy, Water & Sanitation and Urbanization & human settlement. These achievements are grounded on the targets that were set during the fiscal year 2014/2015. They integrate the performances of the Ministry against the key objectives outlined in the long term National programs such as Vision 2020, EDPRS II, 7 YGP, Sector Strategic Plan and other national priorities identified in different national forums or dialogue such as the National Leadership Retreat (NLR), National Dialogue Council (NDC) and Cabinet decisions.

**Transport:** In the road transport infrastructure sector development, the focus was centered on increasing the riding quality of the national road network through road rehabilitation, upgrading and maintenance, accessing productive zones (feeder roads) and pursuing external connectivity and trade facilitation such as construction of multinational roads. During this fiscal year considerable roads infrastructure projects were implemented. New 61km of national unpaved roads were upgraded to paved roads; 106.7 Km of national paved roads were rehabilitated, 956.5 Km of national paved roads were maintained. Aligned to demarcation of the light of way and compensation of the affected population, 510km have been demarcated out of 650km planned for demarcation and compensation was completed to the majority of the affected people.

Currently, 95% of the paved road network, 36% for unpaved national road network and 29% of district unpaved road network are in good condition. The combined national paved and unpaved road in good condition stands at 65.5%.

In the effort to continue refining air transport infrastructure, KIA renovation process and Kamembe runaway resurfacing were completed; Kamembe Airport resumed its operations. Bugesera international airport permanent boundary beacons were put in place and expropriation of the involved population completed at 97%. There were significantly more passenger landings at Kigali International Airport in FY 2014/15, that enrolled a 12% increase compared to the FY 2013/2014 and this increase in passenger landings enabled increased in revenue collections of 8%. This increase in passenger landings was triggered by the launch/expansion of various new routes (Kigali-Lusaka, Kigali- Entebbe Entebbe-Juba and Entebbe-Nairobi).

**Energy:** In the Energy sector the focus was concerted towards energy generation and distribution; 40.5 MW were generated totaling to 160MW, this was boosted by the completion of Nyabarongo I HPP (28MW) and other solar generation power projects; however, there are also other big projects being implemented and close to completion and these will substantially expand power generation; and these include Gishoma peat to power, Kivuwatt, Imported power from Kenya through Uganda and Giciye II.

In electricity distribution, 50,000 households were connected (2% increase) to the grid and 6,400 households were electrified with off-Grid solutions (Mobisol and Ignite). 5,600 solar home systems were installed, and 300 solar systems installed in schools. A number of transmission lines in different sizes were constructed to facility increased access to connectivity, in total 9 km of high, 473 km of medium and 1151 km low voltage lines were constructed in fiscal year 2014-2015.

Water and Sanitation: In ensuring increased access to clean safe water and sanitation, a range of efforts were engaged that led to 306,545 households get access to clean water (115,040 in urban areas and 191,505 in rural areas). This significant stride shifted water connectivity to 79% in urban areas and 69% in rural areas and also led to 15 schools supplied with clean water.

Sanitation services were also improved where 62 schools were provided access to child-friendly sanitation facilities, 2 health centers were provided access to improved sanitation facilities, 1 hospital and 29 public places including market and bus terminals were provided with access to improved sanitation facilities.

Urbanization and Human Settlement: In Urbanization and human settlement, impressive achievements were recorded in a set of programs, different policies and programs were elaborated and approved (these included Ministerial order on Urban Planning and Housing, National Housing policy, Affordable housing instructions and National Urbanization Policy); sports infrastructure renovation and construction were implemented in order to effectively prepare for the CHAN competition scheduled to take place Jan, 2015; settlement of households in the viable and planned villages was coupled with the development of IDP model villages and upgrading of informal settlement; relocation of people from high risk zones was achieved at a recommendable level; plot servicing in different districts was tallied, leading to a total of more than 80 km of plots serviced; rural and urban planning through the elaboration of master plans and acquiring land for affordable housing was cordially attained. To ensure safety of Rwandans, continuous asbestos removal recorded an execution rate of 39% by the end fiscal year 2014-2015.

#### 1. INTRODUCTION

#### 1.1. Rationale

The Annual Report responds to the requirement that the Ministry effectively coordinates and reports periodically on Ministry's performance towards implementation of sector programs, policies, laws and projects. This report builds on achievements registered over the past year. It focuses on the performance of Ministry against the key objectives outlined in the long term National programs such as Vision 2020, EDPRS II, 7 YGP, Sector Strategic Plan and other national priorities identified in different national forums or dialogue such as the National Leadership Retreat (NLR), National Dialogue Council (NDC) & Cabinet decisions.

## 1.2. Objectives and Scope

The objective of the Ministry Annual Report is to provide timely and focused information to the public and development partners on the infrastructure sector performance during the previous financial year so as to facilitate policy makers identify key areas that need an urgent attention to hone efficient and effective allocation of resources and fast-track development priorities. The 2014/15 annual report highlights major achievements in the four sectors: Transport, Energy, Water & Sanitation and Urbanization and human settlement.

## 1.3. Methodology

The Ministry report provides in-depth analysis of key performance areas aligned to the achievements of the respective sectors against set targets in the previous action plan and draw lessons for effective and efficient delivery in the following fiscal year. The majority of the data used in this report was drawn from reports provided by the Ministry's affiliated agencies and other sources as a result of joint rigorous monitoring conducted by the Ministry and its affiliated agencies.

### 2. INFRASTRUCTURE SECTOR DEVELOPMENT

Interventions in the infrastructure sector focused on key 4 sectors that represent all of its segments: Energy, Water and Sanitation, Transport, Housing and Urbanization. Major achievements under each sector are described as follows:

#### 2.1. THE ENERGY SECTOR

Under the EDPRS II, the energy sector is expected to play an important role in increasing domestic interconnectivity of the Rwandan economy through increased investments in electricity generation and transmission infrastructures to meet the electricity demand from the private sector. It is expected that by the end of the EDPRS II in 2018, the electricity generation installed capacity shall be 563MW, while the overall access to electricity nationwide shall be at 70%, with the priority being given to the electrification of economic areas. In response to this, during the fiscal year 2014/2015, the following achievements were registered in the energy sector:

## 2.1.1. Energy generation

The energy generation is composed of Hydro, thermal, solar and Methane source of power. During 2014/2015 fiscal year, 40.5MW were commissioned leading to a cumulative capacity of 160MW; this was ideally mainly achieved by the completion and operationalization of Nyabarongo I with an installed capacity of 28MW, Giggawatt Solar power plant (8.5MW), and other small sources.

The total capacity (of around 160MW) is composed of 128.38 MW on grid local generation, 15.7 MW off grid and 15.5 MW imported energy. 85% of the total energy used in Rwanda is generated locally as opposed to 15% imported from neighboring countries as indicated in the figure 1 and figure 2 below, respectively.

