



UNIVERSIDADE ESTADUAL DE CAMPINAS
INSTITUTO DE ECONOMIA

DANIEL HAKUZWEYEZU

**IMPACT OF CHINESE INVESTMENT ON RWANDA'S
INFRASTRUCTURE (2000-2020)**

**IMPACTO DO INVESTIMENTO CHINÊS NA
INFRAESTRUTURA DE RUANDA (2000-2020)**

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Prof. Dr. Roberto Alexandre Zanchetta Borghi – orientador

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DEDICATION

This research study is dedicated to

The almighty God for this protection and guidance

Also to my beloved wife; And Children for their prayers,

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ABSTRACT

Rwanda is one of the oldest kingdoms in the African Nile valley. Rwanda is also one of the African countries that have suffered from the effects of colonial heritage. Rwandans' unity collapsed during the colonial period. Belgian colonialists introduced ethnic division in 1930 based on phenotypically aspects and the hatred between ethnic groups led the country to genocide against Tutsi. By the time of the 1994 genocide, Rwanda's economic development and infrastructure have collapsed and returned to the 1970s level. Under the Vision 2020 initiative, which aimed to transform the country from a poor to a middle-income country, Rwanda's economy has dramatically improved and many planned targets have been reached, although many challenges remain to be faced, notably in: urbanization, water sanitation, energy and industrialization. Chinese investment during Belt and Road initiative has been instrumental in East African development in terms of international trade and regional integration. It was also the solution for geographically isolated countries including Rwanda. Despite some negative effects highlighted by the study, such as accusations of violating labor law and human rights by foreign companies, foreign direct investments, including from China, have played many important roles in Rwanda's economic reconstruction. The findings of this research show that Chinese investment in Rwanda during BRI reached US\$ 1.47 billion between 2013-2020 in several infrastructure areas. Low wages paid by foreign companies to Rwanda's workforce, however, is still a matter of concern, in comparison to the standard salary provided by the International Labor Organization (ILO).

Keywords: Chinese Investments; Infrastructure; Rwanda's Economic Recovery; Rwanda - Economic conditions

RESUMO

Ruanda é um dos reinos mais antigos do vale do Nilo africano. Ruanda é também um dos países africanos que mais sofreram os efeitos da herança colonial. A unidade dos ruandeses entrou em colapso durante o período colonial. Os colonialistas belgas introduziram a divisão étnica em 1930 com base em aspectos fenotípicos e o ódio existente entre os grupos étnicos levou o país ao genocídio contra os Tutsis. Na época do genocídio de 1994, o desenvolvimento econômico e a infraestrutura de Ruanda entraram em colapso e voltaram ao nível dos anos 1970. No âmbito da iniciativa Visão 2020, que visava transformar o país de um país pobre em um país de renda média, a economia de Ruanda melhorou significativamente e muitas das metas planejadas foram alcançadas, embora muitos desafios ainda devam ser enfrentados, notadamente em: urbanização, saneamento básico, energia e industrialização. O investimento chinês durante a iniciativa *Belt and Road* tem sido fundamental para o desenvolvimento da África Oriental em termos de comércio internacional e integração regional. Foi também a solução para países geograficamente isolados, incluindo Ruanda. Apesar de alguns efeitos negativos apontados pelo estudo, como acusações de violação de leis trabalhistas e direitos humanos por empresas estrangeiras, os investimentos estrangeiros diretos, incluindo os da China, desempenharam muitos papéis importantes na reconstrução econômica de Ruanda. Os resultados da pesquisa mostram que o investimento chinês em Ruanda durante a BRI atingiu US\$ 1,47 bilhão entre 2013-2020 em diversas áreas de infraestrutura. Os salários mais baixos pagos pelas empresas estrangeiras aos trabalhadores ruandeses, no entanto, continuam a ser preocupantes, em comparação com o salário padrão fornecido pela Organização Internacional do Trabalho (OIT).

Palavras-chave: Investimentos chineses; Infraestrutura; Recuperação econômica Ruanda; Ruanda - Condições econômicas

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LIST OF ACRONYMS AND ABBREVIATION

BRI: Belt and Road Initiative

CCCC: China Communications Construction Company

CGIT: Central Government Industrial Tribunal-cum-labor Courts

CPSD: Country Private Sector Diagnostic

EAC: East-African Community

EDCL: Energy Development Corporation Limited

EDPRS: Economic Development and Poverty Reduction Strategy

EUCL: Energy Utility Corporation Limited

EWSA: Energy, Water and Sanitation Authorities

GDP: Gross Domestic Product

IATA: International Air Transport Association

ICT: Information, Communication and Technology

ICTR: International Criminal Tribunal for Rwanda

IDA: International Development Association

IFC: International Finance Corporation

KSEZ: Kigali Special Economic Zone

MININFRA: Rwanda Ministry of Infrastructure

NSIR: National Statistics Institute of Rwanda

PIDG: Private Infrastructure Development Group

PPIAF: Public-Private Infrastructure Advisor Facility

REG: Rwanda Energy Group

RPF: Rwandan Patriotic Front

RTDA: Rwanda Transport Development Agency

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INTRODUCTION

Rwanda is a small country in Africa. Rwanda's population is 12,952,218 of people living in a total area of 26,338 km². It is a landlocked country, with the following neighboring countries: Uganda, Burundi, Tanzania, and Democratic Republic of Congo (World Atlas, 2017). Rwanda was a German colony for a short period of time (1894-1918). After Germany's empire defeat in the World War I, Rwanda became absorbed into the Belgian colonial empire as part of a mandate from the League of Nations. Before colonialism, Rwandans were united people. Hutus, Tutsis and Twas were not ethnic but economic classes. The Belgian colonial occupation had a much more lasting effect on Rwanda. The most lasting effect was how colonial authorities racialized the differences between Hutu, Twa and Tutsi. Rwanda gained independence in 1962, but the post-colonial period was marked by ethnically motivated violence which resulted in genocide against Tutsi in 1994 (Stephen, 2020).

Rwanda fell into genocide over the period of 100 days. More than a million Tutsis have been killed. According to Survivors Fund (2008) , the total number was 1,952,078 people, of which 250,000 and 500,000 were raped. About 67% of the women raped in 1994 were infected with the HIV virus. During regime of Juvénal Habyarimana (president of Rwanda from 1973-1994), the false assumptions made by political leaders and propaganda campaigners included that Tutsis were foreigners in Rwanda and had no right to reside there. Other Hutu political parties (Hutu Power) have used radio to spread their propaganda, claiming that the Tutsis were "cockroaches" (Inyenzi). The radio station RTLM, allied with leaders of the government, had been inciting Hutus against the Tutsi, repeatedly describing the Tutsis as Inyenzi, or "cockroaches" and snakes (Inzoka). Rwanda's leaders had been preparing for this atrocity for years (Clementine et al, 2010).

However, since Paul Kagame's rule beginning in the early 2000s, Rwanda has had a high level of domestic and international stability (Reinier, 2011). The Government of Rwanda has set a Vision 2020, which aimed to transform the country into a middle-income country by 2020. However, due to the global economic crisis caused by Covid-19, this goal of transforming Rwanda into a middle-income country has been revised and postponed to 2035. The development of the Rwandan economy during 2010-2018 makes this African country one of the fastest growing countries in the world. In the aftermath of the genocide, Rwanda sought to break

the trap of poverty and establish its development state (Lisimba, 2020). The development progress remains widespread, through infrastructure and service sector investments. Rwanda has lifted a million people out of poverty between 2005 and 2011. The Rwandan economy has grown at a rate of 8.8% from 2010 to 2018 in the development of key sectors, such as industry, agriculture, education, health, tourism and information communication and technology (Schmidt, 2020).

To that end, Rwanda has tried to attract all potential international investors beyond traditional ones, such as the United States and European states, including therefore emerging economies as China, India, Brazil and Turkey. Rwanda faced special challenges in leveraging FDI as a result of economic development and infrastructure, low level of education, land space and small size. These provisions not only change the level and type of FDI a country is likely to attract, but also affect the type of FDI that can make a significant contribution to the country's development goals and poverty reduction (UNCTAD, 2006). Despite the challenges, China has emerged as one of the major foreign investors in Rwanda since 2006 (Booth & Golooba, 2016; Grimm and Hackenesch, 2019). Chinese investment in Rwanda focuses on infrastructure and plays a key role in the reconstruction of the East African country after the genocide against the Tutsi. Therefore, a better understanding of the state of the Rwandan economy and its evolution over the past 20 years is essential to assess the role that Chinese FDI is playing in terms of the country's economic development.

The study points out how some infrastructure gaps have been addressed by the combination between government's efforts and Chinese investments in helping Rwanda rebuild its infrastructure as a source of development in the period between 2000 and 2020. The study details Chinese investments carried out in Rwanda in different infrastructure areas, such as energy, transport and construction. The main objective is to investigate and evaluate Chinese investments in Rwanda's infrastructure during the period from 2000 to 2020, considering aspects of the movement of Chinese investment internationalization prior and especially during Belt and Road initiative, once including potential benefits of a greater integration among East African countries in the last decade.

The study is split into three chapters. Chapter 1 summarizes the history of Rwanda's pre-colonial times, colonial legacy, genocide against Tutsi, as well as the country's development based on its

Vision 2020 as a post-genocide recovery program for national reconstruction. Chapter 2 highlights China-Rwanda historical economic relations and East-African region in terms of economic integration. Chapter 3 analyzes the role of Chinese investment in Rwanda's infrastructure in different areas during the 2000-2020 period. Conclusion remarks follow summarizing the main research findings.

CHAPTER I

RWANDA'S PRE-COLONIAL, COLONIAL, GENOCIDE AND POST-GENOCIDE DEVELOPMENT

1.1 Historical background of Rwanda

Numerous academic reviews, including Eat Africa Living Encyclopedia & African Studies Center, (1992), show that the Kingdom of Rwanda began to be widely known from the 5th century. According to Kagame (1952), three major periods in Rwanda's past can be distinguished: from the 5th century to the 11th century, the mythological era comprising the kings called (Ibimanuka) [those who fell from the skies]; The conquest kings called Abami b'umushumi (Kings of Belt) who tightened their belt who, starting from Gihanga, endured hardships to build a nation and laid the basis future of Rwanda; The Historical kings (Abami b'Ibitekerezo). During that period between 5th and 11th century, the people did not have fixed homes where to live. They were always moving from a certain areas to other places in a way for finding grass for their cows and return to their former place (Kagame, 1952). At the time of 5th century, the people living in Rwanda were constantly moving and called (Abanyenduga) in Kinyarwanda. Nduga is an area still known in Rwanda as the former district of Gitarama-Butare where the king's palace is located (Rennie, 1972). After Rwanda defeated Buriza, it was left with four major neighboring states of concern to the Gasabo-Nyiginya dynasty, including the Nduga dynasty located west of the Gasabo dynasty, which crossed the river Nyabarongo. The Nduga kingdom belonged to the Banda people, which are now Rwandan family called "Ababanda". Their dynasty was "Nyabihinda" (Rennie, 1972). The Banda was also a large and powerful country in the early time between 5th and 11th century. It is located in Butare (in Nyanza District and a small part of Huye) (Denis, 2020).

According to McKenna & Thinley (2010), from the 11th century onwards the kings of Rwanda were called as Kings of War, but there were kings who were known as war heroes in the Great Lakes region (Interlacustrine kingdoms), who guarding the borders of Rwanda from being invaded, where one of the largest kingdoms of Rwanda consisted of many areas that were also considered small kingdoms like (Gisaka, Bugesera, Ndorwa and Bwanacyambwe). These small kingdoms wanted to liberate themselves from the great kingdom. This is where the proverb came

from that Rwanda is attacking, but not defeated (U Rwnda Ruratera Ntiruterwa). It is a legend that existed during the reign of a king named (Cyilima Rujugira in 16th Century), where the 4 allied kingdoms including Burundi, to attack Rwanda and fail completely. At that time, Rwanda was ruled by kings called King Belt (Abami b'umushumi), but history does not clearly explain their origins. King whose history and names Gihanga Ngomijana ruled Rwanda from the 11th century to 1091-1124 (GoR, 1999).

According to Abdelaziz & Samper (2010), the Rwandan people believed that king were people who could cause rain, protect crops from insects and their cattle. Farmers believed to have derived their strength and faith from God because of his good leadership. According to an Atlas manuscript and a map of the 15th century in a book mentioned by Campos, (2010), it shows that the monarchy of Rwanda was [(Reinos Cristãos) (Principados Interlacustres)] which in Kinyarwanda means good governance of Christian kingdoms located in great lakes region, which is why the Rwanda people regarded the king's rule as supernatural kingdom (Vansina, 1930). Before the colonists set new borders for Rwanda, it was twice as bigger than its current size which also made Rwanda a small country in Africa shown as shown in Figure 1. Some parts of Rwanda were given to Congo, Tanzania, and Uganda. This has led some Rwandan families to settle in other countries, so that even today their native language is fluent in Kinyarwanda (NALRC, 2001).

Rwanda and the loss of native citizenship. There is also the disappearance of some families where children have not been able to identify and see their ancestors as a result of the problem of living in different countries.

According to Africa Studies Center & East Africa Living Encyclopedia (2013), at the apex of the class system was the Tutsi king (Umwami). The Mwami was considered to be of divine origin. A myth tells of three children born in heaven fell to earth by accident, and one of these children, Kigwa, founded the most powerful Tutsi clan. The Mwami trace their lineage to this divine founder. In the middle of the 16th century, Mwami Mibambwe I Mutabazi was able to centralize the monarchy early in the 19th century, Mwami Kigeri IV Rwabugiri fixed the borders that were in place when the Germans arrived in 1894.

In 1894 Rwanda was colonized by the German Empire because it was officially incorporated into East Africa and ruled indirectly under the rule of King Musinga. Rwanda became a German colony only in the short term from 1894-1918 after the defeat of the Germany in World War I. Rwanda was liberated from the German colonial monarchy and placed in the Belgian colonial empire as part of a mandate issued by the League of Nations. The actions of the Belgian colonists had a lasting impact on Rwanda. The main effect is how the colonial authorities discriminated Rwandans by forming ethnic division between the Hutus, Twa and Tutsis (GoR, 1999).

1.1.1 Belgian time in Rwanda

At the end of the WWI, Belgium accepted the League of Nations Mandate in 1916 to govern Rwanda as part of the two-state territories of Rwanda-Urundi, as well as the existing colonies in the West. The Belgians wanted colonialism to prosper. They started coffee farming as a commodity crop and used forced labour methods to grow it. Each farmer was required to use a certain percentage of coffee farms and this was implemented by the Belgians. This form of forced colonialism has been widely condemned internationally, and was not very popular in Rwanda (Patrick et al, 1994).

Rwandans were united and worked together. It would have been hard for Belgians to lead and rule them while united. So, this was their only hope. Luckily, they succeeded and the rest is an ugly history. In Pre-colonial, Rwandans married across their social classes. For nine centuries, Rwandans inter-marry within one another for 900 years. The Belgian colonialists believed Tutsis

were naturally superior nobility, descended from the Israelite tribe of Ham (Adam, 2014). Rwandans shared the same national language, lived in the same villages, and believed in the same "Imana y'I Rwanda", the God of the country. Missionaries and explorers, who were 19th-century racist theories they divided Rwandans based on slavely purpose and evangelism, did not save Rwanda. But the true story origin of Tutsi, Hutu and Twa is well known.

Rwandans unity collapsed during the colonial period. The colonists and missionaries had already arrived in Rwanda through their rule "Diviser pour régner" (GoR & UNDP, 2016). The Hutu, Twa and Tutsi groups of the Rwandans were economic classes (Ubudehe) before the Belgian colonists, which were established by the king of Rwanda called Cyilima Rugwe in 1345 in order to encourage the Rwandans about economic performance. Tutsis were a class of people who owned 8 cows to rise, with ability to share the cows to the second group. They were selected group from all 18 Rwanda families (Abanyiginya, Abega, Abagesera, Ababanda, Abasinga, Abasindi, Abazigaba, Abashambo, Abongera, Abatsobe, Abungura, Abacyaba, Abahinda, Abashingwe, Abasita, Abarihira, Abakono, Abenegitore). The Tutsis were a chosen people from all Rwandan clans, with a high sense of economic development, and willing to defend their country in the event of an attack. While the Hutus were also the chosen people of all Rwandan clans, but were part of the second economic group that did not have a lot of cattle wealth. Because at that time the Rwandan economy was characterized by a large number of cows, they were farmers and were given cows by the Tutsis and they aimed to have more of their cows to move from the Hutu category to the Tutsi category.

However, Twa were people in the third category of the economy who did not pay much attention to the development of the country, who were always interested in hunting and harvesting seeds. There was no discrimination between the two groups in 900 years before colonialism. All of whom lived in peace but did not have the same economic wealth and development goals. it was possible that people living in different economic classes but in harmony with their parents. Since the time the colonists came, they took these Ubudehe classes and turned them into ethnic division based on their body size, lenth of nose and weight. Belgians immediately took these economic classes and transformed into races based on the size of the head, the body, nose, and length of a person, in 1932 they have completed the Insertion of a National Identity called Ibuku (Barata, 2020).

In a letter dated September 21, 1927, John Speek wrote to Georges Morteau as the former Belgian Governor of Rwanda in the following words: “if we need to do something realistically based on our country interest there are knowledge incomparable in the Tutsi youth, they are the ones we should use in Supporting our activities they were born with ability to govern, the Tutsis are in power” (Karen et al, 2006). Unreasonable beliefs developed by John Speek argued that the Tutsis may have been descended from the Hamites, laying the groundwork for the Belgian colonization ' victory sharing and commanding ' politics for their benefit plan. According to this false doctrine – whatever the current value in Africa is brought by the hamates, a branch known as a type of Caucasus. He attributed civilization to an indigenous race of nomads herdsmen related to Gala “Hamites” (Ethiopians), what attracted Europeans in this supposition relies in the fact that it could help to establish the link between physical characteristics and mental capacities, and they supposed that Tutsis may have inborn leadership qualities and had in principles the right to a history and a future, which are almost as noble as those of their European cousins (UNDP & NURC, 2016)

In the early colonial and evangelistic years of 1900-1930, based on prejudice, the colonial and church authorities made the decision to choose Tutsis as partners who could facilitate their cultural and salvation responsibilities in Rwanda (GoR & UNDP, 2016). The ideology of the Bishop Jean Léon Classe was the same as that of John Speek , because he was the one who instigated the hatred between the Hutus and the Tutsis by prioritizing the Tutsis and ended up forcing the Hutus to be the ones who had to protest that Tutsis be favored, telling them that they had to carry out a revolution against the Tutsis (Vansina, 2001).

Many analysts believe that Bishop Jean Léon Classe played a key role in the future of Rwanda. Bishop Classe's role today is being taken seriously by the tragic events that took place in Rwanda in 1994. In fact, while he was aiming to baptize as many people as possible in Rwanda, he used Tutsis (who were considered to be a major ethnic group) and supported them politically and culture. For Bishop Classe, the Tutsis were to be used to support not only the spread of faith, but also the development of the country, because they were already naturally given a clear understanding of development. He warned the colonists in the Letter dated in 1930 in the following words: “ The biggest mistake the state can make and affect itself and the country whatever it would be to eradicate the Tutsi race. Such a revolution would put country in danger

and a breakdown in relations with European countries. Instead of bringing development, but it destroys the activities of the state for the benefit of its people they were born with the ability to hear and obey. In general, we will not have Good intelligent leaders have the ability to understand development like Tutsi they said”(Déo, 2006).

The king of Rwanda Musinga began to face problems of being despised and persecuted, some of his family and leaders began to leave him because they had already realized that the Belgians were the strongest. In late 1916, Rwagataraka, a Rwidegembya native who ruled in Kinyaga, sought a way to protect his father, who had begun to be rejected and imprisoned by the Belgians. In saving his father, Rwagataraka lied to Musinga that he was still hiding Captain Wittgenstein who was the commander of the German army. The Belgians came and asked Musinga to give them to Captain Wittgenstein. So Musinga was frightened and chose to give his servant, when Father Huntziger found out that he had given them to Wittgenstein's servant, he told the Belgians that the one he gave them was not Captain Wittgenstein. So the Belgians captured Musinga and imprisoned him. After an investigation, they found Musinga innocent and released him (Ferdinand, 2020). On November 1931, Bishop Classe fired out King Musinga and sent him in exile, accusing him being anti-European and anti-Catholic. His son Rudahigwa replaced him under the royal title Mutara III (Déo, 2006).

Thousands of Rwandans have moved to the British Defense Forces in Uganda, which was very rich and did not have the same policy as the Belgians. Since 1932, Tutsis, Hutus and Twa have been included in various IDs regardless of their families' origin. Reforms have played a role in ethnic conflicts, and the Belgian Institute for Identity has played a role in fueling hatred. The Belgian has pursued a strategy of exporting goods, imposing agricultural requirements on each chief, chief executive, and farmer (Bonaventure, 2010). They have intensified in these policies of coffee farming. The regulations made coffee a required crop, stating that all the chiefs had to cultivate a thousand trees, 250 senior officers while the farmers were required to cultivate 54. At that time, there was no salary except for forced labor (Boudreaux, 2008).

The regime under Belgian was limited to the Resident. The Resident was supported by the chief officers and the chief officers were supported by the servants. Although workers were not paid, this did not prevent them fulfilling their responsibilities diligently. The Belgian colonialists focused their own interests in extracting various substances from the Rwandans. Some have to

help them in power. The Belgians had a negative attitude towards the oppression of the Rwandans. The Belgians did not want to give their money to develop the country. This was due to the fact that they knew that Rwanda was borrowed to Belgian colonists by League of Nations a short time and they would eventually give up. For this reason they used Rwandans without much money from the Belgian government. Almost all the money spent was from the hands of the people, or from taxes.

The Belgians did not have a clear plan for the development of Rwanda. Their colonialism was a direct dominance, due to the power of the state in the hands of foreign countries. The first goal of colonialism was dominated by politics. The second goal was to make it possible to use the colonized country of Shiku, which refers to the forced work for cultivating such sweet potatoes and cassava. The word shiku is derived from the verb "to attract toward yourself", and in agriculture it means to cultivate and to attract by using much energy (Ocheni & Nwankwo, 2012; Adiaenssens & Butare, 1962).

The first coffee farmers in Rwanda were white priests. The missionaries needed coffee to drink. It was in 1903 that they began to cultivate it in the Mibirizi mission, and then gradually spread throughout the country. Coffee became very popular in 1925, when the Belgian government ordered the people to grow it. It was only in 1933/1934 that Rwandans began to cultivate coffee. The people were not happy for forced to cultivate coffee because they have neither wages nor interest. What the people kept wondering and worrying about were the following: people were obliged to uproot their banana farms to replace by coffee trees; people did not understand why good soil was the basis for coffee cultivation while there was another large area not cultivated for years; injuries and fatigue were not easy to deal with when people did not understand the importance of coffee, as they were also unpaid (Kayumba, 1996).

In the 1960s and 1970s, Rwanda's monetary policy, along with a large amount of foreign aid and trade-related trade, made the Rwandan currency more valuable. However, when global coffee prices fell sharply in the 1980s, the Rwandan currency lost 6.5% of its annual GDP from 1973 to 1980, up from 2.9% a year from 1980 to 1985 and stagnated from 1986-1990. The problem arose in 1990 when the first steps to reform the structure of the International Monetary Fund (IMF) were carried out. While the currency devaluation program has not been fully implemented before the war, the impact on wages and purchasing power has been rapid and staggering. This is

especially true for the educated elite, many of whom have been employed by government or government agencies (Kamola, 2007).

Related to the issue of impunity, there is a legacy of fear in the lives of Rwandans, stemming from the killing of Tutsis and burning their houses since 1959 and which has its origins in the process of racial segregation and the separation of Tutsis and Hutus during of colonialism. From the First Republic since 1959 to the Second Republic, Rwanda became an independent state after secession from the Belgian-occupied Rwandan-Urundi land in 1962. During the First Republic, when the regime fell into the hands of the Hutus power after the abolition of the monarchy, ethnic divisions were strengthened and used for the purpose of a policy of discrimination and hatred against the Tutsi people which became the basis of the Hutu regime. Some Hutus immediately became a special group in all parts of the country (Sellstrom & Wohlgemuth, 1996).

Hatred for Tutsis has continued for decades with Hutus in power. Due to the ideology of division and hatred, the killings have taken a turn for the worse and the ongoing problems of Tutsi refugees who had grown up in various countries, joined the Rwanda Patriotic Front (FPR) and started the liberation war on October 1, 1990 headed by General Paul Kagame. Their goal was to secure their right to return to their homeland and to help the number of Tutsis remaining in the country who continued to suffer and die slowly. As a result, the Hutu-led Rwandan government has widely propagated the ideology of hatred, division and discrimination through the media, such as Radio Télévision Libre des Mille Collines (RTLM) and the Kangura newspaper. Hutu artists such as Bikindi and many others have also helped spread propaganda. That is why the Ten Hutu commendments were enacted by Joseph Habyarimana Gitera and published in Kangura, No. 6 December 1990 (Syolidio, 2014). The 'Ten Hutu Laws' called on the Hutus to separate themselves from the Tutsis. Extremists could easily use discriminatory ideology to portray members of the Tutsi as evil and must be resisted. All of this was aimed at completely destroying the mind of Hutu ethnic group. Among of Hutu's commendments established by Gitera Joseph are the following: All Hutu must know that the Tutsi woman, wherever she maybe is serving for the Tutsi ethnic group. In consequence, any Hutu who does the following is a traitor: marries a Tutsi wife; acquires a Tutsi mistress; acquires Tutsi as his secretary or dependent; borrow or lend money to Tutsi; Hutu must be always ready to fight against his enemy Tutsi (Rutazimbwa, 2013).

Dr Léo Mugesera's speech as Vice-President of the Hutu party Mouvement Républicain National pour la démocratie et le Développement (MRND), on November 22, 1992, at a meeting of the MRND's ruling party, said: "Recently I was instructed that we should reject contempt and we still refuse. Article 3 of the theme of the meeting explained: "One thing I want to inform you about is how to avoid traitors and those who want to harm us, i called our staff from all over the provinces and told them how we would help you, in which i don't want to explain, as i had instructed by July 07, 1992 that the Interahamwe should be in all districts (komini). As you all know, there are some Cockroaches (Inyenzi) from all over the country who have sent their children to help the rebel army (Inkotanyi), this is something you have heard and you all know. This means that we as a community must defend ourselves and destroy those bastards. Truly, i say unto thee. In the day that you let the serpent enter into your house, you shall have trouble. I would like to inform that their home is in Ethiopia (Abyssissia), we will throw them in the Nyabarongo River through Nile river as short-cut will return them as fast as possible'" (Fletcher, 2014). Therefore, Mugesera who has escaped the country to Canada, the High Court of Canada deported him in 2012 after being convicted with genocide crimes (Fletcher, 2014. P 2).

