

REPUBLIC OF RWANDA



MINISTRY OF INFRASTRUCTURE

INFRASTRUCTURE SECTOR ANNUAL  
REPORT FOR FISCAL YEAR 2019/20

September 2020

MINISTRY OF INFRASTRUCTURE

## FOREWORD

The Ministry of Infrastructure presents its achievements for the period from 1<sup>st</sup> July 2019 to 30<sup>th</sup> June 2020. These achievements are strongly aligned to the objectives set by the Government of Rwanda aimed at attaining economic development and poverty eradication as defined in the National Strategic Planning documents such as Vision 2020, NST1 and Sector Strategic plans and other global aspirations such as Sustainable Development Goals (SDGs) and AU 2063 Agenda.

During the year 2019/20, in the transport sector, notable achievements were realized in the areas of roads rehabilitation, upgrading, maintenance and air infrastructure development. However, the air transport services were drastically hit by the Covid\_19 pandemic outbreak.

In energy sector, efforts were directed towards enabling access to safe, reliable and cost effective electricity through increasing power generation and households' accessibility to grid and off grid electricity. As a result, households' connections reached 56% by end June 2020 from 51% of June 2019 and total power generation capacity reached 228.102 MW from 225.8MW achieved by June 2019.

In the Water and Sanitation sector, more efforts were concentrated on rehabilitating and extending water network whereby 514.81 km of water distribution network was constructed to serve 329,450 people in both urban and rural areas. With regard to rehabilitation of non-functional rural water supply systems; 59 were rehabilitated.

In the Urbanization, Human settlement and Housing development; remarkable achievements were realized in the relocation of households from scattered settlements and high-risk zones (9,165 households relocated); Provision of basic infrastructure for affordable houses and sports related infrastructures whereby 3 stadia of Bugesera, Ngoma and Nyagatare were completed.

The Ministry therefore, wishes to thank all stakeholders that contributed to 2019/20 achievements and calls for continued commitment with regard to providing competitive and sustainable infrastructures in order to achieve the Country's objectives as outlined in the National Strategy for Transformation (NST1) and Vision 2050.

**Hon. Claver GATETE**

**Minister of Infrastructure**

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## LIST OF ABBREVIATIONS

AfDB	African Development Bank
AGL	Airfield Ground Lighting
AU	African Union
BPMIS	Building Permit Information System
CHOGM	Commonwealth Heads of Government Meeting
CoK	City of Kigali
COVID -19	Corona Virus
DU	Dueling Unit
EAC	East African Community
EDCL	Energy Development Corporation Limited
EICV	Enquête Intégrale sur les Conditions de Vie des ménages
EUCL	Energy Utility Corporation Limited
FY	Fiscal Year
GEMS	Global Education Management Systems
GoR	Government of Rwanda
GPS	Global Positioning System
GRC	Grievance Redress Committee
ICAO	International Civil Aviation Organization
IDP	Integrated Development Program
IRCAD	Institut de Recherche contre les Cancers de l'Appareil Digestif
JICA	Japan International Cooperation Agency
KBC	Kigali Business Center
KFAED	Kuwait Fund for Arab Economic Development
KIA	Kigali International Airport
KM	Kilometer
KV	Kilovolt
LAIS	Land Administration Information System
LPG	Liquefied Petroleum Gas
LUDP	Local Urban Development Plan
LVWATSAN	Lake Victoria Water Supply and Sanitation Program

MIS	Management Information System
MoU	Memorandum of Understanding
MS	Microsoft
MW	Megawatts
NISR	National Institute of Statistics of Rwanda
NRW	Non-Revenue Water
NST	National Strategy for Transformation
NUC	National Umushyikirano Council
OSBP	One Stop Border Post
OSC	One Stop Center
PK	Point Kilometrique
PSF	Private Sector Federation
PwDs	People with Disabilities
RAC	Rwanda Airports Company
RAP	Resettlement Action Plan
RCAA	Rwanda Civil Aviation Authority
REG	Rwanda Energy Group
RHA	Rwanda Housing Authority
RNRA	Rwanda Natural Resource Authority
RTDA	Rwanda Transport Development Authority
RUDP	Rwanda Urban Development Program
SDG	Sustainable Development Goals
SFD	Saudi Fund for Development
SGR	Standard Gauge Railway
TL	Transmission Line
TMEA	Trade Mark East Africa
TVET	Technical and Vocational Education and Training
WASAC	Water and Sanitation Corporation
WASH	Water, Sanitation and Hygiene
WSS	Water Supply System
WTP	Water Treatment Plant

## EXECUTIVE SUMMARY

This report highlights the key achievements realized in the Fiscal Year 2019/20 by the Ministry of Infrastructure in the sectors of Energy, Transport, Water and Sanitation as well as Urbanization and Human Settlement. These achievements are in line with sector targets embedded in the National Strategic Programs such as Vision 2020, NST1 and other high-level decisions.

The achievements came as a result of implementing key interventions in the sector that aimed at improving the wellbeing of the Rwandans in general. In the energy sector, the customer base grew by 134,356 new on grid connections and 62,306 connected using off grid solutions, which led to an increase from 51% to 56% of electricity access and 478 productive use areas were connected. Furthermore, power generation capacity increased to 228.102 MW from 225.8 MW reported by end June 2019.

In order to improve power transmission capacities of the network, 220/110kV power transmission project, “Mamba-Rwabusoro-Bugesera-Gahanga were commissioned in January 2020.

Moreover, an additional 1,268 km of Medium Voltage (412 km) and Low voltage (856km) lines were added to the distribution network across the country.

In the Transport sector, the paved road network was improved with the rehabilitation of Rusumo \_ Kayonza \_ Kagitumba (208km) as well as upgrading National roads and Urban roads across the country. All of these interventions had a positive impact on the riding quality whereby paved roads network sustained a 96% of roads in good conditions whereas paved and unpaved national roads combined were at 79.3%.

In air transport, major airport infrastructure developments continued. The construction of Bugesera International Airport progressed to 30% from 27.52% by end of June 2019.

In light of the preparations for Commonwealth Heads of Government Meeting (CHOGM), and RwandAir’s expansion plan, KIA have benefited from substantial investment and this has considerably increased the capacity, safety and security at the airport. This involved the implementation of different projects at KIA including Expansion of Kigali International Airport South Apron, Construction of a road connecting the south apron to the main apron at KIA, KIA Arrival terminal and KIA runaway strip grading.



In Water and Sanitation sector, water production capacity was sustained at 267,660m<sup>3</sup>/day due to the fact that planned water production projects were not completed as Covid\_19 significantly affected its implementation plan. More efforts were also concentrated on rehabilitating and extending water network whereby 514.81 km of water distribution network was constructed to serve 329,450 people in both urban and rural areas whereas 109 Productive use areas and 15,553 new urban customers were connected. In addition, 17 boreholes were constructed to serve farms in Nyagatare and Kayonza districts.

Under Urbanization, Human Settlement sector, 8,394 households were relocated from scattered settlements and 771 Households from High Risk Zones and resettled into planned/ viable settlements. Existing IDP model villages were upgraded and new IDP sites were developed. To this end, Kaborogota modern IDP Model Village in Nyagatare District was completed and inaugurated on 4<sup>th</sup> July 2020 among others.

Sports related infrastructures were also prioritized; these include three (3) stadia in Bugesera, Ngoma and Nyagatare districts for football that were completed and are hosting local competitions.

## **1. INTRODUCTION**

The Fiscal Year 2019/2020 marks the third year of implementing the 7 Years Government Programme: National Strategy for Transformation (NST1). Infrastructure projects executed during FY 2019/2020 contributed to the realization of Sector strategic objectives as well as targets set forth in the National Planning policies and strategies as well as overarching continental and global targets such as African Union Agenda 2063 and SDGs.

This annual report is therefore a result of coordinated efforts towards implementing the infrastructure sector programs, policies, laws and regulations and highlights key achievements registered in the period between 1<sup>st</sup> July 2019 and 30<sup>th</sup> June 2020 in line with 2019/20 Fiscal Year plans and the National Strategic sector priorities as adopted in different national fora such as National Leadership Retreat (NLR), National Umushyikirano Council (NUC), Cabinet decisions and other high-level commitments.

## **2. INFRASTRUCTURE SECTOR ACHIEVEMENTS FOR 2019/20**

This section gives a summary of key annual achievements in the sectors of Transport, Energy; Water and Sanitation; Urbanization, Human settlement and Housing Development as implemented by both the Ministry and its Affiliated Agencies. Key detailed achievements are highlighted as follows.

### **2.1. TRANSPORT SECTOR ACHIEVEMENTS**

Rwanda's vision, in transport sub sector, is to become the main logistic hub for the East and Central Africa due to its geographical location. Thus, the Government of Rwanda is keen to developing a reliable transport system not only to enhance the social welfare of the Rwandans but also to improve economic development of the country through enhancing both Domestic and external connectivity to ease internal and cross-border trade.

This section therefore, gives a summary of key achievements for the road transport development and services, trans-border infrastructure development, Railway development, Air transport development as well as inland water transport development.

The following is an overview of key achievements realized by respective transport sub-domains for the fiscal year 2019/2020.

### 2.1.1. Land transport

Land transport comprises the upgrading, rehabilitation and maintenance of National roads, Districts roads, Feeder roads development as well related public transport services. Road transport contributes to improved mobility and connectivity thereby enhancing economic transformation. Furthermore, the country is working towards having a railway infrastructure that will reduce transport costs on both exports and imports in the region.

#### 2.1.1.1. Road transport

Road transport is a key sub-sector as it contributes to economic transformation through continued improvement of the road network. In FY 2019/2020, the paved and unpaved road network construction, rehabilitation and maintenance were prioritized as well as connecting private sector investments.