Figure 1: Total generation capacity

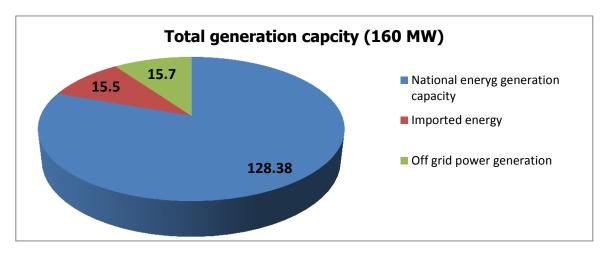
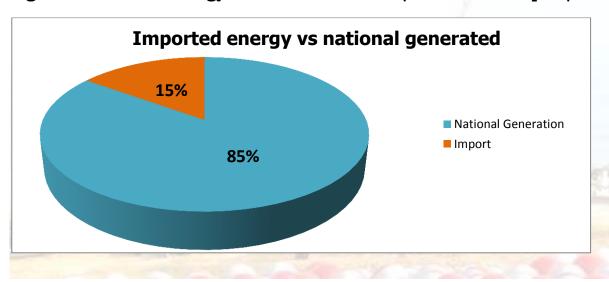


Figure 2: Status of energy in national network (national vs. import)



There are numerous ongoing projects that are positioned to increase and reinforce the long term sector targets upon completion; these include:

- Kivuwatt (25MW) which is at 99% of overall progress that is targeted to be commissioned, October 2015
- Gishoma Peat to Power plant (15MW) whose completion is imminent, targeted to be commissioned, June 2016
- Giciye II is ongoing and expected to be commissioned, February 2016
- Rusizi III under negotiations
- Rusumo HPP under negotiations

- Rukarara V under feasibility study
- Hakan and Symbion under feasibility study
- Nyabarongo II under feasibility study
- Geo-thermal energy generation in Kinigi under feasibility study

For effective operational and management of Micro hydro power plants, and the promotion of private sector in the energy sector development; 15 Micro-Hydro power Plants are under the leasing process and PPA negotiations are near completion.

#### 2.1.2. Operation and maintenance of power plants and other infrastructure

The rehabilitation and maintenance of power plants and other energy infrastructure was implemented. Mukungwa 1 is one of the power plants that have been under rehabilitation and it is expected to be completed and fully operational by October 2015. There were also other ongoing works to maintain Ntaruka and other small power plants. Other energy related infrastructure networks were maintained; that included replacement of transformers, battery charger, switches gears, conductors, network cabins and defected meters in the line to promote energy efficiency and effectiveness.

#### 2.1.3. **Access to Electricity**

In the last fiscal year 2014/2015, 50000 households were connected, representing an increase of 2% to the grid and 6400 households were electrified with off-Grid solutions (Mobisol and Ignite. This FY (2015/16), with the budget available, the target is to connect new 60,000 households to the grid (equivalent to 2.5% increase) and 11,000 households will be supplied by off-grid solutions (Mobisol). In addition, 5600 solar home systems were installed, and 300 solar systems installed in schools.

For effective operational and management of Micro hydro power plants and private sector engagement; 15 Micro-Hydro power Plants are in leasing process; PPA negotiations are near completion. All these mechanisms are put in place to allow improvement in power generation that will be translated into increased access to energy.

# 2.1.4. Electricity Distribution and transmission

To improve quality of power supply, the focus was put on the construction of new transmission infrastructures. During the 2014/15 fiscal year, total length of 9 km of high, 473 km of medium and 1151 km low voltage lines were constructed and also Nyabarongo-Kilinda 110 kV line was constructed to evacuate power from Nyabarongo Hydro Power Plant; Shango- Birembo transmission line is under construction and near completion; the construction of 110kv Ntendezi-Bugarama transmission line (23km) with its sub-station component is ongoing; 30kv transmission line connecting Giciye II (5km) and 110kv Rukarara-Kilinda transmission line with its substation section are all ongoing. These operative transmission lines connect generation plants to different loads through 18 substations where step-up (6.6/110 kV) and/or step-down 110/30 & 110/15kV) is made.

In continuous pursue of effective use of the generated energy, there is an ongoing loss reduction project of Kigali ring project which is a 110 kV from Jabana – Mont Kigali – Gahanga, construction of new substation at Gahanga and rehabilitation of Mont Kigali substation that is deemed to be completed in 2016.

## 2.1.5. Enhanced road security through street lighting

In enhancing road security and safety, 113.8 km of Kigali – Musanze – Rubavu Street lighting was completed and officially inaugurated on January 29, 2015. The project included 20km of medium voltage line, Low Voltage line stringing, installation of 3,528 LED lamps, installation of distribution transformers and control boxes. Other street lighting activities were undertaken in different areas such as 6km in Gicumbi district; installation of public lighting in 6000mt silo for MINAGRI at Mayange and construction of public lighting of Kabarore centre. The listed transmission lines connecting different areas including productive areas and street lighting constructed are depicted in the table 1 below.

Table 1: Productive areas connected

N°	Connected areas	Location
1	Electrification of Cyankeri - Mata	Muhanga District
2	Electrification of Gasenyi tea factory	Karongi District
3	Electrification of Gishubi centre Mukande	Gisagara District
4	Electrification of Karengera centre	Nyamasheke
		District
5	Street lighting of 6km in Gicumbi District	Gicumbi District
6	Power supply to wolfram mining and processing at	Kayonza district
	Kibaya -Rwinkwavu	
7	Construction of public lighting of Kabarore center	Gatsibo District
8	Electrification of NMI company ltd	District Bugesera
9	Electrification of PADAB (project d'appui au	Bugesera District
	development agricole de Bugesera) de la vallee de	
	Rurambi	
10	Electrification site of multi business investment	Rusizi District
	company at Bugarama	
11	Electrification MV&LV line sites Gatare-Buruhukiro-	Nyamagabe
	Musebeya-Kibirizi-Uwinkingi sestors and Mushubi tea	District
	factory	and the second
12	Rehabilitation of LV line and installation in Gabiro	Gatsibo District
	school of infant	diameter and
13	Power supply to lakeside fish farm	Bugesera District
14	Electrification of peat power plant site	Rusizi District
15	Extension line at Rwanda Defence Force Nyarugunga-	Kicukiro District
	Kamashashi	7 4 4 4
16	Electrification of handcraft production centre save	District Gisagara
17	Installation public lighting on storage Karisimbi	Nyabihu District
	geothermal	
18	Installation street lighting from main road to church	Nyabihu District
	Rambura	
19	Relocation of 30kv mv overhead power line crossing	Karongi District
	over the IPRC west plot at Karongi	
20	Supply and installation of public lighting in 6000mt	Bugesera District
	silo for MINAGRI at mayange	
21	Construction of overhead line in bigogwe barracks	Nyabihu District
22	Construction of overhead lv lines in kami barracks	Gasabo District

23	Power supply to Rwanda industries ltd factory located	Kicukiro District
	in kicukiro District antene Gikondo.	
24	Electricity supply in nasho training school	Kirehe District
25	Electrification of Mariba and kiboga centers in gitovu	Burera District
	sector	
26	Installation of mv power line to Kacyiru police hospital	Gasabo District
27	Electricity mv line supply to kabgayi hospital located at	Muhanga District
	kabgayi	

#### 2.1.6. Biogas and Improved cook stoves

In order to reduce incredible high consumption of biomass that is mainly consumed in form of firewood and charcoal, towards achieving the long-term strategy of the EDPRS2 to reduce fuel wood consumption from 94% to 50% by 2018; 1,590 new biogas digesters were constructed for households and 8 biogas digester for institutions against the annual target of 35,000 households and 15 institutional biogas digesters respectively, representing an average performance of 53%. A total number of 182 masons trained on the construction of the digesters. Besides, 161,872 improved cook stoves were disseminated country-wide and 1,145 solar water heaters were installed, this is arguably fundamental in reducing the consumption of wood in Rwanda.

