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Lessons learnt for Rwanda from China's poverty reduction strategies: Policy analysis review's

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Abstract. The present study analyzed the possible lessons to learn in Rwanda from the China performance experiences in poverty reduction tragedies. Over the last 35 years, China has impressively made enormous treads in its fight averse to poverty as it has changed in one of the greatest vibrant economies in the global. The China success in poverty reduction is dedicated largely to different economic reforms which lead to economic growth, implementation of poverty lessening strategies, rural development programs and as well as open door policies. Recently, China has been serving as an economic role model for many developing countries including African states due to its substantial progress in fighting against poverty. In the same way, Rwanda is still struggling with a high rate of poverty even if there is a huge achievement but still there is a long journey to go. The growing cooperation between China and Rwanda are frequently elucidated by the country's call for its natural resources to be based on country development, China is an astonishing example which clearly indicates how a country can revolt from poverty within a decade and be a leading performer on the worldwide scene. From this perspective, there are some policy lessons that African countries including Rwanda can learn from the socio-economic transformation success of China. Even if Rwanda has been gradually facing the developmental restrictions which China did not, and given that the background for Rwandan country differs too much with China, it is worthwhile to draw important lessons from China's success story on how it escaped millions of its population from poverty.

Keywords. Poverty reduction, Strategy, Policy, Rwanda, China. **JEL.** H50, H70, I38.

1. Introduction

Towadays, China has emerged as a powerhouse for many industries and some scholars argue that China has become the World factory. In that perspective, China impress the whole African continent and it is now a pragmatic development partner; whereby may political and economic observers consider a new era and move of South-South relationship to replace the North-South relationship in the future. Persistent poverty in Africa is due to constantly failed and unpopular policies taken by the many Government of African countries, and this malaise is a common cause for chronic and extreme poverty in Africa. From this point of view, there is a lesson to learn from China on how it overturned the

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similar malaise between the years of the 1950s and 1980s when China was closely comparable to many African countries have the same socioeconomic status. The research made by Chen & Ravallion, (2007) indicated that in the 1980s two out of three Chinese were living under poverty line of \$1 a day, whereby on the other hand in Africa especially in the Sub-Saharan Africa 40% of the populace was living under poverty. The efforts of China in fighting against poverty since 1978s created a dramatic gap between Sub-Saharan Africa and China to the extent that in the 2000s in China less than one person was living under-poverty while it was the same proportion of 40% of the population in Sub-Saharan Africa who were living underneath the poverty line. The poverty reduction trend percentage was 1.9% in China while it was 0.1% in Sub-Saharan Africa. However, it is not a straight forward task to compare Sub-Saharan Africa and China and then figure out many valuable lessons for African countries because the contexts of the two parts of World are quite different.

In fact, in most Sub-Saharan Africa including Rwanda in the last thirty decades failing leadership and bad governance used to lead to political instability which usually resulted in wars. However, China was building a strong leadership and good governance that contributed to the promotion of market liberalization which facilitated the Foreign Direct Investment and innovation and creativity (Van de Walle, 2001; Posner & Young, 2007). The Sub-Saharan African countries are mostly unable to finance their economic development through public investment in Agriculture and Infrastructure developments as did China over thirty decades. In this paper, the author attempts to outline and emphasizes the impressive policy lessons that Rwanda can learn from China's success. However, it would not be a good practice for Rwanda to copy and paste any policy from China in order to eradicate poverty but it can be worthwhile to draw some lessons to support homegrown solutions in fighting against poverty.

The Economic Development and Poverty Strategy of Rwanda has to be inspired by the Chana's subsequential economic reform over last thirty decades but it is important to note that by liberalizing too much the economy would create inequality which is not a good example from China to follow. In addition to this, there some important common characteristics between Rwanda and China namely high inequality, high dependence rates because of high fertility rate, and high population density; which enable the author to easily compare Rwanda' strategy for the fighting against poverty with one of China and then draw impressive domestic policy lessons on how China initiated and implemented its strategy for poverty reduction and why it made a successive progress against poverty.

In fact, China's success in lessening poverty is factual indeed from 1981 to 2013, whereby China lifted 850 million people out of poverty, and including particular achievement of lifting a great percentage of people from extreme poverty from 88% to 1.85% in that period. Throughout this era, China fascinated the attention of many economic practitioners and social scholars and other worldwide organizations to lay out important

lessons, especially for the underdeveloping countries particularly the Sub-Saharan Africa. In this perspective, Dollar, (2008) presents a number of policies that China implemented to drop down poverty and those policies can give valuable inspiration and foundation for Sub-Saharan Africa. Heilig *et al.*, (2005) indicated that the economic reforms must be a major pillar in fight against poverty in their first stage for the under-developing countries, and in next stage, they have to focus on social scheme and regional integration and market reforms.

The reason why the World can learn from China's success in escaping from poverty is that in the eras before 1980 China was even poorer than some of the African countries and among the poorest in the worldwide. However, over the period of 35 years, China has been constantly experiencing ambitious and sounding socio-economic transformations that allowed to achieve pragmatic achievement in the economic and human development and consequently dramatic reduction in poverty. China's economy has steadily been rising at an average rate of 9.8% every year from the time when the economic reforms was introduced in 1978, the per capita income has been gradually increasing in fifty-fold over 35 years. The Human Development Index (HDI) was improved gradually from 0.423 to 0.719 respectivery in 1980 to 2013 and this has placed China on the table of honors with high human development classification at 91 out of 187 states around the World (UNDP, 2013). In addition to this, by 2013 China had already attained almost all Millennium Development Goals (MDGs) ahead of Sustainable Development Goals by 2050. This extraordinary socioeconomic development has made China the second heaviest economy in the worldwide in 2010 after the USA, and hence increasing China's global power and influence. However, stable and sustainable economic growth and extraordinary transformational achievements of China was not smooth at all because they created rough domestic disparities, especially socioeconomic development imbalances in terms of admittance to social facilities economic prospects, between regions whereby the eastern region and seaboards were heavy than the interior and far west regions, and severe disparities are observed between urban and rural populations. Within the initiation of new economic reforms in late 1978, the Chinese economy outstretched at a stable growth rate beyond 8% per capita, foremost to a histrionic upgrading in living conditions. This progress has powered historically unheard of poverty lessening: the split of populace below the poverty live in worldwide based "cost of basic needs" decreased from 60% at starting of economic reform in 1978 to 7 percent in 2007 (Sardana & Zhu, 2017).

The remaining underdeveloping countries fighting to develop and decrease poverty are indeed attracted by impressive progress in poverty reduction of China, their wandering about the sources of progress and if possible lessons which can be drawn from that success. There are numerous ingredients that have guided to China's achievement. Some of these ingredients are deep-rooted on a characteristic of Chinese culture

which put much focus on education and as well as saving practice. Others factors involved in the success change the system ("Gai Ge Kai Feng") which was about altering economy from nearly full state-owned to private management, promotion of direct foreign investment, development of infrastructure, and as well agriculture promotion and rural development (Qin, 2015). All those initiates and reforms had been positively contributed to a sharp reduction in poverty in China and some other developing countries may draw very important lessons from such practices.