During the year 2019/20, National paved roads network was extended to 1,425.5Km from 1,390.5 in 2018/19. About 3,248 km of feeder roads were constructed cumulatively to facilitate market access for rural farmers and their produce.

The interventions had a positive effect on riding quality whereby National paved roads network registered 97.6 % of roads in good condition and the percentage of National roads (paved and unpaved) in good conditions was at 76.9% according to the annual Road Condition Survey conducted in FY 2019/2020.

**Here below are the key implemented projects and their status in details.**

#### Roads Rehabilitation Projects

Rehabilitated roads entail the following:

- ◆ **Huye-Kitabi Road (53km):** The contract for works was signed in March 2017 and a service order was issued in May 2017. The project is substantially completed and provisional handover is being prepared.
- ◆ **Kagitumba-Gabiro Road (60km):** The Contract was signed in December 2016. The project is substantially completed and provisional handover is being processed. The construction of

10 boreholes and rehabilitation of Milk Collection Centers (MCCs) that were part of the project were completed and provisionally handed over to communities for immediate use.

- ◆ **Gabiro-Kayonza Road (56km):** The contract was signed in December 2016 and the project is substantially completed and preparations for provisional reception are under way. Furthermore, the project additional works of access road from **Kabarondo to Akagera (35km)** to spur tourism around Akagera Park were also completed.
- ◆ **Kayonza-Rusumo Road (92km):** The contract for works was signed in December 2016 and the project is substantially completed and provisional reception is under preparation. The cross-border market at Rusumo is also completed.
- ◆ **Muhanga-Rubengera road (Lot 1):** Funds were secured from SFD and KFAED. Rubengera–Rambura (15.15 km) project preliminary works started on 18<sup>th</sup> June 2020, Site installation is at 80%, mobilization of personnel is at 90% & equipment is at 80%.

### **Multi-year Maintenance of Paved Roads**

887 km of National paved roads were under multi-year maintenance program and this has led to a sustained riding quality for most roads. The maintenance works ongoing during the FY 2019/20 were as follows:

- ◆ **157km Kigali-Huye-Akanyaru (periodic maintenance):** The riding quality is at 85%. Works for Phase III were completed at 100% and provisional handover is under preparation.
- ◆ **82km Kigali-Musanze road (Multiyear):** The riding quality is at 96%. Execution of works for Phase II of multiyear maintenance is estimated at 85% and is supposed to be completed in December 2020.
- ◆ **102km Nyakinama-Musanze-Cyanika-Musanze-Rubavu road (Multiyear):** Maintenance works are ongoing and the riding quality is at 90%. The contract of another year is under preparation for signature.
- ◆ **65km Kigali- Kayonza road (Multiyear):** The riding quality is at 96%. A site inspection for provisional handover of Phase III was conducted on 19<sup>th</sup> June 2020. The contractor is correcting snags identified prior to the provisional handover. The new contract of another year is under signature.

- ◆ **78km Muhanga-Karongi road (Multiyear):** Maintenance works are ongoing and the riding quality is at 65%; the road is in critical condition thus full rehabilitation is imperative. The road rehabilitation works are ongoing under the sections starting with Rubengera–Rambura (15.15 km).
- ◆ **50km Rusizi-Bugarama-Ruhwa and Access to Rusizi road (Multiyear):** Maintenance works are ongoing and the riding quality is at 86%. A new multiyear maintenance works contract for Phase I is under signature.
- ◆ **98km Muhanga-Ngororero-Mukamira road (Multiyear):** Maintenance works for Phase II of multiyear maintenance is estimated at 96.9% and the riding quality is at 96%.
- ◆ **78km Kigali-Gatuna road (Multiyear):** Maintenance works for Phase II of multiyear maintenance was completed and a provisional handover was done. Service Order for Phase III was issued on 4<sup>th</sup> June 2020 and works progress is estimated to be 14% and the riding quality is at 98%.
- ◆ **61km Kicukiro-Nemba road (Multiyear):** Maintenance works for Phase III multiyear maintenance is estimated at 93% and the riding quality is at 96%.

### Road Upgrading Projects

A number of unpaved national roads (392km) were under upgrading process as the below status highlights:

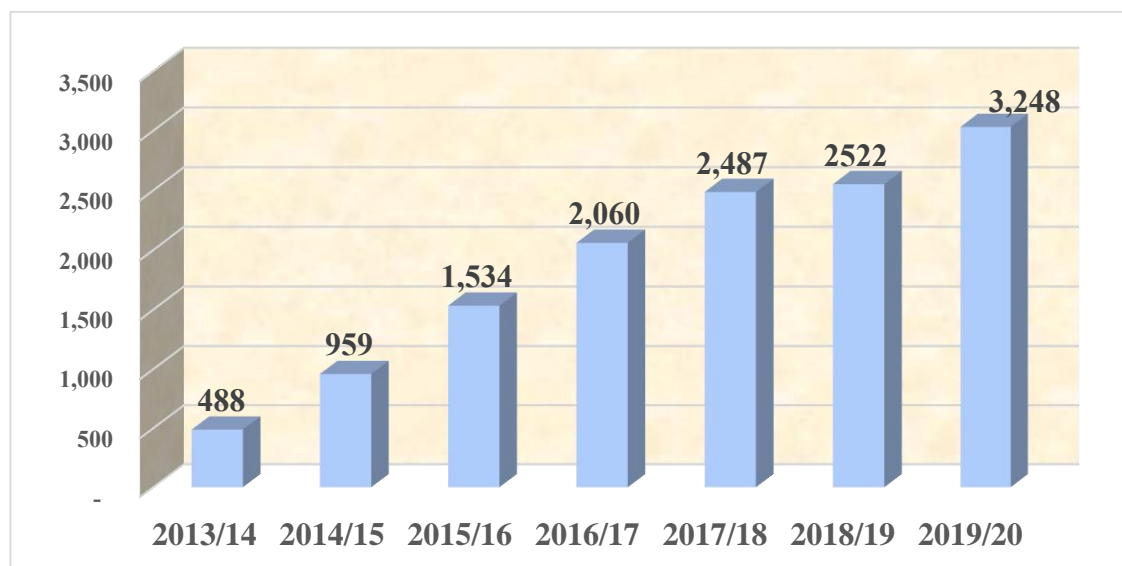
- ◆ **Nyagatare-Rukomo road (73 Km):** The contract was signed on 16<sup>th</sup> July 2018 and the Service order to start works was issued on 18<sup>th</sup> July 2018. The overall progress is estimated at 56.08%.
- ◆ **Base-Gicumbi-Rukomo road (51.4km):** The project initial works are substantially completed. Addendum of 8 months for slope protection of PK23 nearly 600m was sent to the bank for non-objection and feedback is awaited.
- ◆ **Base-Butaro-Kidaho (63km):** The Line of Credit Agreement worth \$66.6 million was signed between the Government of Rwanda and the Republic of India through Exim Bank-India to finance the project following a restructuring process. A procurement process was undertaken, however exorbitant quotations were received and No-Objection from the Bank to cancel the tender was obtained.

- ◆ **Ancillary works to Gisiza-Rubavu road (Kivu-Belt):** The ancillary works cover four (4) Lots namely: Lot 1: Murunda Hospital Tarmac Access Road (4.2km); Lot 2: Bralirwa – Burushya Tarmac Road (4.1km); Lot 3: Bralirwa – Rubavu Tarmac Road (Marine) (6.2km) and Lot 4: Access Road to Symbion Methane Gas (4.2km). The nineteen (19km) road stretch was estimated at 62% of physical progress including mobilization.
- ◆ **Ngoma-Ramiro road (52.8km):** The Loan Agreement was signed on 22<sup>nd</sup> March, 2018 between the GoR and JICA. The contract for the consultant was signed on 19<sup>th</sup> April 2019 and Service Order issued on 6<sup>th</sup> May 2019 to start services related to Detailed Design. Tender documents for related civil works were finalized and submitted to JICA on 3<sup>rd</sup> January, 2020 for their concurrence prior to official publication. JICA’s concurrence is still awaited after addressing comments raised in June 2020.
- ◆ **Upgrade 66.55km Kibugabuga-Nyanza road:** Procurement was initiated and concluded on 22<sup>nd</sup> May 2019 with contract signing for design, construction, and maintenance. The contract for the Consultant to Monitor and supervise services was signed on 31<sup>st</sup> May 2019 and the Service Order was issued 13<sup>th</sup> June 2019. Design activities are fully completed and approved. The overall physical progress of civil works is estimated at 30%.
- ◆ **Huye-Kibeho-Ngoma (66 km):** A concessional Loan Agreement was signed on 23<sup>rd</sup> July 2018 and became effective on 16<sup>th</sup> October 2018. The contract for the consultant was signed and Service Order issued 20<sup>th</sup> March 2019 to start services. So far, the overall project progress is at 47.56% and time elapsed is 41.61%.

### **Feeder roads rehabilitation**

- ◆ Linking rural communities and productive use areas to market was prioritized whereby 450km feeder road roads in six districts of Gatsibo, Nyagatare, Nyabihu, Rutsiro, Gakenke and Nyaruguru are under rehabilitation process with all contracts for works signed.
- ◆ **Rehabilitate 127.6km of feeder roads in Karongi and Nyamasheke districts:** Karongi: Works are completed at 100% and provisional handover took place on 3<sup>rd</sup> May 2019. The works in Nyamasheke had unforeseen challenges which hindered project completion. The overall physical progress for road works was at 87.3% before contract termination.

**Figure 1: Feeder roads trend for the period from 2013/14-2019/20**



*Source: RTDA Administrative data*

Efforts have been directed towards construction, rehabilitation and maintenance of feeder roads in order to stimulate economic growth. An increasing trend is observed as portrayed by figure1.