#### 2.1.7. Petroleum storage facilities

For effective use of petroleum storage facilities, additional 40,000 m<sup>3</sup> of fuel storage was targeted during the Financial Year 2014/2015, SP coming up with 21,000 m<sup>3</sup> and 19,000 m<sup>3</sup> by OILCOM. Towards achieving this, OILCOM accomplished its construction works and SP construction works close to completion, both Companies are in processes to acquire needed operation licenses. However, there is an ongoing concession for development of 60,000 m<sup>3</sup> petroleum strategic storage facility.

## 2.1.8. Energy Investment activities

The following were the energy investments activities undertaken in the fiscal year 2014-2015:

- Tendering of 9 Green field sites supported by GIZ in bridging the financial gap;
- Initiation of 18 PPAs negotiations for the development of small hydropower plants and solar PV plants;
- Feasibility studies were conducted and 20 energy investment opportunities identified and recommendations provided to the potential energy investors;
- o Handed over 17 Brownfield/operational sites to Rwanda Development Board (RDB), the institution in charge of Gov't Assets and privatization;
- o Participated in tendering of 15 operational power plants to private developers and currently concluding PPAs negotiations with successful bidders;
- o Negotiations on the amendment of Hakan PPA (80 MW peat to power plant);
- o Assessment of Symbion feasibility study (50 MW) methane to power plant;
- o Assessment of Goldsol feasibility study (10 MWp) solar Power plant;
- o Geo-thermal exploration studies ongoing in kinigi, Gisenyi and Rusizi

# 2.1.9. Laws, Policies and strategies elaborated

Different laws, policies and strategies to make the sector more effective were elaborated and approved, others still in process of being validated by concerned organs.

- National Energy Policy adopted by cabinet in March 2015
- Energy Sector Strategic Plan (ESSP) to ensure effective delivery of the set targets in the energy sector as set out under the EDPRS-II and to guide the implementation of the National Energy Policy was adopted in March 2015
- SE4ALL (Action Agenda Draft) that will guide the sector till 2030 was developed
- Least Cost Power Development Plan was developed to guide investment in Energy Sector till 2030
- National Energy Efficiency Strategy, January 2014
- Rural Electrification Strategy is being developed and will be completed in this FY
- Renewable Energy Law is being developed and will be completed in this FY
- Guidelines on optimal system integration of autonomous generation will be available before end of this FY

- Development of off-grid access guidelines and action plan is expected to be available in this FY.
- The SREP Scaling-Up Renewable Energy Program (SREP) draft report was presented to SWG for comments. It is being reviewed and the final report is expected by October 2015.

### 2.2. WATER AND SANITATION SECTOR

Under EDPRS II, water and sanitation sector is expected to contribute greatly in increasing access to basic infrastructure to both urban and rural households. It is expected to reach 100% coverage of water supply and sanitation services nationwide by 2017. A number of achievements were registered during the fiscal year 2014/2015:

# 2.2.1. Water and Sanitation Development projects

Different water supply and sanitation projects were under implementation during this fiscal year to principally lay the platform for increasing population access to safe and potable water, and improved sanitation facilities country wide; the progress of each project is highlighted here below:

## a. Water, Sanitation and Hygiene (WASH) Project

UNICEF and the Government of the Netherlands (GoN) partnered in December 2008 to support the Government of Rwanda (GoR) in implementation of the "Acceleration of Access to Water Supply, Sanitation and Hygiene (WASH) towards Reaching Rwanda's Millennium Development Goals" project. During the period of July 2014 to June 2015, the project constructed two water supply schemes and 120 blocks of improved sanitation with separate latrines for boys and girls, handwashing and waste disposal facilities on 60 primary schools and 2 blocks on health centers. In particular, WASH Project in Rubavu district completed networks of 102 km and water storage to supply clean water to 52,000 people living in eight Sectors of Rubavu District (Nyakiriba, Nyundo, Rugerero, Rubavu, Cyanzarwe, Mudende, Busasamana and Bugeshi).

## b. National Water Supply and Sanitation Program, PNEARII

The main milestones achieved by this project were related to the installation of 2 Compacts Mobile Water Treatment Plant units. It's in this regard that 2 CWTP and their complementary accessories of Gihuma and Cyondo in Muhanga and Nyagatare districts, respectively, were put in place during the 2014/2015 fiscal year.

## c. The Lake Victoria Water and Sanitation Program Phase II (LVWATSAN II)

LVWATSAN II is a Regional Program covering the countries that form the East African Community namely; Burundi, Kenya, Rwanda, Tanzania and Uganda. The Program is being implemented under the Lake Victoria Basin Commission (LVBC) of the East African Community (EAC); in Rwanda this project targets the district town areas of Nyagatare, Kayonza and Nyanza.

During fiscal year 2014/2015, 30 public toilets and 4.8 km of storm drainage system were completed in August 2014 through which close to 3,600 people benefited from public and institutional toilets and nearly 200 households benefited from storm drainage system passing through the Nyanza Town. Currently, the project is implementing the construction of water supply systems, faecal sludge treatment plants and landfills.

# d. Butare Water Supply Phase II

Rehabilitation/ extension works of Kadahokwa WTP were completed and the provisional handover was done on February 24, 2015. Central task of the project included the construction works for an earth water-retaining dam with 600,000 m3 of net storage capacity, rehabilitation/extension works aimed at upgrading the Kadahokwa WTP daily production capacity from 4,000 m3 to 8,500 m3 and the extension of the stretch of existing distribution network by 40 km, increasing access to drinking water for 100,274 beneficiaries

# 2.2.2. Water supply projects in critical areas

The Water sector has been facing difficulties in obtaining adequate funding to implement projects in order to accelerate achievement against set target of 100% access by 2017/2018. This was aggravated by that fact that most funding from development partners ended in December 2013. Therefore, Eccentric methods were deployed to rapidly increase water access to areas that were experiencing lower rates of water accessibility. The following sub projects have been initiated in 2014-2015 and implemented to bridge the aforementioned gap flagged in 15

critical districts.

## a. Giheke-Kamembe-Nkanka water supply system

The project is designed to supply water to urban areas especially in Rusizi town and to the surrounding rural areas, with its catchment in mountains of Nyamasheke. The total network expected to cover 126 km and only 48km were completed by June 2015.

## b. Mbona-Nyabirasi-Kivumu-Nyamyumba water supply system

The project is being implemented in Rutsiro district with a discharge of 1300 m3/day. The project targeted a stretch of 123 km, that involved trench excavation, pipes laying, reservoirs construction and other related civil works. The Project recorded a general progress of 80% by the end June 2015.

## c. Gihengeri Water Treatment Plant

This is an ongoing project with expected discharge of 2000 m3/day, with its source in Gigengeri and extension water transporting network of 7km. Water catchment was completed and civil works were at a progress of 40%, end June 2015.