However, poverty in Rwanda has changed, throughout the previous three eras. The Rwandan economic situation replicates a chronic failure to achieve production increases in the framework of a large and in the proportion of population growth. This problem of failure dated a long time as evidence from the 1980s and early 1990, topping to severe physical hitches. Additional, 1994 Tutsi genocide left a terrible legacy, further depriving the country and leaving in a horrific situation of poverty. Different poverty programs were implemented in Rwanda. The poverty evaluation in Rwanda indicate gradual achievement from 44.9 to 39.1% respectively in 2010/1 to 2013/4 (NISR, 2016), but the MDGs objectives were also achieved except the ones poverty reduction whereby the achieved was 39.1% compared to 30.2% as a target to reach. With this situation, the study raised relevant questions which are about: why has Rwanda stayed behind schedule? What might be the lesson which Rwanda could learn from China's success in poverty reduction? For sure China is a typical better case to learn from their achievements.

Nevertheless, there are motives for wisdom in printing lessons for Rwanda from greatest achievement in poverty reduction of China. The idea behind this is not to copy and paste china's particular program for achieving the same success as China. For instance from the period of 1978 was characterized by the series of economic reforms in China and has successful achieve impressive results. Also, Rwanda should not only learn from successes, likewise to the development pathway of China. In this learning process, it must be recognized that the challenges faced by Rwanda in this journey of poverty reduction, are not definitely the same as those faced China. From this perspective, since the beginning of economic reform period, the differences between China and Rwanda are quite apparent; Rwanda tends to have upper inequality, a higher rate of poverty, high dependency level, landlocked geographic location and higher populace density. Therefore, nothing of this justifies that Rwanda cannot learn from the extraord achievement of China in reducing poverty. The present study aim at understanding the extraordinary success of China averse to poverty, specifically the mechanism throughout the reforms preside over poverty lessening, to offer a historical general situation of poverty reduction strategies in Rwanda and as well to pull out some policies lessons from the achievement of China in poverty reduction.

The remaining of the paper is structured as follows, section two present briefly sympathetic china's progress averse to poverty, the third section

reviews policies and Strategies for poverty reduction in Rwanda while section four describes some policy lessons learn for Rwanda from China and final section stretches conclusion and Policicy recommendations.

2. Sympathetic China's progress averse to poverty

2.1. Overview of China's poverty alleviation programmes

The Chinese successful poverty reduction is a key learning experience in this paper where all attention will be paid to learning how China has succeeded in reducing poverty for its entire population from the 1980s. Although making a comparison between countries in the ways they implement policies and strategies for poverty reduction purpose, it is not easy due to many differences in terms of geopolitical, economic and environmental conditions, cultural settings; one country can provide very useful inputs in designing and implementing poverty reduction policies and strategies. In this section, the author looks into the path for the fighting against poverty that China embarked on in the late 1970s up to 2010 era. China has made spectacular progressive poverty reduction over the three decades and its today rapid economic growth is logically attributed to its successful poverty reduction programs.

China's poverty reduction strategies were successful thanks to large-scale and quick economic progress in the previous three decades. This success story was a reality through the continuous reform and structural changes that were facilitated by the shifting from the centralization of economic planning to the decentralization of markets and economic diversification activities increased from agriculture to manufacturing and services industries with effective technological development and know-how transfer, and opening up to the international trade. The famous china's 8-7 socio-economic development Plan aimed at lifting poor households from poverty by improving agriculture, creating and exploiting employment opportunities; providing and developing basic development infrastructures including modern housing, roads and electricity, and improving access to potable water; and along this ensuring primary education for all and improved health care services accessibility (Sangui *et al.*, 2004).

China's poverty reduction strategy program was facilitated by the continuous macroeconomic and political stability of the country. China also reformed its political and administrative system for effective and enhanced policies and decision-making processes and this administrative flexibility attracted many public-private partnerships bringing together administrative institutions, private enterprises and companies, and non-government organizations joint efforts in combating poverty in China.

In addition to this, China privileged and financed numerical and innovative startups embarking on projects and ideas towards job creation benefiting young engineers and promoting rural initiatives involving many poor households in rural areas of China. In 2001, the Chinese government

started a new poverty alleviation plan particularly on developing rural areas in terms of infrastructures and education in order to limit the massive exodus from rural areas to urban areas (Hongbing, 2001). It worthwhile to note that cornerstone of successful Chinese government lies on the efforts deployed in developing the rural areas where in the 1970s the household's income in China's rural areas was extremely very low and a majority of the Chinese population was living without access to basic assets.

- 2.2. Evolution of China's poverty reduction strategies and policies China's successful poverty reduction strategies program dated from 1978 and is classified into four phases (Sangui *et al.*, 2004):
- (i) The rural reform of 1978-1985: In the year 1978, China's economy performance was deteriorating and poverty was severely ravaging the whole country. This program was characterized by the land reform and household responsibility system (HRS) in which the Chinese government performed economic lifting to Chinese population through the equitable provision of land to millions of individual farmers with remuneration for high agriculture production with many rural industries and enterprises being created during that period. This program created a landscaped rural economic growth through rural and institutional reforms all over the country which in turn helped to boost the production of goods and services for local markets and enhancing distribution systems.

This program benefited the entire rural population by raising their income and reducing poverty. The rural reform in China since the 1980s helped to achieve good economic performance characterized by high sustainable economic growth, low inflation, and unemployment rates. Thus such new macroeconomic favorable conditions allowed for effective poverty lessening throughout that period of time.

The result from rural reform on poverty reduction was quite remarkable. The agricultural production steadily increased by an average rate of 6.5% from 1978 to 1985, while the per capita income of rural household subsequently increases at an average percentage of 15.2% for the same period. Further, an yearly sustainable progress rate of 5.7% in grain production and in rural industries' output was recorded, and subsequently a strong price increase in agricultural and farming products contributed to the increase in rural incomes at 15.2 % per year, which in turn resolved the extreme long-standing food shortage in rural areas of China. This increase in agricultural productivity and rural revenues was also justified by the significant poverty reduction from 49% to 24%, and in real terms the figure of poor people in rural settings decreased from 250 to 125 million respectiverly in 1978 to 1985 measured at the approved poverty line (Guan, 1995; World Bank, 2005).

(ii) The National Poverty Reduction and Development Programs 1986-1993: After learning from the rural reform program where poverty reduction pace was very slower and the households living standards was

lagging and the inequality was rising; the Chinese government launched a large-scale development program called The National Poverty Reduction and Development Programs with a wide range of stakeholders of government agencies with a variety of funding channels in order to coordinate a large number of poverty reduction initiatives where the government created the special funds in order to support national poverty reduction programmes including subsidized loan program, food for work (FFW) program, and budgetary poor area development funds and grants (Sangui *et al.*, 2004).