### **Periodic Maintenance of unpaved roads and bridges**

**The following unpaved roads and bridges were maintained in FY 2019/2020:**

- ◆ Periodic Maintenance of **Giticyinyoni-Ruli-Rushaki-Gakenke** (68.7 Km); the overall physical progress was 100% and the provisional handover was done.
- ◆ Maintenance of **Rubagabaga Bridge**: The overall progress is estimated at 83.2%. The target for execution of approach roads and gabions was met at 100%.
- ◆ Maintenance of **Satinsyi Bridge**: The overall progress is estimated at 84%. Currently, improvement of the access road is ongoing until end July 2020.
- ◆ Maintenance of 48.6km **Kabuhanga-Kinigi road** was completed at 100%. Technical inspection for works was conducted on 11<sup>th</sup> September 2019. The project is under routine maintenance by District (Musanze, Rubavu and Nyabihu).
- ◆ Maintenance of **Mukunguri \_ Rugobagoba** (19km) was completed at 85%, however, due to poor performance by the contractor, the contract is in the termination process.

In order to improve urban transport mobility, 67 Km of urban roads in CoK are under construction

- ◆ 54km Kigali urban roads upgrading projects with overall works progress completed at 98%.
- ◆ Sonatube Gahanga-Akagera (13km) with overall works progress estimated at 52%.

#### **2.1.1.2.Trade facilitation infrastructure**

The government continued to put in place required physical infrastructure to facilitate trade in the region. The established physical infrastructure contributes to reducing the time required to transport goods between countries, and border crossing time contributing to reducing trade costs in East African member countries. In this context, the construction of Gatuna OSBP to reduce border-crossing time along the Northern Corridor was completed and Rusumo Cross Border Market was also fully completed.

The construction of the above-mentioned infrastructure has improved trade facilitation through facilitating faster clearance of cargo, realization of significant reduction in transport costs and ensuring effective border control mechanisms.

#### **2.1.1.3.Railway transport**

The railway transport infrastructure is shaping up as the design review and updating of feasibility study for Isaka-Kigali Standard Gauge Railway (SGR) was completed. Right of way demarcation is ongoing with the inception report submitted on 30<sup>th</sup> June 2020 while all digital data for beacon placements were extracted and the beacon prototype was produced for approval. The overall project progress is estimated to be 5%.

### **2.1.2. Public transport services**

In a bid to improve public transport services and promote green transport to cater for the needs of exponentially growing population, the contract for Consulting Services to develop Business Models for Public Transport Services in City of Kigali was signed by RTDA and TRANSITEC consulting Engineers on 22<sup>nd</sup> January 2019 for a period of 12 months. The revised final report was submitted on 29<sup>th</sup> June 2020 and is under review by technical team prior to approval. The study had proposed the following key interventions:



## **Traffic Management Measures**

1. *Road development for buses (bus lane insertion, bus stop design, speed moderator design)*
2. *Optimization of traffic lights functioning*
3. *Global and sectorial traffic management (Access control and traffic plan discontinuity)*
4. *Modification of Public Transport path*

## **Public Transport Improvement measures**

1. *Bus schedules*
2. *Concession model contracts*
3. *Fare structures*
4. *Bus operations efficiency and financial assessment*
5. *Concept and future scenario for Public Transport Network*

### **2.1.3. Inland water transport**

Maritime infrastructure development on Lake Kivu was one of the priority areas to look at when promoting the inland water transport and reducing transportation costs for goods and people. Under the Maritime transport infrastructure development, so far, 50% of infrastructure development funds have been secured through TMEA. The Kingdom of Netherlands agreed to provide 45% of funding gap while the Government of Rwanda will contribute 5%.

During the year in review, the study for development of 4 ports on Lake Kivu was completed at 100% and the contract for construction works of Port Facilities at Rubavu and Rusizi was signed on 9<sup>th</sup> December 2019 and overall project progress is at 3.5%.

The government has also embarked on manufacturing and the supply of Nkombo boat II and feeder boat. The safety assessment was completed at 100%. The feeder boat manufacturing was completed and is now being tested on Lake Kivu. Nkombo Boat II manufacturing is completed at 37% and the overall project progress is at 56%.

### **2.1.4. Air transport**

Rwanda being land locked, flight transport has become an essential driver for the economic, social and cultural development and has totally changed the way businesses are conducted.

During the first half of the reporting period, there was promising growth in traffic and revenue as usual. However, like all other sectors globally, air transport has been one of the hardest hit by the COVID\_19 outbreak. Due to the pandemic, passenger numbers have dropped by 17% compared to the previous fiscal year and Aircraft movement has also decreased by 12%.

In the last 12 months (July 2019-June 2020), comparing to the same period in the previous year (July 2018-June 2019), there was a 19% reduction in international departing passengers (from 391,779 to 335,454 passengers).

### **A. Physical infrastructure development**

In light of the preparations for Commonwealth Heads of Government Meeting (CHOGM), and RwandAir's expansion plan, KIA have benefited from substantial investment and this has considerably increased the capacity, safety and security at the airport. Ongoing investments in both airports infrastructure and the National Carrier (RwandAir) are progressively solving capacity challenges and continually enhancing the Rwandan aviation system.

For the last four years, priority was given to the expansion of the departure area and associated facilities. Nevertheless, after completion of the departure area, emphasis has been shifted to expansion of the South apron, Arrival terminal as well as construction of a service road connecting the South apron to the main terminal building.

#### **1) Construction of New Bugesera International Airport(NBIA)**

The Construction works of NBIA continued and reached 30% considering the original project scope. GoR was as well able to bring Qatar Airways on board as the new Strategic Partner in the implementation of the Project.

#### **2) Expansion of KIA South Apron**

Kigali International Airport has two aprons which are located at the South and North of the Runway. The North apron was dedicated for commercial flights, with 14 parking stands and South apron, with 12 parking stands dedicated for Air force parking and private aircrafts.

However, as RwandAir continued to acquire extra aircraft and considering the increase in high level meetings and conferences attracting more VIPs who often use private jets, it became evident

that the existing aprons were operating at full capacity. Therefore, the expansion of South Apron has added 13 extra parking stands for code C aircraft (e.g. B737-800).

### **3) Construction of a service Road Connecting the South Apron to the main terminal building**

It was observed that the usability of the South Apron parking by commercial flights would be difficult due to the fact that support infrastructure (terminal and cargo buildings) are located across the runway. This posed operational challenges as well as a serious safety threat for aircraft movement during landing and takeoff, resulting from constant crossing of the runway to the main terminal building. Therefore, a service road connecting the South Apron to the main terminal building was constructed/ completed.

### **4) Expansion of Arrival terminal**

Over the past five years, there have been tremendous improvement on KIA terminal building matching traffic growth. However, much of the emphasis was put on the departure processes as well as associated duty-free and passenger boarding gates. However, by the end of FY 2018-2019 the arrival area had exceeded its capacity.

Therefore, the expansion of the arrival area was one of the priority as the country prepared for CHOGM and other meetings and conferences taking place in Rwanda, as well as to accommodate traffic growth resulting from RwandAir's expansion. This project was completed at 87% during the reporting period due to Covid- 19 outbreak that affected project implementation plan.

### **5) Runway Strip grading**

KIA runway strip was not graded, with significant humps and depressions. It was one of the RCAA, ICAO and APEX significant audit findings that was not yet closed. Thus, the main purpose of the project was to improve the safety of aircraft during landing and take-off.

Initially, the project duration was six (6) months, with 5 working hours per day. However, after consultations with airlines on the impact of closing the runway for 5 hours per day, it was revealed this could lead to significant losses to airlines. It was therefore, agreed that the working hours be reduced to 3 hours per day. Consequently, the project duration was extended to 12 months. Therefore, during the reporting period, the project was completed at 49%.

## **6) Expansion of the Main Car park**

Kigali International airport has sustained growth in passenger movements. Over one million passengers passed through the KIA in FY2018/19. The increased growth in passenger numbers placed increased pressure on the capacity of existing landside infrastructure, particularly the demand for short and long-term parking facilities. The existing car park has 319 parking slots, however, pre-Covid -19 data indicates that during peak hour more than 250 cars used the airport parking per hour. This excludes long term parking demand from Airport staff. In view of the above, KIA main car park has been expanded with 130 extra parking slots to improve customer experience for airport users.

## **7) Pavement of Kanombe access road**

KIA has two access roads, one from Remera side (main access road) and the other from Kanombe side which was not paved. Therefore, during the reporting period pavement works for the access road has been completed. This has significantly improved the airport image as well as service delivery for airport users.

## **8) Upgrading of Kamembe Airport**

Over the years, Kamembe airport has been operating during daytime only due to the fact that there was no support infrastructure (Airfield Ground Lighting (AGL) System, communication systems etc.) that allows night operations. In order to improve the airports safety and security as well as operating 24 hours, Rwanda Airports Company with the support of the World Bank through the Government of Rwanda is upgrading the airport. The upgrade includes the following components:

- ◆ Installation of Airfield Ground Lighting (AGL) System, upgrade of power supply and associated civil works which is completed at 60%.
- ◆ Acquisition and installation of Automated Weather observing system (AWOS) with overall project progress completed at 60%.

## **9) Upgrading of Gisenyi Airport**

Currently, the airport is not operational for regular commercial flights, mainly due to runway limitations. To address the challenge, the airport upgrading is planned to be implemented in phases.

- ◆ The 1<sup>st</sup> phase focused on acquisition of land for the planned upgrade

- ◆ Phase two being implemented in the reporting period is the construction of a perimeter fence which is completed at 75%.
- ◆ Third phase will be the extension of the runway from 1km to 1.5km. This will allow medium body aircraft to operate at the airport.