# d. Extension of Runda - Gihara water supply

The project is being implemented in Kamonyi District: Runda – Gihara water supply extension 26km from existing water supply systems with its sources stationed at Nzov). Trench excavation, PVC pipes laying and civil works completed. The projected pinned a total progress of 74%, end June 2015 and Pumps installed at 90%.

# e. Rubego-Nyabisindu- Nyesayo-Mugote Water Supply system

Rubego-Nyabisindu and Nyesayo-Mugote water supply system was implemented to supply water to the 9,000 population living in Kaduha sector in Nyamagabe District. The 17km of the required network were constructed and completed in January 2015.

# f. Nyabihembe-Busengo Water supply system in Gakenke.

Nyabihembe-Busengo water supply system was constructed to supply water to the 8,500 people living in Busengo and Janja sectors of Gakenke district. The 20.7 km of the needed network were constructed and completed by May 2015.

## g. RULINDO Challenge Program

In 2014, 35,934 people, 10 schools and 3 health facilities from the sectors of Buyoga, Mbogo, Rusiga and Cyinzuzi of Rulindo district gained access to safe drinking water. This was as a result of the completion of 8 water treatment systems with a stretch of 104 km of water network in the above mentioned sectors; the inauguration took place on 20th March 2015.

## h. Other ongoing projects

MUTOBO Water Supply Project: MoU between the GoR and SINOHYDRO to implement Mutobo Project through BoT was signed in China on 29th April 2015. The project is expected to bridge the long term water demand gap for the City of Kigali, and its outskirts together with Muhanga and Bugesera districts. The project also targets areas along the pipeline route, in order to achieve a national target of 100% access to clean and safe water. The Project entails construction of two water intakes and Treatment Structures at Mutobo and Rubindi sites, respectively, a pipeline of 100Km and 800-1,000mm to transport water from Mutobo in Musanze district to Kigali; Kigali-Muhanga (55Km, 400-600mm) and Kigali-Bugesera (45Km, 400-600mm).

Kigali Bulk Water Supply Project: Presently, the project is at its study phase which is planned to end by August 2015. The process of land lease is on an advanced stage, whereby WASAC in partnership with Kicukiro and Bugesera districts are working together for expropriation to avail required land for the project. The geotechnical investigations and topographic surveys are already finished. The investor submitted the final project layout and preliminary report.

In general a total of 581 km of new water supply schemes were constructed, rehabilitated and extended; leading to 306, 465 people got accessing safe, clean and portable water.

## 2.2.3. Water production achievements

The volume of water produced increased in the 1<sup>st</sup> quarter of the year by 929,001 m<sup>3</sup> (2.21%). the increase resulted from the optimization of the following treatment plant: Karenge, Rubavu, Musanze, Nyamagabe, Mpanga, Ngenda, Karenge, Muhazi, Kanyabusage, Nyabimata, Kibonabose, Miyove, Rusekera).

Quarter 2 recorded a decrease of 63,725 m3, the production decreases were acknowledged in Gisuma, Kimisagara, Karenge and Kadahokwa due to raw charge by heavy rains and power disconnections on the pumping station; Nyabimata WTP experienced a break down for 48 days.

In summary, four new compact water treatment units were fully installed in Mpanga in Nyanza district, Cyondo in Nyagatare district, Ngenda at Lake Cyohoha in the South and at Lake Muhazi in Rwamagana district. The table 2 below portrays the status on different water production projects by end to the fiscal year 2014/2015.

Table 2: Water production projects status

N°	Project / Activities	Location	Type of Activity	Capacity	progress
1	Installation works of 4 compact units	Mpanga, Ngenda, Muhazi and Cyondo WTPs	Supply and installation	100m3/h by each	Mpanga:100% Ngenda:85% Cyondo:85 % Muhazi:100%
2	Water treatment process optimization	All WTP s	OWASUPI program	Chemicals reduced by 20-30%	Ongoing
3	Energy efficiency consumption	Kimisagara,Nzove, Karenge, Ngenda, Kadahokwa, Gihuma	OWASUPI program	5% reduction	Ongoing
4	Construction of intake structure at Gihira Water Treatment Plant	Rubavu	Intake improvement (Raw water quality)	Water production increased by 30 %	100 % achieved
5	Construction work for extension of Mpanga water treatment plant	Nyanza	Water production increased by 30%	80 m3/day	100 % achieved
6	Rehabilitations works of electromechanical equipment for WTPs and pumping stations	All WTP s	Electromecha nical equipment replacement	All WTP s	80 % achieved
7	Rehabilitation of WTPs and related pumping stations	All WTP s	Pumps replacement	All WTP s	80 % achieved
8	Spare parts for electrolysers	General Maintenance	Preventive and Curative maintenance electrolyser	8 Electrolyzer Machine	100 % achieved

			machine		
9	Repair and	All WTP s	Preventive	All WTP s	90 % achieved
	maintenance of		and Curative		
	electromechanical		maintenance		
	equipment				

## 2.2.4. Sanitation development projects

Sanitation projects were under implementation during the fiscal year 2014/2015 and their current status is as follows:

**Kigali centralized sewerage system project:** Detailed engineering designs for phase one of this project which covers Kigali Central, Kiyovu and Muhima, logged a progress of 80%.

**Sanitation master plan of Musanze town:** The contract was achieved at about 60% but the Consult failed to finish the task which resulted into the cancellation of the contract. It was integrated into the action plan of the year 2015-2016, together with four other secondary cities: Rubavu, Karongi, Rusizi and Nyagatare.

### 2.2.5. Water Tariffs

On the Water tariff study, Discussion and consultation with all the stakeholders was completed; the final draft is on the table waiting for the approval of the responsible authorities.

# 2.2.6. Performance Improvement Programme (PIP)

The Water and Sanitation Corporation (WASAC) initiated a high impact short term Performance Improvement Program (PIP) that will enhance efficient and effective service delivery, with the objective of accelerating the transformation of WASAC into utility that will meet the aspirations of Rwandans. The Program was officially launched by Hon. Min of Infrastructure and started on August 2015.

## 2.2.7. Revenue collection and billing system

After splitting EWSA into 2 companies of energy and water & sanitation, WASAC ltd elaborated quick win strategy for Customer Accounts Conformity and Recovery Operation (CACRO). The implementation started in November 2014. From that point of view WASAC shifted from routine activity of taking monthly invoices by permanent staff (which was costly to the company and was not giving

quality services to the clients as well reduce revenue) to individual performance based activity. Currently staffs are remunerated on one clients correctly billed.

The following charts present monthly revenue collection against sales:

Table 3: WASAC revenue collection

PERIOD	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15
Total sales	1,202,917,992	1,120,776,860	1,076,355,375	1,131,281,185	1,002,465,354	1,200,564,168	1,111,366,579	1,078,554,056	1,092,518,536	1,011,107,818	1,095,824,266
Collection on water	755,341,120	888,143,516	885,783,423	1,297,665,007	1,122,990,041	921,613,067	1,011,097,024	1,113,900,296	1,278,651,385	1,319,429,397	1,750,148,999
Collection Rate	63%	79%	82%	115%	112%	77%	91%	103%	117%	130%	160%

After introduction of evaluation based on performance of commercial field officers, clients billing rate increased up to 100% in May and June 2015.

### Non-revenue water status

During the past year more efforts were invested in NRW management. During the financial year 2014/2015, NRW reduced from 42% to 39% as shown in the table below.