1.1.2 Genocide in 1994

Rwanda is a resurrected country, because in 1994 the country lived a massacre. The "Rwandan Genocide" refers to the massacre against Tutsis, as well as the few Hutus who tried to protect the Tutsis. The massacre, which began in early April 1994, lasted for about a hundred days until the "Hutu Power" lost in mid-July. Massacres in Kigali have spread to all parts of the country. In the first two weeks, local leaders in central and southern Rwanda, where many Tutsis live, fought the genocide. After April 18, the country's leaders were able to discourage those who tried to defend themselves, killing many of them. Authorities rewarded the killers with food, drink, drugs and money. Government-sponsored radios began calling on ordinary Rwandan civilians who had been trained to kill their neighbors (James, 2021). A report by the Rwandan government in 2008 estimated that the death toll had risen to 1,953,074 people. 250,000 and 500,000 women were raped during the 1994 genocide, along with another 2 million refugees. They have fled to neighboring countries, such as Burundi, Tanzania, Uganda, and the former Zaire (Gourevitch, 2018). Rwanda's liberation struggle stopped the July 1994 genocide, defeating civilian and

military leaders involved in the killings. The new government was ordered to repatriate refugees who had fled to different countries (Donatien, 2014).

The genocide was first perpetrated by Hutu militias, in collaboration with the Rwandan government, the Rwandan Armed Forces, and Rwandan civilians in honor of the Hutu Power group. The main consequences of the genocide in Rwanda were the destruction of families in one way or another resulting in the destruction of infrastructure, social status, and the economy (Gahima et al, 2010). In the 100 days of bloodshed, more than a million people have been killed, but also a large number have suffered physically and mentally throughout their lives due to amputation, rape and more. The coffee industry collapsed during the 1994 genocide. At the time of the massacre, many people were left in a state of shock and trauma (Kayitare, 2019).

Canadian General Romeo Dallaire, who led a small UN observer mission, heard of the Hutus planning the genocide in January 1994. He informed UN officials, but was not allowed to do so. Even after the genocide began, and the evidence of the killings was undeniable, the international community did nothing. Annan cabled back forbidding any ‘response to requests for protection’ without authorization from New York, and suppressed transmission of Dallaire’s warning to Boutros-Ghali (Melvern et al, 2000). The United States has strongly discouraged the UN Security Council from authorizing the deployment of other troops (Zack, 2014). According to General Romeo Dallaire (2014), in hindsight, there was a good chance that the United Nations could have intervened. He believed the 5,000-plus force and the UN’s strong mandate could save “hundreds of thousands”. The fact that the United Nations has failed to act what Bill Clinton calls one of his biggest regrets of his presidency, has led to modern actions in support of military relief operations to prevent genocide (Beauchamp, 2014). Two top Obama administration leaders, Susan Rice and Samantha Power, have become the supporters of relief because the United States has done nothing to help Rwanda (Beauchamp, 2014).

The International Criminal Tribunal for Rwanda (ICTR) was set up by the World Security Council on November 8, 1994. The court has a mandate to monitor people played a key role in the genocide and gross violation of international human rights law in Rwanda between 1 January and 31 December 1994. The first trial, which began in January 1997 and December 2011, ended the trial of 80% of accused were convicted (Michèle et al, 2011).

After the genocide, the new Government of Rwanda implemented different mechanisms that deal with the consequences of genocide while contributing to the ‘Never Again’ campaign against future atrocities. After the genocide ended, the country was on the brink of economic collapse. All the farms and agriculture of the country were destroyed, and most of the state infrastructure including schools, hospitals and clinics, roads, homes, business centers and more were almost completely destroyed. Many Rwandans became refugees or internally displaced persons. Furthermore, genocide generated a large number of prisoners, which created a heavy burden on the Rwandan Government (Donatien, 2014).

1.2. Post-genocide and the Vision 2020

The 1994 genocide against the Tutsi left Rwanda far behind at all stages of development and the entire socio-economic life was shattered. Rwandans who have embarked on a process of self-reliance led by Vision 2020 share three key choices: unity, longing, and accountability (HLPF, 2019).

In 1998-1999, the Office of the President of the Republic of Rwanda launched a national think tank on the future of Rwanda convened in the President’s Office (Urugwiro). After efforts to break away from the violence that has plagued Rwanda for 50 years, culminating in a horrific genocide, the government of Rwanda has heard that it is time for Rwandans to start thinking about new things for the future. Since 2000, the current President of Rwanda, Paul Kagame, has tightened his control over Rwandan politics, creating the necessary political security for economic development. After several meetings, the Government drafted a vision called Vision 2020, to address the following issues: How does Rwandans envisage their future?; What kind of society do they want to become?; How can they construct a united and inclusive Rwandan identity?; What are the transformations needed to emerge from a deeply unsatisfactory social and economic situation? (Donald, 2000).

The draft document of Vision 2020 was presented on behalf of Rwandan community, all of whom were involved in the preparation of the Vision 2020, including leaders from various ministries, all levels of the public sectors, private sectors and civil society. The project aims to raise the level of the economy, so that Rwanda to be accounted among the countries with the

lowest poverty level and transforming Rwanda into middle-income country by 2020 (Byrne et al., 2017, p.203). Vision 2020 is a platform for the development of Rwanda, which highlights the urgency of improving the lives of Rwandans (Kaberuka, 2006). Vision 2020 identified six priority pillars and three cross-cutting areas, as shown in Box 1.

Box 1: Pillars of the Vision 2020 and its cross-cutting areas

Pillars of the Vision 2020	Cross-cutting areas of Vision 2020
Good governance and a capable state	Gender equality Protection of environment and sustainable natural resource management Science and technology, including ICT
Human resource development and a knowledge based economy	
A private sector-led economy	
Infrastructure development	
Productive and market oriented agriculture	
Regional and international economic integration.	

Source: MINECOFIN (2000).

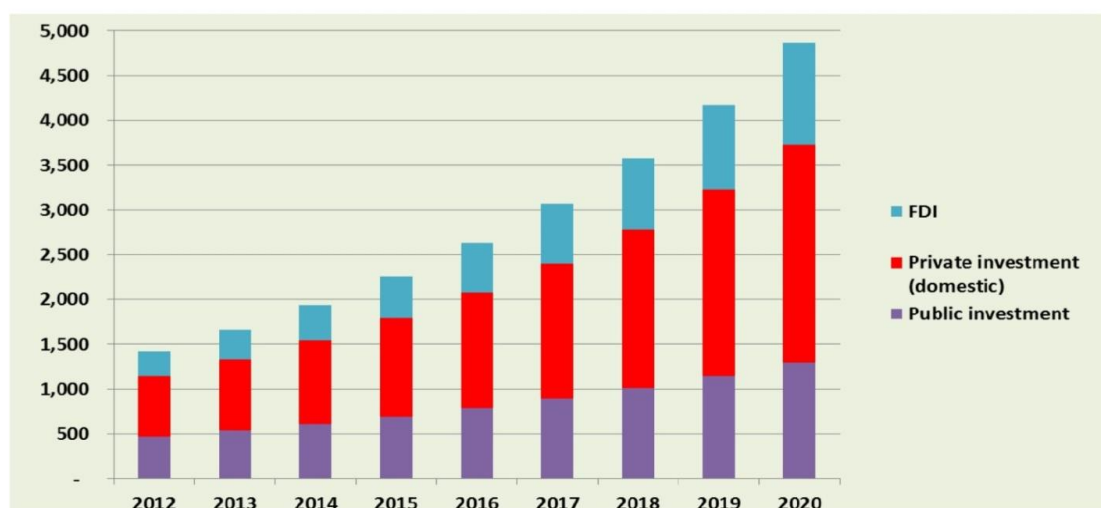
Rwanda is one of the most successful countries in Africa and is an example of success in post-conflict reconstruction (Isaksson & Bigsten, 2012). It has witnessed sustainable economic growth since 2000 and was one of the top ten economically fast booming countries between 2001 and 2010. It has shown signs of economic change, increased exports, domestic tax revenues and attracting foreign and domestic investment. The country has undergone a number of reforms aimed at establishing holistic and equitable human rights. Since 2000, Rwanda has recorded high economic growth rates fluctuated between 8-9% in recent decade (Abbott & Rwirahira, 2012).

In the first document of Vision 2020, it contained 47 criteria and objectives, later revised to 48. The reason for the reform was based on the Coordination of Development Goals at the level of middle-income countries. The current Vision 2020 target for GDP per capita has been revised from US\$ 900 to US\$ 1,240. Some Rwanda's 7 years government program (7YGP) were more ambitious than those in the 2020 Vision. These included the goal of a percentage of the population below the poverty line (20% in 7 years), while it was 30% in Vision 2020 and aims to get electricity in 7YGP (100% in 2035 while it was 35% in Vision 2020) (Heshmati et al, 2020).

It also included climate change indicators and objectives, governance, ICT, and regional integration: Vision 2020 had already been identified as key components in the six pillars. This has been evidenced by well-being of various biodiversity where residents enjoy service delivery, rule of law, and open access to GDP. Some of the goals that need to be achieved need to be further addressed: among the first 47 targets set for Vision 2020, most have been achieved and others are in the process of achieving them including GDP growth rates, agricultural production (kcal / day / person), urban mortality, malaria deaths and college admissions. Many of the desired goals have been achieved (Heshmati et al, 2020).

In these efforts, although direct foreign investment was encouraged, the regional integration seemed to be important in development. Increasing investment has become necessary for the development goals of both the public and private sectors. Domestic investment continued to expand, but requires a strong level of funding to mobilize the necessary resources to support investment. It was expected that total investment would reach 30% of GDP by 2020. Foreign investment has played a major role in encouraging domestic investment and empowering the private sector, both of which play a key role in helping the economy grow (OECD, 2003). Figure 2 shows the estimated level of investment required to meet the 30% investment target to GDP by 2020 (AFDB, 2013).

Figure 2: Estimated level of investment needed to meet the 30% of GDP by 2020 (US\$ million)



Source: Rwanda's Ministry of Infrastructure (2013).

Private investment has reached 22% of GDP by 2020. However, the Covid-19 pandemic has disrupted international trade and services in the global economy and country's economic activities. The Rwandan economy is also in a state of turmoil, which has led to a slowdown in Rwanda. Exports and tourism, however, are on the rise despite the turmoil in international trade and travel (UNCTAD, 2020). The following sections explore more about the efforts of Rwanda's government to support the economic growth in different areas.

1.2.1 Economic structure and trade of Rwanda

Rwanda's economy is largely based on agriculture. More than 76% of the population is subsistence farmers. Agriculture accounts for more than 40% of GDP. The most prosperous agricultural areas in the country are the mountainous regions of the Congo-Nile and central plains, where they are usually harvested for two years each year. Major edible crops include bananas, sweet potatoes, cassava, tomatoes, sorghum and beans. Major exports include coffee, tea, pyrethrum, cotton and cinnamon. Considering the role of various sectors in Rwanda's GDP, including energy, agriculture, trade and hospitality, and financial services, they play a major role in GDP. The National Bank of Rwanda estimated that Rwanda's exports increased by 29 % in 2019, to US\$ 995.7 million. Goods, especially gold, tin, tantalum, tungsten, tea, and agriculture, accounted for more than 57% of Rwanda's revenue. Rwanda accounted for US\$ 90.5 million in tea exports in 2018, an increase of 7.4% since 2017. At the same time, coffee, valued at US\$ 68.7 million, was added. 7.2% compared to last year. The service sector contributes 49.27%, including tourism, accounting for almost half of GDP. Tourism and the country tops in foreign exchange earnings, with revenues of about US\$ 438 million in 2017 (Rwanda Development Agency, 2020). Rwanda's export key partners are China, Brazil, Germany, Belgium, Pakistan, Spain, and Kenya. Much Rwandan coffee and tea is exported to Germany and other European countries.

According to Rwanda Development Board and US Department of states (2021), Rwanda's exports have been increasing year by year. In 2014 Rwanda's exports making it the number 147 exporter in the world the exports have increased to US\$ 1.35 billion. During the period of five reported years 2014- 2019, it increased by 58.1% to US\$ 2.1 billion. Although, there was a speciality in Gold exports for making a lot of income (US\$ 444 million in 2018-2019), Refined Petroleum (US\$ 137 million), Coffee (US\$ 75.5 million), Tea (US\$ 72.5 million), and Tin Ores

(US\$ 71.2 million). The most common destination for the exports of Rwanda are United Arab Emirates (US\$ 470 million), China(Hong Kong US\$ 30,9 million, Congo (US\$ 371 million), Uganda (US\$ 61.2 million), United States (US\$ 45.2 million), and Thailand (US\$ 37.1 million).

Table 1: Rwanda's trade statistic, from 2012-2019 (US\$ billion current values)

Year	2012	2013	2014	2015	2016	2017	2018	2019
TRADE	1.1	1.3	1.3	1.5	1.5	2.0	2.0	2.1
Nominal exports								
Nominal imports	2.4	2.4	2.6	3.0	3.1	3.0	3.1	3.8
Nominal trade balance	-1.3	1.2	-1.3	-1.6	-1.6	-1.0	-1.1	-1.7

Source: Made by Author, updated data from RDB and US Department of State July (2021).

Table 2: Rwanda's main exports statistics, in 2019 (US\$ million, current values)

Rwanda Exports by Category	Amount
Pearls, precious stones, metals, coins	314.54
Coffee, tea, mate and spices	162.31
Mineral fuels, oils, distillation products	150.13
Ores slag and ash	101.60
Miscellaneous edible preparations	48.87
Milling products, malt, starches, wheat gluten	39.69
Animal, vegetable fats and oils, cleavage products	37.74

Cereals	32.29
Residues, wastes of food industry, animal fodder	25.75
Sugars and sugar confectionery	21.58
Other made textile articles, sets, worn clothing	19.78
Electrical, electronic equipment	17.79
Vehicles other than railway, tramway	16.73
Edible vegetables and certain roots and tubers	16.53
Salt, sulphur, earth, stone, plaster, lime and cement	15.67
Cereal, flour, starch, milk preparations and products	9.86
Iron and steel	9.12
Soaps, lubricants, waxes, candles, modeling pastes	9.01
Fish, crustaceans, mollusks, aquatics invertebrates	7.12
Beverages, spirits and vinegar	6.56
Furniture, lighting signs, prefabricated buildings	6.48
Lac, gums, resins	6.06
Live animals	6.04
Paper and paperboard, articles of pulp, paper and board	6.89
Machinery, nuclear reactors, boilers	5.87

Source: Made by Author, data from Trade statistics by commodity and service type (2021).

However, the rapid development of services, especially construction and tourism, services and tourism are the main sources of revenue for GDP. According to the National Institute of Statistics of Rwanda (NISR, 2021), the GDP per capita was US\$ 820 in 2019 and US\$ 830 in 2020, respectively, while the targets plan was US\$ 900. Despite efforts, it should be mentioned that there is a long way ahead. The private sector would play a key role in helping the economy grow. Slight savings, skills, and high cost of energy are some of the obstacles to private investment. Strong private sector capabilities would help maintain high levels of public

investment and accelerate development. The Government has prioritized the transformation of Rwanda in trade, equipment construction of new international business hotels, a conference center in Kigali City, a new building for domestic goods, and a public warehouse known as customs. The government is also investing in expanding its fleet, and public RwandAir, and in terms of having the airports that fit it, the construction of Bugesera International Airport is underway (Rwanda National Statistics Institute, 2019).

Rwanda is a country that has taken the initiative to improve its economic development, despite the fact that Rwanda is facing many challenges. Although Rwanda is a member of various international organizations, it does not prevent it from making decisions on what it wants to achieve regardless of the pressure some powerful countries put on less power nations. Rwanda is a member of the East African community and South African Common Market (COMESA) and Rwanda is the only country in the region that has signed an agreement with the United States (BIT). Rwanda has also signed a Trade and Investment Agreement (TIFA) with the United States (IGC, 2017).

1.2.2 Investment inflows

Over the last 20 years, the Government of Rwanda and its Partners increased investment in developing transport infrastructure, services as well as human resource development. The support has catalyzed development of modern infrastructure and services, generally contributing to reduction in transaction costs, aiding mobility of goods and services, thus increasing the country competitiveness (MININFRA, 2020).

In 2018, inflows were mainly composed of FDI with a share of 82.5%, followed by other investment (OI) 16.2%. Other Investments means any portion of the Fund's average daily net assets not invested in Affiliated Funds. By definition, FDI is composed of equity investments from non-resident investors with a shareholding of at least 10% of the company's total capital, and reinvested earnings. In 2018, the FDI inflows increased by 7.1% year-on-year, to US\$ 381.9 million from previous US\$ 356.4 million in 2017, mainly driven by an increase in equity investment 75.5% and debt from affiliated investors 20.2%. The consists of tradable instruments (shareholding less than 10%, its inflows increased to US\$ 5.9 million in 2019 from US\$ 0.3 million in 2017). The OI, which includes loans from non-affiliated companies, trade credit and

advances, currency and deposit, life and non-life insurance technical reserves, pension entitlements and standardized guarantee schemes, as well as other accounts receivable/payable, decreased by 21.2%, mainly due to a decline in borrowings (BNR, 2019). According to the National Institute of Statistics for Rwanda (NISR, 2020), Rwanda attracted US\$ 462 million in FDI inflows in 2018, representing five percent of GDP. Rwanda had a total US\$ 3.2 billion of FDI stock in 2018, the latest year data is available. In 2019, the Rwanda Development Board (RDB) reported registering US\$ 2.46 billion in new investment commitments (a 22.6% increase from 2018), mainly in energy, manufacturing, construction, agriculture, services and mining. FDI accounted for 37% of registered projects. In terms of stocks, FDI remained the main component of total foreign private capital (FPC) with a share of 71.4% at the end of 2018, followed by other investment accounting for 25.2% and private investment representing 3.4%, as shown in Table 3.

Table 3: FDI Inflows & Stocks in Rwanda (US\$ million current values)

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Change %
FDI inflows	251	119	256	258	315	233	266.3	356	462	420	400	7.1
Other investment	–	–	–	168.4	96.3	195.3	95.4	75.2	93.9	–	–	21.2
OI Stocks	–	–	–	477.1	504.7	578.6	747.1	772.8	804.9	–	–	25.2
Number of Green field investments	–	–	–	–	–	–	–	6	8	20	–	–

Value of Green field Investments (US\$ million)	–	–	–	–	–	–	–	116	224	1.246	–	–
Inflows FDI stocks & Outward FDI stock in US\$ billion												
Inward FDI stock	2012	2013	2014	2015	2016	2017	2018	2019				
	0.7	0.8	1.2	1.4	1.7	2.0	2.3	2.6	Increased 16.6 %			
Outward FDI stock	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	–			

Source: Made by Author, update data from RDB and US Department of State July (2021).

Based on data presented in Table 3 above, it shows that FDI inflows increased in 2018 more than previous years where the total FDI inflows in Rwanda rose by 7.1% to US\$ 462.9 million from US\$ 356.4 million registered in 2017. The continued increase in FDI inflows led to an increase in stocks by 16.6% to US\$ 2,283.7 million. In 2018, FDI inflows in infrastructure areas, such as electricity, ICT, transportation, dominated the total FDI inflows with a share of 37.9%. FDI inflows in the ICT sector followed with a share of 21.3% of the total as in Table 4. The transportation came in third, with a share of 2.3% of the total FDI inflows. At the end of 2018, the FDI stock was still concentrated in the ICT sector, with a share of 29.1% of the total, followed by the electricity (11 %) and tourism (9%).

Table 4: FDI inflows and stocks in infrastructure areas (US\$ million, current values)

FDI inflows	Year			FDI stocks	Year		
Sectors	2017	2018	% share	Sectors	2017	2018	% share
Electricity	45.8	144.8	37.9	Electricity	123.3	250.9	11.1

ICT	50.3	81.4	21.3	ICT	589.7	663.7	29.0
Transportation	3.2	8.7	2.3	Tourism	200.4	197.8	9.0
Total	99.2	234.9	61.5	Total	913.4	1112.4	49.1

Source: Made by Author, data from FPC Census (RDB, NISR,PSF) (2019)

In the year of 2020, real estate and construction and industry accounted for 68% of total investment recorded at 48% and 20%. Other sectors that have attracted significant investment include agriculture, infrastructure, ICT, mining and financial services. 24,703 jobs were created by new investment and industry and and 8,661 jobs and construction creating 6,372 new jobs. The government aims to create 214,000 new jobs annually from investment and other markets. Foreign Direct Investment accounted for 51% of investment recorded in 2020, while local joint venture projects accounted for 29%, and 20% of investment, respectively. In comparison, foreign direct investment accounted for 37% of all investment registrations in 2019, while joint ventures accounted for 44% and 19%, respectively. Some of the major investment activities recorded in 2020 included: Organization that supplies smallholder farmers in East Africa (One acre fund) (US\$ 193 million), Phoenix Plaza (US\$ 179 million), Duval Great Lakes Ltd (US\$ 69 million), China Electricity and Electricity Corporation (Sinohydro Corporation Limited US\$ 66 million), Girinzu Investors (US\$ 41 million), Petrocom Building (US\$ 35 million) and Africa Management Ltd (US\$ 29 million).

Business registrations increased as RDB started working with the Rwanda Revenue Authority in 2019 to register individual enterprises through its online business registration system and to provide them Tax Identification Numbers. Out of Rwanda's 9 designated Industrial Parks, Bugesera is the most advanced and has been promoted to the status of a Special Economic Zone. Between 2015 and 2020, the Kigali Special Economic Zone attracted US\$ 2.35 billion in investment, generating US\$ 800 million in export revenues and creating over 13,394 permanent jobs (RDB, 2021).

In 2020, Asia became the biggest investor in Rwanda, as it accounted for 26.2% (US\$ 341.5 million) of total investments. Main investors were China (US\$ 282 million), European Union (247.7 million), United States (US\$ 205 million), Middle East (US\$ 91.4 million) and African Union (54.1 million). Although in top 10 investors into Rwanda, China has been first investing heavily in 2020 as it is shown in Table 5 below (RDB, 2021).

Table 5: Top 10 countries investing in Rwanda 2020 (US\$ million, current values)

Coun try	CHI NA	USA	UK	IND IA	EGY PT	SWED EN	DR C	SOMAL IA	FRAN CE	NETH ERLA NDS
Inves tmen t	282.0	205.3	28.5	22.7	17.7	12.1	10.0	9.8	6.8	5.4
Shar e%	27.7	15.8	2.2	1.7	1.4	0.9	0.8	0.8	0.5	0.4
Proje cts	16	7	2	13	3	1	1	2	3	2

Source: Made by Author, data from RDB one stop center, 2020).

1.2.3 Labor statistics framework and trade unions concept

Around 75% of the Rwandan working age is working in rural areas. But in terms of labor there is still a lot of needs to be improved. According to ILO (2020), Rwanda is working hard to improve the labor structure but the income inequality gaps continue to be high. In addition, a growing number of young people are putting pressure on the job market. Inadequate job creation at the normal level prevents productivity from rising. Urban areas have very few jobs compared to rural areas. Compared to all other countries in the region, Rwanda has a better position to prevent children labour in various activities (ILO, 2020).

The labor law in Rwanda provides for a maximum of 45 days working hours per week (excluding daily and weekly leave) but additional hours may be agreed upon and the employer (Art. 43). The law re-engaged the fireout in Rwanda provides for a leave of absence within a week not later than 24 hours Art 44). An employee is entitled to an annual leave of no less than 21 days off. Refusal to provide appropriate leave can also be a source of conflict between the employee and the employer. The Rwandan government does not allow anyone who employs an employee without contributing to the employee's social security fund. An employee's right to leave in accordance with labor laws in Rwanda may be violated in the following ways: Maternity leave (Articles 56 to 61) - female childbirth worker with 12 weeks of maternity leave; it can be included 2 weeks before childbirth and a monthly increase with salary on time maternity or childbirth problems reported by a well-known doctor.

A lack of skilled labor has been a mounting problem. For example, the education system does not fully supply the labor market with an educated workforce: Despite a very high net enrolment 100% 2013 in primary education level, 1/4 of the population has no sufficient educational attainment. On the positive side, the Technical and Vocational Education and Training (TVET) system has been prioritized and it has achieved an increasing enrolment ratio during the 2010s, so far. According to TVET students, a privation of finding placement, employment opportunities and inadequate skills are often obstacles. Employers consider the labor market as quite effective in the country, which includes positive measurements of cooperation in labor-employer relations as well as retaining and attracting talents. Although the private sector association is still a business-based organization rather than a political-user association, it is increasing the capacity of its users. The membership of trade unions has been steadily increasing, mainly due to the influx of migrant workers out of illegal labor. Today, about 32% of the members of all trade unions are from the informal economy. The increase in the membership rate was faster than any other employment rate, indicating that the labor union had increased by 1.5% in the period from 2014 to 2017; to 3.8% in 2017 (ILO, 2018).

Despite Rwanda's economic growth, innovation and knowledge-based strategy, investment and employment-based skills, ILO and its three members are committed to contributing to the achievement of the goal. It is in this context that the ILO's Good Work Plan can be a market for assessing and preparing for the future of job development in Rwanda. The ILO promotes efficient work as a national goal and supports its members to achieve that goal through development and implementation of the Decent Work Country Programmes (DWCPs), which is the ILO's main vehicle for funding in the member states of this organization. A good work plan consists of inseparable, interrelated and supportive goals, namely: job creation and project development; social protection; rights and entitlements to work; and leading social discussions.

The ILO and its three members outline the country's urgency and implementation strategies that would make the best use of human resources to achieve the desired results. ILO has been operating in Rwanda since 1994, and supports the implementation of the program and Many Child Labor Prevention, Employment and Entrepreneurship Policies, Social Protection, Labor Relations and Public Agreements The purpose of this Decent Work Country Programs is to

identify and focus on key activities identified by ILO and GoR, staff and organizations users (DTDA, 2020).

In recent years, the labor union has met with rapid increasing. There has been an increase in the number of corporate executives from the illicit economy, an increase of 219% from 2014 to 2017 and up to 69,000, so far (Table 6). About 29% of the current members of the trade unions are from the extraordinary economy. The increase in members has benefited the union. Despite the rapid increase in the number of employees, the number of employees has increased significantly by 1.5% during the period from 2012 to 2019. Although the number of employees has increased significantly, it is still a small part of the total workforce. This is reflected in the higher level of trade unionism which increased by 7.0 % in the above period, to 19% by 2020.