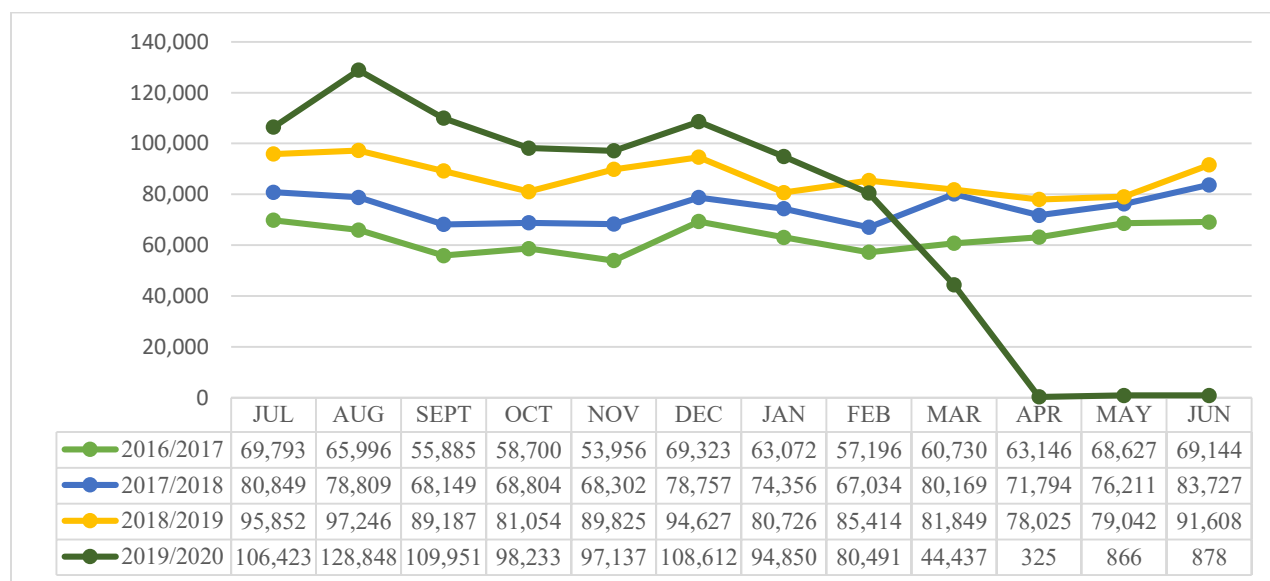
### 2.1.5. Air Transport statistics and Trends

The year 2019/2020 has been a year of promising financial and operational results in its first six months. However, the second half of the year was seriously affected by COVID-19 Pandemic; Flight operations at Kigali international Airport were halted on 20<sup>th</sup> March 2020 and this has negatively affected the performance of the aviation sector.

#### Passenger Movement

Over the past four years, passenger numbers have been growing year after year, mostly due to RwandAir’s expansion in routes and equipment as shown in the below figure.

**Figure 2: Passenger movement**



*Source: RAC 2019/20 Administrative data*

In general, pre-Covid passenger numbers were growing at an average of 12%. However, after the outbreak, passenger movement dropped significantly, from 44,437 in March 2020 to 325 in April 2020, when the airport was closed for all passenger aircraft movement. Overall passenger movement decreased by 17% compared to the FY2018-19 (from 1,044,455 passengers in 2018/19

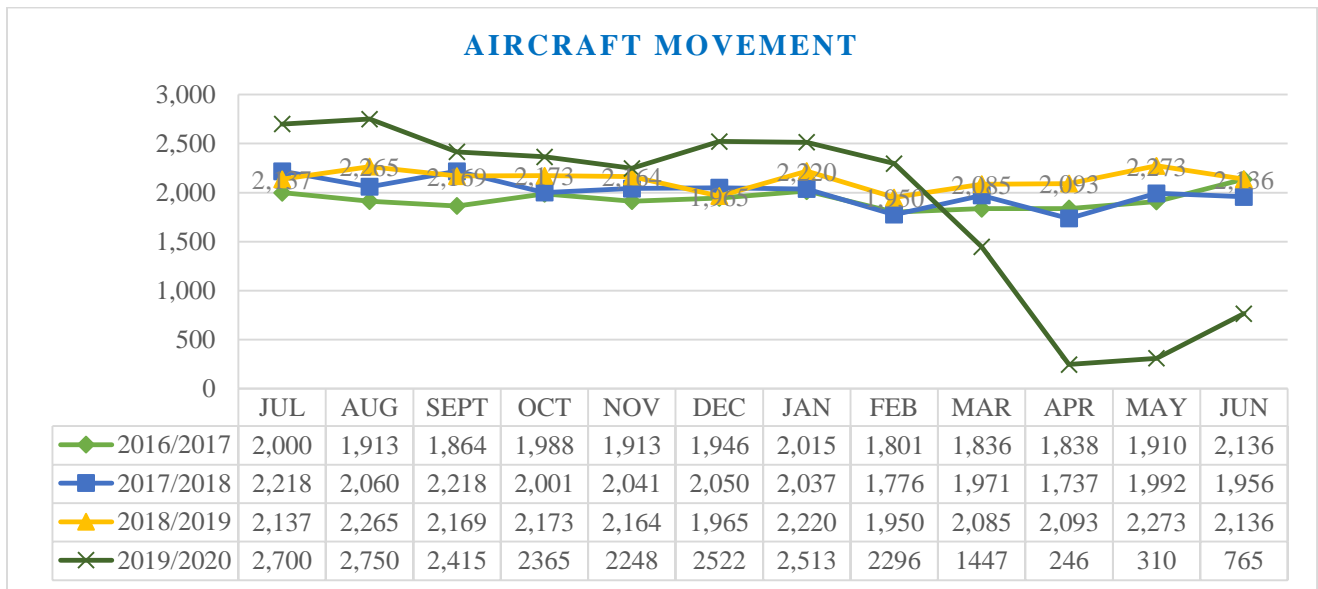
to 871,051 passengers in 2019/2020). In particular, RwandAir passengers decreased by 25.6% compared to FY 2018/2019 figures (coming from 1,151,300 to 856,167 Passengers in 2019/20).

### Aircraft Movement

Aircraft movement constitutes landings and take-offs as well as overflights. Recorded data indicates that passenger movement, before Covid-19 aircraft movement has been steadily increasing over the past four years at an average growth rate of 5%.

As indicated in the graph below, after the COVID-19 outbreak, aircraft movement declined sharply from March 2020. However, by end May aircraft numbers started to pick up slowly mainly resulting from cargo and general aviation. Overall, aircraft movement decreased by 12%.

**Figure 3: Aircrafts movement**



*Source: RAC 2019/20 Administrative data*

### Overflights

Most of the airlines overflying Rwanda’s airspace are charter flights, making it difficult to assess reasons for increase or decrease. Currently, there are four regular commercial airlines overflying Rwanda’s airspace. They include Turkish airline, Ethiopian Airline, SN Brussels as well as Kenya Airways. Overflights have changed from year to year, with a growth of 7% in the four three financial years. The reduction due to COVID was 34%.

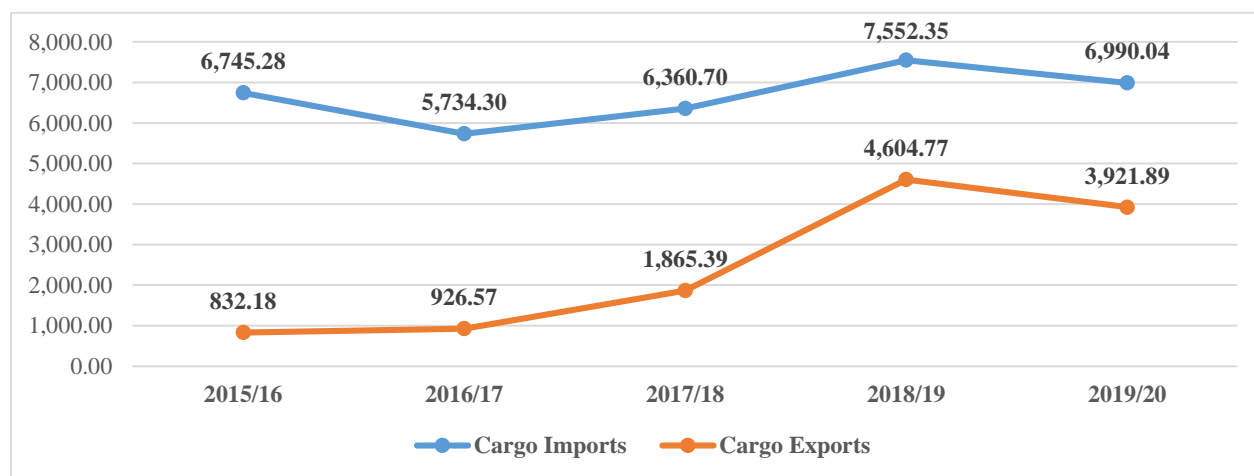
## Cargo Statistics

Before Covid-19 imports have been growing at an average of 4.8%. However, after RwandAir started operating long haul flights in 2017 to Europe and Asia, operating wide body aircraft (Airbus\_A330-300 & A330-200 as well as Boeings 737-800NG), this has facilitated importers and thus increasing imports by 10.9% and 18.7% in 2017/18 and 2018/19 respectively.

Although exports were not recording high volumes compared to imports, before Covid 19 they were steadily increasing at a higher growth rate, averaging at 53%. Mostly driven by Government of Rwanda initiatives through the National Agricultural Export Board (NAEB) and Made in Rwanda campaign. The biggest contributor is Agricultural products (Fresh Vegetables, Fruits and Flowers).

As all other areas of airport business, cargo movement have been also affected by the Covid-19 outbreak despite the weaver on Cargo aircraft. Exports decreased by 17% compared to the same period of 2018-19.