Table 4: Non revenue water status

	14-Jul	14-Aug	14-Sep	14-Oct	14-Nov	14-Dec	15-Jan	15-Feb	15-Mar	15-Apr	15-May	15-Jun	Total
Billed consumption	2,111,540	2,162,848	2,008,870	1,947,246	2,027,343	2,050,366	2,175,474	2,030,650	1,956,511	1,991,374	1,847,311	1,977,373	24,286,906
Own Consumption	15,725	14,752	9,771	7,044	8,038	8,259	7,617	8,492	7,762	8,617	9,063	10,091	115,231
Total billed	2,127,265	2,177,600	2,018,669	1,954,318	2,035,392	2,058,642	2,183,091	2,039,142	1,964,273	1,999,991	1,856,374	1,987,464	24,402,221
Total Supplied	3,500,846	3,374,151	3,271,908	3,252,459	3,188,862	3,349,860	3,496,672	3,080,575	3,343,917	3,189,667	3,402,372	3,378,103	39,829,392
Performance	61%	65%	62%	60%	64%	61%	62%	66%	59%	63%	55%	59%	61%
Loss	1,373,581	1,196,551	1,253,239	1,298,141	1,153,470	1,291,218	1,313,581	1,041,433	1,379,644	1,189,676	1,545,998	1,390,639	15,427,171
Loss rate	39%	35%	38%	40%	36%	39%	38%	34%	41%	37%	45%	41%	39%

### 2.3. TRANSPORT SECTOR

Under EDPRS II, the transport sector is expected to play an important role in increasing the domestic and international interconnections. The following achievements were registered in the transport sector:

### 2.3.1. Roads construction and rehabilitation

In improving the riding quality and increasing domestic interconnectivity and external links to the Central and Northern Corridors as well as to regional commercial poles; different construction, rehabilitation and maintenance projects were implemented. In total, 4 road rehabilitation projects and 7 unpaved national roads for upgrading, registered some progress in 2014/2015 fiscal year as highlighted below:

### Road rehabilitation

- Kitabi-Crete Congo/Nil (33km) completed at 95%
- Huye Urban roads (3.8km) completed at 95%
- Huye-Kitabi (53km) under contract negotiation
- Karongi-Rubengera road (17km)) under contract negotiation

# Unpaved national roads for upgrading

- Kivu Belt Lot 4 & 5 (66km) achieved at 73%
- Kivu Belt Lot 6 (24.5km), ongoing
- Kivu Belt Lot 7 (48km), started end June 2015;
- Base-Kirambo-Butaro-Kidaho (63km)
- Base-Gicumbi-Rukomo (51 km), under contract negotiation
- Access road to Bushenge Hospital (3km), completed 100%

#### Road maintenance

Furthermore, 2014/2015 fiscal year earmarked numerous road maintenance projects that saw 10 National paved roads on 907.8km and 13 National unpaved roads maintained, respectively. Also 4 urban roads rehabilitation projects in Huye, Musanze, Gicumbi and Rubavu districts were undertaken, 5 road upgrading projects and 11 road studies were executed. In the same fiscal year, new 61 km of unpaved roads were upgraded to paved roads.

These endeavors has enormously improved roads conditions countrywide, presently, 95% of the paved road network, 36% of unpaved national road

network and 29% of district unpaved road network are in good condition. The combined national paved and unpaved road in good condition stands at 65.5%.

Under the demarcation of the light of way and compensation, 510km have been demarcated out of 650km planned for demarcation and majority of the population encroached by these demarcation activities were compensated before the commencement of projects.

In supporting private sector development; 11.5 kms of roads were constructed; these include Cimerwa-Bugarama road (10km) which is at 98%; upgrading of access road to Fuel Storage (1.5km), upgrading of KCC Access Roads (3km) which was achieved at 60% and Access road to Rwamagana Industrial Park (2.7km) with earth works completed at 30%.

In the campaign to promote the development of secondary cities, a lot has been done to ensure feasible road network through construction and upgrading of urban roads in Musanze, Rubavu, Gicumbi and Rusizi districts.

#### Revenue collection (RMF, RCAA and Rwandair) 2.3.2.

The current revenues of the Road Fund are derived from (i) petrol and diesel levy, presently at 83 FRW per litre (€ 0.1) for both petrol and diesel effective from July 01st, 2015, which is about 72% of the revenues, (ii) Road toll based on COMESA regulations, charged on foreign heavy vehicles which constitute 28% of fund revenues. Therefore, by the end of June 2015, RMF collected an amount totaling to 27,055,002,160Frw. This amount includes 1,200,000,000 FRW contributed by the city of Kigali for Strategic Maintenance Project.

From 1 July 2014 to 30 April 2015, RCAA recorded revenues of RWF 10.56 billion of which RWF 8. 99 billion were aeronautical revenues (85%) and RWF 1.57 billion non-aeronautical revenues (15%). The key contributor to aeronautical revenues was airport service fees that generated to the magnitude of RWF 6.8 billion and the non-aeronautical revenues comprised of rent, parking and bank interest, all together totaling to RWF 1billion.

Rwandair cemented commendable success in its operations by generating to the tune of US\$ 88,275,389, representing 88.4% of the forecasted revenue of US\$ 100,665,337 and about US\$ 7 million increase in comparison with 2013/2015 fiscal year revenues of US\$ 81,420,918, resulting in 8% increase in revenue generation.

Fiscal year 2014/2015, recorded an increased number of passengers, with the launch of Entebbe-Juba and Entebbe-Nairobi routes, Mwanza destination resumed and new destination to Lusaka was introduced to the existing network, bringing the total of Rwandair destinations to 17 and total passengers to 503,538. This translated into 12% increase in the number of passengers travelled with Rwandair compared to the previous fiscal year that recorded total number 448,243 passengers.

#### 2.3.3. Air transport development, capacity building and safety

In ensuring civil aviation safety and security in Rwanda, RCAA ensured effective implementation of the safety-related Standards and Recommended Practices (SARPs) and associated procedures contained in the Annexes to the Convention on International Civil Aviation and related ICAO documents. This saw one of the Operators (Rwandair) being IOSA certified under the IATA-IOSA registry in November 2014, and received the IOSA certificate from the IATA Vice President for Africa; an indication of an effective safety oversight system in Rwanda. Rwandair was also confirmed as an IATA Member on 27th March 2014 and officially received IATA membership certificate on 26th May 2015.

The plan to reduce dependence on expatriates that started two years ago in specialized areas of Flight operations and Maintenance saw 15 Rwandan Engineers trained and deployed. More aircraft engineers and technicians are expected to graduate by the end of this calendar year (2015). The following is a summary of the current skills stock and ongoing trainings;

- 20 Rwandan Pilots including 2 captains in service;
- 23 Rwandan Engineers in service;
- 10 pilot cadets already at Ethiopian Airways for a period of two years;
- The second batch of 9 aircraft technicians will complete their training in December this year (2015);
- The first batch of Cadet Pilots will complete their training in November this year (2015);
- The 3rd batch of 10 aircraft technicians is planned to begin training end this month. Recruitment was done and the candidates were vetted. Process of obtaining bursaries from REB ongoing;
- 10 undergraduates were sent for training in Sir Lanka for 4 years as Aircraft Engineers;
- Other recurrent courses were conducted as per the training plan

In light of Government 7 year plan and Core EDPRS 2, huge investment has been made towards modernization of the airport systems and airspace. In this fiscal year, Kigali International Airport was completely renovated to cope with exponential traffic growth and provide consumer comfort, security and convenience. Remarkable progress has been made in modernizing air navigation services and weather reporting systems. This increased terminal areas and processors and also doubled airport capacity; KIA Presidential terminal refurbishment completed; Works on KIA car park expansion is at near completion.