This program aimed at sustaining the agricultural growth through public investments in education and research, hard infrastructures such as roads and irrigation which later encouraged agricultural productivity and generated many job opportunities for millions of rural population in China. During the 1980s the Chinese government introduced a 9-year compulsory schooling program and the government heavily invested in agricultural research and engineering targeting poorer rural marginalized areas and groups of people, providing millions of rural farmers and laborers with jobs in irrigation projects. The national poverty reduction and development programme produced a tremendous result in poverty reduction whereby the rural poor population dropped from 125 to 80 million respectiverly in 1985 to 1993 (Sangui, 1994).

(iii) The 8-7 Poverty Reduction Plan 1994-2000: After the success of the National Poverty Reduction and Development Programs of 1986-1993 where there is a remarkable impact on poverty reduction, there were some other increasing difficulties and the diminishing pace was being noticed and required more government commitment and efforts folded to tackle the food scarcity and clothing problems for the remaining households which were still living in poverty. It is in this context that another national anti-poverty strategy known as the 8-7 Plan was launched targeting already identified and listed counties, and it aimed to assist poor rural households by improving agriculture, improving employment opportunities, providing and developing basic development infrastructures including modern housing, roads and electricity, and improving access to potable water; and along this ensuring primary education for all and improved health care services.

This poverty reduction plan showed great achievements in poverty lessening. The figure of rural poor population was reduced from 80 to 32 million respectiverly in 1993 to 2000 (Meng, 2013). The annual poverty reduction rate was 12.3% during that period of time, with 3.6% biger than the average rate of poverty lessening for the whole reform period of post-1978. The literacy rate rose to 85%, while the enrollment proportions rose to 99% and 89% respectiverly in primary and secondary education during the same period. The tremendous progress was also achieved in the health sector, whereby the life expectancy at birth increased to 70 years, infant mortality rate dropped to 3.1 %, and under-5 mortality cut down to 3.9 %,

the diseases immunization from birth stretched 98 %, with 85% of the total populace could have admittance to essential medicine (World Bank, 2001).

(iv) The New Century Rural Poverty Alleviation Plan for 2001-2010: Based on the pragmatic lessons drawn from the previous 8-7 Plan, the government of China engaged in the new Century Rural Poverty reduction Plan covering the period from 2001 up to 2010. In the early 1990s, it was obvious that a large scale poverty alleviation program was most needed as it had been revealed that the poor rural populace in China was largely still there and particularly concentrated in western regions where poor families were relatively dispersed in poor villages instead of in poor counties. This is why the new plan came in targeting poor villages rather than poor counties.

This plan emphasized mainly on science and technology, but also on culture, and health improvement. The New Century Rural Poverty Alleviation Plan sought to sort out the disparities observed between the urban and rural areas all over China with the intention to limit the mass rural-urban migration. This new century plan was facilitated by the regional integration and globalization which has created global networks, and which allow China to boost the foreign direct investments (FDI) and fuel into heavy industrialization revolution and new technologies and management skills. This program has been characterized by a huge amount of exports, building big cities, stimulated high tech innovations so as to conquer world markets (Yansui et al., 2017).

The strong overall result of this programme was mainly the decrease from 32 million in 2000 of the rural poor population to 15 million in 2007. This tremendous achievement in the rural poverty reduction and development programs during this period was largely enabled by the capacity development of local communities especially in terms of agricultural technology training, and a wide range of investments in infrastructure including roads and irrigation projects, construction of schools and health clinics (LGPRD, 2001).

(v) Precision Poverty Reduction Strategy (2011–2020): The Chinese authorities have introduced the new Poverty Reduction Plan covering the period from 2011 to 2020. The main objectives of this new poverty reduction programme were, first of all, to eradicate poverty by 2020. Another mission was to narrow the existing regional disparities. Within this development strategic framework, the government of China surveyed 14 poor regions with special difficulties, 832 poor counties, and 128,000 poor villages to receive government grants and assistance. To effectively implement this programme, the Chinese government formulated another five-year poverty reduction plan in 2016 with the main focus on the main thematic areas including the assistance to the poor households through agricultural and industrial development opportunities inclusiveness, providing better housing conditions by relocating people living in rural remote or naturally bad climate conditions areas. The government of China budgeted an envelope of 600 billion Yuan to finance the relocation

programme. The subsidies were extended to households with low income, to poor households to ensure their education (Liu, 2017). The education strengthening measures include developing preschool education in poor villages, providing free lunch for all primary and middle school students in poor counties, and providing free high school and technical and vocational school education and living allowances for students from designated poor families. The poor households were provided with assistance in terms of social security in order to help them have access to basic health services.

For effective implementation of this poverty reduction programme, the partnerships between local governments and development partners and other stakeholders including financial institutions, rural enterprises, and cooperatives to participate in that poverty reduction programme. This programme has also recorded tremendous results for the sake of fully eliminating poverty by 2020. In this perspective, the results showed that the rural poor population has been reduced from 166 million in 2010 to 43 million in 2016 with an annual poverty reduction rate of 20% (UNDP, 2016).

In concluding this section, it is important to say that nowadays, all developing countries can learn from the Chinese experience and China is becoming a development model for many developing countries. The key in the Chinese successful poverty reduction resides in the full political commitment where the Chinese government has been proceeding for building strong state institutions accompanied by the decentralization of its administrative system and economic powers to the local governments and hence enabling its citizen got empowered and able to participate in the decision processes and empowerment. China succeeded in poverty reduction because it opted for the transition from an agricultural to an industrial and service-oriented economy. China consistently reduced poverty to millions of its population by promoting and accompanying entrepreneurial initiatives and adjusting its market mechanisms.

Recently, after evaluation in 2015 found that around 55 million population still live below the poverty line and most of them live in rural and detach areas in the country. Addressing this challenge, in the 13the five Year Plan 2016- 2020 poverty reduction program was taken among the priority with the purpose of raising all population remain in poverty by 2020 (UNDP, 2016).

China's spectacular development and advance during the past three decades reflect the openness of its economy and society to the international trade which has made one of the greatest export powers of the world. China's exports are fuelled by the vast inflows of foreign direct investments from all over the world, which have made China be the great hub of modern industries and factories with advanced technology. Now China is a global power of science and technology, and many Chinese workers who are proficient in all categories of skills are scattered across the world to conquer every single market through their highly competitive enterprises.

2.3. Sympathetic China's poverty reduction policies and strategies According to Wu & Cheng, (2010), the policies and strategies for poverty lessening can be viewed in three main constituents such as pro-poor economic progress strategies, a rural social security, and development-targeted on poverty lessening policies and programmes. This section is going to analyze the main poverty lessening strategies, policies, and programmes in rural areas of China so as to draw key lessons for Rwanda

2.3.1. Rural reforms and poverty reduction

In the late 1970s, China initiated its economic reforms which led to the decentralization of its economy to make it market-oriented and controlled based on the openness to the international trade and cooperation. In the rural areas of China, there are still some remarkable signs of extreme poverty and high inequality. Despite its pragmatic economic development, China remains one of the developing countries because the living standards are still low as it is still the case for Rwanda. Despite strong rural reforms in the late 1970s, the disparities between China's urban and rural settings are worrying today. Largely, China's success touching poverty is based on development of urban areas, industrial development and exports promotion which hugely fulled by Foreign Direct Investments (FDI) but the fight against poverty is ongoing in rural settings. The rural reforms reside in economic reforms which are materialized by the fact that rural poverty was spectacularly reduced to 30.46 million people by the end of 2017 with the poverty incidence decreased to 3.1% (Montalvoa & Ravallion, 2009; David, 2007). In the years of 1980s and 1990s, China introduced the land privatization policy which in turn resulted in dramatic poverty reduction.