Table 6: Labor evolution and trade union status in Rwanda, 2012-2020

Creating decent jobs				
Policy reforms addressing creation of decent employment		Several labour market policies are active in the areas of the employment policy, skill development, poverty eradication strategy, productivity/competitiveness policy, and industrial policy		
Number of total working age population (WAP)		6.8 million workers and a workforce participation rate of 53% in 2019		
Informal employment covered		2.3 million		
Employees (Men)		54%		
Employees (Women)		46%		
Total	Gender gap in term of employment percentage point (p.p)	Unemployment	Youth Unemployment	Time-related Underemployment
	-17 p.p	17%	21%	28%

Men	+2 p.p	16%	17%	26%
Women	+9 p.p	18%	26%	32%
Number of Trade unions		3		
Members of trade unions		233.323		
Trade Union members share of total employment		3,8%		
Trade Union members share employees		19%		
Women member share of Trade Unions		32%		
Affiliated members from the informal economy		68,727		
Growth of Trade Unions members from 2012-2020		124%		
Number of Collective Bargaining Agreements (CBAS)		8 CBAS were registered in 2020 with coverage of at least 38,000 workers. CBAS, are registered in SYPEPAP, REWU, STRAVER and STRIGEP		
CESTRAR, COTRAF AND COSTYLI members		197.323+24.000 +12.000	Tota= 233,323	

Source: Made by Author based on data from CESTRAR & DTDA (2020).

According to Rwanda Extractive Workers Union (2020), the Center for Trade Unions of Rwanda (CESTRAR) is a large Union with 85% of the members of the union. The Congress of Travail et de la Fraternité (COTRAF) represents 10% and the National Council of Organizations Syndicale's Libres au Rwanda (COSYLI) represents 5%. Social dialogue includes all forms of communication, counseling, or social exchange such as the Danish Workers' Union (2020), in three labor unions, the Center for Trade Unions of Rwanda (CESTRAR) and a large family comprising 85% of all members of the union. The Congress of Travail et de la Fraternité (COTRAF) represents 10% and the National Council of Organizations Syndicale's Libres au Rwanda (COSYLI) represents 5%. Social dialogue includes all forms of negotiation, consultation, or exchange of information between stakeholders on common issues related to

economic and social policy. It can be unique or institutional, and is often a combination of both. This can be due to representatives of stakeholders at the national, regional, or institutional level on general issues related to economic and social policy. It can be unique or institutional, and is often a combination of both. It can be due to the national level, regions or projects.

The East African Union of Trade Unions and Employers' Unions has increased its capacity to work together at the negotiating table. At a meeting in a hotel in Arusha (Tanzania), leaders of trade unions and trade unions of six East African trade unions (NOTU- Uganda, CESTRAR- Rwanda, COSYBU- Burundi, COTU-Kenya, TUCTA-Tanzania and ZATUC-Zanzibar) exchange hands, laugh, and share together. An image like this would be used by trade unions to work together to find common solutions in many countries, but in East Africa, this spirit of consensus is something new.

The International Trade Union Confederation (ITUC) affiliates CESTRAR and COTRAF. The federations are considered as independent, but CESTRAR has links to the government and the ruling Rwandan Patriotic Front party (RPF). La Centrale des Syndicats des Travailleurs du Rwanda (CESTRAR) was established in 1985 with a central structure of the then ruling national republican movement for democracy and development party. In 1991, CESTRAR declared its independence vis-à-vis the political parties and revised its constitution. The organization works closely with the government and civil society organizations. CESTRAR is governed by the national trade union congress, the national trade union council, and the national executive bureau. The two main objectives of CESTRAR are: i) the improvement of the socio-economic conditions of workers, and ii) creating solidarity among workers and involving them in trade union activities. The largest and one of the most influential unions in CESTRAR and Rwanda is the Rwanda National Teachers Union (SNER). This organization has registered 65,000 members who all work in the formal sector. This constitutes 33% of CESTRAR total membership. The workers' union of enterprises in construction, carpentry and handcraft (STECOMA) is the second largest union with nearly 57,000 members, which is 29% of the centre's total membership (ILO, 2020).

Minimum wage is one of the tools of the labor market used to increase the balance of wages in low-income sectors, and the main purpose of determining the minimum wage is to provide them with the necessary social security in terms of possible wages, thus preventing them from being

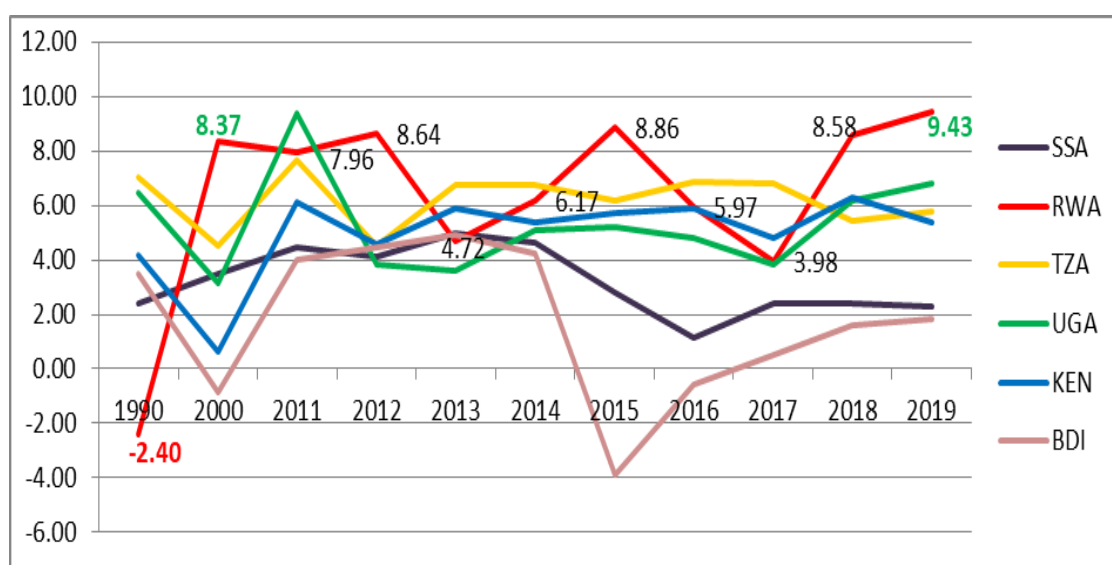
used of employees with limited knowledge when considering the ability of employers to pay. The most common goals for minimum wages are sweating or consumption, maintaining purchasing power, eliminating bad ends and preventing industrial conflicts (ILO, 2020).

According to salary explorer (2021), in Rwanda US\$ 184 is the lowest wage per month and US\$ 3,150 is the maximum average salary per month. The average salary the country is US\$ 787 per month. The salary distribution also shows that 25% of the population earns less than US\$ 436 per month while the wealthiest 25% of the population earns more than US\$ 2,178. Employees with a certificate or diploma earn 17% more than their peers who have only reached the highest level. Employees who earn a bachelor's degree are earning 24% more than those who can only earn a bachelor's or master's degree. Professionals who have earned a bachelor's degree are paid more than 29% compared to those who have a bachelor's degree. Finally, PhD holders earn 23% more than those with higher degrees when they do the same job.

1.2.4. Economic reform agenda

Rwanda's real GDP grew by 9.43% in 2019, exceeding the regional average. The increase was in services (7.6%) and industry (18.1%), especially construction (30%). Development-oriented investment led by public investment in basic services and infrastructure. Real GDP per capita increased by 6.1% in 2019 and inflation rate has risen slightly to 1.6% in 2019 (AfDB, 2020).

Figure 3: Rwanda's annual GDP growth (%) compared to Sub-Saharan Africa and EAC



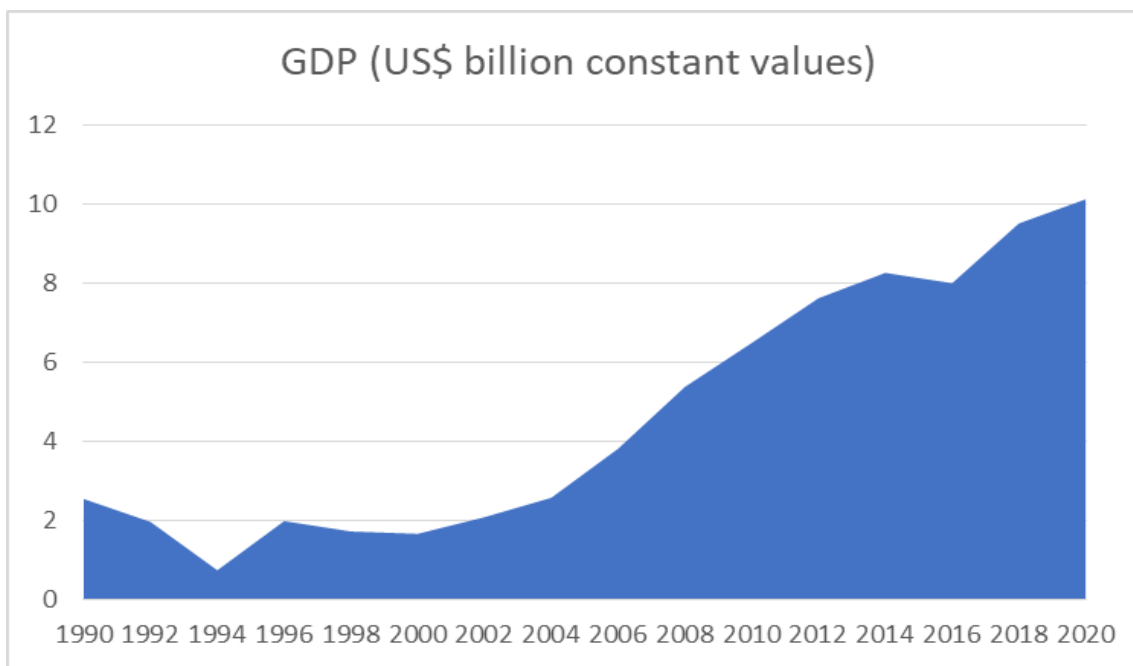
Source: World Development Indicators (2020).

The abbreviation meanings are the following: SSA=Sub-Sahara Africa, RWA=Rwanda, TZA= Tanzania, UGA=Uganda, KEN=Kenya and BDI= Burundi.

Rwanda's GDP annual growth at the first quarter of 2020 was US\$ 10.12 billion. It has increased by 7.46% from 2019 when was US\$ 9.71 billion, in 2018 was US\$ 9.64 billion increased 7.32%, in 2017 was US\$ 9.25 billion increased by 4.14% from 2016, in 2016, it was US\$ 8.70 billion, increased by 1.78% from 2015. In 2000 was US\$ 1.71 million and GDP per capita of US\$ 261 (World Bank, 2021). In Q2 2020, in face of Covid-19 crisis, Rwanda's GDP decreased by 12.4%. Agriculture dropped by 2%, Industry dropped by 19% while Services dropped by 16%. Economic sectors that were most affected included: Education dropping by 67%, hotels and restaurants that dropped by 62%, transport activities that dropped by 41% where air transport dropped by 96% and land transport decreased by 18% (NISR, 2020).

Figure 4 shows the Rwanda's economic and evolution of the country's GDP, clearly regaining momentum after the 2000s, thus differing from its trajectory over the 1994s, severely affected by the genocide, when GDP level was around US\$ 1.195 million only.

Figure 4: Rwanda's GDP upward trends (US\$ billion constant values) 1990-2020



Source: Made by Author; data from World Bank (2020).

Rwanda's economic and social achievements in the post-recovery phase have continued to be impressive. GDP growth, for the most part, has been supported by robust performance in each of the major economic sectors. Industry (propelled by construction) and services (driven by information, infrastructure and communication technology ICT and trade and transport) each has grown at an annual rate between 9% and 10% since 2006, and agriculture (led by crops and livestock) has grown at 5.4%. Broad-based sectoral growth facilitated rapid structural transformation, meaning the movement of labor out of low-productivity agriculture and into industry and services and from farms to cities, although most people still live in rural areas (World Bank Group & Republic of Rwanda, 2018).

Based on limited resources that Rwanda has, prioritization and follow-up were essential made. This section shows short, medium and long term emergencies acknowledges the complementarity and complementarity between different policies of development have been well implimented. For example, industrial development and services cannot be achieved without competing knowledge, infrastructure and financial services. Expected policies, some of which have already been devised and implemented, include trade liberalization, domestic investment, GDP per capita, poverty reduction, foreign access, private sector reform, of taxes, the exchange rate and market interest. The private sector can provide better and more competitive in the areas that government goes weakly. With these policies in place the economy must face the challenge of transforming the agricultural economy into a high-tech reform (IMF African Department, 2020).

Table 7 describes targets from Vision 2020 and its achievements thus far, especially with the objective of transforming Rwanda into a middle-income country.

Table 7: Initial stages and level achievements in diferents areas

Action plan	Initial data 2000s	Targets to be achieved in 2020	Level of achievement 2020
GDP Annual growth (US\$ billion)	1.7	8.0	10.2
Domestic investment (% to GDP)	18%	23%	30%
GDP per capita (US\$)	220	900	830
Population access to	2%	35%	60%

Electricity %			
People living under poverty line %	64%	30%	16%
Access to Sanitation %	20%	60%	64%
Urban population %	14%	30%	17%
Access to clean water	52%	100%	57%
Life expectancy	49	55	69.06
FDI inflows (US\$ Million)	120	480	400
GDP Growth rate	6%	8%	9%
Infant mortality rate (X/1000)	76/1000	30/1000	26/1000
Poverty rate	64%	35%	20%
School enrolment (PRIM & SEC)	68%	80%	100%
Women in Parliament	25%	62%	64%

Source: Made by Author, data from EARP-EF (2020).

Vision 2020's GDP per capita has been revised from US\$ 900 to US\$ 1,240 by 2030, trying to make Rwanda a middle-income country. Some goals have already been achieved but others still need more ambition. Among the first 47 indicators identified in Vision 2020, 28 (60%) were achieved and the rest remains in government's plans to achieve them, including GDP growth rate, agricultural production, child mortality rate, high school transitions, malaria-related deaths and higher enrollment rates. Many of the goals expected to be achieved were already achieved.

Other indicators that were significantly higher than the achievement rate, such as life expectancy, have increased significantly from 49 years in 2000 to 69 years, 75 years in 2020, and a decline in infant mortality from 76/1000 in 2000 to 26.5/1000 by 2020, the number of women dying decrease from 870 / 100,000 in 2000 and 210/ 100,000 in 2020. The population is still below the poverty line by 20%, while poverty has drastically decreased from 64% of the population to less than 16% in 20 years (UNFPA, 2020).

The rise of Rwanda's economy is gradually getting investors' attraction, although large-scale public investments continued to close the infrastructure gaps, particularly in energy, telecommunications, and road transport. Trade integration was also accelerated with Rwanda's accession to the East African Community (EAC) in 2009, which significantly brought down tariffs from an average of 16.5% to 11%. Rwanda's global rankings on "Ease of Doing Business", 2018, was ranked 2nd in Africa after mauritius and 29th in the world (World Bank,

2019). The sustained economic growth has also led to 1.7 million people being lifted out of poverty between 2000 and 2017 (Masimba et al., 2020). However, 2019 it was ranked 38th in the world (EAC, 2019).

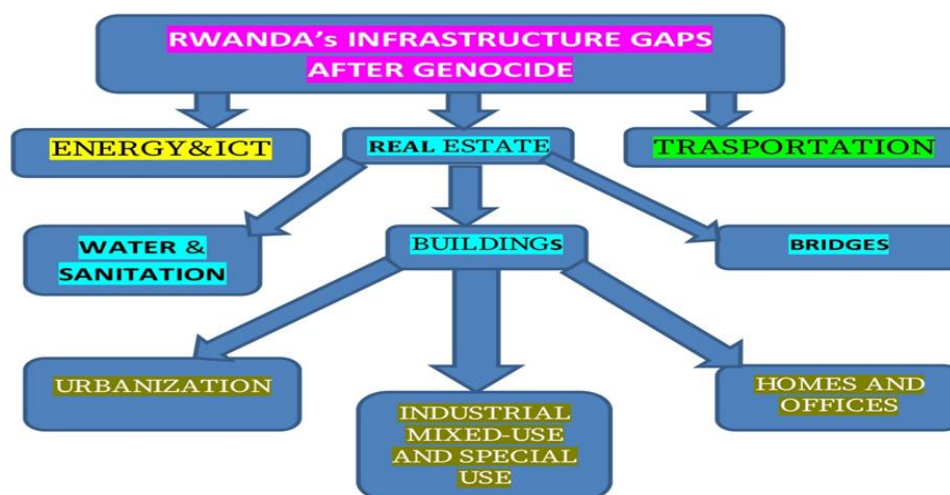
To achieve this goal, the Government of Rwanda has pursued economic development, seeking to transcend basic technology in the multi-sectoral industry to move from modern technology to service, tourism, and information technology (ICT). Mobile money was available where traditional bank infrastructure was not available in 2015: Rwandan currency enters Africa. 61% of Rwandans with mobile accounts live in rural areas and 72% live below US\$ 2.50 per day (World Bank, 2016). The Agaciro Development Fund, Rwanda's sovereign wealth fund for buffering economic shocks, takes contributions from Rwandans not just by traditional bank deposit but by text message on mobile phones, facilitated by Rwanda's extensive broadband Internet, among the fastest in Africa. Since 2016, drones have started delivering blood to rural hospitals, making it difficult to cross the road: new technology has compared the old way of delivering motorcycles or cars (Eom & Janet, 2018). Despite the many challenges, efforts have been made in various areas to address structural barriers that hinder the country's rapid and complete development.

Due to the geographical challenges of Rwanda, instead of setting up export-oriented industries, the national government has focused on transforming Rwanda into a trade and technology hub. Louise Mushikiwabo, the former Minister of Foreign Affairs and Cooperation in Rwanda, described the model of local development. "If you are not given oil and all natural resources, you can use technology and innovation together to achieve the goals of economy" (Jones, 2016. P 2). Decision-makers in Rwanda think that the country must be "land-linked," not land-locked, thinking that there would be an opportunity to exchange views and connect economic networks in East Africa; To this end, Kigali hosted the World Economic Forum, the African Union, and the United Nations. In fact, Rwanda has taken a good strategy to promote digital innovation, as it focuses on being an international technology hub used by the human capital. To achieve these goals, the Rwandan government has pursued what some consider being economic growth, seeking to transcend basic technology in the multi-sectoral industry to move forward the latest in services, tourism, and ICT (TRALAC, 2018).

1.3 Infrastructure development in different areas

Infrastructure is essential in accelerating the economy and fighting poverty in the country. Adequate infrastructure in the form of a system for transporting people and goods on the road and by train, ports, energy, airports and their good infrastructure are also needed to connect with other countries of the world economy. The economy needs reliable infrastructure to connect the pipelines provided and effectively transport goods and services across the border. Infrastructure connects households across the city with employment opportunities, health care and education. Clean energy and public roads can reduce air pollution (MININFRA, 2012). Rwanda understands the importance of infrastructure in the development of a competitive private sector. To this end the government continues to invest heavily in infrastructure. Almost a tenth of Rwanda's annual budget is committed to transport and other infrastructure. To develop a vibrant private sector, Rwanda is investing in Roads, Rail and water transport infrastructure with the intent of dramatically reducing the cost of transport to businesses and individuals (Visit Rwanda Platform, 2020).

Figure 5: Status for infrastructure damaged and the gaps needed to be reconstructed



Source: Made by author.

1.3.1 Roads

Rwanda's transport system is composed mainly of three means of transportation namely: road, lake and air transportation. Rail transportation does not exist yet, but the construction of a

regional railway network linking Rwanda and Tanzania is being increasingly envisaged by the government. Therefore, Rwanda is largely dependent on its road transport system. All major towns are connected by the road network. Rwanda is also well connected by the road transport system with the neighbouring countries of Uganda, Kenya, Tanzania, Burundi and the Democratic Republic of Congo. The road system plays a very important role in the import and export flows of the country. The Rwanda road network has improved through rehabilitation and upgrading during the past years. The total road network covers 2,662 km of paved roads and 11,346 km unpaved roads, making a total of 14,008 km (RTDA, 2019).

The road rehabilitation and reconstruction policy was launched in 2000. The relevant districts are located in Cyangugu, Kibungo and Kigali-Ngali provinces, where villages and towns are among the most difficult in the country after social-politics crisis and rainfall of 1997 and 1998. The infrastructure that needs to be reformed is also a major cross-border road, especially between Rwanda, Burundi and the Democratic Republic of Congo. Most of the country's major cities are paved with dirt roads. However, the condition of these roads has recently been very poor, with many potholes and vehicles often moving on the contaminated shores as it was considered easier than the road itself (Olivia, 2018).

Rwanda's total trunk road network, about 14,000 km of roads, includes 5,408 km of classified network and 8,600 km of non-classified network referred to as "tertiary roads". The classified network is of responsibility of the Ministry of Infrastructure and is divided into 3,245 km of primary roads (1,022 km of paved roads and 2,223 km of dirty roads) which reflect to international traffic and ensure inter-regional links and 2,163 km of secondary roads (all dirty) which operate the local links (World Bank, 2006).

In 2010, 1,525.8 km of paved roads were upgraded to paved roads through government funds and development partners. In 2017 the government set up to upgrade and rehabilitate the roads which helped to improve the condition of the country's major highways. Highways in Kigali cities, as well as major roads in Ruhengeri, Kibuye and Gisenyi are two-lane roads, but the country's major roads are already paved (RTDA, 2017). The government is currently upgrading 445 kilometers of the country and the highways to reach the highways. These projects include: Base-Gicumbi (40 km), Rukomo-Nyagatare (73 km), Nyanza-Bugesera (66 km), Bugesera-Nyanza (57 km), Huye-Kibeho-Munini (66 km), Road around Kigali (80 km) and Base-Butaro-

Kidaho (63 km). There are also efforts to renovate 343 km of dirt road, as shown in Box 2, in particular: Kagitumba-Kayonza-Rusumo (209 km), Huye-Kitabi (53 km), Muhanga-Rubengera (60 km) and Musanze -Cyanika (21 km) (RTDA, 2018).

Box 2: Main paved roads, starting point and destination

Nno	Start	Destination	Via	Description
1	Kigali	Gatuna (border)	Byumba	The main road through the north of the country, this is the main road <u>Kabale</u> to Kampala in <u>Uganda</u>
2	Kigali	Kayonza	Rwamagana	Leads east from the capital. Resurfacing of this road was completed in 2012, and it features Rwanda's first proper by pass around the town of Rwamagana
3	Kayonza	Kagitumba (border)	Nyagartare	A continuation of route, running to the far northeast of the country. Prior to 1994 most of this road was within the Akagera National Park but the area has now been settled, largely by refugees who returned from Uganda after the war
4	Kayonza	Rusumo (border)	Kibungo	The main route into Tanzania, running down to the far southeast of the country. The border is a high bridge over the Kagera River (which is also part of the most distant headwater of the <u>Nile</u>)
5	Kigali	Fugi Burundi (border)	Gitarama- Butare	The road linking the main two cities of Rwanda as well as being the main link to Bujumbura, the largest city and former capital of <u>Burundi</u> . The section south of Gitarama was resurfaced in 2004
6	Gitarama	Gisenyi DRC border	Kibuye rubengera	This road was surfaced for the first time by Chinese engineers within the last

				decade, running through very hilly terrain and crossing the Nile/Congo watershed.
7	Butare	Cyangugu DRC (border)	Gikongoro	A very stretch of road running through the heart of Nyungwe Forest and ending on the shores of Lake Kivu. It also links to the Congolese city of Bukavu
8	Kigali	Gisenyi DRC (border).	Ruhengeri	A road that passes first through the hilly areas around Mount Kabuye and then turns west to head along the southern edge of the <u>Virunga</u> volcano chain, before ending up at Gisenyi, on the shores of Lake Kivu. The road continues into <u>Goma</u> in the DRC.
9	Kigali	Cyanika Uganda (border)	Ruhengeri	A road linking Ruhengeri and <u>Kisoro</u> in Uganda. Passes very close to Mount Muhabura is also important to the vistors of Virunga Park
10	Kigali	Burundi	Nyamata	The road was paved since 20006, the government of Rwanda is considering building a new international airport near the town of Nyamata

Source: Made by Author, based on data from RTDA annual report (2018-2019).

Rwanda is a small country and the distance from Kigali to the provincial cities is not very far compared to other regional countries. However, due to the nature of the road and the land, the average travelling time for a heavy loaded vehicle , it takes from Kigali as follows: Huye, 3 hours; Cyangugu, 5 hours; Gisenyi, 2 hours, Ngoma, 3 hours; and Karongi, 4 hours. All secondary roads are not built and very difficult to cross in the sun. Truck traffic during the rainy season is very difficult due to floods and landslides, especially in the highlands of the country. The government's plan to improve the transport sector focuses on rural areas. Its main objectives are to maintain and repair the rural highways in order to promote trade and to assess whether the international railway line connects the Tanzanian railway line. These measures would play a

major role in infrastructure development for economic development and burden reduction on relief programs (RTDA, 2019).

The main roads in Kigali city, as well as the main roads in Ruhengeri, Kibuye and Gisenyi, are a two-lanes and are still paved (RTDA, 2017). In 2010, 1,525.8 km of paved roads were upgraded to paved roads through the state fund and development partners. The government is currently upgrading 445 kilometers of the country and major roads to reach major highways. These projects include: Base-Gicumbi (40 km), Rukomo-Nyagatare (73 km), Nyanza-Bugesera (66 km), Bugesera-Nyanza (57 km), Huye-Kibeho-Munini (66 km), Road around Kigali (80 km) and Base-Butaro-Kidaho (63 km). There are also efforts to renovate 343 km of dirt road, as shown in Table 5, in particular: Kagitumba-Kayanza-Rusumo (209 km), Huye-Kitabi (53 km), Muhanga-Rubengera (60 km) and Musanze -Cyanika (21 km) (RTDA, 2018).

1.3.2 Air transportation

RwandAir is the national carrier of Rwanda, headquartered at Kigali International Airport. It launched its operations in the country in December 2002 under the name Rwanda Express, which was returned in June 2009 to RwandAir. RwandAir, which operates in Kigali as its hub, is one of the fastest growing and smallest airlines on the African continent, consisting of two two Boeing 737-700NG, two CRJ900NG, and two Bombardier Q-400NG, all in stages. Two and three new Airbus A330 models reaches 27 cities in the West, Central, East and South, and Southeast Asia.