Completed expansion study for Gisenyi airport which considered a runway length of 2000m; however, another study which considers a runway length of 1500m is proposed.

The expropriation for New Bugesera International Airport (NBIA) is at 97; the remaining 3% is under process, demarcation with beacons was completed at 100%. The lack of appropriate land ownership documentation, incorrect bank accounts and unresolved relocation of 64 families to new Musovu Houses delayed completion of the process.

On 15 June 2015, Kamembe airport resumed operations following the completion of resurfacing of the runway, in enhancing safe operations.

The 2nd brand new Q400 NextGen was delivered on 22nd June 2015 and introduced into service immediately. This increased the fleet size to a total of 8 aircraft. Additionally, in April 2015, a Purchase Agreement was signed between Rwandair and Airbus for 2 A330 aircraft, one -200 and one -300, due for delivery in the 2<sup>nd</sup> half of 2016 aligned with the airline's route expansion plans to Asia and Europe.

In meeting its international obligations on security, Rwanda has established a memorandum of understanding with Police and Rwanda Defense Forces to enhance its aviation security capability. New aviation security vetting responsibilities are also in place to ensure proper selection of personnel involved in civil aviation activities; of the many initiatives under NCIP (Northern Corridor Initiative Projects) aviation projects have gone a long way in achieving critical steps such as signing of MoU on common airspace block.

A Memorandum of Understanding by the Northern Corridor member countries is in place for the establishment, management and implementation of a seamless airspace. The member countries that comprise of the Rwanda, Uganda, Kenya, and Southern Sudan have also kick-started the documentation and collection of data to harmonize procedures, consider the interoperability of equipment, search and rescue agreement and incident and accident investigation

Amendment of the RCARs was partly undertaken during 2013–2014 and was completed in second quarter of 2014-2015 (November 2015). This line of work was the largest of its type ever undertaken by RCAA using local expertise. The new regulations were adopted by the Cabinet in its session of 13/02/2015 and published in Official Gazette on 25 May 2015.

RCAA facilitated promulgation of a national safety legislative framework and specific regulations, in compliance with international and national standards, that define how the RCAA will conduct the management of safety. On 28 April 2015 the Director General signed Rwanda Aviation Safety Policy Statement. Development of Rwanda State Safety Programme Manual is in progress and 75% of the work has been accomplished.

A total of twelve BASAs were ratified during the financial year 2014-2015. Through the Northern Corridor initiatives, air transport liberalization was enhanced resulting in local operators enjoying fifth freedom rights throughout the EAC. New Fire Truck acquired at a cost of €368,000.00 and delivered to KIA. This additional fire truck will further boost fire station readiness against fire outbreaks at Kigali International Airport.

# 2.3.4. Inland water infrastructure development

In the framework of developing Inland Water Transport and Railway Projects; 3 studies are under development: these include SGR Kampala Kigali which was at 42% by end June 2015; Development of Ports in Lake Kivu which was completed at 95% and Navigability of Akagera River of which RFP is still under review.

## 2.3.5. Transport trade infrastructure development

Transport and Trade facilitation measures were developed to cut down the number of non-tariff barriers along the northern and central corridors and these include construction of Ruhwa, Rusumo, Kagitumba OSBPs with studies ongoing for Gatuna and Cyanika OSBPs.

## 2.3.6. Rural and urban interconnectivity

For rural and urban interconnectivity through ONATRACOM operations; 7 Branches across the country continued to operate and 39 routes were maintained out of 151 routes. The number of passengers from July 2014 up to 30 June 2015 is 1,002,804. This number decreased compared to 1,061,839 passengers transported from July 2013 up to June 2014.

Following up the payment of creditors (arrears): the current status is as follows: (i) Creditors paid 2,094,069,127 Frw and unpaid balance is 2,663,711,688 Frw. The creditors unpaid before Cabinet decision to pay the arrears are FRW 1,777,103,283 and FRW 886,608,405 represent the new additional debts after Cabinet decision, and this debt originates from RSSB and RRA fines, penalties, interests and employees remuneration.

# 2.3.7. Laws, Policies and strategies for the Transport sector

During the past year, a number of laws and policies were under elaboration, of which a number of them was approved, and others still in the process of approval. Rwanda Civil Aviation Authority's new enforcement policy was published and is now operational, and a number of air transport companies already considered it for consultations.

Transport law is under elaboration; Traffic & Road Safety Law was drafted and waiting for approval by penal court; the contract was signed for the development of the Tools for analysis of rates for Transport projects, the inception report provided and validated, overall progress is now at 30% and data collection is ongoing.

The road design manual and standards were elaborated and it is in the process of being validated at higher level before submission to cabinet for approval. Roads safety and roads signs manuals were elaborated as well.

### 2.4. HOUSING AND URBANIZATION SECTOR

Under EDPRS II, Housing and urbanization sector is expected to promote settlement in planned and viable villages; upgrading urban centers and facilitate households with access to affordable housing. It is also expected to reach 30% coverage of urban population while 70% of rural population settled in planned Umudugudu by 2017/2018. The key accomplishments in this sector during the fiscal year 2014/2015 are as follows:

#### 2.4.1. Plots servicing and affordable housing development

During the fiscal year 2014/2015, much emphasis was put on plots servicing in different urban areas mainly in that of secondary cities. In total the servicing works completed for the estimated 35 Km for Huye, Musanze, Rubavu and Nyagatare districts;

The comprehensive list of plot serving and their status countrywide are indicated in the following table.

Table 5: Plot servicing works general status for 2014/2015 fiscal year

District	Sector	Site	Km	Status
Rubavu	Gisenyi	Rurembo	4.5	Completed
Musanze	Muhoza	Kabaya	4.5	Completed
Burera	Butaro, Rwerere Rugarama,	Moma, Mulindi, Rwinkuba	12	Completed
Gakenke	Nemba	Nemba	1.4	Not completed
Rulindo		Rusine	10	Completed
Nyagatare	Nyagatare	Nyagatare	10	Completed
Huye	Tumba	Kigarama	15	Completed
Nyanza	Busasamana	Busasamana	12	Completed
Ruhango	Kinihira	Gatengezi, Musamo, Mataba, Bweramvura	15	Completed
Kamonyi	Gihinga	Gihinga	13,3	Completed
Gatsibo	Kabarore Kabarore		Beaconing 17	Not completed
Bugesera	Nyamata	Kayumbu	6.5	Completed
TOTAL			104.2	

This program of plot servicing was initiated by in 2012 and since then many plot servicing programs have been initiated and completed. This program is vital to the execution of the Master Plans implementation programs and also serves as tentative measure in controlling informal settlement.