China's rural development has activated the booming creation of small and medium enterprises since the 1980s. This rural industrialization created real non-farm employment opportunities for the rural Chinese population (Zhang et al., 2015). In the early 2000s, it was estimated that about a half of employment opportunities apart from farming jobs were found in rural enterprises. The rural enterprises contributed to the improvement of lives of people living in rural settings and hence to the rapid and sustainable development (Zhang, 2003). The gross production of rural enterprises which was about a 10% share of China's GDP in 1985, increased gradually to be more than 30% in the 2010s. This is the undoubtfully the proof that the development of rural enterprises has contributed effectively to reducing income inequalities and hence poverty.

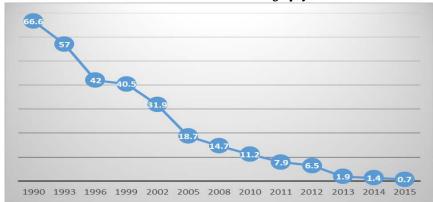


Figure 1. Poverty reduction in China between 1990-2015 based on international poverty line(1.90\$ US per day)(% of population)

Source: Computed from World Bank, (2018)

2.3.2. Industrial development and poverty reduction

Economic development is a strong pillar for rural development whereby enabling productivity and employment. In this economic transformational process, there is a notable transition from farm jobs to non-farm jobs such as industry and services jobs and furthermore, this process enables the towns and cities on the national wide level. The industrial development process in China started from about two centuries and has been a continuous process through which firms gradually developed more manufacturing techniques and capabilities thanks to the cross-national technology transfer from Russia and many European countries which allowed the accumulation of knowledge and factory level production techniques. In the 1970s, the manufacturing industry in China rose gradually to cover the entire range of industrial activity through the wide range of product mix, including highly sophisticated operations involving petroleum refining, ships building, car manufacturing, military equipment, nuclear weapons, and earth satellites.

A sophisticated and successful industrial reform in China which began in late 1978 demonstrated great achievements impacting all economic spheres starting from rural industry including mining and construction as well as manufacturing whereby about 20 million jobs were created within three decades on in (Thirty Years, 2008). The development of industry in China recorded great performance since 1952 whereby industrial production was averaging an yearly growth percentage of more than 11% per annum between 1952 and 1978, while employment rate was increasing at an increasing rate of nearly tenfold, just to say specifically from 5.3 million jobs in 1952 to 53.3 million jobs in 1978. However, within such period of time, the industrial revolution and structural change accelerated the pace of shift in the structure of the industry, from traditional and dominant consumer manufacturing products toward intermediate and producer products. Hence the new and modern industries especially for the manufacturing of heavy machines, telecommunications, and power

generating emerged accounting from only 6.2 % of industrial output in 1952 to 25.7 % in 1978 (Brandt *et al.*, 2016).

The openness of China to the international trade and the liberalization of the domestic market enabled such industrialization to be effective. In industry, the industrial reforms which systematically began in the early 1980s whereby within the framework of the programme called Township and Village Enterprises (TVEs) allowed the expansion of collective rural industrial firms. This industrial development programme produced remarkable results in developing the whole manufacturing sector in China with the labor-intensive production of consumer goods, development of sophisticated factories for textiles, garments and food processing (Xiaolan & Balasubramanyam, 2003). The industrial development and expansion of industrial firms in rural areas of China have been the major pillar of the successful economic reform process and this was facilitated by the macroeconomic decisions made by the Chinese government to make state-owned enterprises (SOEs) more autonomous.

The industrial reform in China usually was done in three development phases whereby the first phase was about the move from agricultural communes to household farms. Around 1980, the mandatory target framework of output planning and administrative allocation of inputs and products were designed for the purpose of improving the performance of enterprises within the domestic markets. Within this framework, stateowned enterprises obtained the upright to keep a modest portion of total profits and unparalleled inspection over any output above the required plan goals. In this regard, a number of efforts were undertaken such as decentralized and semi-market transactions, long tolerated grey market, was also encouraged as a means of encouraging firms to preside over their doings more actively and effectively. However, concerning the external markets, a new "open door policy" dismantling long-standing barricades to global trade and investment endorsed by special motivations to increase overseas economic contacts, especially in the Southern region. The seconds' phase constituted the expansion of Township and Village Enterprises (TVEs), whereby in early of 1984, the new reform policy focused on two novelties such as dual pricing and the enterprise contract responsibility system. Dual pricing segregated supplies of industries production into plan and market components.

In this system, the state-owned enterprises (SOEs) performed marginal auctions and acquisitions on marketplaces where prices replied gradually to the powers of supply and demand in order to ensure long-term economic stability. And at the similar time, bank credits in substitute budgetary assumptions became the reliable source of outward funding for industrial enterprises, hence stimulating the emergence of start-ups. and the third phase constituted the restructuring and privatization of individual state-owned enterprises (SOEs) whereby the contract accountability system was introduced and then the enterprises were allowed to set performance targets with their employees for total profit and

economic surpluses. With the reorganization and restructuring of State-Owned Entreprises (SOEs), the new management system allowed the flexibility in different performance management domains including research and development, product innovation, investment planning, marketing, supply chain management, wage and employment structures (Brandt & Thun, 2016; Hu & Jefferson, 2008; Naughton, 2015).

Consequently to these industrial development policies and strategies, a big amount of domestic private firms were created and due to the open door policy of the Chinese government, many foreign private firms were also attracted by the establishment of special economic zones (SEZs) which helped very much in making easy foreign direct investment, and hence introducing duty free policy for materials destinated to the manufacturing of goods exclusively for exports. Therefore, following that robust industrial development and reform processes which reshuffled the free trade and factory expansion, it was a starting point for the development of commodity and many other important sectors to the Chinese economy, especially the craft sectors. In this perspective, the Chinese acquired numerous intermediate technology and engineering and chemical skills from Japanese particularly in expanding small-scale textiles factories in producing cotton goods foodstuffs in northern China (Rawski, 1980, 1989; Grove, 2006; Ma, 2008). However, the emerging of private firms in China in the early 1980s was the overall results of creation of technical schools specializing in textile engineering, and engineering profession overhaul, and importantly the creation of local chambers of commerce whose role was to facilitate the dissemination and sharing of-technologies and knowhow start-ups (Morgan, 2003; Haggard, & Huang, 2008; Schott, 2008; Mandel, 2013).