The Government of Rwanda has decided to reform the air transport system, invest more in air infrastructure and create an environment that attracts public and private participation. Significant investments have been made in the development of Kigali International Airport and Kamembe Airport, among other things, the expansion of the railway station, road repairs, control towers, and modern aid. The effort has already resulted in an increase in traffic and additional traffic at Kigali International Airport. The government is also working on other key projects in this regard, including the expansion of Rubavu Airport in the Western Province, as well as the construction of Bugesera International Airport on a green site, which is expected to transform the airport as soon as possible ended (MININFRA, 2018).

In February 2020, it was reported that Qatar Airways had purchased a 49% stake in RwandAir (The Africn Report, 2019). A stake in an African airline would widen the company's reach in

one of the world's fastest-growing aviation regions, and potentially help it bypass restrictions imposed on it by some Arab states.

1.3.3 Urbanization

More than half of the world's population lives in cities. Africa is the second fastest growing city in the world. In order for growth to be effective and efficient, it must be addressed around the world all development agencies in a concerted effort focus on good planning, infrastructure and finance. Rwanda is one of the fastest growing economies in Africa, with agriculture a one-third of the economy. Urbanisation design, is not only for goods, but also for trade industrial production, domestic development through job creation and nature protection and agricultural resources, which provide opportunities for sustainable and robust growth and growth the living standards of the population are increasing. The population growth of Rwanda is a small area and it is still difficult to develop land and agriculture as dominant in the economy activities that cause physical aspects including hills, social and economic development; barriers that show us where to look when we are dealing with change - connectivity, densification, affirmation and economic growth - the pillars of this policy (Jemes, 2015).

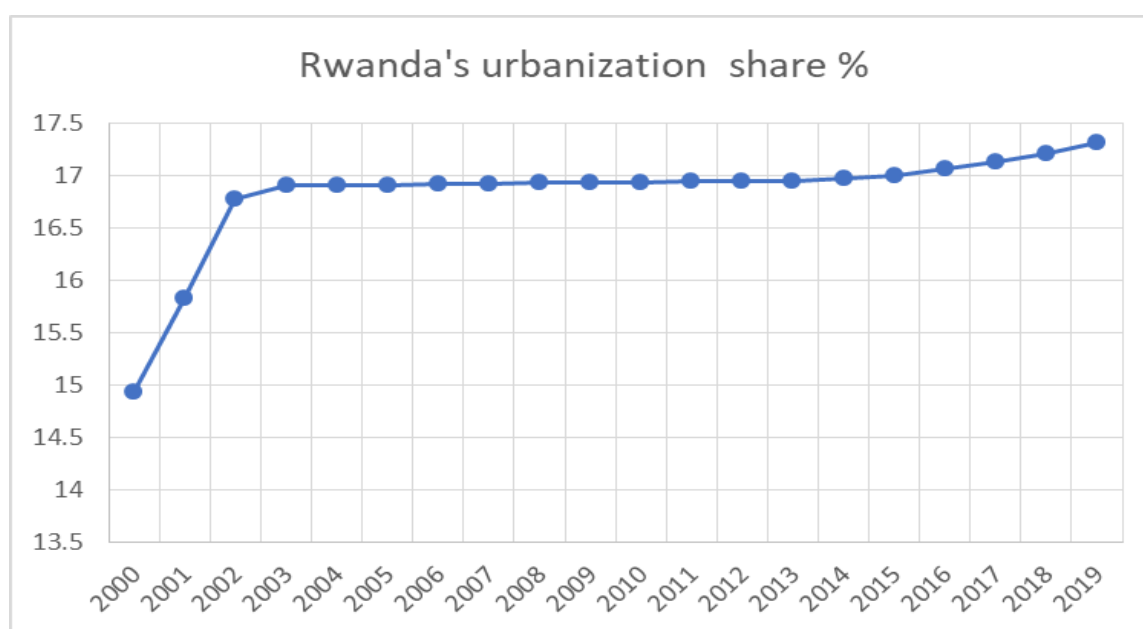
The Urban Development Project in Rwanda aims to provide infrastructure and services to six secondary cities across the country, namely Muhanga (formerly Gitarama), Rubavu (Gisenyi), Nyagatare, Huye (Butare), Rusizi (Cyangugu), and Musanze (Ruhengeri), up to the city of Kigali. A 2012 census and a 2014 household survey surveyed the city's share of 16.5% and 17.3%. The urban growth rate has increased significantly, from 15.8% to 26.5% between 2002 and 2015, an increase of 132% or about 2 million (World Bank, 2018).

Rwanda has begun construction of 2,000 low-cost housing units for high-income earners, in an effort to address the problem of low-income housing in the country's cities. The intended beneficiaries are those in the income range of between US\$ 220 a month and US\$ 771 a month, according to development officials. The entire project cost more than US\$ 50 million and would easily accommodate up to 10,000 people. The Urban Development Project of Rwanda aims to provide infrastructure and services to six secondary cities in the country: Rubavu (Gisenyi), Nyagatare, Huye (Butare), Rusizi (Cyangugu), Muhanga (formerly Gitarama), and Musanze (Ruhengeri) and up to the City of Kigali, which forms the core of the greater Kigali region

(Mininfra, 2019). Rwanda's economic reform focuses on the rapid growth of cities with special themes, Re-thinking of cities in Rwanda: From population transitions to economic change. The report finds that the share of cities in the total population of Rwanda in 2018 12 million has increased significantly compared to the official documents because the city information needs to be improved. A 2012 census and a 2014 household survey surveyed the city at 16.5 and 17.3%, respectively. However, using another simpler definition of cities, report researchers found that the city level increased significantly from 15.8% to 26.5 percent between 2002 and 2015, an increase of 132 percent or about 2 million the largest cities in Rwanda (World Bank, 2018).

Rwanda's Strategies for the Implementation of the National Urban Policy (NUP) are beginning to review the blueprint for all cities to ensure that they are community-based and in line with national development goals. In addition, the Government of Rwanda has established the Rwanda Housing Fund to promote affordable housing policies to address the housing gap through public-private partnerships. Rwanda focuses on prioritizing investment and strengthening local, institutional, and institutional institutions, based on the perception that "no country has ever entered a small economy without industry and cities. No one has grown up to make a lot of money without strong cities (MININFRA, 2021).

Figure 6: Rwanda's urban population as a share of total population



Source: Made by Author, based data from World Bank (2020).

However, urbanization still faces several barriers, including the need to develop urban infrastructure, a critical cost in the housing sector that developers are reluctant to bear. Housing-related infrastructure accounts for 17% of housing costs in Kigali. Missing links to formal infrastructure networks, paved roads, electricity, and water supply are holding back development (World Bank Group, 2020). In this regard, public-private partnerships could play a crucial role. For example, there are opportunities for international and local firms to enter the building materials sector, especially for low-cost, technology-driven production of local building materials. Global expertise could help with technology transfer (IFC, 2018).

1.3.4 Water and sanitation

Rwanda's water resources are facing increasing challenges due to the pressure of climate change, the desire for economic and social development, and the damage caused by inadequate and inefficient operations of land use, even; and uncertainty due to climate change, and so on. At the same time, water resources are based on resolving many conflicting issues and play a key role in facilitating the achievement of the National Development Goals 2020. Addressing the above issues requires a robust policy and legal framework that is adequately supported and used by the relevant skilled workers (GoR, 2012).

The Kanzenze water plant, valued at US\$63 million, seems to be a solution for the people of Kigali and Bugesera. The Bugesera factory has a capacity of 40,000 meters of water, including 30,000 meters to be sent to Kigali and 10,000 meters to supply Bugesera residents. The project construction started in 2017, and is expected to address the shortage of water in Kigali and its suburbs. The National Water and Sanitation Authority (WASAC) estimated that one person uses four jars a day, or 80 liters a day. The total amount of water the City of Kigali needs is 143,000 meters per day. As already shown, the capacity is 90,000 meter cube per day, and 30,000 meters from the Kanzenze factory. That is, only 23,000 meter cube are left for every resident of Kigali to have access to water at all times. Rwanda has set a goal that by 2024 every citizen would have access to water (WebRwanda, 2021).

The International Finance Corporation (IFC), the Public and Private Infrastructure Advisory Board (PPIAF), a multi-donor fund, has provided technical assistance and capacity building to the Rwanda Energy and Sanitation Authority (EWSA) project. Following the decision to share

EWSA in two special water and energy projects in 2014, PPIAF has developed a high-level strategy on the functioning of the Rwanda Water and Sanitation Authority (WASAC). Three organizations in collaboration with the Infrastructure Development Group (PIDG) have helped fund the project in various phases of its development: a project managed by IFC and funded by PIDG, which provided financial support and technical assistance to the government of Rwanda to pay for legal, financial, technical and environmental assessment of the project (Donald, 2015).

With regard to the Kigali Water Supply Project, aims to reduce the cost of the project and increase productivity and the decision to separate the infrastructure of the distribution of the factory from private investment. In addition to the well contribution, the water treatment plant, and the two pumping stations, the project first included the distribution and distribution infrastructure needed to achieve the project - three reservoirs, distribution pipelines, and a pumping station. However, it was agreed that after the successful implementation of the communal infrastructure, WASAC, in contrast to the support provided by the Government of Rwanda. This helped each project to supply and distribute water independently to find the right solution to support and improve the performance and benefits of end users, and reduce the total project cost from US\$ 79 million to US\$ 61 million (OECD, 2019).

1.3.5 Energy

One of the key issues in the energy sector is that Rwanda after the conflict has led to a significant increase in energy. However, by 2005, the country had experienced a severe power outage, evidenced by heavy loads. Lack of supply and distrust has raised the cost of doing business, and at the same time ruining the opportunity to attract new investment. Power plants in the country, especially from oil, have not been sufficiently capacity-driven and have been poorly maintained, while power outages have been halted by drought in the region, which has also affected Kenya, Tanzania and Uganda, leaving Rwanda without how to get electricity from its neighbors in the early 2000s. As of 2008, the power company had only 109,000 grid-connected households almost all in Kigali cities, almost none in rural areas (Janvier et al., 2016).

Energy is key to Rwanda's development and poverty reduction. Electricity accounts for a small share of Rwanda's overall energy consumption in 2013, but it has expanded rapidly in recent decade, Investors have pointed out how to get the most expensive energy the first problem they

face when they consider a plan to expand the country's energy capacity. The country plans was special economic sectors to stimulate trade growth, and electricity needs to be significantly expanded to meet their needs. In the same way, fulfilling Rwanda's goal of increasing electricity supply to households faster will require more electricity. The use of biomass, especially wood and charcoal, is currently dominant in the supply of primary energy. Although the share of basic energy decreased over time with other energy sources, biomass is remain an important pillar of Rwanda's energy system. Checking whether biomass is sustainable in terms of environment and health remains a major challenge for a country as densely populated as Rwanda, especially in parts of the country where there seems to be some downside (WISDOM, 2013).

Rwanda has considerable natural energy resources such as hydro, solar, peat, gas, and biomass. It currently has only about 216 megawatts (MW) of installed electricity capacity to serve the whole nation (RDB, 2018). Rwanda's energy sector strategic plan and roadmap 2013-2017 sought to increase the country's installed capacity from 110.8 MW to 563 MW by 2017, mainly from hydro, peat, methane, geothermal and solar power, in order to reduce the country's electricity deficit. Lack of access to adequate power remains an obstacle to achieving development targets in the post-genocide era. The generation capacity for solar energy is 280 kilowatt-peak (KWp) which is generated by two on-grid plants of 250 KWp located at Mont Jali in the city suburbs and a 30 KWp at Nelson Mandela Education Center in Bugesera district in eastern Rwanda (REG, 2017).

A detailed plan has been developed for the distribution of power lines across the country. This is done with migration due to urban politics and calm. For consumers with an income level who cannot support grid prices or those who are more than 5 kilometers from the national line, the government has pursued the PPP as a solution for the final consumers. There is also a goal to provide up to 230 MW of electricity to end-users. Many employers and employers are productive, industry in particular, key to development and employers. it requires reliable and sustainable electricity to compete and has a lucrative business (MININFRA & AfDB, 2014). In addition, the national average is 41 kWh, compared to 457 kWh in sub-Saharan Africa and 1,155 kWh in other developing countries. The government is monitoring the country's energy mix, as follows: peat (255 MW), methane (75 MW), hydro (140 MW) and solar (18.5 MW). In 2014, most of the rural population in Rwanda were no electricity or access to safe drinking water. The

latter was costly: frequent infections in children aged 12-23 months were 22% and 49% for 18-23 months showed poor development in 2014-2015 (Government of Rwanda & Rwanda National Bureau of Statistics and others 2016, p.137). Electricity and clean water were considered public goods to be provided by the state. 49% of households in Rwanda do not have access to electricity (Government of Rwanda & Ministry of Infrastructure, 2019).

Electricity Roll-out Program (EARP) Rwanda Popular in Rwanda Electricity Distribution Program is a nationwide electricity transmission program, especially at home, but also for other infrastructure. The cost of connecting the home to the grid depends on the time it is away from the normal network but on average about US\$ 1,000 per line. Coordination fees are supported as follows: 80% by government and development partners, 10% by Energy Water and Sanitation Ltd (EWSA), and another 10% by beneficiaries with reduced income. EARP is part of an affordable development plan and is divided into two phases: Phase 1 (2009-2012) begins to expand the national network and provide direct access, with a target of connecting 350,000 by the end of 2012, or 16%. About US\$ 350 million raised in Phase 1 allows the goal to be exceeded. The combined total was 379,851 in August 2013, indicating key steps taken. Phase 2 (2013-2018) allows the connection of non-grid connections, resulting in 70% of the population having access to electricity, of which 48% are required to be on the grid (Rwanda's Ministry of Infrastructure, 2020).

There are ambitious plans to expand the supply of electricity to keep pace with increasing demand from existing customers, as well as an expanding supply demand from new industrial users and to supply the electricity required to service the additional households to be connected to the grid through the EARP. In order to satisfy this demand, the energy utility company has planned a five-fold expansion of capacity, as shown in Table 8. The expected investment costs of this generation capacity, as well as the associated investment costs required to roll out the required transmission and distribution system were set out in US\$ 44 billion (WASAC, 2013).

Table 8: Estimated capital cost requirements of planned investments (US\$ million)

Categories	2014/2015	2015/2016	2016/2017	2017/2018	Total
Electricity	613	429	603	547	2,195.3
Generation to deliver	289	318	524	510	1,642.

591MW					4
Public Projects preparation/DP	56	28	56	0,6	141
Hydro	7	0.0	0.0	0.0	7.0
Geothermal	39	23	55	0.0	116.5
Other sector studies	9	5	0.8	0.6	15.2
Generation	233.3	290.2	468.3	509.9	1,502.5
Public/ Partner Development	96.4	114.0	78.7	143.9	433.0
Peat	72.5	116.4	152.9	103.1	443.8
Hydro (Domestic)	69.9	26.6	46.3	24.8	167.6
Hydro (Regional)	19.5	39.1	62.4	85.7	206.8
Methane	0.6	54.0	176.0	255.0	485.6
Thermal	24.2	54.0	5.7	11.3	95.2
Solar	48.5	0.1	25.0	30.0	103.6
Transmission (all public)	324.5	111.3	79.7	37.0	552.5
Domestic lines & sub-stations	147.8	104.0	70.0	6.7	328.5
Region lines & sub-stations	176.7	7.3	9.7	30.3	224.1
Electricity Access	127.2	315.6	302.1	232.3	977.2
EARP (all public/DP)	125.0	312.8	294.6	220.0	952.7
Households b & SME's	86.4	169.2	176.5	185.2	617.4
Productive Users	38.6	143.7	118.1	35.0	335.3
Off grid Electrification	2.1	2.9	7.5	12.0	24.5
Public costs	0.6	0.3	0.0	0.0	0.8
Private /consumers costs	1.6	2.7	7.5	12.0	23.9
Biomass	2.9	2.6	2.6	4.7	12.8
Biogas	2.7	2.5	2.5	2.4	10.2
Subsidy	2.6	2.4	2.5	2.4	10.0
Cook stove	0.2	0.1	0.04	2.28	2.6
Government support to cook stove	0.22	0.11	0.04	2.28	2.6
Petroleum	9.4	323.8	413.3	0.0	746.5
Government (site development)	0.0	0.0	0.0	0.0	0.0
Government (storage facilities)	0.8	0.0	0.0	0.0	0.8
Private storage Facilities	8.6	70.4	0.0	0.0	79.0
Pipeline (investments)	0.0	253.3	413.3	0.0	666.7
Energy Eff. Demands side	3.9	8.7	6.0	5.2	23.8
Private	283.2	426.1	786.7	378.0	2,215.4

Public	610.4	831.4	930.9	411.7	2,784.3
Total	757.2	1,080.0	1,328.0	789.7	3,955.7

Source: Made by Author, data from EWASA & ESSP (2013)

The government of Rwanda recognizes that availability of efficient and reliable energy supply is a prerequisite for social prosperity, human development and economic growth. Rwanda heavily relies on traditional biomass, for instance, wood, charcoal, dung, with more than 83% of households using firewood and demand for biomass energy continues to be a major driver of deforestation (Eustache, 2020).

There are some challenges and barriers to the implementation of energy projects, as identified in the Energy Sector Strategic Plan (ESSP) in 2018. Further action may identify more long-term strategic issues that will need to be addressed to meet 2030 new goals of transforming country into middle income, which can be incorporated into these to produce a coordinated review of gaps which can inform the prioritisation of identified actions. This subsequent review will take into account as far as possible the results of a number of ongoing reviews including: assessment of gaps in the institutional capacity for energy planning; development of a rural electrification strategy; development of a least cost electricity generation development plan; and institutional functional review of REG and MININFRA.

In addition to sector-specific issues, general barriers to investment, in particular access to sufficient credit on reasonable terms for both companies and individuals, need to be addressed in more detail in further actions. Lack of availability of recent data remains a barrier to several areas of the energy system until more detailed analysis can be carried out (GoR, 2020).

This chapter, therefore, summarized key challenges for Rwanda's development in the post-genocide context. The chapter addressed the history of Rwanda during the colonial period and the impact of colonialism on the country, leading to the genocide against Tutsi in 1994. As a result, social and economic impacts were dramatic. Infrastructure was destroyed and the economy fell down sharply back in level of the 1970s. Based on the Vision 2020 initiative, Rwanda's government has been showing a strong commitment to transform the country from one of the poorest countries to a middle-income country during the recent decades. Although Rwanda

has not been able to achieve all its goals, there have been many achievements among the planned targets. As increasing presence of China has been important to carrying out a great part of investments, particularly in infrastructure areas, the following chapters will discuss this closer relationship established between Rwanda and China.

CHAPTER II

CHINA-EAST AFRICA HISTORICAL ECONOMIC RELATIONSHIP

China is a country that knows what it means to be poor and to be so in a time when the industrialized world managed to create unprecedented wealth and affluence. This reality and the ongoing transformations are fresh in the memories of the Chinese people. China's involvement in African affairs dates back to the 1950s. The time marked the beginning of African states breaking free from the yoke of colonialism. China's relationship with Africa in modern times was thus characterized by the former supporting liberation movements that had then been in momentous stages leading to independence of most African countries from the colonial masters in the 1960s. China's opening up and re-discovery of Africa coincided with Africa's deteriorating economic performance as a result of conflicts, mismanagement as well as structural adjustment policies. China brought a viable alternative of social, political and economic development formula to the unipolar world of the 1990s (Gebrihiwot et al, 2013).

On November 12, 1971, China and Rwanda established foreign relations, and since then friendly relations have seen good progress between the two countries. It was then marked by a joint seal and a Joint Declaration on the Establishment of Diplomatic Relations between the Republic of China and the Republic of Rwanda. The Government of the Republic of China fully supports the Government of the Republic of Rwanda in the fight against new colonialism, the maintenance of national independence and the implementation of the policy of peaceful cooperation between the various countries (Lisimba & Parashar, 2020). The two countries also work closely together in areas such as infrastructure development and health. After establishing this stable relationship, the Chinese government began to provide Rwandans a scholarships covering in different programs (Byusa, 2010). Chinese investment in Rwanda, which focuses on infrastructure, has played a key role in rebuilding East Africa country after the genocide against Tutsi, which lasted 100 days over 27 years ago. China is now the second largest country investing in Rwanda, behind the European Union. The importance of Chinese investment in infrastructure and economic development in Rwanda has been prominent over the past 20 years. A sign of acceleration is evidenced by increased investment in free-trade taxation and building industry in order to increase the value of Rwanda's domestic production (MINECOFIN, 2020).

Despite the long-standing relationship between Rwanda and China, it has continued to grow and become stronger over the past 20 years, when China has helped Rwanda in economic agenda for rebuilding infrastructure as a pillar of the country's economic development. This Chinese relationship has spread throughout the East African region where China has launched a cross-border trade linkage project through Belt and Road Initiative. This chapter is composed of three main sections discussing the history of the Rwanda-China economic relationship, as well as China-East Africa relations and the impact of Belt and Road Initiative in bringing together international relations, trade, and cooperation, with a particular focus on how landlocked countries can benefit from this project to overcome in geographical isolation.

2.1 Rwanda-China historical relations

China has become Rwanda's biggest trading partner and project contractor since 2005. China has provided support for Rwanda in its process of reconstruction and industrialization. In 2017, the bilateral trade volume reached US\$ 157 million, with an increase of 10.6%. Despite the intensification of economic relations between Rwanda and China more recently, it is important to highlight the long-term relationship already established between both countries since 1976. According to Rao Chinese Ambassador in Rwanda (2017), "as soon as this political relationship became strong, China began planning scholarships for Rwandans. Therefore from 1976-2016 there were 600 Rwandan students awarded Chinese scholarships including Chinese government scholarships, more scholarships provided by independent Chinese universities, local governments and social institutions. currently there are about 1,100 Rwandan students studying in China, of who more than 200 are in various bursary programs. In addition, the Chinese Embassy in Rwanda provides more than 100 scholarships to Rwandan high school students through the Imubuto Foundation each year and Chinese language teaching in Rwanda. By looking at health care services, China started to dispatch its medical team to Rwanda in 1982, and there have been hundreds of medical staff working in Rwanda since then" (Xinhua, 2017).

All these were possible due to the Rwandese government efforts to facilitate and attract foreign investors through its Rwanda Development Board (RDB). Moreover, China is also one of the few countries where the agreements covered a range of sectors, including an agreement on mutual visa exemption for diplomatic and service passport holders, as well as those related to infrastructure development, civil airport and culture and scientific cooperation, and human

capacity development especially in terms of construction costs for the 40-kilometers Kigali Bugesera International Airport highway, which would cost US\$ 54 million upon completion. Rwanda Development Board has an office in Shenzhen for the same purpose of attracting and facilitating Chinese investors. Furthermore, China and Rwanda signed a number of cooperation agreement covering areas such as investment, finance, e-commerce and law enforcement (CGTN, 2018).

President Kagame's invitation to President Xi Jinping to visit Rwanda in 2018, the two heads of state agreed to further improve cooperation in various fields in the new era and take a comprehensive plan to improve relations between the two countries. There was an exchange of information and communication between the ruling parties of the two countries, the Communist Party of China (CPC) and the Patriotic Union of Rwanda (RPF) (GoR, 2018). During Foreign Affairs Summit, President Xi addressed his message active participants for leading the reform of global governance, and building a comprehensive pipeline for global cooperation, in line with the principles five of Peaceful Coexistence: respect for regional sovereignty and integrity, non-conflict, non-interference in internal affairs, equality and public interest, and peaceful coexistence (CGTN, 2018).

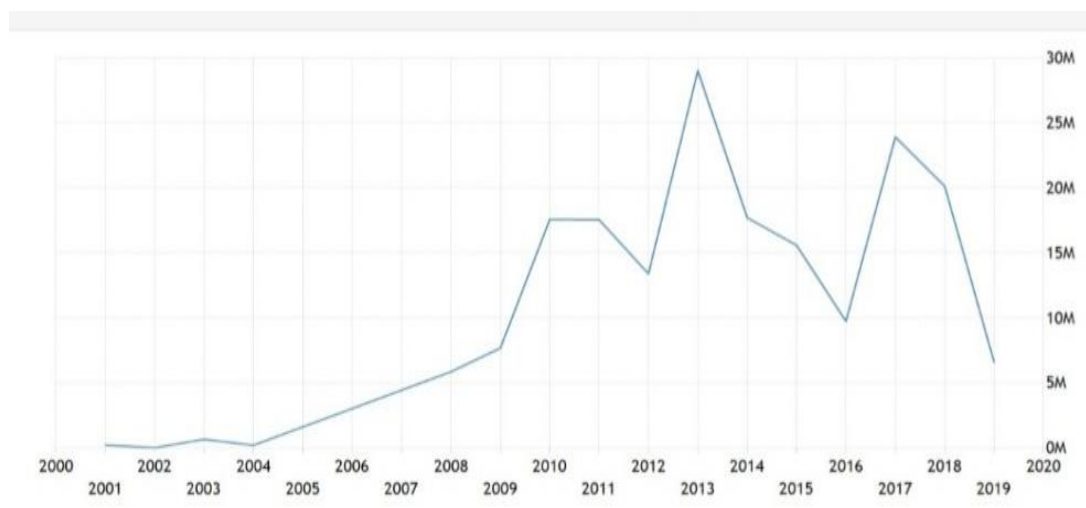
On February 19, 2021, in Kigali, an agreement on economic and technological cooperation was signed between the Republic of China and the Republic of Rwanda. This agreement was signed by Rao Hongwei Chinese Ambassador to Rwanda and Dr. Uzziel Ndagijimana, Minister of Finance and Economic Planning of Rwanda. Wang Jiaxin, Economic and Trade Advisor at the Chinese Embassy in Rwanda, and officials from the Ministry of Finance and Economic Planning in Rwanda attended the signing ceremony. Ambassador Rao said that since Chinese President Xi Jinping's historic visit to Rwanda in 2018 relations between Rwanda and China have reached high record (Ministry of Foreign Affairs, 2021).

According to Rwanda Revenue Authority (2015), China continues to be a business partner of Rwanda. Total trade between Rwanda and China reached US\$367 million in 2014, up from US\$ 245 million in 2013. This is an increase of 50% per year. Rwanda imports to China mainly electronics, machinery and light goods while the country exports mainly minerals, leather and leather, tea, coffee and pyrethrum, pesticides and flowers. According to Emmanuel Hategeka, Permanent Secretary in the Ministry of Commerce of Rwanda (2015), the significant trade

growth between China and Rwanda was due to the rapid development of investment in telecommunications infrastructure and communication, where China is the largest supplier of goods. After significant trade growth in 2014, China continued to be one of Rwanda's key partners in 2015. However, trade inequalities between the two countries are evident. Figures from Chinese customs showed that between January and September 2014, Rwanda exported 62 million worth of goods to China (Ntambara, 2015).