For this particular year affordable housing development was among top priorities in this sector; 34 Ha of land out of 49 Ha has been acquired at Ndera and Kanombe sites. Master plans for these sites are under elaboration. A design of two types of housing units (2 bedrooms and three bedroom Apartments) for Ziniya project/Kicukiro was elaborated; currently building permit has been obtained; BRD is in the position to implement the project after signing an MOU in relation to the project implementation. The feasibility study on affordable housing project is ongoing, final draft is under review moreover, ToRs for feasibility study and housing market study in all cities is under elaboration.

In the promotion of research and local building materials, a countrywide assessment has been carried out and is almost at its completion stage, registering a progress of 80%. The drafting of a report on Rock products and other raw materials required in concrete mix is also ongoing.

# 2.4.2. Rural and urban development planning

To foster better plan for rural and urban developments, different master plans were developed and implemented. Under this call, Lakeshore land development plans for Lakes of Mugesera, Gashora (Rumira) and Mirayi were elaborated and street addressing plans were implemented in the Musanze, Huye and Nyagatare districts.

Local Development Plans (LDPs) for 3 emerging centers & National Border towns were elaborated; these include: Ngarama in Gatsibo district, Gatuna in Gicumbi district, and Kagitumba in Nyagatare district.

The implementation Studies (Detailed Physical Plans) were under development for LDPs of Rullindo, Burera, Nyabihu, Ngoma, Gisagara, Rusizi and Ngororero Districts with 3 LUDPs already validated (Rulindo, Ngororero and Kagitumba).

The master plans for the extension of the city of Rubavu and Nyagatare are in final stages and are to be approved by the district council after completion.

# 2.4.3. Rural settlement development

In the promotion of viable settlement, two IDP Model villages were upgraded in Huye and Muhanga districts; the implementation progress in Huye district is at 90%, bringing the construction processes at final stage. For Muhanga district the implementation progress is at 75% with plot servicing completed and the construction works at 40%, adopted 4 in one construction policy. Conversely, in Rusizi district IDP Model village site was identified and will be implemented in the next fiscal year.

Equally, the informal settlement upgrading project for three districts of Huye, Musanze and Nyarugenge were implemented, the settlement upgrading of Agatobotobo cell in Huye district was at 65% overall progress; however for Musanze district, the project was transferred in next fiscal year due to lack of budget; and for Nyarugenge district, the consultant submitted the 1st and 2nd phases of study of upgrading Agatare Cell and the validation meeting was held on 8th May 2015 and all designs are completed.

Rellocation of people from the high risk zones was further prioritized in fiscal year 2014/2015; this embarked the implementation of relocation of people living in high risk zones of Nyabihu district and Mukamira sector under climate Adaptation project. Payment of Expropriation compensation completed, Contract signed and the construction of 200 houses officially launched.

# 2.4.4. Public assets rehabilitation and management

Different projects under this theme were under implementation. One of the key projects looked into was construction and rehabilitation works in the preparation of CHAN scheduled to take place January, 2016, four main stadiums and training playing grounds were under construction and rehabilitation processes. The progress struck in this fiscal year is as follows:

- The rehabilitation works at main Amahoro stadium were at 22%, the playground at 65%
- Rehabilitation works of the playground at UR-CST Campus was at 70%;
- The rehabilitation works of the main Kigali Nyamirambo Regional Stadium were at 50% and the installation of artificial pitch was at 55%;
- Huye Stadium: Works at Kamena access road were at 92%, installation of artificial pitch was at 45%, and site mobilization (site lighting and score board) was ongoing;

• Rehabilitation works at main Rubavu stadium were at 65%, construction works on artificial pitch were at 55% and site mobilization (site lighting and score board) was ongoing.

Furthermore, other renovation works were registered that geared, the Triministerial building refurbishment launched on 19<sup>th</sup> March 2014; these include MINALOC, MININTER, MIFOTRA and Migration-Emigration offices, and these buildings are expected to host a few more institutions after refurbishment. However, the project experienced some delay associated with contractor's failure to deliver as per agreed time line. In general, all works are at a progress of 54%.

The Parliament fence construction has been successfully implemented and it is at final stages. Its works stood at 95% at the end of the fiscal year and the effort to commence main works on rehabilitation Parliamentary Building were stepped-up, and is in procurement process.

The Operational House for Maranyundo Weather Doppler Radar Station was constructed and provisional handover was done on 8<sup>th</sup> June 2015; it is now operational and lauded to remain critical with in the East Africa region.

In establishing National database of movable Government assets, Forty-five (45) institutions out of 125 have submitted their data records and currently Rwanda Housing Authority is compiling the available data while waiting on other institutions to respond.

The valuation and Inventory of Government fixed assets-properties was carried out in three provinces and the city of Kigali. The provinces where inventory and valuation was carried out include Eastern, Southern and western provinces and the results are shown in the table 6 below:

Table 6: Government assets inventory

No	Province	Number	Plot size (ha)	Land value	Building	Book value	Insurance
		of plots		(Rwf. B)	value (Rwf.	(Rwf. B)	(Rwf. B)
					B)		
1	Eastern	4,826	8,5647.56	90.113	130.429	237.08	170.326
2	Western	4,096	2,2281.18	123.539	459.3114	637.135	186.295
3	Southern	6,079	6,9765.2	68,979	197.639	259.551	226.226
4	CoK	728	2,271.91	861.122	347.035	1,208.163	381.192
	Total	15,729	179,965.85	70,053.774	1,134.4144	2,341.929	964.042

In general the 3 provinces and the City Kigali where Inventory and valuation of government fixed assets was conducted shows that in total, there are 15, 729 Plots of land, with estimated size of 179,965.85 Hectares at a value of 70,053.774 billion Rwandan francs. The book value for Government buildings is estimated at 2,344.949 billion Rwandan francs.

#### 2.4.5. Asbestos removal status

To preserve eco-friendly green cities, 348,115.5 m<sup>2</sup> of Asbestos were disposed to the burial sites countrywide, presently, the cumulative Asbestos removal stands at 506, 039m<sup>2</sup> out of the targeted 1,308, 259 m<sup>2</sup>, this brings the accomplishment rate to 39%. In addition, 15 Asbestos burial sites are operational and well managed in Rusizi, Karongi, Ngororero, Gisagara, Huye, Nyanza, Muhanga, Kamonyi, Bugesera, Kayonza, Ngoma, Nyagatare, Musanze, Rulindo and Gicumbi Districts. Repair works and electrical installations were completed in all asbestos burial sites.

Training on asbestos safe removal was provided to different companies and notice calling for public institutions to integrate for asbestos removal in their budget was communicated to concerned institutions for consideration.

#### 2.4.6. Laws, Policies and strategies

Under this sector a number of laws, policies and strategies were elaborated during the 2014/2015 fiscal year. These included Rwanda Building Code, National Housing Policy and other 8 implementing orders have been approved and adopted by cabinet. The Government asset policy is still under preparation; the drafting of the law amending the current law establishing Rwanda Housing Authority is ongoing and expected to be available by end of July 2015.

Legal instruments that will ease the implementation of low cost housing and urbanization process were approved. For instance, National Housing Policy was approved and adopted by the cabinet in March 2015; Rwanda Government asset Policy and framework was elaborated and approved by SMM, urbanization steering committee was established, and will be reviewed by Inter-Ministerial Consultation committee prior to approval by the cabinet.