However, the most vital effect of these reforms was a change from planning economy to the market economy. Researches conducted by several scholars between the period from 1980 to 1989 indicated that the magnitude of market transactions done by the state-owned enterprises (SOEs) changed gradually; whereby the portion of material inputs bought via the marketplace increased from 32 to 59 % (Yingyi & Jinglian, 2000), or from 12 to 66 % (Jefferson & Rawski, 1994). The similar surveys indicate the portion of output sold on the marketplace increased from 49 to 60% (Furen, 1991), or from 13 to 66 % (Jefferson & Rawski, 1994). In addition to this, during the 1980s the enterprise funds and bank loans became the main source of external sources of finance for enterprises in replacement of state budgetary grants. This industrial reform enhanced the enterprises' autonomy, created fair market completion among enterprises, and finally, the allowed the entrepreneurial incentive mechanism system within enterprises (Yingyi & Jinglian, 2000; Fan & Woo, 1993).

2.3.3. Economic Growth and Poverty Reduction

Economic growth is more important tool for lessning poverty and upgrading the human conditions of living in all developing countries and maintaining a better standard of living in developed countries. Actually,

economic growth brings prosperity and creates more employment opportunities, makes structural adjustments possible and effective and deepen other associated reforms. All emerging economies in this new and modern world are relying on high, stable and maintainable economic progress which truly facilitates the development of minor and middle enterprises which in turn contribute in increasing government revenue, preventing financial risks and maintaining financial stability. Economic growth needs to be supported by political stability, favorable business environment, strong leadership, and good governance. Economic progress, thus, contributes to human development, which in turn stimulates economic progress as well. In the late 1970s, the progress rate of GDP averaged about 9 % per year during the past three spans (Montalvo & Ravallion, 2009).

Many scholars especially Shaohua & Ravallion, (2004) and Zhang & Long, (2005) indicated that there is a positive correlation between economic progress and poverty lessening.

Therefore, any successful strategy for poverty reduction must start with promoting rapid, stable and sustained economic growth. The policies and strategies for poverty reduction must be fully pro-poor that permit the poor people to involve in the opportunities generated by that growth. This may be achieved by thinking and drafting policies which can improve labor markets functionalities, ensuring women empowerment and fully eradicating gender inequalities in the decision-making process and furthermore increase financial inclusion for lightening entrepreneurship; but however, the major determinants of economic progress in any country consist of improved leadership and governance (Lin, 2003).

Rodrik, (2013), ascertained that economic growth is the best tool for poverty eradication because it contributes too much to uproot transformation of any society and help to provide the better life. Development researchers around the world and especially around a wide range of developing countries over the past five decades constantly indicated that rapid and sustainable economic growth has been the most effective economic instrument to make many people escape from poverty; and in this way China is a typical example as it has lifted over 500 million people from poverty to wealth creation since 1979 due to its extraordinary and rapid, stable and sustainable economic growth between 1985 and 2001. To achieve stable and sustainable economic growth is not an easy task. China implemented the market-oriented economic reform; in early 1978, China started the economic transformation beginning with the rural reforms (Riskin, 1987; Cheremukhin *et al.*, 2015).

Subsequently to the inceptive rural reforms, the country economy gained abundant food supply escaping many people from hunger. This rural reform served as the motivating factor for others reforms that were subsequently designed and implemented such as opening up the economy to the domestic private companies (Li, 1991; Jabbour & Dantas, 2017), in the next stage, reforms also took place in the banking and financial sector

whereby the introduction of a new system which incorporated a national bank, commercial banks, financial companies and as well capital stock market (World Bank, 1995).

Fiscal, social, and environmental policies are the pillar of China's Sustainability of progress and development. Fiscal sustainability refers to the government expenditures which affect income distribution and hence reducing inequalities; Social sustainability refers to the social relationships, interactions, and cohesion for providing the public goods to the human societies. This creates a supporting cycle leveraging economic progress and hence improving human capabilities and social welfare, Environmental sustainability consists of managing natural resources resulting in the reduction of ecosystem degradation, pollution, the risks of climate (Saavedra-chanduvi et al., 2013). Growth policies like investment in human capital and job creation that only foster greater labor utilization could reduce poverty while the one that seeks to boost technological development, tends to favor highly skilled workers and can harm the poor people and lower skilled workers. Growth policies have to increase the flexibility of the labor market's needs.

The features of China's economic reform have been qualified as pragmatic, with reference to the famous statement of Deng Xiaoping: "crossing the river by feeling the stone" (Zhu, Ying, & Warner, 2002). Therefore, the progress of economic reform was divided into the following five phases (Zhu & Warner, 2017).

The first phase of economic reform in 1978-1984 which involved the control of the planning system throughout the strong market regulations, complementary to the scheduled economy (Dorn, 2016). The conceptual quarrel for this policy was focused on Deng Xiaoping's well-known novel philosophies which state that "socialism could have market economic elements and capitalism could have planning elements" and "a good cat is the one which can catch a mouse regardless its color."

The second phase was implemented in 1984-1992 and involved the novel thought of a scheduled market economy to accurately match the standard philosophy of the social economy. In this perspective of achieving rapid and sustainable economic reform, the socialist economy is attached to the rule of value that makes economic operators independent in terms of decision making on the production, marketing, and pricing system.

The third phase which started from 1992-2001 was characterized with the new political struggle of shifting from planned economy to a market economy with the purpose of "establishing a socialistic market economic system". In this system, the same of major policies were the support of the private sectors such as local private enterprises and overseas-owned enterprises.

The fourth phase was implemented in 2002-2013 which was characterized by an important phase in the development of an upgraded socialistic market economic system, gifted of the substantial upheaval taking place over time, comprising world financial crisis in 2008.

The fifth phase started from 2013 up today has been designated as reconcentrating on political regulation whereas more developing market economy which is more regulated and institutionalized, within the "rule of law", and the global economic cooperation under the governance of CCP (Sardana & Zhu, 2017). This form of the economy makes more prominence of sustainable economic growth and social integration and creation of enlarged global economic ties. The objectives of more reform in economics is to achieve the so-called "China Dream." Kuhn, (2011), indicated that Chinese Dream focused on strong China (in the economy, politics, diplomacy, technology, and military), Civilized China (equity and fairness, strong culture), Harmonious China and Beautiful China (Health friendly environment and low pollution).

Therefore, with this economic reform and other development innovations over 35 years have been contributed to the economic progress whereby number of the population in china get out below the poverty line, good economic, developed infrastructure and friendly environments of Investments, well-educated and fresher generation of labor force, upgraded technology and FDI, new investment for Chinese companies abroad

(Zhu et al., 2010; Zhu & Warner, 2017). Economic growth has allowed creating many jobs in China especially since the 1990s, enabled the transformation of Chinese society by ensuring the right income distribution, and the rapid economic growth driven by successful economic reforms in China has resulted in a miraculous reduction of poverty.

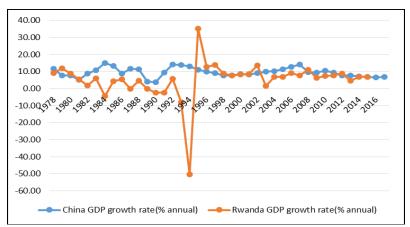


Figure 2. GDP Growth Rate since the reform of 1978 of China and Rwandan situation **Source:** Computed from World Bank, (2018)

2.3.4. Agricultural growth and poverty reduction

The increase in agricultural production has been China's major accomplishments over four decades in the fight against poverty. The achievement of the rural reforms obviously constituted a solid basis for the entire national economic reform and thus the dramatic decrease of poverty. In late 1978, the "household responsibility system was introduced which subsequently made the agricultural output increased rapidly and thus making the rural farmers become richer and wealthier. The agricultural

reform was successful and served as the catalyzer of many interesting reforms in other related economic sectors not only by ensuring the food security for rural Chinese population but also by upgrading the ideological and thinking culture towards a market-oriented economy (Rozelle *et al.*, 1998).