According to Li Yaohong November 2014, "economic and trade adviser at the Chinese embassy in Rwanda, low exports were largely due to declining global mineral prices. As the international economy grows the price of minerals and trade between the two countries was growing significantly. In order to boost trade between China and Rwanda, signed a free tax agreement on 97% of goods imported from Rwanda to China. Rwandan Ministry of Trade initiated the new strategy on export for supporting rapid development of goods from Rwanda to regional and international markets" (Ntambara, 2020). One of the ways was to build a strong relationship between Rwanda's exporters and major exports makets, as well as ChinaAbout. 20 Chinese companies in the construction, manufacturing, transport, construction and service sectors have set up shops in Rwanda. These include China Construction Corporation, Star TV, Star Media, Beijing Construction Engineering Group and China Road and Bridge. Major trade barriers between China and Rwanda include high transportation costs and high production costs due to unreliable electricity were planed to meet 563 MW in 2018 (Société Generale, 2020). Rwanda's exports to China amounted to US\$ 6.58 million in 2019, according to UN trade statistics COMTRADE (2021). Rwanda's exports to China information, historical and statistics - were last updated in August 2021. With Rwanda's exports to Hong Kong were US\$ 7.91 million in 2019, according to UN figures from COMTRADE. Rwanda's exports to Hong Kong. The historical statistics show that in 2013 the Rwanda's exports were higher than other years. The rwanda's exports trends to China is shown in Figure 7.

Figure 7: Rwanda's export to China (Coffee, Tea, Salt, Iron, and Mate) 2000-2020



Source: Made by Autor based on data from Comtrade on 19th June, (2021).

Although Rwanda has increased its exports, imports are still higher and Rwandan francs depreciation was increased, due to the large number of imported goods. As December 2018, the Rwandan currency lost 2.2% compared to the US dollar at the end of June, more than 1.7% depreciated during the same period in 2018. Rwanda's imports increased by 7.5% to US\$ 577.8 million in the first half of 2019 compared to US\$ 537.3 million in the first half of 2018, while exports increased by 58.1%. In line with the plan in Rwanda, there is an increase in exports mainly due to the increase in domestic products in new industries, flowers, minerals, cement, mattresses, dairy products, textiles, and metals (OEC, 2019).

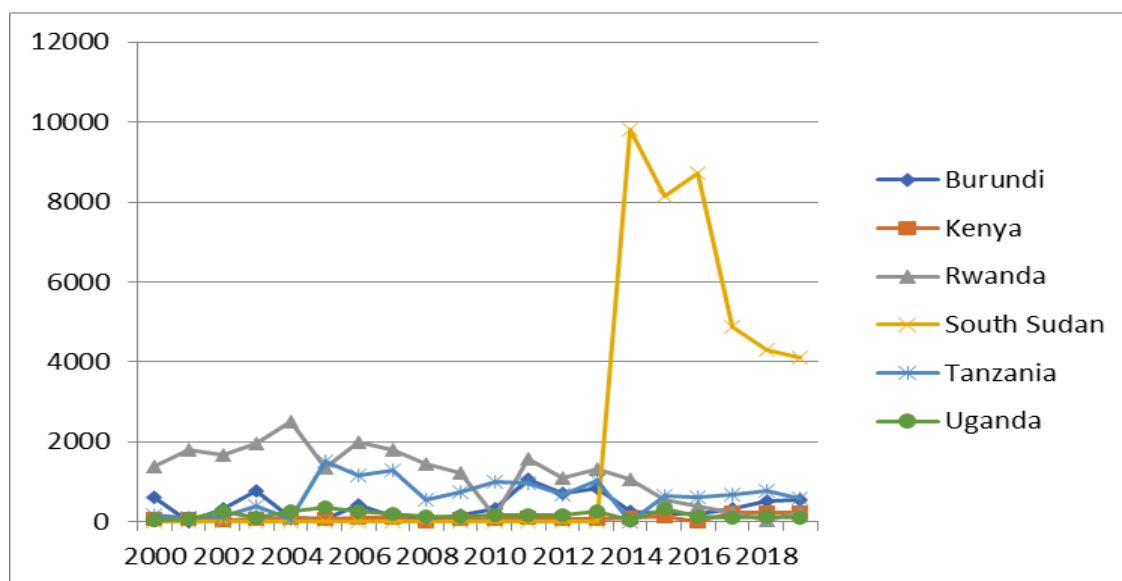
Apart from bilateral trade in goods and services, China is a vital source of investments and one of the key development partners for Rwanda in the construction of infrastructure. As a land-locked country, Rwanda has always aspired to gain better connectivity with the continent and mostly with the East African region. China has emerged therefore as a significant partner to Rwanda. From 2002-2018 the two countries launched 61 investment projects and joint ventures worth US\$ 419.5 million (Magazine, [2018](#)). Moreover, their investments in tourism, energy, transport and construction sectors were US\$ 352.5 million (Magazine, [2018](#)). Rwanda has played a key role in China's projects. One year after signing the China Belt and Road Agreement, Rwanda has announced that it will also be possible join the China Infrastructure Investment Bank in Asia, which can compete with the World Bank (Paduano, 2019).

As an example of this proximity in early November 2019, China brand and Chongqing Export Commodities Africa Itinerant Exhibition kicked off in Rwandan's capital city Kigali. The three-day show was sponsored by China's Ministry of Commerce to organized, establish a platform with Rwanda and other neighboring countries to promote economic and trade exchanges between China and these countries, particularly Rwanda. Twenty-first Chinese companies from Western China's Chongqing municipality and Northern China's Tianjin municipality brought high-quality products including mechanical equipment, automobile and spare parts, hardware tools, building materials, electronic products, food and beverage and agricultural products. A trade and business promotion forum was held as part of the same event, where companies and officials from China and Rwanda, as well as representatives of Private Sector Federation of Rwanda attended. The show and the forum had had the intention to let Rwandan companies and consumers know more about Chinese goods, and promote diversification of bilateral trade and joint venture projects (Xinhua, 2019).

As the Covid-19 pandemic began to take over the world in 2020, Rwanda was participating in closer cooperation with China in order to further strengthen bilateral cooperation to continue to achieve new results. The pace of China-Rwanda cooperation has not been hampered, and time-tested relationships have further strengthened China's confidence in contributing to the transformation of Rwanda as a whole and the recovery from the devastating effects of the Covid-19 pandemic. One might remind that 2021 marks the 50th anniversary of Rwanda-China relations. Due to the Covid-19 pandemic, the assistance offered by China seems special at this time (MINECOFIN, 2021).

In fact, East African countries continue to reduce their imports, in order to promote the development each country has done its best to increase the exports. Trade between China and East African countries is increasing, as shown in Figure 8. And the trade between South Sudan and China has been on the rise since 2013. South Sudan is the East African country that imports the most goods from China due to the war and conflict have plagued this country since the 2000s, which has prompted South Sudan to increase its imports from, including war vehicles imported from China in 2013-2018 (WITS, 2018).

Figure 8: China's exports to East African countries 2000-2019 (US\$ million current values)



Source: Made by Author, data from UN Comtrade & China & Africa research initiative Jan (2021).

2.2 Economic relationship of East Africa and China

East African countries attract the attention of global investors. This is not only the case in the maritime economy, but also because of the way they contribute to the coastal countries of Central Africa in the East African region of Kenya and Tanzania. As it facilitates the trade of coastal countries, such as Rwanda, regional economic cooperation is also important for the development of the country. In Kenya, the port city of Mombasa is helping to connect the Democratic Republic of Congo (DRC), Rwanda, Burundi and Uganda on the coastal. In Tanzania, the port city of Dar es Salaam also connects the DRC, Rwanda and Burundi. This is a major corridor that has been calling for economic power, such as China, especially as it could play a role in boosting infrastructure in the East African region (Horvat, 2020).

Trade relations between Burundi and China were established in 1963. The State Councilor of China and the Minister of Foreign Affairs, Wang Yi, during his visit to Burundi on January 11, 2020, “China is ready to cooperate with Burundi in the interests of building a belt and a road and implementing the eight major measures proposed at the Beijing meeting of the China-Africa Cooperation Forum (FOCAC) focusing on infrastructure and agriculture” (Xinhuanet, 2020). In

the meantime, Kenya has become a good place for Chinese investors to increase trade and cooperation in East Africa. China is currently providing investment to Kenya, building hospitals and schools in undeveloped areas. Since China and Rwanda signed an agreement in 1983 to set up a mixed commission for economic and trade cooperation, in 2016, China's direct investment in Rwanda reached more than US\$ 100 million in digital television and garment manufacturing, while China and Rwanda's business grew to US\$ 157million in 2017. Foreign relations between South Sudan and China were established on January 4, 1959.

China is one of South Sudan's key partners in trade and economic cooperation and the signing of the November 2011 agreement on trade, economy and skills. In addition, a joint economic and trade committee was set up and in October 2012 about 60 Chinese-controlled companies registered in South Sudan (Embassy of the Republic of China in South Sudan, 2012). China-Tanzania relations have seen steady progress since the establishment of foreign relations on April 26, 1964. "In recent years, China has continued to be a major trade partner in Tanzania, where 19.3% of the goods exported to Tanzania in 2017/2018. China. China is also based in Tanzania and the largest direct investment market (FDI) with more than 700 investment shares valued at US\$ 7.1 billion and more than 87,000 jobs has been created" (IPP Media, 2020). Uganda-China relations were established in 1962. According to the Ministry of Trade, Industry and Cooperatives in Uganda (2016), China has been Uganda's business partner in 1962, and is the second largest market. In recent years, China's expoert to Uganda have increased from US\$ 622 million in 2013 to US\$ 886 million in 2016 and Uganda's exports to China have decreased in recent years, from US \$66 million in 2014 to 27 million in 2016.

According to Chiniese studies (2021), the trade intensities between China and EAC increased over the years 2000-2019 for Kenya, Rwanda and South Sudan, but decreased for Burundi while for Tanzania and Uganda only the export intensity index increased compared to the import intensity index which has decreased (Aimé & Wang, 2021). The increase in trade intensities over the years 2000-2019 is very evident, as shown in the values of exports and imports and as measured more rigorously by the trade intensity indices in Table 9. Increased bilateral trade between China and the EAC member states of Burundi, Kenya, Rwanda, South Sudan, Tanzania, and Uganda is particularly evident, which can be easily explained by the fact that China has entered into bilateral trade agreements with the EAC countries (Aimé & Wang, 2021).

Table 9: EAC's Export Intensive Index to China, 2000-2019 (US\$ billion real terms)

Export Intensive Index EAC TO China	BU-CH	KNY-CH	RW-CH	SSU-CH	TZ-CH	UG-CH
Year	Burundi	Kenya	Rwanda	South Sudan	Tanzania	Uganda
2000	0.632	1.105	0.418	-	1.45	0.242
2001	0.193	1.007	0.238	-	1.22	0.236
2002	0.337	1.087	0.304	-	1.429	0.521
2003	0.368	1.09	0.229	-	1.513	0.628
2004	0.411	1.151	0.271	-	1.19	0.665
2005	0.587	1.039	0.339	-	1.227	0.513
2006	0.282	1.026	0.251	-	1.077	0.644
2007	0.446	1.15	0.493	-	1.232	0.634
2008	0.471	1.206	0.543	-	1.325	0.546
2009	0.824	1.22	0.432	-	1.389	0.53
2010	0.583	1.314	0.311	-	1.416	0.491
2011	0.497	1.409	0.287	-	1.346	0.561
2012	0.508	1.407	0.322	-	1.514	0.673
2013	0.484	1.515	0.449	-	2.001	0.599
2014	0.49	1.956	0.34	0.099	2.339	0.585
2015	0.31	2.432	0.34	0.459	2.624	0.662
2016	0.509	2.759	0.336	0.222	2.672	1.188
2017	0.427	2.151	0.41	0.273	2.68	0.99
2018	0.331	2.131	0.481	0.267	2.801	0.747
2019	0.515	1.941	0.674	0.418	2.775	0.678

Source: Made by Author, data from Chinese studies, Aimé & Wang (2021, vol 10, n°2).

Burundi's index number of exports to China from 2000-2019 is less than 1, as shown in Table 9, so export of goods from Burundi to China is not strong. Table 10 indicate that Rwanda's imports from China was decreasing year by year compared before last decade. This shows that Rwanda has made efforts to increase international trade from 2000-2019 and the relationship with China is strong. In this case, Tanzania is forefront of supplying more goods to China followed by Kenya this is means that Tanzania and Kenya are increasing domestic output. This is confirming that these maritime countries have the opportunities to increase their exports more than landlocked ones (Aimé & Wang, 2021).

Table 10: EAC's imports Intensive Index from China, 2000-2019 (US\$ billion real terms)

Year	Burundi	Kenya	Rwanda	South Sudan	Tanzania	Uganda
2000	0.617	0.061	1.392	-	0.179	0.057
2001	0.001	0.074	1.803	-	0.094	0.067
2002	0.342	0.057	1.671	-	0.141	0.251
2003	0.791	0.063	1.958	-	0.393	0.114
2004	0.104	0.097	2.514	-	0.71	0.274
2005	0.083	0.076	1.363	-	1.502	0.363
2006	0.425	0.098	2.1	-	1.155	0.261
2007	0.153	0.092	1.789	-	1.275	0.199
2008	0.028	0.09	1.436	-	0.549	0.129
2009	0.163	0.075	1.235	-	0.742	0.145
2010	0.337	0.075	1.28	-	0.988	0.161
2011	1.054	0.098	1.588	-	0.976	0.176
2012	0.722	0.077	1.095	-	0.677	0.165
2013	0.851	0.077	1.326	-	1.042	0.257

2014	0.267	0.107	1.081	9.809	0.8	0.42
2015	0.198	0.142	0.543	8.146	0.665	0.321
2016	0.192	0.15	0.398	8.727	0.616	0.133
2017	0.338	0.244	0.233	4.892	0.685	0.097
2018	0.527	0.229	0.028	4.288	0.775	0.122
2019	0.569	0.245	0.238	4.115	0.579	0.096

Source: Made by Author, data from Chinese studies, Aimé & Wang (2021, vol 10. n°2).

The above information indicates that South Sudan and Burundi have a high imports trade relationship with China and the level of cooperation in exports is not high. In addition, Rwanda's imports from China have been dramatically decreasing since last decade, when it has taken ambition plan to minimize imports by increasing national output. Tanzania is still in forefront to minimize import index. The level of trade relations as been changing, indicating that trade relations has not improved overall.

In 2015, trade between China and Africa totalled US\$ 179 billion. Forum on China Africa Cooperation (FOCAC) has since grown beyond economic diplomacy to include multilateral support on a number of fronts. Further constraining the growth potential of many African countries is a weak infrastructure system; as observed in Rwanda. Poor infrastructure reduces opportunities for regional integration opportunities for regional integration. The latest Infrastructure Consortium for Africa's Report that African countries would require between US\$ 174 billion and US\$ 240 billion annually until 2040 to meet their infrastructure needs. This coincides with Chinese the strategy of increasing international investment and trade international investment and trade that could meet part of Africa's demands (SAIIA, 2018).

Infrastructure requires substantial external support and technical support and assistance. Some of the most enthusiastic investors in East African infrastructure are China and Japan. India, although not very invested, has also shown interest in expanding regional activities. A total of 32 ports, is to be constructed, with the cost totalling US\$ 3.5 billion. The total cost of the investment program is expected to be US\$ 25.5 billion, exceeding the cost of Mombasa-Nairobi railway

project. Chinese investment in railway projects has enlarged across the entire East African and Great Lakes Region. In 2018 the China Railway Group and the China Civil Engineering Construction Corporation completed a US\$ 4 billion railway line connecting Ethiopia to Djibouti. Given that 95% of Ethiopian trade passes through Djibouti, the construction of the railway seems to fulfilling Ethiopia's trade need (AFDB, 2018). The volume of trade between China and Africa has grown drastically. According to Ministry of Commerce, People's Republic of China (2018), the total trade volume between China and Africa grew to US\$ 204.19 billion. In 2019 EU accounted for 31% of exports and 29% of imports. China accounted for 11% of exports and 16% of imports, while the United States had a 5% share of exports and a 6% share of imports (Eurostat, 2020).

Chinese investment is not only increasing in Africa but also trade between Africa and China is bigger than with the United States, reflecting the good relations between the African continent. Between 2002 and 2008, following the signing of the African Growth and Opportunity Act (AGOA), which provided tariff-free access to 6,500 products for qualifying sub-Saharan countries, trade between the U.S. and Africa grew to US\$ 100 billion (CNBC, 2019).

U.S.-African trade has declined over the past 10 years, while China is now Africa's largest trading partner. According to the American Enterprise Institute (AEI, 2019). The value of Chinese investment and construction in Africa has reached US\$ 2 trillion since 2005. Washington's top African diplomat on the African continent, Tibor Nagy, has sought to resolve the issue and regain power in parts of the world where the United States and Europe, especially France, have never faced good competition for political or economic participation in years ago (CNBC, 2019). Experts say the competition on political and economic involvement between the United States and China is playing out across Africa. China has implemented a new infrastructural vanguard. Chinese companies have played a key role in building ports, roads and railways to strengthen trade and economic ties between African countries.

China and Africa's trade has been growing over the past 13 years. The value of China-Africa trade in 2019 was US\$ 192 billion, from US\$ 185 billion in 2018 as it shown in Figure 9. In 2019, most of China's exports to Africa are Angola, followed by South Africa and the Republic of Congo. In 2019, Nigeria was the largest supplier of goods to China, followed by South Africa and Egypt (JOHN HOPKINS & China –Africa Research Initiative, 2021).

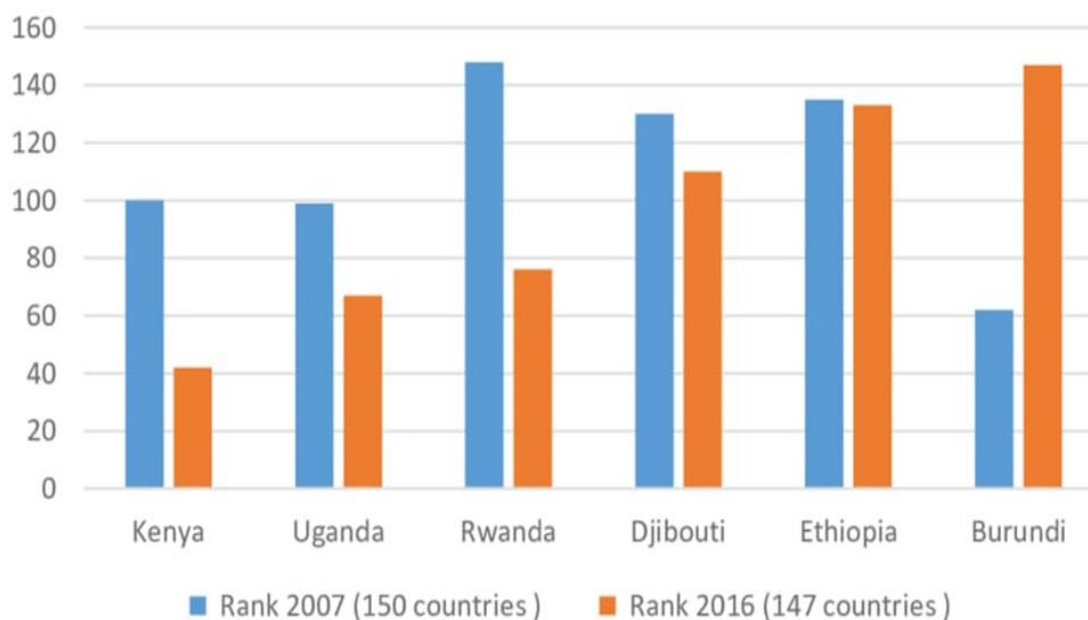
Figure 9: China-Africa trade vs US-Africa trade in two decades (US billion) real terms



Source: Made by Author, data from UN Comtrade, China & Africa research initiative, Jan (2021).

There is a need to invest in infrastructure in East Africa. This region reflects the poor quality of infrastructure. As shown in the Figure 10, the list of infrastructure in some East African countries between 2007 and 2016 shows that the quality of infrastructure related to trade and transport in general has improved, with the exception of Burundi. Kenya was ranked 42nd in 2016, followed by Rwanda ranked 76th while Burundi was ranked 147th. Chinese investment could also play a role in boosting technology in African countries. Once designed to meet local needs, Chinese technology can be easily integrated with the needs of the African private sector. Rwanda can take advantage of the opportunities opened up by BRI because its infrastructure can boost trade and investment, thereby contributing to poverty reduction, job creation and global integration, because it will play a significant role in extraditing Rwanda from the geographical constraints of landlocked to landconnected (World Bank, 2018).

Figure 10: Ranking of the quality of trade and transport-related infrastructure



Source: World Bank (2018).

Empirical literature on infrastructure and development in East Africa focuses mainly on infrastructure for public development, sustainable production and the impact of infrastructure on trade. The role of the Chinese investment in the region includes job creation but in all Chinese activities there is a marked role on ideas of development, especially in the field of infrastructure. China's infrastructure is well-balanced between energy transport, especially railways and hydropower (Brautigam et al., 2017). No doubt if, in the absence of the Chinese promises and sponsorships, many projects would have go off the ground, especially refusal to support infrastructure development. On the other hand, there are allegations that Chinese investors prefer using Chinese labor or explore treat local labor with low payments (Muekalia, 2007). According to Buchanan Xinhua (2019), Rwanda may seize the opportunity opened by BRI as the infrastructure projects involved may enhance trade and investment possibilities, thus contributing to poverty reduction, employment creation and integration to the rest the world (AfDB, 2018).

The China Global Investment Tracker (CGIT) is the main comprehensive public data set covering China's global investments inaugurated in 2003-2019. The CGIT includes 3,500 large transactions across energy, transportation, real estate, technology, and other sectors, as well as

the full lists presents amounts, Chinese companies, host countries, and sectors involved in appedices (Global Investment Tracker, 2021).

Table 11: Chinese's FDI flows in East Africa (US\$ million current values)

Chinese FDI inflows	Rwanda	Burundi	Kenya	South Sudan	Tanzania	Uganda
2003	3.30	0.00	0.74	0.00	0.00	1.00
2004	3.30	0.00	2.68	0.00	1.62	0.15
2005	4.72	0.00	2.05	0.00	0.96	0.17
2006	7.71	0.00	0.18	0.00	12.54	0.23
2007	7.30	0.00	8.9	0.00	-3.82	4.01
2008	20.18	0.00	23.23	0.00	18.22	-6.70
2009	28.8	0.69	28.12	0.00	21.58	1.19
2010	41.63	101.22	0.00	0.00	25.72	25.50
2011	58.52	0.00	68.17	0.05	53.12	9.91
2012	63.54	1.50	78.73	7.80	119.7	9.79
2013	73.33	1.09	230.54	11.49	150.64	60.60
2014	110.72	3.45	278.39	6.82	166.61	60.50
2015	123.57	2.06	281.81	13.08	226.23	205.34
2016	89.36	2.39	29.36	2.03	94.57	121.51
2017	99.25	-0.58	410.10	12.21	132.46	79.04
2018	146.82	4.06	232.04	13.12	177.47	225.80
2019	167.51	-1.90	10.37	5.49	115.58	143.22
Total	1049.56	12.76	1786.94	32.21	1313.29	942.36

Source: Made by Author, data released from Chinese investment Tracker Updated 08 Jan (2021).

Table 11 shows that from 2003 to 2019 and the BRI investment are excluded. The first country to host most Chinese FDI inflows was Kenya, followed by Tanzania and Rwanda. Burundi was the last, after Uganda and South Sudan.

Revenue from Chinese construction companies has been increased time by time as shown in Table 12. The top 3 countries were Tanzania, Uganda and Kenya, while Rwanda followed in the 4th place, and Burundi was in the last place. In 2019 the gross annual revenues of Chinese

companies' engineering and construction projects in Africa totaled US\$ 7.6 billion. The top 2 countries to earn much revenue were Kenya, Tanzania because of being maritime countries and these two countries account for 51% of all Chinese companies' 2019 construction project gross annual revenues in East Africa.

Table 12: Gross Annual Revenues from Chinese construction companies' projects in East Africa (US\$ million current values)

Gross Annual Revenues	Rwanda	Kenya	Uganda	Tanzania	South Sudan	Burundi
2000	16.2	61.1	19.1	47.0	0.0	0.8
2001	28.15	35.4	17.5	74.4	0.0	3.2
2002	11.6	32.9	12.4	41.1	0.0	1.8
2003	7.2	31.3	20.3	58.7	0.0	1.5
2004	10.2	52.7	35.8	86.5	0.0	1.1
2005	9.5	35.3	55.5	210.1	0.0	2.4
2006	21.7	82.4	76.5	261.4	0.0	10.4
2007	37.6	265.4	189.8	264.8	0.0	11.1
2008	45.5	386.9	153.7	416.9	0.0	12.7
2009	81.4	570.8	189.0	543.2	0.0	5.6
2010	141.7	885.1	151.5	811.5	0.0	14.4
2011	129.5	1390.5	315.8	981.2	4.3	24.6
2012	123.8	1306.4	269.0	1146.1	0.0	45.9
2013	144.0	1447.4	442.1	1709.8	126.8	281.2
2014	235.6	1695.6	1117.5	2069.7	200.5	67.9
2015	212.5	3845.7	1550.6	1414.7	1143.9	71.5
2016	157.8	4547.7	1889.9	1524.1	160.2	63.0
2017	196.3	3729.2	2174.3	1025.9	354.7	27.0
2018	288.1	4352.7	2147.7	1076.0	460.5	40.8
2019	308.7	4167.6	1540.4	1282.8	242.9	86.2
Total	2207.5	28,922.0	12368.3	15045.8	2693.8	772.8

Source: Made by Author, data from American Enterprise Institute and the Heritage Foundation, 2021

During the last decade, a higher share of the global population gained access to electricity than ever before, but the gaps of people without electricity in Sub-Saharan Africa is still huge. significant progress has been made since 2010 on various aspects of the Sustainable

Development Goal (SDG), but progress has been unequal across regions. While more than one billion people gained access to electricity globally over the last decade (World Bank, 2021). In spite of abundant generation potential, as of 2019, East Africa has an electrification level of 36%, with over 140 million people without access. At least further US\$ 2.7 billion/year in generation capacity are required to satisfy the projected demand growth from already electrified consumers (Falchetta et al., 2020). Twenty countries showed strength in increasing electricity, e.g. Kenya, Rwanda and Uganda had a significant change since 2010-2020 (World Bank, 2021).