Implementation orders and instructions with dissemination campaign component were finalized, eight orders were adopted by the Cabinet; these

include Presidential order, two Prime Ministerial orders, Ministerial orders and Instructions as detailed below:

- Ministerial Order on Urban Planning and building Regulations: with 3 annexes namely Rwanda Building Code, Urban Planning code and Faults & Sanctions in Building activities;
- Ministerial Order determining the instructions of categorization of buildings, conditions and procedure for application for and issuance of building permits;
- Ministerial Order determining the contents of urban planning documents and procedures for investigation, initiation, organization and issuance of authorization to carry out urban planning Operations;
- Ministerial Order determining procedures for formulation, approval, revision and publication of the specific land development planning;
- Presidential Order determining procedures for formulation, approval, revision and publication of the master plan for land management and urban planning;
- Prime Minister's Order determining conditions for authorization to carry out real estate development operations;
- Prime Minister's Order determining conditions for authorization to carry out real estate development operations;
- Prime Minister's Instructions determining the procedure for eradication of asbestos materials:
- Prime Minister's order determining procedures for formulation, approval, publication and revision of the local land development plan.

### 3. CHALLENGES ENCOUNTERED

During this past year the infrastructure sector encountered a number of challenges of which Ministry persevered through and managed to land a list of remarkable achievements. Main challenges that were recorded in the fiscal year 2014-15 are stated below:

- Delays in giving non objection from the development partners and funds disbursement and legal opinions from stakeholders;
- Restructuring processes (staff placement and recruitment) across all affiliated agencies have hampered the implementation of planned projects on time;
- o Pockets of expropriation issues that delays implementation of different projects and programs, especially these were associated with lack of land tittles, complaints and non-compliancy by some land owners;
- Emergency of contractors that are not financially and technically capable of implementing different programs/projects granted, hampered timely accomplishment of planned projects;
- Extensive procurement procedures associated with appeals and projection of risks delayed the implementation of different programs/projects;
- Water reduction levels led to reduced volume of water produced, in turn affecting water supply in different parts of the country, especially City of Kigali and other urban areas; this further framed into a number of water treatment plants not operate to their maximum capacity;
- o Too much time required in PPA negotiation processes delayed achievement of planned targets;
- o Payments have been delaying for so long than usual due to long processes by concerned institutions;
- o Imprecise feasibility studies that result into poor planning of some projects which turn out to require extended timeline and resources, deferred the progress of these projects;
- Delays to start works by some contractors and un expected termination of contracts delayed projects implementation in some areas;
- Weaknesses in contract Management delayed execution of projects as aligned to set targets;

- o Poor collaboration and coordination between stakeholders, especially the implementing agencies such as districts, hinder smooth progress of certain projects, more importantly on the execution of earmarked funds to their budgets;
- o In particular, Rwandair experienced challenges in terms of intense competition by bigger carriers like FlyDubai, Qatar Airways, Kenya Airways and Ethiopian Airlines. Several other hiccups such as the Ebola pandemic, Burundi crisis and xenophobic attacks in South Africa among others, stalled the operational performances of Rwandair in these areas.



#### 4. LESSONS LEARNED

Despite the challenges aforementioned above, there were lessons drawn from 2014/2015 fiscal year as shown here below:

- Establishing good collaboration and partnership with different stakeholders is central, especially, in planning process and organizing Sector Working Group Meetings;
- Outsourcing extra budget through targeting external funders, mainly, financing minor projects is central as it greatly supplement additional ordinary budget requirements;
- In planning for affordable housing projects, the government's effort towards availing land for development, carry out plot serving and leave the implementation to private developers stood to bring more success in this area;
- Coordination committee on urban and rural settlement composed of all stakeholders/partners flagged to be essential in the implementation of different programs/projects under Rwanda Housing Authority;
- o Joint planning with all concerned stakeholders proved to be critical to avoid future delays in the projects implementation;
- o Improved coordination and communication has contributed to effective implementation of projects ,though, more interventions are needed;
- Private sector involvement greatly contributed to the successful implementation of different projects but their interventions needs to be more oriented and guided;
- Strong Monitoring and Evaluation system is believed to help in the successful projects implementation, however, there are still some gaps
- o Anticipated Procurement process is likely to contribute to the timely projects execution without delays;
- o Increased ownership by projects implementers and stakeholders has raised projects execution rate but needs to be sustained.

### 5. RECOMMENDATIONS FORMULATED

To address the challenges aforementioned, more realistic action plan coupled with well detailed performance contracts and operational procedures will be adopted in FY 2015-16 to avoid unnecessary delays, as staffing in the Ministry and Agencies is at an admirable level. Here below are the recommendations to be adopted for effective projects and programs implementation:

- o Linking the pre-determined Annual Action Plan with the Procurement Plan accordingly to ensure timely and exhaustive achievements;
- o To entrench the culture and spirit of result based management through ensuring a honed mechanism between planning and implementation of projects.
- Smart project environmental and social impact assessment and analysis should go hand in hand with the project study to minimize social complaints and delays;
- o Effective monitoring and Evaluation of implementation of Procurement plan and contract management should be given high priority;
- o Job trainings tailored to the needs of the staff are required to be periodically organized to increase technical skills and boost personal development career plans as one of retention measures;
- o To establish a strong coordination and partnership mechanism between all stakeholders, especially districts on the use of transferred funds;
- o In expropriation process, district one stop center should always be consulted especially to fast-truck issuing of genuine land tittles respective clients. It would be important to include One stop Centre staff in the expropriation team;
- o Improved framework should be put in place to fortify supervision, technical support and monitoring of earmarked transfers. This certify proper projects implementation and the value for money during the implementation process;
- o In determining the contractor, the technical and procurement teams should always interweave efforts to ensure proficient contractors;
- o Rwanda Housing Authority should concentrate on construction of new government offices and giving guidance on programs/strategies implementation, consequently, rehabilitation activities should be left to

- corresponding institutions for implementation and funds allocated to their budgets;
- o Procurement planning should always start in advance, so as to ensure that all issues in procurement are furnished in advance to avoid the risks of delay.
- Joint planning process to be effectively organized and conducted through bringing on board all aligned implementers especially in the Imihigo preparation, and consultations should be improved and stressed;
- o Liaise with MINECOFIN for invoices payments on time to avoid delays and suspension of works by contractors;
- o Put more emphasis and importance on projects preparation, planning ahead for getting non-objection and legal opinions on time and improve communication and projects information sharing;
- o Organize exchange meetings for sharing lessons learned and best practices in the infrastructure sector;
- o Improve implementation rate of projects for the next year by engaging all stakeholders on time;
- o Instill the culture of excellence in all staff and stakeholders.

## 6. CONCLUSION

This report is a summary of achievements registered across the infrastructure sector, namely, Transport, Energy, Water & Sanitation and Urbanization & human settlement in the 2014/2015 fiscal year. Despite substantial progress enjoyed in this fiscal year, pinches of challenges were encountered and resilient measures must be put in place to guarantee improved performance across all the sectors of infrastructure. It's in this regard, effective measures were taken into consideration to guarantee continuous progress in the next 2015/2016 fiscal year where much improved and balanced triumphs are expected to be delivered, given targets set Vs. proposed activities and inputs.