The shift from the common agricultural production to the household responsibility system (HRS) or individual farming allowing the liberalization of China's agricultural economy was the starting point for economic diversification in China. As a result, amid 1978 and 1984, agricultural GDP augmented by 7.1% per year, an era when rural poverty populace cut down the fastest. In fact, the agricultural progress also perform a major role in enabling and strengthening the adjusting transformation of the entire economic system. The agricultural progress is arguably the most successful and the right instrument for rural development for developing countries and for a better transition from farming activities to non-farming activities including manufacturing and service activities when it is supplemented by other more quick growth of the non-agricultural sectors.

This is a reality as the acceleration of agricultural development has been facilitating the increase of per capita income and hence the purchasing power and supporting the industrial development through the provision of cheap food and creating so many employment opportunities and enabling the massive consumption of industrial goods as well as. Therefore, the agricultural growth when accompanied by other right structural adjustment and economic drivers and institution reform can constitute a key driver in the overall growth process (Mellor, 2017).

In the early 2000s, China deepened and reinforced its poverty reduction strategies to make them more decentralized at the community level in order to lift a mass of Chinese population from poverty. In this perspective, by the end of 2001, around 21% of entirely rural villages, which had been formally selected as very poor, were pick out in such pro-poor growth policies by providing quality and market-oriented education, technical and vocational training, agricultural subsidized loans, and agricultural tax exemptions, market-based incentives, all of these in the framework of Grain for Green Program; Food for Work Program; Pro-farmers policies and Welfare programmes such as social security expanded to rural poor people (Montalvo & Ravallion, 2010).

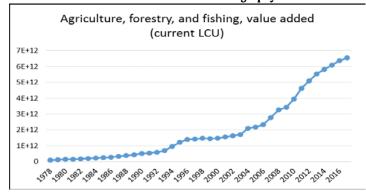


Figure 3. *China' Agriculture, forestry, and fishing, value added (current LCU)* **Source:** Computed from World Bank, (2018)

2.3.5. Openness to international trade and investment careers

Major world economies had grown stable and sustainable based on successfully integrating into global markets, notable integration into global financial capital and multilateralism which are pillars of globalization. The openness to the international markets allows to accelerate growth, facilitates technology transfer, increases competition and benefits both producers and end consumers (Tarr & Volchkova, 2010). Over 35 years, China benefited from the opening of its economy to the global markets in terms of smoothing the population living conditions, lowering financial and market risks, and attracting many worldwide enterprises and companies and technology transfer from the developed world was a major target, especially from western countries. In the late of 1978, the share of the total trade balance in China's national income amounted to only 7 %.

The open-door policy to international trade stimulated the opening of China to overseas trade and hence increase the foreign imports and the boosts exports as well and hence the foreign direct investments in the country by create many special economic zones whereby foreign investors can easily start factories and get advantages of the cheap and skillful Chinese labor. In 1987, the capacity of foreign trade augmented by 25 % and in 1998 it increased to 37 % of China's gross domestic product (GDP). A numeral of administrative reforms were hosted in foreign trade institutions in the wake of developing world-class seaports. In this perspective, the regions were given more specific autonomy to administer their economy and promote their exports independently. Within this framework, the decentralization of trading activities was deepened for the purpose of facilitating and increasing exports, and trading enterprises were created in connection with industrial and manufacturing companies.

China has tremendously benefited a lot from the opening its economy to the global markets in late 1978, both China's exports exploded by more than 7800% and imports increased by more than 5600% in over the last 35 years increasing. The progress in China's trade balance has faraway overtaken the development in global trade balance in the recent era. As the outcome of this China's growth, the Chinese economy is nowadays the second biggest in terms of international trading and industrial production

after the United States of America (USA). In order to be effective, the open door policy was eventually supported by the stable macroeconomic system because normally all investors expect to get the positive return with minimum risk from their investments. However, the higher the risk is usually associated with the higher return and economic value added of investments. In this perspective, a stable macroeconomic environment with low inflation and financial stability is vital to decrease the risks linked with investments and it is a precondition for reducing poverty and inequality. For this, strong fiscal and monetary policy instruments perform an significant role in financing and enhancing public investments (Heilig et al., 2005). In fact, trade liberalization made China one of the more open economies in the global whereby the fraction of overall exports and imports in GDP augmented from 11 to 64 % (NSBC, 2006). Since China opened the door to the international trade, the trade share has been snowballing from under 10 % before the reform period to 22.9 % in 1985, and from 38.7 % in 1995 to 63.9% in 2005. Further, China become a major world markets player since it joined the World Trade Organization (WTO) in 2001 attracting so many foreign direct investment (FDIs), and its annual inflows were averaging \$70 billion between 2004 and 2006, while boosting outflows of its direct abroad investments at around \$16.1 billion in 2006 (Chen et al., 2011; WTO, 2008; UNCTAD, 2007).

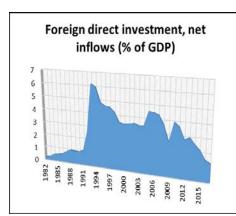


Figure 4. *China's FDIs, net inflows*

Figure 5. China 's Situation of Export and Import

Source: Computed from World Bank, (2018)

2.3.6. Social welfare system

The social welfare system includes health care system and social security scheme. In the early 1980s, the Chinese government dissolved the commune health care system, and now the health care system is financed by the local governments for local population, while for the urban population, the healthcare services are provided into different insurance schemes such as Government Insurance Scheme (GIS) and Labor Insurance Scheme (LIS). The GIS is supported by the country budget and covers government workers, pensioners, disabled veterans, university educators, and students. The social security was eventually reformed following the

reform of state-owned enterprises, in which the new system was initiated and hence an unemployment compensation and retirement support were provided whereby employees and firms including private enterprises were encouraged to jointly contribute to a fund that was established for the purpose of healthcare expenditures financing (Mark & Laiyin, 1997).

In fact, the Chinese social welfare policies were not much of success as was economic reforms. In Chinese rural areas, the basic health and elementary education were the most two fields which were lagging behind other development fields, while in urban areas the population was provided with many social benefits and human services including elementary schooling, health care, accommodation, and recreation facilities (Hong & Kongshøj, 2014). Since the 2000s, the Chinese government embarked on the lifting of the living standard of the Chinese population.

The social development in China was supported by the emergence market-oriented economy and liberalization of labor markets which in turn helped to increase the freedom of choices for individuals among different socio-economic spheres such types of employment, workplace, consumption, business creation, etc. (Guan, 2000; Mai & Mingliang, 2008; World Bank, 2008).