2.3 Belt and Road Initiative with infrastructure expansion in East Africa

Belt and Road Initiative is a transcontinental long-term policy and investment program which aims at infrastructure development and acceleration of the economic integration of countries along the maritime and land routes of the historic Silk Road. The total BRI project volume of investments are estimated around US\$ 4 to 8 trillion, through diverse funding channels such as BRI bonds, private capital investment and public-private partnerships (PPP), as well as State-Owned Enterprise (SOE) investment, which would be crucial for the success of the Initiative. The Initiative was unveiled in 2013 by China's president Xi Jinping and until 2016, was known as OBOR – One Belt One Road. On March 28, 2015, the official outline for the Belt and Road Initiative was issued by the National Development and Reform Commission (NDRC), the Ministry of Foreign Affairs (MOFA) and the Ministry of Commerce (MOFCOM) of the People's Republic of China (PRC), with authorization of the State Council (ADB, 2019).

East African infrastructure roundtable was a ministerial level event considering investment opportunities in infrastructure and energy sectors of countries within the region. Roundtable included the participation of governments, multilateral development banks, international development agencies, regional organizations, the private sector, and civil society thus promoting the potentialities for further investments in the region (RTI, 2018).

Limited capacity and resources at the EAC and national levels in the three sectors are important according to EAC's experts report (2018). Branch staff in these six countries has their limits technical design, implementation and infrastructure development that supports green infrastructure development. For example, one energy expert said the slow expansion of rural, industrial cities national power connections in all EAC member states can be attributed.

Inadequate numbers of skilled workers, such as electricity, are available to install wires and maintenance of electricity infrastructure. In addition, driving training works the SGR was to be operated with China because the Nairobi railway station was unable to provide enough valid training. Government of Rwanda receives technical support from GGGI to help ensure that the development of Bugesera International Airport connects with the country green growth and climate control. With this help, GoR learned strategies to reduce the use of assets at the airport. For example, there is a purpose to reduce energy use by 20%, while measures to improve the water system are sought to achieve the goal of reducing water by 30%. The capacity of the technical teams based on the sectors in the ministry is limited, and they have limited ideas in formulating policies in the EAC Secretariat. Impact of EAC Secretariat the working groups conclude after submitting their comments to the Cabinet and the EAC, a body that coordinates the top management of the EAC member states. Technical team's response indicated that there was follow-up to match the priorities and lessons learned decision-making unless they are based on civil society groups that are easy to coordinate advocacy change (EARF & ACTS, 2018).

However, the role of civil society at the EAC regional level is small because it lacks adequate coordination to effectively support the EAC meeting. There is also the importance staff turn to the EAC Secretariat, and although EAC members have sent the sector experts in the EAC secretariat, technical capacity is still insufficient. Civil society, educational institutions and the private sector in EA countries can help provide need investment need in education and technical support from national governments formulate a comprehensive policy and train future leaders. For example, the University of Rwanda, Makerere University in Uganda, the University of Nairobi in Kenya and the University of Dar es Salaam are training, researching and working for graduate students and technical staff ready to take responsibility for infrastructure development. The members agree that curricula need to be revised to ensure they are consistent with addressing national issues taken into account in national economic activities (EARF & ACTS, 2018).

Availability of infrastructure investment opportunities to invest in green has been taken seriously in the country green economy strategies, and green opportunities and investment designed to attract investment. For example, the development of green cities in Rwanda it began with four green cities and four green villages and will benefit the region through job creation, a sustainable environment, a stable green transition the economy and the power to solve the problems of the

country and the region political turmoil, caused by poverty, corruption and lack of transparency. EAC member states have taken ambition funding for the development of infrastructure and the use of public funds to attract the private sector investment to support national or regional infrastructure. The value designed green, multi-regional infrastructure, and formulated policy measures. In fact, Kenya and Rwanda is in the process of using existing green growth strategies, while Uganda is in the final stages of its green growth strategy, awaiting Parliament and administrative approval. Tanzania has no green growth strategy but has Climate Modify, the action plan and environmental regulations in support of green development. This initiative could play a big role in building regional development economic policy (RECDT, 2021).

The Belt and Road in East African region involves in corridors that passe through various countries, particularly Djibouti, Ethiopia, Kenya and Tanzania (McMakenzie, 2017; Mukwaya & Andrew, 2018). One of the BRI projects in Eastern Africa, the standard gauge railway, is already under construction. It will connect the ports of Mombasa and Dar es Salaam to Kenya, Uganda, Tanzania and Rwanda (Figure 11). Regarding the financing, the Silk Road Fund was established in 2014 with US\$ 40 billion of initial total capital provided by the Asian Infrastructure Investment Bank, and it was estimated that US\$ 350 billion would be committed to BRI projects by China until 2022 (ODI, 2019).

Figure 11: Belt and Road Initiative in Eastern Africa – the standard gauge railway network



Source: OECD (2014).

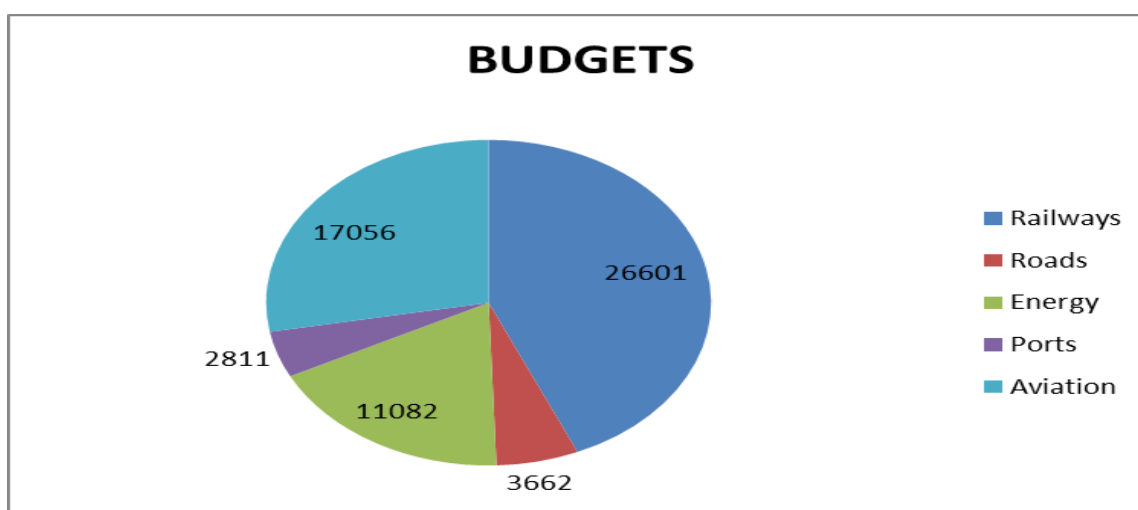
Infrastructure plans for the East African region involve the implementation of the Integrated Corridor Development Initiative, which comprehends an intermodal strategy and has been endorsed by the countries involved during their 3rd Retreat on Infrastructure Development and Financing in November 2014. The Rwandan phase of the Lake Victoria Transport Program (LVTP) has begun while the Ugandan, Kenyan and Tanzanian parts are at different phases. The LVTP has been followed by the Lake Tanganyika Transport Program (LTTP) (EAC, 2018).

According to the East African countries Heads of States' priority list (2018), approximately US\$ 500 million would be required for project preparation during the next 3 to 5 years to move the projects which are at identification and conception stage to the preparation phase. The implementation of the proposed flagship projects required an investment amounting to more than US\$ 61 billion. The construction to standard gauge railway of the Dar es Salaam – Isaka – Mwanza and Isaka -Kigali/ Keza –Gitega – Musongati (Tanzania, Rwanda and Burundi). The construction to standard gauge of Uvinza – Musongati Railway line (Tanzania and Burundi), construction to standard gauge of the Mombasa – Nairobi – Malaba – Kampala-Kigali line with Malaba – Nimule Juba spur (Kenya, Uganda, Rwanda and South Sudan), construction of Dar es Salaam to Chalinze Expressway (144 km) in Tanzania. Similarly, the LAPSSET corridor development (Kenya, South Sudan and Ethiopia), the construction of Rusizi Hydro power Project (Burundi, Rwanda and DRC), construction of Rufiji Hydropower Project at Stiegler's Gorge along the Rufiji River, 2100 MW (Tanzania), and development of Zanzibar ports are among the flagship projects too. The meeting also approved "Development of Resilient Infrastructure to Accelerate Industrialisation, Support Trade to Foster Socio-Economic Transformation in the EAC" as the theme of the 4th HoS Infrastructure Retreat (EAC, 2018).

The Finance Ministers of four of the six members of the East African Community (EAC) presented their national budgets before their respective parliaments. The budgets of four countries excluded Burundi and South Sudan, amounted 91.8% of whole EAC countries' budgets. Kenya's budget remains the biggest in the region at nearly US\$ 30 billion. Tanzania's 2019/2020 budget is US\$ 14.3 billion, Uganda US\$ 9.1 billion, and Rwanda US\$ 3.2 billion. At a total of US\$ 56.6 billion, the budgets are ambitious in their continued spending on infrastructure which has plunged the region into unprecedented levels of public debt.

Part of the common solution to fill the coffers seems to be to attract investments in specific sectors and boost tax collection. Figure 12 presents the detailed information about the main proposed infrastructure projects for the East African region covering different sectors and countries.

Figure 12: Investment requirement by each infrastructure area (US\$ million)



Source: Made by Author, data from EAC Heads of States' Priority infrastructure projects, (2018).

Railways, energy and aviation are the key areas accounting for large budgets in East African infrastructure, as presented in Figure 12 and detailed in Table 13. Detailed projects and amounts of Chinese investment during BRI in East African countries are available at Appendices.

Table 13: EAC Proposed flagship projects (US\$ million current values)

No.	Project Name	Areas	Cost (US\$million)
1	Construction to standard gauge of the Mombasa – Nairobi – Malaba – Kampala-Kigali line with Malaba – Nimule – Juba spur	Kenya, Uganda, Rwanda and South Sudan	19,221
2	Construction to standard gauge	Tanzania, Rwanda and	5,580

	railway of the Dar es Salaam – Isaka – Mwanza and Isaka – Kigali/ Keza – Gitega – Musongati	Burundi	
3	Construction to standard gauge of Uvinza – Musongati Railway line	Tanzania and Burundi	600
4	Phase II construction of the 2nd Container Terminal – Kipevu West at Mombasa port	Kenya	320
5	Construction of Rusizi Hydro power Project	Burundi, Rwanda, DRC	1,082
6	Construction of Dar es Salaam to Chalinze Expressway (144km)	Tanzania	1,408
7	Construction of the Kampala – Jinja Expressway / Southern Bypass (96km)	Uganda	1,000
8	LAPSSET Corridor Development (comprising 32 berths at Lamu Port, Lamu-Isiolo-Lokichar-Juba highway and Lamu-Moyale-Addis Ababa Highway, Crude oil pipelines to Juba and Addis Ababa, 3 international Airports and 3 resort Cities	Kenya, South Sudan and Ethiopia	15,200
9	Mombasa – Nairobi – Malaba - Jinja Expressway	Kenya, Uganda	886
10	Construction of a new crude oil pipeline from Hoima	Uganda and Tanzania	4,000

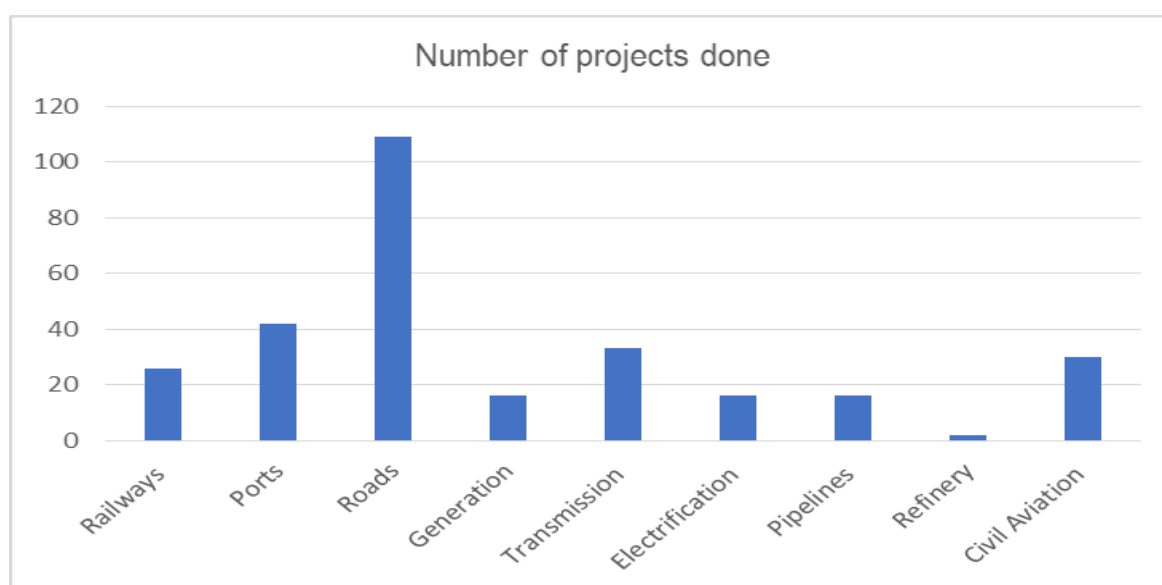
	(Uganda) to Tanzania (1,443km)		
11	Rehabilitation, expansion and construction of new airports and EAC Upper Flight Information Region comprising of Bujumbura, Bugesera, Jomo Kenyatta, Arua, Msalato, Pemba airports and establishment of EAC Upper Flight Information Region (Seamless Operation).	Burundi, Rwanda, Kenya, Tanzania and Uganda	1,856
12	Hoima Oil Refinery	Uganda	4,000
13	Development of Zanzibar Ports including Maruhubi, Mangapwani, Water and mkoani	Tanzania	2,131
14	Phase II of Dar es Salaam Maritime Gateway Program (2nd Container Terminal at Dar es Salaam Port, Berths 12 to 14)	Tanzania	360
15	Construction of Rufji Hydropower Project at Stiegler's Gorge along the Rufji River, 2100 MW (Tendering Stage)	Tanzania	2,000
16	Upgrading of Handeni-Kiberashi-Kwamtoro-Singida road (434 km)	Tanzania	368

17	Lake Victoria and Lake Tanganyika Transport Program (LVTP)	Kenya, Rwanda, Tanzania, Burundi and Uganda	1,200
18	TOTAL		61,212

Source: Made by Author, data from EAC Heads of states' priority infrastructure projects (2018).

Following implementation status of the priority infrastructure projects agreed at the 3rd Retreat, one can observe the situation as of November 2017, as shown by Figure 13. A total of 9 projects out of 40 projects was at conceptual stage in 2014, then moved to various stages of preparation and implementation, while 9 projects were fully completed between November 2014 and November 2017. However, project preparations and implementation remain as the main challenges, especially due to financial and capacity constraints. Other proposed projects have not yet reached a satisfactory level. A considerable number of projects (146) were still under different stages of the preparatory, requiring enough funding to move to the next stages.

Figure 13: Implementation status of priority projects as of November 2017



Source: Made by Author, data from EAC Heads of priority infrastructure projects (2018).

Chinese contribution to these infrastructure projects has been large in the East African countries. Total infrastructure spending linked to Chinese projects representing a significant rise after 2010. This went from negligible levels reported in the early 2000s. The degree of Chinese engagement

in the region, driven mainly by increases in financial support to infrastructure development, has been made significantly under the BRI where totaled amount of Chinese investment reached over US\$ 11.27 billion during BRI. Chinese investments have also benefited from a bilateral agreement. The country has invested in 52 out of the 54 African countries. China's official statistics by Venkateswaran (2020), shows that 49 of the 54 African countries (i.e. over 90%) have already signed Memorandum of Understandings (MoU) with China. Geographically, 22 of the 49 countries (nearly 50%) are located in West Africa, with East Africa (12 countries), North Africa (9 countries) and Southern Africa (6 countries) comprising the other 50%. While MoUs are not legally binding, they formalize Chinese investments in the country, with due acknowledgement from the local government. Moreover, signed MoUs can pave the way for a legally binding agreement (Venkateswaran, 2020).

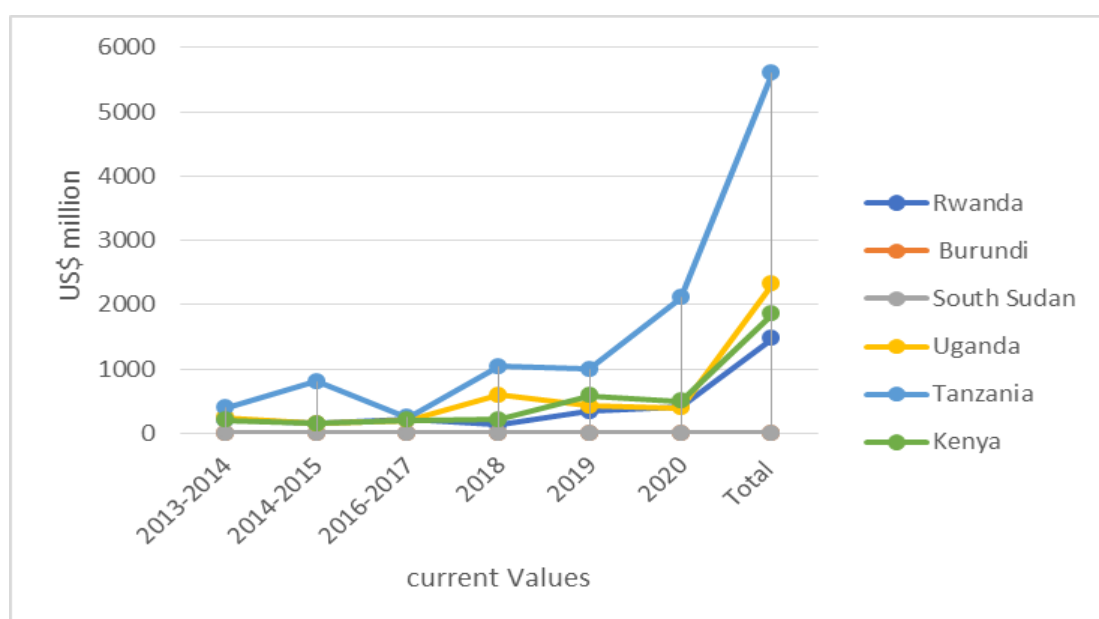
Across the continent, Chinese railway, port and road projects can be found at various stages of completion. Some of the infrastructure projects shows China's role in building and financing intra-African connectivity. As part of the BRI, China has built and financed, for example, the US\$ 3.6 billion Mombasa-Nairobi Standard Gauge Railway. The Mombasa-Nairobi line is expected to eventually link Kenya, Tanzania, Uganda, Rwanda, Burundi, and even South Sudan and Ethiopia. Beyond railways and roads, China is also financing and constructing ports in different parts of the continent. Tanzania's Bagamoyo Port, is expected to become Africa's largest port, capable of handling 20 million containers per year. The port may service cargo to and from landlocked Uganda, Rwanda, Burundi, South Sudan, Ethiopia, parts of Zambia, and the eastern Democratic Republic of Congo, once China's other regional rail projects are also completed (Harriet, 2018).

According to East African Community Headquarters' report Arusha, Tanzania, 4th July (2019) 35 out of 286 projects identified by the Heads of State of East African States as infrastructure development projects have been completed and were in operation since 2019 (Richard, 2019.p.1). The EAC Heads of State Joint Retreat on Infrastructure and Health Financing and Development held in Kampala, Uganda on 22nd February, 2018, approved a set of 286 priority infrastructure projects in various sectors for joint promotion and coordinated implementation by the Partner States. Some completed projects are: the rehabilitation of the 270 km Malaba-Kampala railway; construction of the 472 km Mombasa-Nairobi Standard Gauge Railway line;

Lake Nyasa Ports – Itungi, Kiwira and Ndumbi; construction of the 454 km of 20- inch diameter (mainline 450 km and spur line KOSF to PS 14 km); Mombasa – Nairobi refined petroleum oil pipeline; taxiways rehabilitation and construction of other new semi full parallel taxiway, rehabilitation, expansion, refurbishment of Passenger Terminal Building at Kilimanjaro International Airport in Tanzania. Similarly, 106 projects (36% of all projects) were at the highest level of project development (EAC, 2020).

As shown in Figure 14, the countries that continue to be the largest recipients of Chinese investment in infrastructure during BRI are Tanzania, Kenya, Rwanda and Uganda. The latter are Burundi and South-Sudan as are still behind. This was due to the fact that from 2013 to 2017 when the Belt and Road began in East Africa, Burundi and South Sudan had been plagued by war against Rebbbers groups. Often when countries are in conflict or war, foreign and domestic investment in the country is threatened due to the projects that investors are willing to invest in that are not well secured, for example: Burundi is a landlocked country as one of six member states of the East African Community (EAC). However, the socio-political and economic crisis is linked to the 2015 national elections, followed by the great violence, which has long been obstacles to attract efficiency foreign direct investment (UNCTAD, 2015).

Figure 14: Chinese investment in EAC during BRI (US\$ million current values).

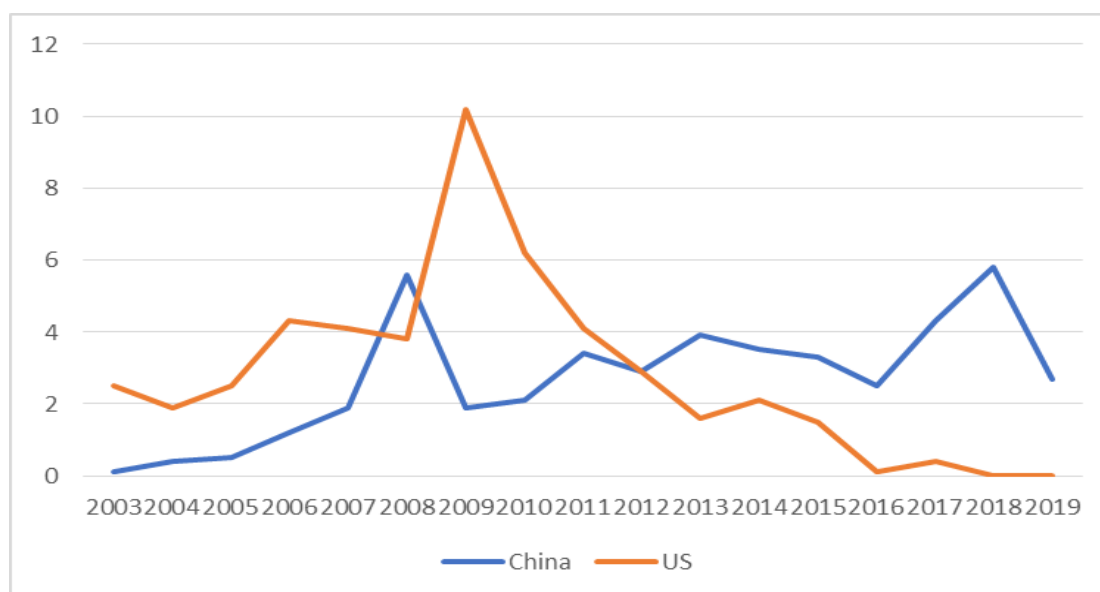


Source: Made by Author, data from Chinese Global Investment tracker (2021).

Relations between East Africa and China continue to produce more on the African continent and Chinese investments had been grown more than US investment, as shown in Figure 15. Governments largely acknowledge the need for new investment and the importance of Chinese finance in the states' large-scale projects. Domestic efforts are also being made to address the infrastructure problems. Researchers believe that complementary China-East Africa relations are important. The type of infrastructure and its quality are in the interest of both sides in accelerating cross-border investment. They also believe that institutional development has become a solution rather than a problem and that investment is needed early in infrastructure to harmonize the development process while also continuing to strengthen economic return on both sides. However, Chinese investors and the international community as a whole are becoming increasingly aware of the importance of the environment, welfare, good governance, and the people involved in development (OECD, 2021).

According to Shirley (2021) the article of China-Africa Research Initiative, "The value of China's investment and construction combined since 2003 to 2019 exceeds US\$ 49.1 billion to Africa and FDI stock in Africa amounted US\$ 110 billion, contributing over 20% of Africa's economic growth". In 2019 only the Chinese investment in Africa amounted US\$ 2.7 billion as shown in Figure 15, Chinese FDI flows to Africa have exceeded those from the U S. The Belt and Road Initiative has become relatively more important, while the US and other rich countries have discouraged Chinese activity in Africa. China continues to compete in African territory and Africa is interested with a good cooperation that would focus on both benefits (Africa & China Research Initiative, 2020). FDI inflows have been declining since 2010, after the global financial crisis. Ten years ago, the United States had the largest investment, but in the last decade China invested most in Africa (American Enterprise Institute, 2021).

Figure 15: Chinese investment vs US FDI inflows in Africa (US\$ billion)



Source: Made by Author, data from Johns Hopkins, China & Africa Research Initiative and U.S. Bureau of Economic Analyses, Jan (2021).

The low infrastructure rankings for countries in East Africa highlight the need for improved infrastructure and the BRI represents an opportunity for countries to develop the quality of infrastructure. Governments are clearly understanding these needs and have sharply been increasing the share of their budgets dedicated to addressing the infrastructure deficit. The empirical literature on infrastructure and development in Africa has mainly focused on the impact of infrastructure on aggregate growth, firm output and the impact of infrastructure on trade. Despite a large body of theoretical work on the relationship between infrastructure and growth, empirical analyses in Africa have not yet offered a resounding consensus. Researchers believe that relationships are based on interactions with countries, types of infrastructure, and the periods under study (AFDB, 2018). For China, institutional development is an outcome rather than a starting point, and early infrastructure investment is necessary to leapfrog the development process – further underlining the fundamental difference of the two approaches.

However, the Chinese and the international community as a whole, are becoming increasingly aware of the importance of the environment, social welfare and governance, as well as ownership of development activities (OECD, 2021). With the full supported by the governments, the private

sector and the public, as the Kigali Amendment avoids reaching 0.4 ° C of global warming in the 21st century while maintaining ozone layer. The amendment would play a key role in the 2019 Paris Agreement too (UNEP, 2019).