**Figure 4: Cargo statistics**



*Source: RAC 2019/20 Administrative data*

### 2.1.6. Transport sector policies, strategies and laws

The following are the ongoing policies, strategies and laws under review/drafting:

- ◆ Draft law governing Road traffic was sent to Prime Minister's Office for Cabinet consideration

- ◆ Draft law governing Public and Freight transport on road was sent to Rwanda Law Reform Commission for legal opinion.
- ◆ Draft law governing Water transport was sent to Prime Minister's Office for Cabinet consideration.
- ◆ National Transport Policy and Strategy have been submitted to Prime Minister's Office for Cabinet consideration.
- ◆ Feasibility study on introduction of electric vehicles in Rwanda was completed
- ◆ Developed the law authorizing ratification of 16 BASAs between Rwanda and other countries.
- ◆ Developed regulations, enforcement measures and awareness strategies to guide Unmanned Aircraft Systems (UAS) operations.

## **2.2.ENERGY SECTOR ACHIEVEMENTS**

This section summarizes how far the energy sector has gone implementing the government commitments in power generation, transmission and distribution as provided for in the National Strategy for Transformation (NST-1) as well as the Energy Sector Strategic Plan.

The sector primary objective is to meet the energy demand, which is imperious for Private sector development, and increasing households' access to both on-grid and off-grid electricity that is sufficient, reliable and affordable for all in order to boost economic activities and social welfare. The following sections discuss key interventions made during the first two quarters of 2019/20.

### **2.2.1. Energy generation**

The sector target by 2024 is to reach 556 MW of power installed capacity. The total installed capacity increased to 228.102 MW by June 2020 from 225.8 MW by end of June 2019. The additional capacity is from the upgrade of Agatobwe micro hydropower plant (0.2 to 0.39MW), commissioning of Kigasa (0.272MW) and Nyirantaruko (1.84MW).

The highest annual peak demand was 151.02MW observed in February 2020, compared to 140.61MW observed in February 2019. The demand growth this year was 2.8% while it was 5.9% for the fiscal year 2018/2019.

However, there are ongoing projects expected to increase the generation capacity as per NST plan.

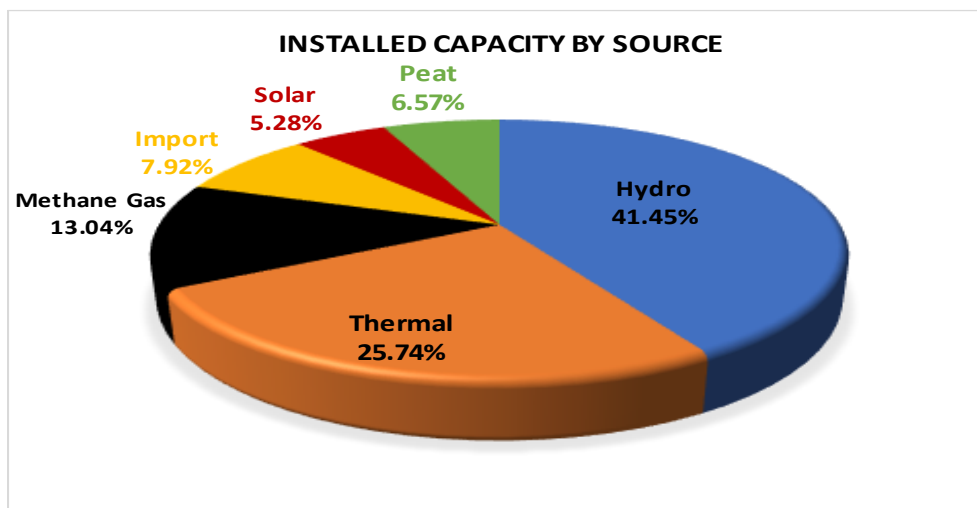


- ◆ Construction of 80 MW Hakan Peat-to-Power Plant that is completed at 91.4%
- ◆ Construction 80 MW Rusumo Hydro Power Project that is completed at 64%.
- ◆ Construction Rukarara V Mushishito (3MW) with overall progress estimated at 80%
- ◆ 43.5MW Nyabarongo-II HPP construction with overall asset valuation completed at 30%.  
In addition, procurement of a supervising firm was at contract negotiation stage by end June 2020.
- ◆ Symbion Methane Gas-to Power Project (50MW) construction with overall works progress completed at 5%.

### Generation mix

Hydropower and thermal power continue to dominate with the highest shares of the installed generation capacity of 94.678MW equivalent to 41.45% and 58.8MW equivalent to 25.74% respectively, while solar power contributes the least as per the graph below.

**Figure 5: Power installed capacity by source (%)**



*Source: EDCL Generation and Transmission Department*

### 2.2.2. Electricity Transmission and distribution

Power transmission infrastructure carries electricity from the power generators to the distribution transformers. For Rwanda, this is mainly composed of the 110 and 220 Kilovolt transmission network build across the country.

Following the commissioning of a 220/110kV power transmission project, “Mamba-Rwabusoro-Bugesera-Gahanga in January 2020, an extra 119km was added to the transmission network.

Moreover, 63 distribution projects had been completed, adding an additional 1,268 km of Medium Voltage (412 km) and Low voltage (856km) lines to the distribution network across the country.

**Key transmission and distribution line projects under implementation include:**

- ◆ Construction of 79.3km of 220kV Mamba-Rwabusoro-Rilima and 110kV Bugesera - Gahanga TL and associated SS which is completed at 96% (overall progress).
- ◆ Construction of 119km of 220kV Single circuit Rusumo-Bugesera-Shango TL and associated substations with overall works completed at 45.74%.
- ◆ Construction of 63.5km of 220kV Rwanda-Burundi TL and associated substations which is completed at 68%.
- ◆ 23.3 km of 110kV single circuit Mukungwa-Nyabihu Transmission Line and associated Substations construction with TL completed at 27.5% and works for substations completed at 34%.
- ◆ Rubavu distribution Network upgrading from 6.6kV to 30kV that is completed at 73%.
- ◆ Construction of 48.06 km of 30kV distribution line from Gabiro Substation to Gabiro Commercial Farm that is completed at 15%.
- ◆ Construction of 15kV Power distribution line Musha-Rwamagana completed at 98%
- ◆ Construction of 30kV power distribution line: Nyagasozi-Kavumu completed and commissioned.

**Key projects implemented for network performance improvement include:**

- ◆ 14.7km of Kigali distribution network reinforcement (Rehabilitation of Medium Voltage underground network) which is completed at 100%.
- ◆ Kigali distribution network reinforcement (Construction of 1.5km, four-circuit Overhead line between Gikondo and KBC - two circuits strung) completed at 100%.

**2.2.3. Access to Electricity**

The government has committed to meet universal access to electricity by the year 2024 with an estimated 3.7 million households connected. Significant investments in construction and extension of power networks were pursued as discussed above; as a result a total of 134,356 households were

connected to grid electricity in the year ending June 2020. This has led to a cumulative total of 1,092,081 households (40.3%) connected to electricity on the national grid.

A total of 62,306 households were connected to off-grid electricity, mainly roof-top solar panels by end in 2019/2020 fiscal year, bringing the cumulative total to 404,982 households connected to off-grid electricity. This was mainly done by Independent Private Investors procuring and distributing solar home solutions to end-users on a willing-buyer and willing-seller basis. The overall Percentage of households connected to off-grid electricity was recorded at 15.1% by end of the reporting year.

Therefore, total connection mix by end June 2020 was 56% of the 2.7 million Rwandan households (NISR, EICV-5) connected to electricity both on-grid (41%) and off-grid (15%).

Furthermore, a national survey conducted in 2018 indicated a total of 9,542 productive use areas countrywide. Out of the 478 productive use areas connected to the grid between July 2019 and June 2020; 147 were sector and cell offices, 91 were health facilities (Hospitals, health centers and health posts), 42 secondary schools, 23 water pumping stations and the remaining included markets, factories, telecom towers among others.

#### **2.2.4. Use of biomass energy solutions**

The target by 2024 is to halve the number of households using traditional cooking technologies from 83.3% in 2017 to 42% by 2024 through the promotion of modern energy efficient technologies.

In order to achieve this, promotional awareness campaigns among the citizens to transition from traditional cooking fuels to Modern cooking technologies such as improve cook stoves, Biogas, LPG and electricity were conducted.

Within this reporting period, 31 awareness campaign sessions on Radio and TV were conducted in 17 districts of Burera, Gakenke, Gatsibo, Gicumbi, Karongi, Kayonza, Kirehe, Musanze, Ngoma, Ngororero, Nyabihu, Nyagatare, Nyamasheke, Rubavu, Ruhango, Rusizi and Rutsiro. The message was on the availability and importance of transitioning to modern cooking technologies including liquefied petroleum gas and electricity.

### **2.2.5. Energy policy and strategic frameworks**

The following are the M&E and regulatory frameworks under development:

- ◆ National Survey on Biomass Fuel use was conducted and the draft report is available
- ◆ Guidelines to shift from traditional woody biomass to modern clean cooking technologies were developed
- ◆ The Least Cost Power Development plan was revised and updated in February and June 2020. The purpose of the plan is to have a systematic development of the Rwanda Generation Resources prioritizing the least cost options, to ensure that the tariff affordability objectives are being optimized.

## **2.3.WATER AND SANITATION SECTOR ACHIEVEMENTS**

Provision of adequate water supply and sanitation services is a critical component to the promotion of safety of public health, socio-economic development and poverty reduction. In recognition of this important role, the Government of Rwanda has committed to achieving universal (100%) access to clean water services, specifically within a reach of 200m in urban areas and 500m in rural areas, and access to sanitation facilities by 2024 as per the National Strategy for Transformation.