In fact, in order to speed up the improvement in social and welfare system, The Chinese government opted for three major aspects of social policies. The first category of policies undertaken was the ones that were designed to influence and redistribute the factor income which subsequently makes growth more effective and intensive to gain rapid and sustainable growth. In this regard, the Chinese government invested more capital in making labor markets more flexible and dynamic by focusing more on human capital assets aspect than it was previously focused on physical assets. This idea of making social change a new strong priority helped to overturn the unemployment and underemployment status in China over the last 25 years. This policy of public investment in infrastructure that intended to boost productivity particularly in very low income and poor regions produced empirical results including improved nutrition, better sanitation, assuring basic education for all, and provision of basic health services for all population living in rural and impoverished regions (Jalan & Ravallion, 2002; Lin, 2004; Shenggen et al.,2002).

In post momentum of factor income redistribution policy, the chines government introduced another programme regarding the income transfers and mandatory insurance scheme and such programme was financed by social contributions collected or funded by the government. Under this programme, the major outcomes were the smoothing income and social insurance, providing assistance to most vulnerable and deprived individuals, and hence reducing chronic poverty. The insurance system in China comprising mandatory pension, employment, and health insurances were covering about 80% of the Chinese population in the 2000s (Song et al., 2015; Yaohui & Jianguo, 2014).

Another major pillar of this social development was the provision of human services to the Chinese citizens by the government or Non-Government Organizations (NGOs), and to the employees by both public and private enterprises. For this perspective, the government committed a extensive range of financial transfers to poor local government administrative entities; the typical example of this government commitment is demonstrated by the decision taken at the 11th Congress of the ruling Communist Party in early 2006 whereby the Chinese government committed itself to increase the efforts to boost the provision of human services particularly in rural areas (Lindbeck, 2006; Luo *et al.*, 2007).

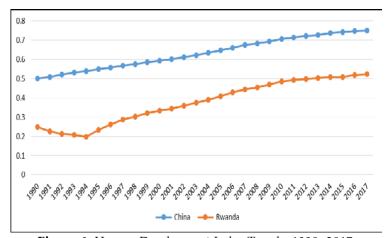


Figure 6. Human Development Index Trends, 1990-2017 **Source:** Computed from United Nations Development Programme (UNDP), (2018)

2.3.7. Pricing system

For the sake of market liberalization, the Chinese government opted for perfectly competitive markets whereby consumers can afford cheap goods than under controlled markets. The Chinese government then created independent and competent utilities regulatory body for markets regulation in order to ensure equity and transparency. It is the pricing system which smoothened such regulation in order to ensure low prices are determined by market prices. The Chinese government was aware that the prices of basic consumer goods must be quite low for the improved welfare of consumers who were, in turn, subsided in order to maintain such equilibrium. In order to allow the shift from the planning system to a market system, the government of China opted to introduce a dual price system in the early 1980s (Lin, 2004) whereby the prices determination for the same set of goods was articulated by the planning system on one hand and by the market forces on the other hand. Within this pricing framework, the owned state enterprises (SOEs) were allowed to purchase the given quantities of inputs and sell given quantities of outputs at the prior set prices. Additionally to this, every enterprise can acquisition extra quantities of inputs and sell additional quantities of productivities at prices that were specified by the market forces.

Furthermore, the dual pricing system was also transacted in the construction of urban apartments which were supplied at extremely lower prices. The dual price system was so far more reinforced and extended to the transactions of both public, private and even external companies which were permitted to build houses and apartments and sell them at relatively affordable market prices. During that period of time, in urban areas companies and enterprises were obliged to provide their workers with apartments at relatively low market prices with the possibility to increase depending on the increase in salaries and wages. The dual price system was an economically efficient instrument in providing incentives and subsidies for enterprises which consequently increase their profit by economizing on costs of inputs and by the way increasing return on the outputs (Bennett *et al.*, 2008).

2.3.8. Development of transportation infrastructures

Over the last 35 years, the government of China has heavily devoted and public infrastructures especially the modernized transportation infrastructure which consisted of many highways and railways; and this has contributed to the Chinese economic growth from late 1978 up to date with the facilitation of admittance to markets, allowing domestic market connections, lowering costs of production and transportation, and upgrading China's profile and increasing its competitive advantage. Besides contributing to economic growth, the investment in transportation infrastructures was a key to poverty reduction by providing access to services and economic opportunities. The Chinese government investment in transportation infrastructure was mainly funded by the government thanks to the Food for Work Programme which facilitated the construction of a larger number of transportation infrastructure in poor areas and hence creating many job opportunity for poor populations, particularly in rural areas. Usually, the food for work programme allowed to provide free food, cotton, and industrial products for highways workers, and such investment was part of vast and ambitious national poverty reduction programs constantly undertaken since the years of the 1990s particularly in what was called the Roads Improvement for Poverty Alleviation (RIPA) program, which is the development of rural highways (Zhou & Szyliowicz, 2006; Brandta *et al.*, 2016).

The development of transportation infrastructure in China was facilitated by various poverty reduction policies and economic reforms that occurred since 1978 and the institutional reforms including the fiscal decentralization that took place in the 1990s, during that period of time, Chinese economy was opened to the global market and was thus required to have a wide range of modern and sophisticated transportation infrastructure in order to attract many foreign direct investments (FDIs). As a response to this, the Chinese government invested more money in the building of new and improving existing transportation infrastructure whereby the total investment was accounting 609.11 billion of Yuan in 2008

which in fact was 76 times the size of the same investment in the year of 1978 (Fan & Chan-kang, 2005).

In this development agenda, almost all areas in China can account highways, which claimed to be most accessible means of transport than any other transport means and thus contributed a lot in economic progress and poverty lessening in rural settings. During the period of 1994 to 2000, the Chinese government accelerated the construction of infrastructure for further highway networks in order to respond to the huge booming economy and large growing necessity of mobility thus 42,000 kilometers of new highways were constructed every year in rural areas. In the late 2002s, the extent of highways coverage was 1.065 million kilometers which means they were 244,000 kilometers more than in 1995 (Xueliang, 2008; Bayane & Yanjun, 2017).

2.3.9. Improved economic and social infrastructure

The Chinese industrial development accelerated the pace and requirement of technological innovation and changes in economic and social structures. Technological innovations are not only for hard structures but also for a Soft structure which comprise of for instance the legal framework, financial institutions, good governance and the schooling systems (Chow, 2004; Lin, 2011, 2013).

In China, the technological innovation has been the basis for rapid and sustainable growth for many years ago (Lin, 1995; Landes, 1998). Investment in education and skills is most imperative than even investment in physical assets such as machinery and plants because quality education usually produces strong and sustainable human capital which actually consists of people with required capabilities to absorb technological skills and innovations, necessary factors in delivering rapid, stable and sustainable economic growth. Investment in human capital directly leads to the improvement of human development index as well as driving progress. As an outcome of the investment in improving the education system, the illiteracy percentage decreased from 22.9 to 6.7 % respectiverly in 1982 to 2000. The percentage of the Chinese populace who had secondary education or higher education upsurge from 0.6 to 2.9 % respectiverly in 1982 to 2000; and the proportion of secondary students at schools augmented from 8.9 to 46.0 % respectiverly in 1978 to 2000 (NBSC, 2003). In order to stimulate economic growth, diversified labor skills are required, including engineering, technical and vocational, machine intelligence, for the Creation of non-farming opportunities and this programme can be achieved through the training for youth (Lin, 2012).