In East Africa, Chinese involvements also include some degree of criticism regarding, for instance, wages paid for workers. However, to large extent, Chinese engagement has meant a visible impact on prospects for development, especially of in infrastructure provision. As seen, China's activities in infrastructure cover several areas, as transport and energy, in particular railways, roads and hydropower (Brautigam and Hwang, 2016). In the absence of Chinese engagement and financing, it is doubtful whether some of the major projects being undertaken in the region would have been implemented. China's role on the African continent has been defined by the financing of more than 3,000, largely infrastructure projects (Witney & Wiegert, 2018). Although not consensual, the impacts of BRI are large on East Africa, Rwanda included. For instance, by reducing the export and imports trade margins, the BRI also could result in increases to the GDP growth in the region for both maritime and non-maritime countries, such as Rwanda. Given the increasing impact of China's investments on the region, the next chapter addresses in particular the case of Rwanda.

CHAPTER III

CHINESE INVESTMENTS IN RWANDA'S INFRASTRUCTURE AREAS

China and Africa have a longstanding partnership. Although at a small scale in the beginning, China began to invest in African countries in the 1980s and kept expanding its investments since then. From the 2000s onwards, China's investment in Africa has been growing even more rapidly in several African countries. Africa still represents, however, a small part of Chinese FDI stocks (4% in 2009) and between 3% and 10% of Chinese FDI outflows (Njoroge et al., 2020). Chinese investment in Rwanda has had bigger impacts on infrastructure projects. For example, China has constructed 70% of the country's roads, beginning with a loan of 250 million yuan in 2009, equivalent to nearly US\$ 36 million at that time (Jenna, 2010). As to other African economies, China has become Rwanda's biggest trading partner and project contractor (Byusa, 2010). China is now the second-largest source of foreign direct investment in Rwanda, behind only the European Union (Xinhua& Ying, 2018).

3.1 Chinese investment in Rwanda before BRI

At the same time, Chinese institutions were also involved in local training. For example, Chinese clothing manufacturers and construction companies have given training to many Rwandans. Rwanda aims to rebuild itself in a foreign investment hub. Basically, this is in line with China's strategy to expand investment in Africa, which offers more opportunities for China-Rwanda cooperation. In addition, there are other ways of exchanging goods on both sides. China is not the major donor to Rwanda, but it provides Rwanda with an alternative to withstand the pressures and conditionalities of the Western donors. Rwanda is a good example of how China has contributed to Africa's development in various ways. Unlike some Western countries, China has tried new ways to help African countries in terms of development. As a fast-growing country, China has used its experience in this process to change its support strategy based on the infrastructure transformation of the African continent (Oskar, 2017). In fact, Chinese investment in Rwanda has been increasing year by year, as shown in Table 14 below.

Table 14: Chinese FDI stock in Rwanda before BRI

YEAR	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
US\$ million	2.3	3.3	4.72	7.71	7.3	20.18	28.8	41.63	58.52	63.54

Source: Made by Author, data from MOFCOM. Updated 08 Jan (2021).

Chinese experts set up an IT park in Kigali, and helped reduce the cost of communication and expand subscribers through the provision of cheap mobile phones. In this regard, A-Link Technologies, a Chinese technology company that registers mobile telephony, opened its business in 2007 in Kigali. A major investment company, however, Star Africa Media Communication Network Technologies, a Chinese technology company, has introduced a pay-TV system that has the capability to expand many African countries. It is expected to increase its investment by up to US\$ 20 million on television in addition to the Internet provider in Rwanda. Rwanda was selected for the project because of its location (NUR, 2010).

After the tragedy of Rwanda, China is one of the countries that have played a key role in the country's economic development, rebuilding infrastructure in terms of investment and free of taxes on Rwanda's exports to China. China has increased the number of scholarships for Rwandans who want to study in China, and not only but also increased the number of travel permits for Rwandans who want to go to China (free visa). During BRI's under Xi Jinping's leadership, China's investment has grown exponentially and focused on infrastructure.

The Kigali City Tower is a mixture of high-rise offices and commercial buildings located in Kigali, the capital of Rwanda. The building consists of a 20-storey, tall tower in the country, a four-storey commercial center and a car park, a space divided between rented and commercial premises. Top retailers include the Nakumatt supermarket, Bourbon Coffee and four cinemas. The building, formerly known as the Bus, was built by Rwandan businessman Hatari Sekoko and by Chinese investors. Construction began in 2006 and the center was inaugurated in 2011 with total cost of US\$ 20 million (Charlotte, 2015). Detailed information on Chinese investment in Rwanda during BRI is presented in the following sections.

3.2 Chinese investment in Rwanda during BRI

In the post-genocide period, Rwanda has advanced key policies to deal with poverty and conditions of a low-income country, as seen before through Vision 2020 Initiative. In this regard, amid potential foreign investors, China has emerged as a trusted rival for traditional investors and business partners. As infrastructure is key to economic development of the nation, China has expanded its investments in the construction of visible and durable infrastructure areas in Rwanda. In order to reduce aid dependence, Rwanda was pleased to work closely with China in building industries that can increase the capacity and value of Rwanda's exports, while other stakeholders have focused on providing aid and assistance to Rwanda, which is considered like poison gift slowing down the country's development. Rwanda has long wanted to cut its second hand imports, in order to develop its industries but has not stopped sanctions by foreign powerful countries that want to benefit from Rwanda's imports. However, Rwanda stood firm and decided to continue strengthening its efforts to build more industries in order to reduce imports cost (Steffen, 2018).

3.2.1 Investment conditions, promotion and facilitation in Rwanda

Overall investment conditions and incentives in Rwanda follow the law of 11 February 2015, as it reviewed law n° 26/2005.

Related to investment conditions and export promotion and facilitation, the purpose of this law was largely to promote and facilitate investment in Rwanda, as can be seen in terms and conditions described in Box 3 below.

Box 3: Overall investment conditions and incentives in Rwanda, 2015

No.	TYPE	CONDITIONS
1	Export processing zone (EPZ)	A protected area used for processing goods that are subject to control for export purposes
2	Business process outsourcing	An agreement by which a foreign company outsources the implementation of some of its business functions to an enterprise in Rwanda

3	Global business activities	Management of transactions across borders for foreign-based clients
4	Investment certificate	A document that the Board issues to an investor who fulfils the requirements set out in this law. The document clearly describes the facilitations the investor is entitled to depending on the investment made
5	Regional office:	A place in Rwanda where an international company has relocated its regional general management and the coordination of its main operational activities in the region
6	Headquarters	A place in Rwanda where an international company has relocated its general management and the coordination of its main operational activities
7	Incentive	Any tax or non-tax inducement extended to an investor to facilitate and support investment
8	Capital	Any wealth in the form of tangible or intangible assets used for investment purposes
9	Mutual fund	A professionally managed fund which pools money collected from many investors for the purpose of purchasing securities
10	Investment enterprise	An enterprise using tangible or intangible assets for profit-making purposes in accordance with the provisions of this law
11	Fund management	A service provided by a financial professional authorized by the competent authority in order to attain goals set by the clients by optimizing the profitability of their funds

12	Wealth management	Investment and advisory services provided by investment professionals to high-net-worth individuals with the aim of maximizing returns
13	Asset-backed securities	financial securities whose accessories derived from assets are used for payment
14	Investment profit	Use of tangible or intangible assets for profit-making purposes with the exception of all retail and wholesale trade
15	Collective investment scheme	An arrangement in which several investors form a group and work together for the purpose of improving their common interest
16	Venture capital	Money provided by an investor in the launch of a start-up company, a company in its infancy stage or one which is expanding into a new field of business activities with perceived long- term growth potential;
17	International company	A business company that owns or controls production or service facilities in one or more countries besides the home country
18	Export	Selling goods and services outside member countries of the East African Community
19	Captive insurance scheme	Insurance taken out by a business company in Rwanda that is restricted exclusively to risks emanating from outside Rwanda in connection with a company to which a company in Rwanda is affiliated
20	Investor	Natural or legal person that invests in an investment enterprise in Rwanda
21	Registered investor	An investor who holds an investment certificate

22	Value addition	Product processing which increases its value by at least thirty-five per cent (35%) as defined by the rules of origin in terms of manufacturing
23	Private equity	Funds invested in a private company by an investor approved by the competent authority in order to acquire controlling rights and receive dividends as a shareholder
24	Foreign investor	<p>a). a natural person who is not a citizen of Rwanda or of a member State of the East African Community (EAC) or the Common Market for Eastern and Southern Africa (COMESA)</p> <p>b). A business company or a partnership not registered in Rwanda, a member state of the East African Community (EAC) or Common Market for Eastern and Southern Africa (COMESA)</p> <p>c). Business company or a partnership registered in Rwanda whose foreign capital from countries other than East African Community (EAC) or Common Market for Eastern and Southern Africa (COMESA) member States is at least (51%) of the invested capital</p>
25	Board	Organ in charge of investment promotion in Rwanda
26	Competent authority	Any competent public organ

Source: Made by Author based on data from Government of Rwanda (2015).

According to Rwanda's government (2015), all business sectors are open to private investment regardless of the origin of the investor. However, investors are encouraged to invest in priority economic sectors, which are deemed the following: export; industrial manufacturing; sectors of energy, transport, information and communication technologies, financial services and construction of low-cost housing.

A foreign investor can invest and buy shares in an investment company in Rwanda as well as Rwandan investors in terms of encouraging and facilitating investment. In addition, personal property, whether individually or collectively, cannot be invaded. It is in this context that intellectual property rights and legal rights relating to the transfer of technology have been recognized in accordance with private law. When it fulfills all tax obligations in Rwanda, the investor is allowed to return abroad, the proceeds from trade, debt and interest on foreign loans, the proceeds from the liquidation of the investment, and all other assets owned (UNCTAD, 2015).

According to the Official Gazette of May 27 (2015), the government's investment request is followed by a number of documents, such as a certificate of legal status in a business entity, a business plan, an impact assessment to environment in accordance with the applicable laws, the expected number of employees and categories of work, the payment of registration fees and the licenses issued by the business sector its operations. The business plan mentioned above must include: a) the name of the project and the details of the project to be invested or invested; b) action plan; c) the date of commencement of operations; d) detailed information on all equipment from the country or region in which the investment operates; e) detailed information on any funding and resources that will come from outside Rwanda, including the time limit for this investment and assets that will be invested; f) market research; g) detailed technical information provided for the exchange of knowledge; and h) a five-year chart of investment projects.

Investment allowance of 50% for the first year for new or used assets if the investor invests in business assets worth at least US\$ 50,000 each and operate at least one of the priority sectors provided by the Rwandan Government as following: a registered investor investing in products used in Export Processing Zones are exempted from customs taxes and duties; a Preferential Corporate Income tax rate of 0% is provided for an international company with its headquarters or regional office in Rwanda if it fulfils provided legal requirements; a Preferential corporate income tax rate of 15% is provided to investors who fulfill the all legal requirements; Corporate Income Tax holiday of up to seven years is entitled to an investor who fulfills the requirements in government priority sectors; companies that carry out micro finance activities approved by competent authorities pay corporate income tax at the rate of 0% for a period of 5 years from the time of the approval of the activity; duty exemption on raw materials, plant and machinery and

other inputs; stamp duty exemption; Value Added Tax (VAT) is refunded within 15 days; immigration incentives for registered investors to recruit three foreign employees; duty drawback to apply on input of goods from domestic tariff area (UNCTAD, 2015).

3.2.2 Criteria linked to Rwanda- China investment agreement

When both Rwanda and China agree on a list of projects - whether a complete industrial construction project or technical assistance -Chinese teams would do their best to submit the relevant projects to the government of Republic of Rwanda. For technical assistance, Chinese teams are working with Ministry officials in negotiations with the Rwandan government. The project must be approved by the Chinese government. The project must be technically sound and can generate economic benefits as follows: The project should have a positive impact on health, such as job creation and training; Chinese companies should be selected as a project. In order to increase the export of goods; equipment, technology, and then the necessary services in the project should be sold in China before any other countries. The principle is that less than 50% of the markets ago, are from China; The basic needs of the money, materials, and work needed for the project must be prioritized. These figures show that grants, non-profit or credit loans are provided as support for procurement from Chinese companies. In Rwanda, all such aid has been translated into practical ways (World Investment Reports, 2016).

Another benefit of the Chinese investment is that: the corruption is very little in the system. China does not provide loans to government borrowers. Money is deposited in China until a Chinese company requests to pay for goods and services by issuing invoices and development reports (OECD, 2016).

The Mashyuza cement industry, built with the support of the Chinese government, plays a key role in building Rwanda's manufacturing. The same is true of the ICT sector, where the Chinese company Star Media has invested US\$ 29 million in Rwanda. It helped create more jobs and attracted more than 30,000 customers. Regarding cement, one can think of many Chinese companies operating in Rwanda are customers of this Mashyuza cement factory, e.g of chinese construction company are: RXB, CCECC, BCEG and Top International Engineering Corporation. In addition to this, many construction sites are becoming a better way to exchange culture. Rwandan workers are sent to China for training and when they return they not only share

technical knowledge with their colleagues but also help to spread Chinese language and culture knowledge. On the other hand, Chinese workers learn Kinyarwanda intensively during the work (CARI, 2018).

China and Rwanda have a tight economic relationship and assess whether these bilateral relations can be put to good use. However, due to the challenges that Rwanda continues to face in not having many industries that can increase export products, it continues to face severe trade imbalances. In the absence of railways and navigable rivers, roads are still the most important means of transport and modes of connectivity in and around Rwanda. In the various news and announcements of investments and grants from China to Rwanda, road construction is a regular feature of this relationship. Another important aspect of these infrastructure constructions is the employment, training and skills upgrading for local Rwandans. However, while construction projects are labor intensive, more than 2,500 jobs has been created (Global Africa, 2019).

The Belt and Road Initiative is a partnership that is mutually beneficial for Rwanda and addresses Rwanda's development challenges. According to Xinhua (2019), Rwanda foreign minister Richard said "The Belt and Road Initiative is a good initiative, which addresses development requirements of China's partners". China is an important partner for Rwanda at all levels, and Rwanda welcomes the growing partnership with China". Rwanda and China have important relationships in infrastructure development, party-to-party and people-to-people exchanges, and at the political level (Lisimba, 2021). Like other potential investors, China too looks for a destination with security, political stability, governance transparency and a business friendly environment to invest and expand its economic activities (D'Amour & Wu, 2017; Eom, 2018). In this bilateral relationship, Rwanda is clearly not the dominant partner based on existing and potential material sources. Beyond the rhetoric of "south-south cooperation" Rwanda must find avenues to keep China interested (Xinhua, 2017).

Practical partnerships have developed through various joint projects in various sectors, such as infrastructure, agriculture, small-scale industries, mining, health, digitalization and human resources. China's role in Rwanda's infrastructure development during Belt and Road Initiative at the time of road construction includes support and construction in transport, information and communication technologies, and energy (OECD, 2020).

Twenty-five years after the genocide that killed more than a million people, Chinese investment has played a significant role in Rwanda's reconstruction. Much of this can be seen in the new office of the Prime Minister of Rwanda worth US\$ 27 million, which entered the Office of the Minister of Foreign Affairs as part of a gift from China on April 22 (2019). There is also the "Special Economic Zone", an industrial forum built by the Chinese engineers of Star construction which has been the engine of economic development in recent years and is full of Chinese documents on many buildings, tens of millions of dollars are also coming into the undeveloped Eastern Province of Rwanda, where China is sponsoring and building where China is financing and building three multi-thousand-person stadiums (Stephen, 2019).

The Belt and Road program, as presented in Chapter 2, is an opportunity to be embraced by Africa and China, once it has established development, infrastructure, cooperation, and productivity in the countries concerned. Since its inception, Rwanda has been interested in benefiting from the construction of infrastructure connecting the country with other maritime countries and building connectivity in order to increase productivity and increase the value of goods, according to Kayonga (2018), ambassador of Rwanda in China. From this partnership, Rwanda can not only avoid isolation, but also improve the level of development in the fields of industry, education, medicine and agriculture. In fact, all of these points were considered in the memorandum of understanding signed during President Xi Jinping's visit to Rwanda (John et al, 2019).

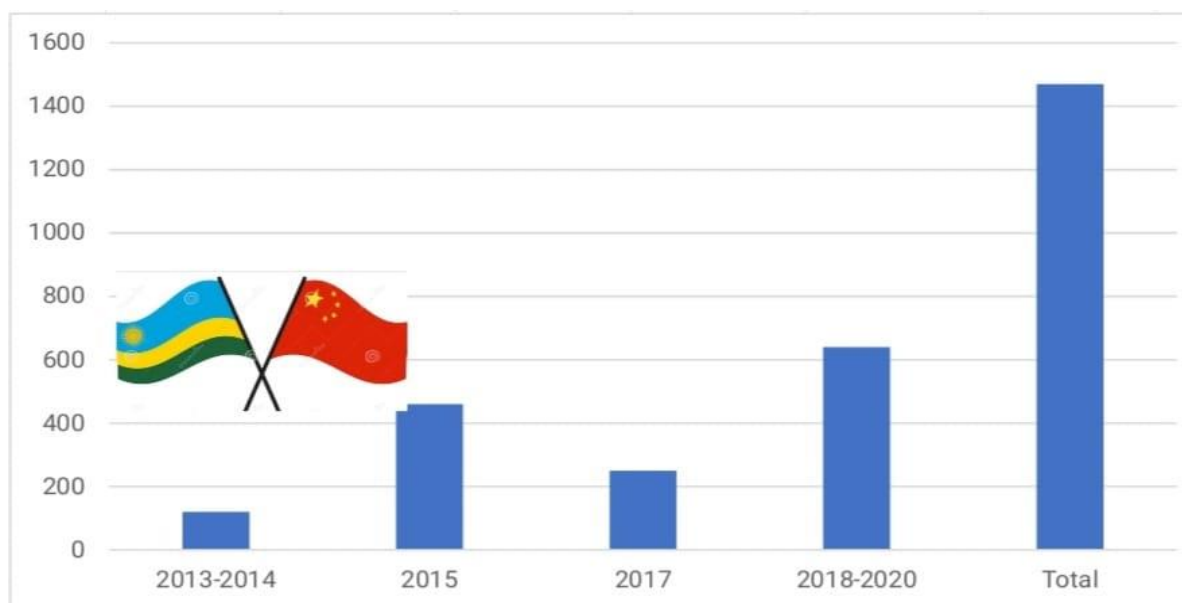
According to the Rwanda Development Board in June (2021), in quarter of 2020, 24 Chinese companies were registered in Rwanda, bringing an investment of US\$ 300 million. Many Chinese investors in Rwanda are concentrated in construction and real estate sectors, energy and ICT. According to the director of the Rwanda Development Board (RDB, 2020), "the Chinese investors are encouraged to invest in various sectors beyond the real estate sector and further cooperate with local entrepreneurs with special projects, which could provide hope to the future".

For developing countries in particular Rwanda, initiatives to promote and facilitate new investment in industry, especially in different sectors that drive private sector development and structural change, would be important to complement recovery gaps that remain in infrastructure. Addressing the challenges and maximizing the impact of investment packages on sustainable

development and inclusive recovery would require several efforts such as: (a) swift intervention to safeguard existing projects and improve the quality of these projects, so that they can carry out the sustainable projects, in order to avoid cost overruns and negative effects on investor risk perceptions; (b) although Chinese investment has increased in Africa, especially in Rwanda, it is important that other developed countries could also show their role in increasing investment large projects in developing countries in order to improve infrastructure. In return for the money that developed countries invested in developing countries, well-funded projects should be developed by economists experts in order to mitigate the impact of losses on national and bilateral joint projects; (c) put efforts in bilateral and multilateral interests and guarantee agencies to counter upward pressure on project financing costs in lower-income developing countries (World Bank, 2021).

According to the China Global Investment Tracker (2021), Rwanda has been an important recipient of Chinese investments, especially during BRI launch in 2013. From then until 2020, over US\$ 1.4 billion were invested by China in different areas of Rwanda's infrastructure, as observed in Figure 16. One should note that Chinese finance has been highly concentrated, with about 70% going to Rwanda's infrastructure (OECD & ACET, 2020).

Figure 16: Total Chinese investment during BRI 2013-2020, (US\$ million current values)



Source: Made by Author, data from China's Global Investment Tracker, 26th July (2021)

3.2.3 Chinese investment in energy

In view of Rwanda's efforts to reach global power by 2024, hydroelectric dams have been provided in many regions. In 2018, a US\$ 214 million investment agreement was signed between Chinese state-owned Sinohydro and Rwanda's Energy Development Corporation Limited (EDCL), the country's largest public utility company. The agreement deals with the construction of the Nyabarongo II Dam in Southwestern Rwanda. The Sinohydro dam, which was built on the Nyabarongo River, has a capacity of 43.5 MW and would provide irrigation water to the south-west of the country. Sinohydro has five years to complete the construction. Once used, it has provided 11.5% of Rwanda's national grid capacity (221 MW). According to EDCL, (2018), the new dam would support Nyabarongo I, to supply of electricity with a capacity of 28 MW of 20,000 hectares.

In terms of other energy sources, the Chinese government provided Rwanda with solar energy in 2014 to boost the country's energy sector. Valued at US\$ 642,304, 416 units of solar equipment have been installed in rural areas of the Southern, Northern and Eastern Provinces, where public electricity is not available. These tools were aimed at improving rural energy and improving the well-being of the people (Ben, 2014). Rwanda has set a target of generating 563 MW of electricity in 2017 to reduce the country's electricity shortage. For the most part, lack of energy remains a barrier to achieving development goals in the country. It is in this context that Chinese investment from many energy sources can play a role in reducing to some extent these major development barriers (Xinhua, 2020).

3.2.4 Investment in roads

Chinese investment in road construction is high. Various accounts confirmed that China has built about 70% of the roads in Rwanda (Nanda, 2012; Paduano, 2019). Roads are an important way to transport and connect the country. Road construction is a common feature of China-Rwanda relations, and other countries related to Rwanda are lagging far behind in China in terms of infrastructure (Lisimba, 2020).

Most notable was the agreement to support the construction of a 14-kilometer road connecting Kigali and Bugesera International Airport. According to Chinese Ambassador to Rwanda Rao

Hongwei, (2019), that new road would cost US\$ 54 million and would be completed in partnership with the People's Republic of China (Centre for Africa-China Studies, 2021).

Chinese companies are well-established partners who are committed to improving urban roads in the Rwandan capital Kigali, in partnership with Road & Bridge Corporation (CRBC). The Kigali City Council also approved the project for its significant contribution to the city's redevelopment since 2011. China Road and Bridge Cooperation (CRBC) has started an urban road upgrading project in Rwanda's capital city Kigali, which is expected to improve the overall traffic situation in Kigali. This road has been prolonged to neighbouring country Tanzania. The 160-kilometer Kigali-Rusumo road has become a major road connecting Kigali and Tanzania (Ngabonziza, 2019).

Over 20 years of cooperation, Over the past 20 years, Chinese companies in Rwanda have been proud of the way they have been treated and the good relations they have had with Rwandans and investments are producing mutual as all the projects have provided additional benefits such as job creation, knowledge transfer and capacity building in this system. The roadmap connects not only the provinces and villages of Rwanda, but also the country and its neighbors, such as Burundi, Tanzania, Uganda and the Democratic Republic of Congo. The group, along with railway projects in East African countries, may increase regional cooperation and trade development between partners (CGTN, 2018).

The projects ahead are developing feeding roads (which are rural roads that allow farmers and entrepreneurs to access local markets) as well as urban roads in the capital, Kigali, and the second towns of Rubavu, Musanze, Huye, Rusizi, Nyagatare and Muhanga. The development of these highways and cities could ease the pressure on Kigali and increase the country's economic landscape. Plans are underway for the road connecting Kibungo, Ngoma and Nyanza, as well as Nyagatare, Byumba and Base, and the Kigali bypass road (MININFRA, 2021). Currently, Rwanda does not have its own railroad system, which limits its economic activities since it is landlocked. The government would like to construct two regional lines, the Dar-es-Salaam-Isaka-Kigali line and the Mombasa-Nairobi-Kamapala-Kigali line.

3.2.5 Investment in housing and urbanization

Chinese investment has been instrumental in Rwanda's urbanization, as assisting Rwanda to build cities, hospitals, residential housing and model villages' office building complexes, hotels and stadiums. For example, the Kigali Convention center and three new hotels were completed and launched in 2016. Kigali Radisson Blu Hotel, Marriott Hotel and Ubumwe Hotel opened in 2016 too. In addition, in 2018, China's construction projects included the Vision City, both in the final stages of completion. The construction of Vision City includes the construction of 4,500 housing units in Kigali, known as the largest property development in Rwanda to date (Qing & Xuan, 2017).

The Chinese company (CCECC) has been working on the first phase of the Vision City project, which is part of the Rwandan government's efforts to address housing issues in the capital "Kigali". The project comprises by four phases. The first phase of the project consists of 504 units of villas and apartments. Therefore the four phases have been completed in 2017. This vision city projects aims to help Rwanda in solve the housing issues in the capital Kigali. The first phase of the project was largest housing consists of 4,504 units of villas and apartments and have a capacity to accommodate more than 22,000 families. With total cost of US\$ 150 million, it is the largest residential housing project in the country's history (Xinhua, 2019). Integrated Polytechnic Regional Centre (IPRC) Musanze has been built by Chinese company and started in 2013 enrolling up to 1,500 students and advanced diploma students, as well as 400 short-course trainees, with investment around US\$ 32 million (about Rwf 27.3 billion) signed between Rwanda and China. The IPRC Musanze provides students with technical and vocational training in the fields of agriculture, construction, electricity and electronics(Xinhua, 2018).

3.2.6. Advantages of FDI in Rwanda

Another important aspect of infrastructure investments is the employment, training and skills upgrading for local Rwandans. During construction, 406 Rwandans have been trained by Chinese firms. However, in terms of employment from Chinese investment in Rwanda in 2016, Chinese firms employed 1,100 Rwandans (Caleb, 2020). In 2018, the industry was at the forefront, and has created 3,498 jobs out of a total of 7,027 jobs from Chinese investment. From 1976-2016, 600 Rwanda's students awarded Chinese scholarships. In 2017, the number of scholarship has been increased,up to 1,100 Rwandan students. Also in 2017, November 19, the

Chinese Embassy in Rwanda and the Imbuto Foundation signed a Memorandum of Understanding (MoU) worth Rwf30 million, to provide scholarships to 100 students, “the wise come from poor families.(China & Africa Research Initiative, 2018). In 2020, around 1,200 Rwandan students were studying in China and then returned home to study online because of Covid-19 pandemic (Xinhua, 2020).