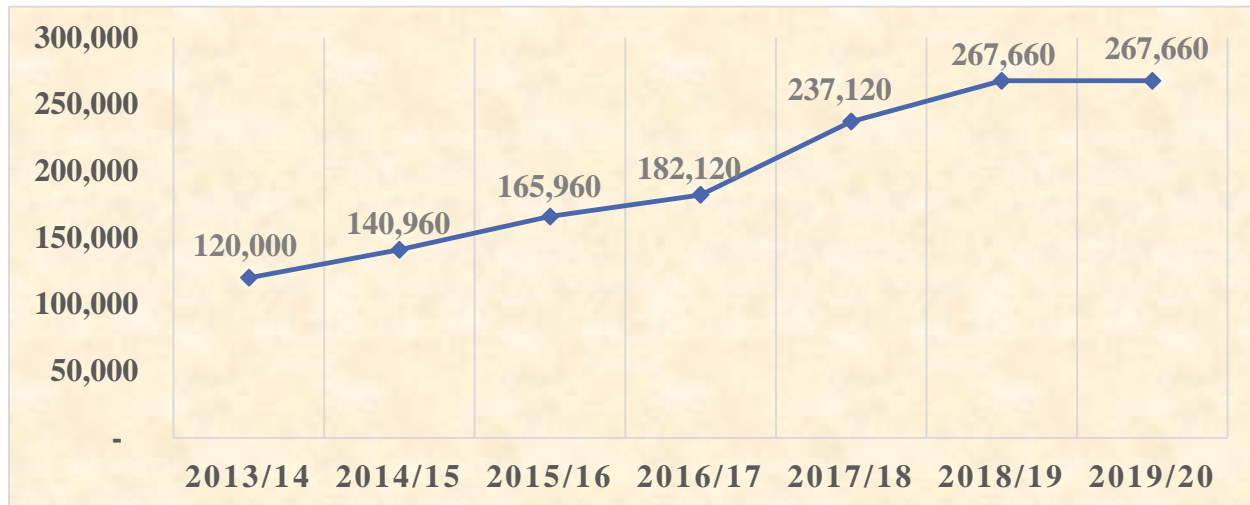
Therefore, the following sections summarize the progress made as far as 2019/20 Fiscal Year is concerned. The following are key sector achievements.

### **2.3.1. Water supply projects**

#### **A. Water production**

Water production is among the corner stones for the sustainable water service delivery. The total daily production capacity was maintained at 267,660m<sup>3</sup>/day from 26 WTPs of which 22 operated by WASAC Ltd and 4 operated by private investors (Mata, Nyabimata, yungwe bikore and Mizingo WTPs). The figure below shows Water production capacity trend from FY 2013/14 to 2019/20.

**Figure 6: Water Production Capacity Trend**



*Source: WASAC administrative data*

However, there are water production projects that were supposed to be completed in the FY 2019/2020 but Covid\_19 outbreak affected its implementation plan and its completion timeline was therefore shifted in the fiscal year 2020/2021:

- ◆ Construction of Gihira water treatment plant with production capacity of 15,000 m<sup>3</sup> per day with closing year progress estimated at 80.7% by end of reporting period.
- ◆ Construction of Kanzenze water treatment plant of 40,000m<sup>3</sup> per day, with progress estimated at 88.2% end of reporting period.

In addition to the above mentioned projects, Mwoya WTP of 3000m<sup>3</sup>/day, Nyankora quick win of 30m<sup>3</sup>/d and Karongi quick win are planned to be implemented in 2020-2021.

### **B. Water network extension**

The existing water network is overtaken by the rapid cities expansion and population growth which calls for urgent investments for upgrading and resizing of the water supply networks. To achieve this, the construction, extension and rehabilitation of 568km of water supply network in City of Kigali and surrounding peri-urban networks, 1,112km of water networks in Secondary cities and peri-urban areas and 171 km of water supply systems in rural areas were planned.

During the year in review a total of 514.81km of water network were constructed and as a result 329,450 population accessed clean water. 109 productive use areas and socio-economic facilities

(18 health facilities, 57 Schools, 23 Administrative buildings, 7 Markets, 1 prison, 1 industrial park and 2 TVETs) were connected. The below table gives the details on access and connections;

**Table 1: Completed water supply projects and served people**

No	Project	Location/ District	length	Population
1	Nyakabingo –Shangasha	Gicumbi	22.97	8,331
2	Rwangabo-Bwisige	Gicumbi	46.29	11,106
3	Bulindi –Cyumba	Gicumbi	28	14,756
4	Rwengwe, Nyarwambu and Nyakagezi-Rwesero	Gicumbi	19.25	5,783
5	Kareranyana	Gicumbi	10.40	40,739
6	Ruhunde – Rushara	Burera	19.6	43,526
7	Mageragere	Nyarugenge	30	19,000
8	Connections in dueling yards	CoK & in other Urban areas		77,765
9	Other interventions by WASH Partners	Various districts	338.3	186,209
<b>Total</b>			<b>514.81</b>	<b>407,215</b>

**Source:** 2019/20 WASAC and partners

Furthermore, the rehabilitation of 59 non-functional rural water supply systems were completed; 39 are under rehabilitation at 59% while 28 are planned to be rehabilitated in 2020-2021. 17 boreholes have been constructed to serve farms while 200 are under construction to serve population in the remote areas.

In Urban areas, 15,553 new customers were connected bringing the total number of customers to 230,190 customers as per end June 2020.

Here below are the highlights for the projects progress:

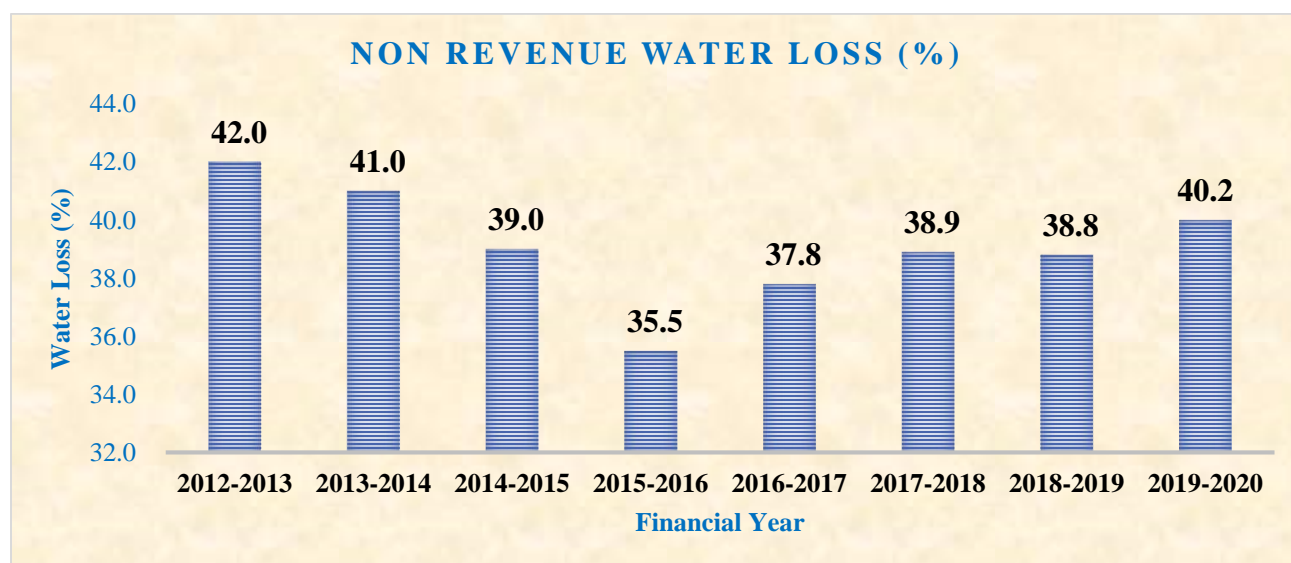
- ◆ Gicumbi WASH Program (127km) completed at 100%;
- ◆ Construction of Ruhunde - Rushara Water supply system (19.6km) completed at 100%
- ◆ Construction of Rwamagana Industrial park & extension to Ntunga WSS (10Km) completed at 100%;
- ◆ Extension of 19km Kanzenze-Karumuna water supply project completed at 85%.
- ◆ Construction of Nyabizi-Rusarabuye Water Supply System (14km) completed at 69%
- ◆ Rehabilitation and extension of 284km in city of Kigali and surrounding areas (200km constructed and 84km rehabilitated) completed at 27.28%

- ◆ Rehabilitation of 1,112km of water networks in Secondary cities and peri-urban areas completed at 35%.
- ◆ Strengthening of 11km for Nzove-Ntora Principal Transmission Pipeline in Kigali City where detailed designs were completed and contract signed.

### 2.3.2 Non-Revenue Water reduction

During the year in review, the focus was to progressively reduce NRW from 38.8% recorded in 2018/19 to 32% by 2019/2020. However, due to the disasters experienced this fiscal year that washed away many water infrastructures, roads construction works that damaged some other and delays incurred during the implementation of 2019-2020 strategies towards NRW reduction resulted into an increase to 40.2% by end June 2020.

**Figure 7: Non-revenue water loss**



*Source: WASAC administrative data*

### 2.3.3 Billing and recovery

Optimization of in house developed billing and recovery system, Customer Management System (CMS) played an important role in improving billing efficiency which increased from 99% in June 2019 to 99.4 % in June 2020 as the below table shows.

**Table 2: Water billing efficiency**

<b>Year</b>	<b>2017-2018</b>	<b>2018-2019</b>	<b>2019-2020</b>
<b>Number of accounts billed</b>	195,736	212,113	228,712
<b>Total number of live accounts</b>	203,864	214,637	230,190
<b>Billing Efficiency (%)</b>	96	99	99.4

The optimization of the billing system brought considerable advantages such as elimination of manipulation of revenue data by staff, capacity building for commercial and finance staff as well as facilitating customers to pay their water bills online.

However, collection efficiency dropped from 91.3% (June 2019) to 83% June 2020 whereby 25,202,428,738 Frw out of 30 billion have been collected. The drop in the collection was due to the COVID-19 pandemic that affected the collection in Quarter four of 2019/20.

#### **2.3.4 Sanitation projects**

The National Strategy for Transformation aims at developing waste management systems in cities, towns and rural areas and ensure 100% access to improved sanitation services. So far, the access to sanitation facilities has been defined in terms of “access to a decent/improved toilet”; therefore, the need to an integrated approach to “waste management” was extremely appealing to align the NST-1 with the Sustainable Development Goals. For this purpose, the following projects were under implementation

- ◆ Construction of Kigali Centralized sewerage system where RAP was completed.
- ◆ 12 out of 27 model public toilets were completed while 15 are ongoing with works progress estimated at 68%.
- ◆ The study for the construction of the 4 Faecal Sludge Treatment Plant and 4 landfills is ongoing with the Supervisor on board to do detail design.
- ◆ The procurement process for the construction of Masaka Faecal sludge treatment plant is ongoing (Evaluation stage).
- ◆ The study for conducting the Feasibility study for construction of Nduba sanitary landfill is ongoing (Interim report under review).



- ◆ 4 out of 14 model school latrines in 4 Districts (Musanze, Ruhango, Karongi and Gatsibo) were completed while 10 model school latrines are expected to be completed in August 2020.

### 2.3.5 Ongoing Studies for future investment

#### Ongoing Studies to be continued in 2020-2021

- Water supply Master plan in city of Kigali:** The study will focus on Kigali as a capital and seven adjacent sectors (Gahengeri, Muyumbu, Ntarama, Nyakaliro, Runda, Shyorongi and, Rugarika) with objective to have a clear long-term picture of water demand and actual water supply status in the city of Kigali until 2050. Interim report was presented and approved in February 2020 and study is planned to be completed by March 2021.
- Integrated National Water supply and Sanitation Master plans:** The study will help the sector to have key scenarios of water demand, potential sources for new treatment plants and draw down the strategic required investments for the next 10-15 years in order to maintain the 100% access in water and sanitation sector. The study is planned to be completed in April 2022.
- Study for water access rollout program to connect households and productive use areas:** This was initiated to Provide strategies and assess required investment for every household and productive use areas in Rwanda to get access to clean water at its premises; the completion period is in February 2022.
- Feasibility study for Rehabilitation and extension of water supply system in the volcanic region under external grant from Netherland.
- Feasibility study and detailed design for construction of Nduba modern landfill
- Study for construction of 6 WTPs Ngoma of 12,000m<sup>3</sup>/day, Muhazi of 10,000m<sup>3</sup>/d, Sake of 6,000m<sup>3</sup>/day, Busogwe of 12,000m<sup>3</sup>/day, Kagaga of 9,000m<sup>3</sup>/d and Musogoro with daily production capacity of 7,000 m<sup>3</sup>.
- Study for Water Supply in Ngororero District
- Feasibility and detailed study for the rehabilitation of Nzove 1 WTP
- Feasibility study for Akagera Tourism Camp Sites Water Treatment Plant.

### **2.3.6 Water and Sanitation sector policies, strategies and laws**

- ◆ National water supply services law and National Sanitation Services law were submitted to Prime Minister's Office for Cabinet consideration.
- ◆ Baseline study on waste collection and recycling countrywide was conducted and the interim draft report was validated, comments and inputs were provided to the consultant.
- ◆ Sewerage connection guidelines were developed and approved and final report is available.
- ◆ WASH MIS data collection and analysis completed for the 12 districts and is ongoing in 5 additional districts.

## **2.4 URBANIZATION AND HUMAN SETTLEMENT SECTOR ACHIEVEMENTS**

Urbanization and Human settlement development is a continuous process, which requires comprehensive guidance to ensure its sustainability. The Government has tackled the process proactively and has embarked on a vision to nurture the positive impact of urbanization and planned human settlement for socio-economic improvement for all residents.

Remarkable achievements were therefore recorded in the relocation of households from high-risk zones and scattered settlement; IDP Model villages development; Development of Rural settlement site zoning plans; Provision of basic infrastructure for affordable houses; Elaboration of LUDPs for Emerging Centers/markets. Public assets management and related oversight on the implementation of regulatory and Policy frameworks were also impressive. The following section discusses details on the achievements in the sector during the year in review.

### **2.4.1. Human Settlement Planning and Development**

#### **2.4.1.1. Urban Planning and Development**

Urbanization needs to be accelerated for its transformational potential and its association with higher productivity, and higher income opportunities. Therefore, planned interventions were implemented as follows:

- ◆ Under RUDP Phase II, 39.72 Km of asphalt roads and drainages in the 6 Secondary Cities were under implementation with overall works progress completed at 42%. In addition, Agatare informal settlement upgrading works has continued and works progress was completed at 61%.

- ◆ CoK and Secondary City Master Plans of Rubavu, Muhanga and Nyagatare Districts were reviewed and their Physical Plans were developed in harmony with the Land Use Master Plan. For Secondary Cities of Rusizi, Huye and Musanze Districts, the Community meetings on land use and zoning plans are ongoing and compilation of the final draft reports is also ongoing.
- ◆ 4 Local Urban Development Plans (LUDPs) for Muganza (Rusizi district), Remera (Muhanga district), Rwinkwavu (Kayonza district), Kirambo (Burera district) were elaborated and all reports are available, except Muganza in Rusizi which stayed behind due to Covid\_19 lockdown.
- ◆ To ensure effective implementation of developed Master plans, sixteen (16) districts (Burera, Gakenke, Rulindo, Nyabihu, Ngororero, Rutsiro, Nyanza, Gisagara, Nyamagabe, Nyaruguru, Ruhango, Gatsibo, Kayonza, Kirehe, Rwamagana, Ngoma) were audited and findings were shared to districts officials for consideration/compliance.
- ◆ Draft inception reports were completed and submitted for Studies on upgrading informal settlement in 10 sites of CoK.
- ◆ Operationalization of Building Permit Management Information System (BPMIS) has been scaled up in 6 more Districts (Nyanza, Ruhango, Gatsibo, Kirehe, Nyabihu and Nyamagabe), making a total of 21 districts with BPMIS in the country. Only nine districts remain without the system but are planned for 2020/2021.

#### **2.4.1.2.Rural Settlement planning and development**

In order to promote decent settlement of Rwandans, 8,394 households from scattered settlements and 771 households from high-risk zones were relocated and settled into viable settlements. In addition, IDP Model Villages at the borders of Nyagatare, Gicumbi, Burera & Nyaruguru (phase II) were under upgrading process with overall works progress completed as follows:

- ◆ Burera, Nyagatare and Gicumbi Districts works completed at 100%. Kaborogota IDP Model Village in Nyagatare was inaugurated on 4<sup>th</sup> July 2020 Liberation day.
- ◆ Kivugiza/Nyaruguru District works progress completed at 94%.

## 2.4.2. Affordable housing Planning and development

The affordable housing development was among top priorities for the housing sub-sector during this fiscal year. The prime objective was to acquire and service land for affordable housing and mobilize private investments for the development.

### Provision of infrastructure for affordable housing

- ◆ **Izuba Project of 250 DU at Batsinda on 3Ha:** Overall project works is at 71.8%
- ◆ **Rugerero Resettlement Project of 120DUs:** The overall progress of works based on initial contract is 55%.
- ◆ **Busanza (1,020 DU) on 7Ha:** Contract for infrastructure support was signed and overall construction works progress for affordable houses is at 51.7%.
- ◆ **54 DU on 1ha at Kabuga II:** The overall progress of both infrastructure support and housing progress, works are at 25%.
- ◆ **Batsinda II Project of 548 houses on 10Ha:** Overall works progress is completed at 21.9%.
- ◆ **517 DU on 5.5 Ha at RUGARAMA:** The overall progress of works for both infrastructure support and houses is at 20.74%.
- ◆ **278 DU at Masaka on 5 Ha:** The overall works progress of both infrastructure support and houses is at 7.07%.
- ◆ **88 DU on 1.38 Ha at Rusororo:** Infrastructure support has been assessed at 100%, and the assessment report with recommendations has been produced and sent to National Approval Committee.

Furthermore, sensitization and awareness campaigns for Local (PSF, Estate developers, cooperatives, DFI's) and foreign Investors through direct contacts in meetings, fliers, exhibitions were conducted.

- ◆ MoU with MAGIA to develop Affordable Houses at Gahanga site was signed.
- ◆ Tripartite MoU was signed between RHA, CoK and ADHI to develop Affordable houses on 35 Ha situated in Kigali Sector (Karama Site).
- ◆ Draft MoU with ORASCOM to upgrade and re-develop Intambwe site (Mu Myembe) was prepared and shared for inputs.
- ◆ Draft MoU between RHA, CoK and Investors to facilitate land acquisition and infrastructure support was finalized and shared with concerned institutions for inputs.
- ◆ Two investments (TANGENHAMO Ltd, and GASASIRA Consolatha) were mobilized.

- ◆ Report on the assessment of EoIs to invest in Affordable Houses in Kigali and Secondary Cities was approved and other two investors such as Red Cardinal, TISSIMO S.A.S were mobilized.
- ◆ The MoU between CoK, RHA and two investors (ORESCOM and MAGIA) is being drafted.