Rwanda has often emphasized the growth of knowledge-intensive services, tourism, and information and communications technology (ICT) over labor-intensive manufacturing to grow its economy. According to ILO (2018), Rwanda’s manufacturers Utexrwa and H&C jointly employment around 2,000 workers and the Rwandan government is turning to job creation in the industry, despite the implementation of national requirements for the training and employment of local workers. On the other hand, it has been important for them to reach an agreement with a Chinese investor who supports the transfer of power as a key factor in Rwanda’s infrastructure. In this event, Rwanda’s experience shows how African governments can ask foreign investors in the industry to implement knowledge transfer programs to facilitate change in their countries. However, the Utexrwa textile industry still faces challenges in terms of language integration (Janet, 2018).

By concentrating in infrastructure’s production, in the Kigali Special Economic Zone (KSEZ) and Kigali in general, firms can benefit from backward and forward linkages where firms buy raw materials and intermediate goods from each other. This reduces transportation costs and should lower the cost of goods overall. These benefits can also build an environment that attracts more firms to the SEZ. At the same time, high concentration of investments in the capital city may also cause regional development imbalances among other regions of the country (UNCTAD, 2019).

As discussed earlier, the infrastructure involved in Chinese investment in Rwanda is key to national development and overcoming structural barriers. Apparently, despite investment, large infrastructure and overall development gaps still need to be solved. BRI projects can leave the region in a better position in infrastructure. Not only that, but trade between the two countries is likely to grow, and Rwandans trained in these projects can continue to develop Rwanda’s infrastructure, technology and economic development in general. As noted earlier, most Chinese

investment is in road rehabilitation, other forms of transportation, housing and urban development, energy expansion, and other key areas (MININFRA, 2020).

In this regard, the relationship between the two countries has become commonplace for Rwandans, but it has also led Rwandans to look for ways to innovate, train other people in various activities, receive training and more knowledge. Good diplomacy between China and Rwanda can expand trade and investment opportunities, including technology and knowledge exchange. It is also clear that major economic interests are contributing to China's profits as well as tax exemptions in the first seven years in terms of attracting investors as per Rwandan law. In addition, although Chinese investors in these projects have given Rwandans more jobs, their salaries are criticized due to the incompatibility of low wages, which means an economically negative impact.

Although large infrastructure and development problems still remain, it is possible to attest the contribution and an overall impact that Chinese investments have caused to Rwanda's economy from a range of sectors, and also helping building large and small-scale industries, contributing to the increase in Rwanda's value of domestic products.

In this regard, Rwanda has been benefiting from the Chinese relationship which largely involves as a key in infrastructure areas, including: buildings, roads, energy and other major development projects. Chinese companies, such as the Chinese Construction Company (CCECC) and Sinohydro, among many others, are leading groups of Rwandans in construction efforts. For instance, CCECC has been involved in the tender for the construction of the Nyarugenge district hospital and the construction of a tall building in Kigali called the Kigali City Tower. Other major companies in Rwanda, including Beijing Construction Engineering Group (BCEG), have won the construction of the Kigali Convention Center. In this regard, the Chinese investment is playing a significant role in Rwanda's infrastructure domain. China invested around US\$ 1,470 million in the period of time between 2013 and 2020. Most part of these investments have been intensified during Chinese Belt and Road Initiative, which may also cause indirect effects from a greater regional integration among the neighboring countries. In the Chinese Belt and Road Initiative, China-Rwanda have started the two railways named Northern Corridor and Central Corridor, which may help Rwanda to overcome its geographical isolation and become a

connected land in order to facilitate transport and trade within the region and international markets.

3.2.7 Side effects of FDI in Rwanda

Although Chinese investment played much role in Rwanda's infrastructure, it has not managed to promote satisfactory salaries as provided by International Labor Law. But Western nations have continued to raise allegations that Chinese wages in Africa are unsatisfactory and employ workers with low education.. Furthermore, these jobs rarely come with adequate job security or training that can be used to advantage, and as useful new experience in applying for more stable and permanent jobs in other firms. It is clear that not only for Chinese investors but also all foreign investors; there should be improvements in labor conditions. In the mining sector, for instance, the miners and employees are mistreated by paying low wages where most of workers being paid less than US\$ 40 per month (ILO, 2020).

According to the Rwanda Extractive Industry Workers Union (2020), “no foreign company in mining could comply with the provisions of the Labor Code of Rwanda. The Rwandan government has repeatedly warned private companies to comply with Rwandan labor law and international labor law but have not implemented it”. There are some companies from rich countries such as Belgium and Germany in most mining markets but do not respect human rights and labor law. According to the Secretary General of Rwanda Extractive Industry Workers Unions Andrée Mutsindashaka at a meeting of Trade union members and Human Rights Commission held in Muhanga district (2019), “Valuing an employee is about respecting his or her rights and giving him or her legal requirements. The mining sector is the second largest generate income economy in Rwanda the time has come for companies fail to respect human rights and the provisions of the Labor Code in Rwanda, which seeks to be closed permanently, rather than to prevent workers and employers from continuing unresolved labor conflicts” Nonetheless, there are labor rights organizations, for example FES Rwanda, which play a very important role in advocating for workers and social welfare, especially providing training to researchers, private companies and trade unions. This gives hope that in the future of labor framework with domestic and foreign companies still violating the law and human rights would be penalized or corrected, so that living standards of workers and Rwandans in general can improve steadily.

CONCLUSION AND RECOMMENDATIONS

Rwanda has suffered from effects of colonialism. That includes the loss of some parts of Rwanda by the creation of new borders, the separation of some Rwandan families by living in different countries with losing their native citizenship, and racial segregation based on the nature of Rwandans body, leading to ethnic hatred between Hutu, Tutsi and Twa. Rwanda fell into genocide against the Tutsi in 1994, when more than one million people were killed. The country's economy and infrastructure were destroyed and the country was left in poverty.

Rebuilding the country's economy has required a lot of energy from Rwandans since then. Governmental efforts as well as foreign direct investment (FDI) of the friendly countries of Rwanda have been instrumental in development. Rwanda and China have been countries with strong ties over the last 50 years, and trade between the two countries has continued to grow, especially in recent decades. China continues to expand economic relationship with East African countries in general. To a large extent, China's Belt and Road Initiative has been an opportunity for East Africa's region in terms of cross-border trade and infrastructure development. The countries with geographic isolation such as Uganda, Rwanda and Burundi have also benefited from BRI, once promoting further regional integration between countries and access to international markets at lower costs. In this regard, the BRI may transform the landlocked countries into landconnected ones.

In the aftermath of the genocide, the current government of Rwanda has put a lot of effort into rebuilding the economy and rebuilding infrastructure though Vision 2020 aimed at transforming Rwanda into a middle-income country. In the process of repairing damage, particularly in the reconstruction of infrastructure, foreign investment, including growing Chinese FDI, has played a major role. Among the positive effects of Chinese investment in Rwanda, one can mention the following: creating new and more jobs, awarding scholarship for Rwandans by Chinese government, training Rwandans in various domains, increasing domestic output, building model villages for enhancing urbanization process, constructing small, medium and large industries in order to increase the value of domestic products and increase the capacity of domestic investors. During BRI, from 2013 to 2020, China invested over US\$ 1,470 million in different areas of Rwanda's infrastructure. Although Rwanda has experienced dramatic economic growth, there are still gaps to be addressed, such as income inequality which is still a big issue in employment,

electricity access, construction of more paved roads and access to clean water and sanitation. Rwanda still needs to increase both local and foreign investment in order to reach these goals.

The findings of this study points that China is playing a concrete role in helping to lift Rwandans out of poverty. However, China represents both challenges and opportunities for East Africa, especially in Rwanda. As other Western investors, Chinese firms also need to improve labor conditions, raise the current low wages and implement work contracts to assure workers' rights. Trade unions, therefore, play an important in role in changing this reality.

Based on the evidence provided in this study, the government of Rwanda should continue empowering local and foreign investors to forge a more dynamic economy to fill the remaining infrastructure and development gaps. It is also recommended that the government of Rwanda and trade unions integrate with all investors, including the Chinese, to regularize wages following International Labor Organization's recommendations. The trade unions of Rwanda need to put efforts in collective bargaining agreements to address the issue and guarantee certain wage level and standard working conditions. It is also important that investors, whether domestic or foreign, take into account the value of Rwandan workers, so that the quality of work in Rwanda becomes a model for the region. Local and foreign investment must be secured, so that it can continue to grow and benefit both sides.

BIBLIOGRAPHY

- Abbott, P. & Rwirahira, J. (2012). Aid Effectiveness in Rwanda
- Abdelaziz. M & Samper. D. A. (2010). Teaching & Learning about East Africa" Project: East Africa Living Encyclopedia: Pennsylvania Uniiversity
- Adam. F. (2014). Who are some lesser known important historical figures of Rwanda and what should people know about them?
- Adriaenssens. J. (1962). Le droit foncier au Rwanda, Butare, 1962 (polyc.)
- AFDB. (2018). Africa's Infrastructure: Great Potential But Little Impact on Inclusive Growth.
- AFDB. (2020). East Africa Economic Outlook; Macroeconomic developments and prospects; Publications/2019AEO/REO_2019_-_East_Africa
- Aimé. J. U & Jianfeng W. (2021). EAC-China Economic Relations in Trade and Its Influences: An Analysis Based on Trade Intensities School of Business, Zhengzhou University, Zhengzhou, China.
- Alexander, B., Atif. A., Bent. F., & Daniel, L. (2016). Does Infrastructure Investment Lead to Economic Growth or Economic Fragility? Evidence from China
- Alpha, F., Lisimba & Swati, P. (2021). The 'state' of postcolonial development: China–Rwanda 'dependency' in perspective, *Third World Quarterly*, 42:5, 1105-1123, DOI: 10.1080/01436597.2020.1815527.
- Anna. K., Marco, H. (2021). China Belt and Road Initiative: Measuring the impact of improving transport connectivity on international trade.
- Barata. (2020). Amateka y'U Rwanda
- Booth .D. & Golooba .M. (2016). The Evolution of the Internet in Ethiopia and Rwanda: Towards a "Developmental" Model
- Boudreaux. K.C. (2008). Economic Liberalization in Rwanda's Coffee Sector:A Better Brew for Success

Brautigam. D, Xinshen. D, McMillan. M, Silver.J. (2017). Chinese Investment in Africa:How Much do we Know?

BTI. (2020). Rwanda Country Report 2020

Bukola. A, Stephanie. B. (2018). Rwanda hosts Chinese President Xi Jinping and Indian PM Narendra Modi Updated 0158 GMT (0958 HKT) July 24, 2018

Byusa. V. (2010). Chinese external assistance to Rwanda. NUR– Rwanda Journal, 19, Series B: Social Sciences.

CACS. (2021). China and Rwanda sign Economic and Technological Cooperation Agreement.

Caleb. C. (2020). China's investment in Rwanda

Campos. F & Regina. C. (2010). A Escrita da Historia1 University of Sao Paulo in Volume1

CGTN. (2018). Opinion Rwanda and China: Partners in Development

CGTN. (2020) Rwandan leader hails China's 'equal treatment' more precious than money.

China Global Investment Tracker. (2021): <https://www.aei.org/china-global-investment-tracker>.

CNBC. (2019). The US-China trade rivalry is underway in Africa, and Washington playing catch up

D'Amour & Wu. (2017). Rwanda Fast Forward: the Many Perspectives That Make Rwanda a Unique Country

Denis. N. (2020). Uko Nduga yigaruriwe n'Umwami w'u Rwanda hakoreshejwe ubucakura bwo ku rwego rwo hejuru; Kuwa: 25/08/2020 11:18 »

Dollar. D. (2019). Global China: Understanding China's Belt and Road Infrastructure Projects in Africa

Donald .K. (2015). Heavily Indebted Poor Countries initiative

Donald. K. (2000). RWANDA VISION 2020 Initiative

- Donatien. N. (2014). The Genocide against the Tutsi in Rwanda: Origins, causes, implementation, consequences, and the post-genocide era
- EAC. (2018). Building a Reform Consensus for Integrated Corridor Development in the East African Countries: Implementation
- EAC. (2019). Thirty Five (35) EAC Priority Infrastructure Projects Completed
- EAC. (2020). Railway Sector Enhancement Project
- Eustache. K, Danna. D., Umaru. G. W., & Venant. K. (2020). Current Status of Renewable Energy Technologies for Electricity: Generation in Rwanda and Their Estimated Potentials
- EWSA & GoR. (20214). Expression of interest for scaling up renewable energy program (SREP) financing for energy projects in Rwanda
- Falchetta. G, Manfred. H, Simone. T. (2020). Pathways to 100% Electrification in East Africa by 2030
- Fletcher. N. (2014) The words that can kill: The Mugesera's Speech and the 1994 genocide against Tutsi in Rwanda
- Francis. D. (2020). Global Citizenship Observatory (GLOBALCIT) Robert Schuman Centre for Advanced Studies in collaboration with Edinburgh University Law School Report on Citizenship Law: Rwanda RSCAS/GLOBALCIT-CR 2020/10 April 2020
- Gabrehiwot. M. B & Liu Hongwu. (2013). China-Africa Relations; Government, Peace and Security: Institute for Peace and Security Studies (Addis Ababa University) and Institute of African Studies (Zhejiang Normal University) Printed in Ethiopia. ISBN 978-99944-981-1-6
- Githaiga. N, Alfred. B, Bing. W, Salum. M. A, (2019). The Belt and Road Initiative: Opportunities and Risks for Africa's Connectivity.
- GoR. (2019); (2020). Investment Climate Statements: Rwanda.
- Government of Rwanda (2006); Rwanda aid policy

Grimm. K, Hackenesch. C. (2019). Why African countries are interested in building agricultural partnerships with China: lessons from Rwanda and Uganda. P;165

Harriet. K. (2018). China is Integrating Africa - Infrastructural and Economically.

IFSWF. (2012). Agaciro Development Fund: <https://www.agaciro.rw/index.php?id=158>

IGC. (2017). Raising exports and attracting FDI in Rwanda

ILO. (2020). Global Employment Trends for Youth 2020; Technology and the future of jobs

IMF African Department. (2020). The Development Path Less Traveled: The Experience of Rwanda

IMF. (2019). Three-Year Policy Coordination Instrument-Press Release; Staff Report; and Statement by the Executive Director for Rwanda

IPP Media. (2020). China to set fund for helping Tanzanian graduates create jobs

Ivan. R., Mugisha. (2020). Rwanda now gets Qatar on board for Bugesera Airport

Janvier. M, Muhammad. W, Bin. C. (2016). Overview of Rwanda energy sector: From energy shortage to sufficiency

Johns Hopkins & CARI. (2017). China-Africa Research Initiative at Johns Hopkins SAIS releases policy brief, “The United States and China in Africa: What Does the Data Say?”

Johns Hopkins & CARI. (2018). Chinese manufacturing moves to Rwanda: A study of training at C&H Garments.

Johns Hopkins & CARI. (2021). China-Africa Trade: China Africa Research Initiative at Johns Hopkins University’s School of Advanced International Studies

Johns Hopkins (2021). China helps Africa substantially with debt cancellation, restructuring: report

Jones. T. (2016). Rwanda's Future Is Bright

- Kagame. A., (1972). Les organisations socio-familiales de l'ancien Rwanda, Bruxelles, 1954; IDEM, Un abregé de l'ethnohistoire du Rwanda, Butare,
- Kayumba. A. (1996). "Le Mutwa", Cahiers du Centre Saint-Dominique, n°2, 1996, pp.63-83
- Kimanuka T. (1916), "Uburetwa" et "Akazi" au Marangara de 1916 à 1959
- Lily. K. (2016). China is on a mission to modernize African farming and find new markets for its own companies
- Lily. K. (2016). Rwanda is a landlocked country with few natural resources: Why is China investing so heavily in it? Kigali: Quartz Media, Inc.
- Lisimba. F. A & Swati Parshar. (2020). The 'state' of postcolonial development: China–Rwanda "dependency " in perspectives
- Logiest (G.). "Christianisation indirecte et cristallisation des clivages ethniques au Rwanda, 1925-1931", Etudes et Documents d'Histoire Africaine (Louvain), 1978, pp.
- Matthew. S. (2019). Investment Climate Statements: Rwanda; Economic and Commercial Officer United States Embassy
- McKenna. A, & Thinley. K. B. (2010). Kingdom of Rwanda historical kingdom, Africa
- McMakenzie. B. (2017). Belt & Road: Opportunity & Risk: The prospects and perils of building China's New Silk Road
- Michel. N. (2019). Rwanda eyes \$100 million in private investments from China
- Michèle. P., Mark. A., Drumbl. M. (2011). The Justice and Reconciliation Process in Rwanda
- MINECOFINE. & MINAFET. (2021). The trend of china's grants to Rwanda compared to other donors. Kigali: GoR Report.
- MININFRA. (2014). Sustainable Energy for all; Rapid Assessment and Gap Analysis
- MININFRA. (2020). Government to increase production capacity of karengwe water treatment plant and strengthen its distribution network

- MININFRA. (2015). Rwanda Renewable Supply and Demand
- MININFRA. (2018). Final Transport Sector Strategic Plan for the; National Strategy for Transformation (NST1)
- MININFRA. (2019). Rwanda Energy Sector Strategic Plan
- Mizero. P. (2011). The Freindship between China and Rwanda
- MOFCOM .(2021). China’s FDI Inflow Surge in Q1 2021: An Explainer
- MOFCOM. (2018). Rwanda Sign Memorandum of Understanding on E-commerce Cooperation.
- Mukwaya. R. & Andrew M. (2018). Modelling the economic impact of the China Beltand Road Initiative on East Africa
- NALRC. (2001). Language & culture; study kinyaranda in the US: National African Language Resource Center/ Michigan State University
- Natalie. K. (2019). Economic growth in Rwanda has arguably come at the cost of democratic freedom
- Nkundabagenzi. F. (1962). Le Rwanda politique 1958-I960; Bruxelles,
- Nkurikiyimfura J.N. (1994). Le gros betail et la Société rwandaise. Evolution historique: des XIIIé - XIVé siecles à 1958, Paris.
- OCED. (2019). Development Co-operation of the People's Republic of China
- ODI. (2017). Trade facilitation, transport costs and the price of trucking services in East Africa
- OECD. 2019. Historical data of trade balance: Rwanda's Net Trade in Gold 1995-2019
- OECD. 2019. Rwanda's Trade profile; <https://oec.world/en/profile/country/rwa>
- OECD & ACET. (2021). Quality Infrastructure in 21st Century Africa Quality Infrastructure in 21st Century Africa: Prioritising, Accelerating and scaling up in the Context of Pida (2021-30).

OECD & ACET. (2020). Quality Infrastructure in 21st Century Africa Quality Infrastructure in 21st Century Africa: Prioritising, Accelerating and Scaling up in the Context of Pida (2021-30).

OECD. (2015). Development Co-operation of the People's Republic of China

OECD. (2018). China's Belt and Road Initiative in the Global Trade, Investment and Finance Landscape

Paterne, M. (2012). The Friendship between China and Rwanda

Patrick. D. Sellstrom.T, Anderson. S. k, Wohlgenmuth. L. (1994). The international response to conflict and Genocide: Lessons from Rwanda. Historical Perspective:Some explanatory factors

RDB One Stop Center. (2020). Annual Report; Rwanda at a Glance

RDB. (2021). Quality Infrastructure in 21st Century Africa

RDB. (2021). Rwanda Development Board registers US\$ 1.3 billion worth of investments in 2020.

RDB. (2021). Rwanda: Foreign Investment

RDB. NISR. PSF. (2019). National Bank of Rwanda Foreign Private Capital Consus in Rwanda Year 2019

REG. 2021). Rwanda electricity access

Reinier. M. (2021). Country report Rwanda

Rennie. J. K. (1972). The precolonial kingdom of Rwanda: a reinterpretation: Transafrican Journal of History;Vol. 2, No. 2 (1972), pp. 11-54 (44 pages). Published By: Gideon Were Publications <https://www.jstor.org/stable/24520214>

Richard .O. (2019). Thirty Five (35) EAC Priority Infrastructure Projects Completed

Rodgers. M, Andrew. M. (2018). Modeling the economic impact of the China Belt and Road Initiative on East Africa.

RTDA. (2019). Annual report 2019

RTDA. (2018); The 124.3 kilometers Base-Rukomo-Nyagatare road project to promote trade and increase mobility in the region.

RTDA. (2020). The 124.3 kilometers Base-Rukomo-Nyagatare road project to promote trade and increase mobility in the region

Rutazimbwa. (2013). Ten Hutus' commendments

SAIIA. (2021). China_Africa Toolkit

Salary surveying. (2021). Rwanda/Slary exploler.com

Samuel. B, Godwin. N.O, Asemota. L. (2018). The State of the Power Sector in Rwanda: A Progressive Sector with Ambitious Targets

Sellstrom. T., & Wohlgemuth, L. (1996). The International Response to Conflict and Genocide: Lessons from the Rwanda Experience. Synthesis Report, Joint Evaluation of Emergency Assistance to Rwanda.

Shirley. Z .Y. (2021). Why substantial Chinese FDI is flowing into Africa

Stephen. P. (2018). China’s Investments in Rwanda Raise Familiar Questions About; debt; ciate at LSE Ideas, the London School of Economics’ foreign policy think tank

SUERF. (2008). A 2008 AERG Report estimates the number Tutsi were killed to be 1,952,078 people (<http://allafrica.com/stories/200810040044.html>)

Sylidio. S. (2014). Amateka ya Ngeze Hassan n'uburyo yabonye ikinyamakuru Kangura

TIBA. (2008). Rwanda: Chinese Invest Big Into IT and TV in Rwanda

UNCTAD. (2012). World Investment Report: Towards a New Generation of Investment Policies. Retrieved 10 26, 2020, from unctad.org:

UNCTAD. (2015). Law Relating to Investment Promotion and Facilitation

UNCTAD. (2019). World investment report 2019: <https://worldinvestmentreport.unctad.org/world-investment-report-2019/chapter-4-special-economic-zones>

UNCTD. (2006). Investment Policy Review Rwanda; New York and Geneva: UN Publishers

UNDP & CCIEE. (2018). The Belt and Road Initiative: A new means to transformative global governance towards sustainable development; United Nations Development Programme; China Center for International Economic Exchanges:

UNEP. (2019). World takes a stand against powerful greenhouse gases with implementation of Kigali Amendment

Valery. H. (2019). Why It's Going to be Difficult to Roll Out 5G in Africa Chinese manufacturing

Vansina. (1930). Antecedents to Modern Rwanda: The Nyiginya Kingdom, New York, University of Wisconsin Press, p.168

Venkateswaran. L. (2020). China's belt and road initiative: Implications in Africa

Weisbrod. A., & Whalley, J. (2011). The contribution of Chinese FDI to Africa's pre-crisis growth surge (No. w17544): National Bureau of Economics research

Wicket. J. Magohe N, Innocent N, Mwahija S, (2021): Railway sustainability: the far stretch from projects to reality

WISDOM. 2013). Woodfuel Integrated Supply Demand Overview Mapping

Witney. S & Wiegert. J. (2018). The competing in Africa: China, the Europe Union and United states

WITS. (2018). Sudan Imports from China 2014-2018

World Bank. (2006). Private Solutions for Infrastructure in Rwanda

World Bank. (2016). Africa's Infrastructure

World Bank. (2018). Building Bridges: China's Growing Role as Infrastructure Financier for Sub-Saharan Africa. Washington, D.C.: World Bank Publishers

World Bank. (2021). Rwanda Economic Update: Making Electricity Accessible and Affordable.

World Bank. (2008). Transport Prices and Costs in Africa

World Bank. (2021). Report: Universal Access to Sustainable Energy Will Remain Elusive Without Addressing Inequalities

World Bank.(2016). Rwanda: Achieving Food Security, Reducing Poverty, Moving up the Value Chain

Xinhua. (2019). Analysts envisage opportunities from BRI for Rwanda

Xinhua. (2019). China Brand Show to promote economic, trade exchanges between China, Rwanda

Ying & Xinhua. (2018). Full text of Chinese President Xi's signed article on Rwandan media. <http://www.chinadaily.com.cn/a/201807/21/WS5b52edcfa310796df4df7dd8.html>

Zawya. (2019). BRI Connect: An Initiative in Numbers; China's Belt and Road Initiative (BRI): What's in it for the world?

Zhang. (2018). China, Rwanda vow to write new chapter in bilateral ties

APPENDICES

Chinese investment in East African countries in infrastructure areas during BRI (US\$ million)

Rwanda					
Type	Investor	Partner/Target	Sector	Subsector	Intervals 2013 - 2020 (US\$ million)
Construction Contracts	China Communication s Construction	Not Available	Transport	Autos	220
	China Railway Construction	Not Available	Real estate	Construction	150
	Power Construction Corp	Not Available	Energy	Hydro	210
		Rwanda Energy	Transport	Autos	130
	Sinopes, jiangxi, Water	Not Available	Energy	Hydro	340
Investment	CITIC	International Financial Corporation	Real estate	Prosperity	500
Total Amount					1,470
UGANDA					

Type	Investor	Partner/Target	Sector	Subsector	Intervals 2013 -2020 (US\$ million)
Construction Contracts	China Communications Construction	Not Available	Transport	Autos	480
	China Railway Construction	-	Transport	Autos	150
	Power Construction Corp	-	Energy	Hydro	1,690
Total Amount	-	-	-	-	2,320
KENYA					
Type	Investor	Partner/Target	Sector	Subsector	Intervals 2013 -2020(US\$million)
Construction Contracts	China Communications Construction	Not Available	Transport	Autos	1,080
	China Railway Construction	Not Available	Transport	Autos	300
	Power Construction Corp	Not Available	Energy	Hydro	150

	-	-	Transport	Autos	200
Investment	CITIC	International Financial Corporation	Real estate	Property	120
Total Amount	-	-	-	-	1,850
TANZANIA					
Type	Investor	Partner/Target	Sector	Subsector	Intervals 2013 - 2020 (US\$ million)
Construction Contracts	China Construction	Not Available	Transport	Autos	690
	China Railway Construction, AVIC	Not Available	Transport	Rail	150
	China Railway Engineering	Not Available	Real estate	Autos	100
	-	-	Transport	Autos	1,040

	-	Not Available		Rail	140
	China Construction Corp	Not Available	Energy	Hydro	1,400
Investment	China Henan International, China Railway Engineering, China Energy Conservation, Fugian Construction	International Financial Corporation	Transport	Autos	2,110
Total Amount					5,630

Source: Made by Author, data from Chinese Global Investment Tracker (2021).