### 2.4.3. Government Assets Management

Different projects linked to Government assets and office management were under implementation. Here below is the status of implemented projects:

- ◆ Construction of National Archives is completed at 70%. This multi-store building will have the total floor area of 12,000 square meters with modern facilities for proper preservation of national archives.
- ◆ High Commercial Court Building was completed and handed over, is now operational.
- ◆ Construction of Bweyeye Border Post was completed and handover was completed in December 2019.
- ◆ Sports infrastructure development in Districts were undertaken where 3 Stadia (Bugesera, Ngoma, and Nyagatare) completed at 100%.
- ◆ Construction of Gatonde Hospital in Gakenke District is completed at 98%.
- ◆ Construction of Gatunda Hospital in in Nyagatare district is completed at 98.6%.
- ◆ Construction of Munini Hospital in Nyaruguru district is completed at 62.9%
- ◆ Construction of Nyabikenke Hospital in Muhanga district is completed at 72.3%
- ◆ IRCAD Africa centre construction works are completed at 14.9%.
- ◆ Certified Analytical Mining Laboratory is progressing well with overall construction works completed at 78%.
- ◆ **Public Buildings acquired to accommodate government institutions:**
  - **A&P building** has been acquired at 100% and some government institutions are already working from there.
  - **Albert supply building complex:** Its valuation report has been completed and contract negotiation is ongoing with the owner.
  - **Gacuriro building:** The valuation report was completed and payment done.

**The technical assistance was also provided in the construction of the following building projects;**

- ◆ **King Faisal Hospital:** Where Out patient's department works are completed 78.9%; VIP Clinic completed at 86.1%, Main gate & Umbrella completed at 78.2%. The main gate works have been completed and ready to be handed over.
- ◆ **NTARE School:** The overall progress of works is completed at 53.5%.
- ◆ **Kanombe Military Hospital VIP Wing:** The progress of works is at 65.6%.
- ◆ **GOLF Project:** All activities done are in line with repairing the damaged areas by rainfall. Course is almost repaired and irrigation system completed, overall works are at 82.6%.

#### **2.4.4. Asbestos eradication**

In order to ensure Rwandans' well-being, the framework contract was signed to removal and replace all asbestos materials from Government buildings in Partnership with Reserve Force. To this end, 86,461.9Sqms of asbestos were safely removed from both public and private buildings. The cumulative asbestos removed is 1,144,766.2 m<sup>2</sup> (Government: 525,056.2 + Private: 619,710), out of 1,692,089.2 m<sup>2</sup> which is equivalent to 67.7% countrywide.

In addition, nineteen (19) Asbestos burial sites operationalized from the beginning of the project have been demarcated and their location (GPS coordinates) was sent to RNRA in order to incorporate them in LAIS as protected areas.

#### **2.4.5. Regulatory frameworks**

- ◆ Prime Minister's Instructions (PMI) determining the conditions and procedures for obtaining Government support for Affordable Housing projects were reviewed, the final PMIs are available.
- ◆ An Inception report for the Baseline survey to inform reporting mechanism on average share of built-up area of cities that is open and green space (SDG 11 indicator) was validated.

### **2.5. MAINSTREAMING OF CROSS CUTTING AREAS**

The key cross cutting areas highlighted in National planning framework and Institutional plans include Capacity Building, Disaster Management and Climate Change, Gender, Regional Integration, HIV/AIDS as well as Disability and Social Inclusion. These have been mainstreamed

in infrastructure development projects as elaborated in the following sections below.

### **2.5.1. Capacity development**

Annually a priority skills review is performed internally to assess available skills and match existing and projected demands for critical skills with available supply.

In the transport sector, 60 staff were trained and attended include Capacity Development for Women Construction Engineers; Comprehensive Bridge Engineering; Vehicle Load Management; Road Administration; MS Project software in Project Management; New Financial Reporting Framework; Road Asset Management; e-connect for Impact Evaluation; Internal Auditors Practices and GEMS.

Rwanda's air transport industry has seen tremendous growth in the past decade, and as the industry grows, there is growing demand for improving human resource capacity. In this regard, a comprehensive capacity-building plan was developed, aimed at increasing the knowledge base for aviation staff.

To achieve this objective, 27 courses were conducted in different areas including Technical courses (48 staff trained), Safety and Security as well as Administration (379 staff trained) and Corporate Governance (49 staff trained). In order to maximize the number of staff trained and minimize the cost of training, some of the critical courses that require a high number of staff were conducted in-house. Furthermore, a number MoUs with approved training organizations to conduct the in-house trainings were signed.

In the Urbanization and Human settlement sector, various trainings have been conducted in the spirit of capacity enhancement in BPMIS usage. As a result, 18 staff of OSC in six districts where BPMIS was deployed were trained. In addition, Sector land managers, OSC staff and other stakeholders were trained in Land management, Urbanization policies and Inspection tools.

Training on Spatial Planning Tool /SDF was as well delivered in the fiscal year 2019/2020 with specific focus on the use of the matrix of functions (MoF) and use of the Spatial Multi-Criteria Evaluation (SMCE) methods; in total 30 people were trained.

In the Energy sector, for the year in review 341 EUCL staff, 89 EDCL staff and 1 REG Holding staff were trained in various fields ranging from hydropower management, GIS and geometric

network operations, sector reforms management, contract management as well as health and safety.

### **2.5.2. Environment, Disaster Management and Climate Change**

To ensure disaster management and climate change is mainstreamed in the transport infrastructure development that is the most hit by the disasters, a study is being commissioned to develop climate resilient infrastructure.

The study will develop measures to incorporate climate change in design and construction of road infrastructures. It will also propose early warning mechanisms for climate adaptation mainly on paved roads. Therefore, the study is progressing well at 29% with key deliverables of draft preliminary Vulnerability Assessment Mapping report, inception report and Capacity Building Plan availed.

The development of Environmental Impact Assessment and Environmental Management Plans are another avenue through which the Ministry is mainstreaming climate change in infrastructure development.

### **2.5.3. Gender mainstreaming**

Continuous efforts are put in place to ensure Gender is mainstreamed in all ongoing infrastructure projects. During the year in review, 200 awareness campaigns and training in Gender Based Violence were conducted for the transport sector projects. Furthermore, the Grievance Redress Committees (GRCs) headed mostly by women were formed and trained in new 6 Districts and LVTP (118 GRCs trained).

Among 407,215 people (329,450 in rural area and 77,765 in urban) served with clean drinking water 52% were female and 48% were male. Total of 7,125 people were employed in the water supply and sanitation projects where 5,409 were men and 1,716 were women.

### **2.5.4. Regional Integration**

The objective of connecting Rwanda with the region and the rest of the world and attaining a paradigm shift from land lockedness to a land-linked country is embedded in national policy frameworks that guide the country's Vision. The market size of 160 million people in the EAC as



opposed to around 12 million Rwandans presents an incredible opportunity for trade and economic growth between Rwanda and the region.

Connectivity is central to the country's medium and long-term development agenda also aligned with the EAC agenda. To this end, the rehabilitation of Kagitumba \_ Kayonza \_ Rusumo (208km) that is completed. Inland water transport project to construct four modern Ports on Lake Kivu were initiated and will be continued in the Fiscal year 2020/21.

The completion of Trans-border infrastructure such as Gatuna, Rubavu and ongoing Rusizi I OSBPs have also improved the way businesses along the borders are conducted. This led to simplification and synchronization of border administration, reduced time for cross-border flow of goods and people, standardized information on trade procedures, simplifying border procedures and customs documentation.

Rwanda along with Northern and Central Corridors partner states are also accelerating the implementation of selected EAC projects including the standard gauge railway.

#### **2.5.5. Disability and Social Inclusion**

Key interventions were to enforce accessibility to infrastructure both private and public sector for people with disabilities (PWDs). Disability and social inclusion have been mainstreamed in transport during construction of bus shelters with facilities for PWDs and weaning mothers. The latest being the acquisition of two (2) new public transport buses with reserved seats for PWDs.

Furthermore, building inspections on compliance with Building code are regularly conducted to ensure PWDs are facilitated.

### **3. KEY CHALLENGES ENCOUNTERED**

- ◆ The low performance for some projects was mainly due to the outbreak of Covid – 19 that led to total lockdown in Rwanda as well as all over the world which significantly affected the projects implementation plan. Some of the projects are yet to resume due to Travel restrictions by some countries.
- ◆ Heavy rains during the months of October 2019 to April 2020 also hindered progress on all infrastructure projects and affected the existing infrastructure as well leading to huge emergency works.

- ◆ Overriding expropriation issues have greatly impeded timely implementation of different projects. Some of the challenges involved are associated with lack of land titles, complaints and non-compliance by some landowners. This also goes along with the high expropriation costs due to violation of road reserves.
- ◆ Delay in projects design phase which took longer than planned affected the timely implementation of a number of water supply projects in Urban and peri-urban areas.
- ◆ Poor performance by some consultants/contractors led to the cancellation of the contract hence affecting the project delivery time.
- ◆ Lack of capacity for District to operationalize the completed sanitation facilities. This involves a number of sanitation facilities put in place to be managed by District through Private operators (e.g. LVWATSAN project and Nduba landfill) but the responsibility of management was brought to WASAC due to the delay of recruitment of competent private operator.

#### **4. CONCLUSION**

This report highlights the key achievements realized in the infrastructure sector over the course of twelve months of fiscal year 2019/20.

The main purpose is to build sustainable and resilient Infrastructure through roads upgrading, rehabilitation and maintenance; air transport physical infrastructure development and improving related services; energy generation and transmission projects to ensure electricity access; water supply and Sanitation projects; Urbanization and human settlement projects as highlighted in the report.

While much has been achieved, the Ministry is conscious that more effort is required in dealing with the impact of the Covid-19 pandemic on both economic and operational aspects of Rwanda's economy.

Looking ahead, the Ministry will continue to implement ongoing and planned infrastructure projects to achieve NST1 targets in close collaboration with all stakeholders while ensuring that interventions aimed at mitigating Economic Impact of Covid\_19 are prioritized. This will ensure improved performance across all the infrastructure sectors by the end of the fiscal year 2020/21.



REPUBLIC OF RWANDA