Since 1978, China has created a favorable business environment which in turn has been usually a key to attracting foreign investors who want to safeguard that the returns of their investment will be positive. In this perspective, strong and good governance was the ultimate guarantee of political stability, a corrupt free system, and a low level which are also the key drivers to the prosperous investment. However, over 35 years China has constantly reformed its leadership and administration system by

softening legal enforcement of contracts, enterprises creation and compliance with regulations in order to ensure high business profitability. The protection of human rights has been at the heart of China's legal reform and the introduction of the rule of law; in this regard China signed many international related human rights conventions, and in early 1992 when the economic reform was being deepened with very good functioning, it was argued that many important laws were needed in order to go by the that deepening of economic reforms, and for that perspective, many private, public and social laws were drafted or revised and passed. More than 300 laws related decisions based on the Chinese constitution were voted, 700 administrative regulations were adopted by the state council, and 6,000 local regulations were also adopted by local legislative bodies (Yu et al., 2013).

In addition to this, enhanced institutional capacity for protecting property rights contributed a lot to the increase of productivity and ultimately growth. The Chinese government needed to collaborate and deal with the global business community, particularly foreign investors through its open door policy, and in this perspective, a large number of laws were drafted and legislated for the functioning of the market economy. China had subsequently made an impressive effort to modernize the Chinese legal System and made it independent of all kinds of political influence.

2.3.10. Development of private sector and economic transformation

The creation of enabling business environment has fostered the development of enterprises and hence facilitating the economic transformation of China in the last three decades. In order to strengthen its private sector, China set up the improved leadership and vision to become a middle-income country, and this has been supported by the continuous learning from western world experiments and innovation in order to build a stable and sustainable economic growth.

China's pragmatic reforms since the 1980s have been providing strong incentives and motivation for enterprise creation and retaining and attracting back the talented Chinese people. The private sector development strategy in China resulted in creating a lot of employment opportunities pulling million of Chinese people from poverty for over three decades. In China, the progress of the private sector which is at the heart of economic transformation went hand in hand with the change from a centrally controlled economy to the liberal economy, and agricultural reform. In this perspective of the private sector and enterprise developments, China set up policies targeting towns and village enterprise creation (TVEs), special economic zones, widespread privatization of stateowned enterprises. The progress of the private sector is a long process which involves the creation of human and institutional capital needed for managing enterprises for industrialization purpose.

However, the private sector development expanded and penetrated the industries for which during the prior reform, they were characterized by the state dominance and ownership including finance and banking,

telecommunications, steel, petroleum, tobacco, etc, to the extent that in 2003 such penetration was accounting around 59.2 % of China's gross domestic product (GDP) (OECD, 2005). In fact, the development of private sector triggered the overhaul of the whole economic system turning from poverty to growth and prosperity, from villages to cities, from planning or controlled to market liberalization, from state ownership and dominance toward private ownership and decentralization, and from isolation to global integration. The emergence of the private sector and such economic transformation allowed for an increase in output per capita and thus lifting more than 500 million from poverty; the data show that absolute poor villages level declined from 40.65% in 1980 to 10.55% in 1990 and 4.75% in 2001 (Chen & Ravallion, 2004).

2.3.11. Changes in income inequality

A serious consequence of economic progress is the deepening gap between the rich and the poor. The increase in inequality 7% per decade since the 2000s made China one of the uppermost inequality country in the global with a Gini index of 50 %. Another serious difficult is that the success against poverty has stayed geographically uneven over the decades, where the coastal settings persisted better than inland settings, hence leading to regional inequality (Sachs, 2005). The causes of income inequality in China from came gaps from disparities between rural and urban areas, a wide and complex informal sector, disparities in admittance to education and discrimination for employment opportunities specifically for rural migrants (Herd, 2010). Changing inequalities among the population is new agenda for eradicating poverty in China by 2030 through the revising a inclusive social security system elementary medical insurance, joblessness insurance, and sustenance security for urban residents (Xie & Zhou, 2014).

According to Sicular *et al.*, (2017), China made remarkable progress in lessening income inequality since 2008. However, Since the late 1970s, China has experienced impressive changes transforming its economic structures, institutions and social settings, and employment status. Therefore, over the past 35 years, China recorded the most rapid and sustainable economic growth rate in the world, but however, China's economic growth was unevenly performed which made China the country with the uppermost income inequality in the global. This can show by the fact that while the annual GDP growth rate was near to an average of 10 % amid 1985 and 2014, the Gini coefficient of income delivery augmented from 0.38 to 0.471 for the same period.

However, in recent few years, the Chinese government has been much more concerned to tackle this uneven income and wealth distribution issue, and thanks to the efforts being invested deep transforming Chinese economy, there was a significant declining trend in income inequality since 2008, whereby Between the period of 2008 and 2014, the Gini coefficient decreased by 2.3 % Sicular *et al.*, (2017). Further, the statistics from the two CHIP surveys of 2007 and 2013 also confirmed that income and wealth

inequality declined by 3 % in the same period of time mainly owing to the decrease income gap amid urban and rural families (Li & Sicular, 2014).



Figure 7. *Income inequality, Gini coefficient for China and Rwanda,* 1990-2017 **Source:** Computed from World Bank, (2018)

3. Policies and strategies for poverty reduction in Rwanda

Over the last two decades, Rwanda has undergone a various economic transformation with private led development and building a knowledge-based economy. Since 2008, Rwanda's economy has been growing at an average rate of 7%. Apart from such growth and economic transformation, a number of constraints including inadequate financial services, poor quality of infrastructure and education, weak private sector, unemployment and deficit trade balance weighted against the successful economic growth. These constraints were the roots of poverty in Rwanda and any policy to fight poverty should target those highlighted areas.

3.1. Historical context of poverty in Rwanda

Poverty in Rwanda dates several decades and is caused by a number of interrelated factors such land, demography, environmental deterioration, geographic location, bad governance as well as little and restricted sources of progress. The socio-economic problems that Rwanda faces today are mainly structural and inherent in the 1994 genocide against Tutsi. It is therefore significant to investigate the case of Rwanda as special which needs special agenda for keep on short-term involvements to deal with emergency wants and long-term viewpoint regarding the sustainable development goals (SDGs).

The poverty incidence in Rwanda is depth with very low agricultural yield, starvation and cyclical droughts, low human resource development; very restricted occupation opportunities; high populace density and demographic pressure; poor health indicators; high transport expenses and environmental deterioration. These microeconomic hitches give increase to the shocking macroeconomic troubles such as operational trade discrepancy; high exposure to terms of trade tremors owing to thick

reliance on only export of coffee and tea; structural unevenness between government incomes and expenses; negative savings; and very little level of private investment. These shocking problems and limitations have led to persistent degradation of social welfare over time, making poverty a extensive issue. In the early 1990s, the significance of the scope of poverty was rising, and the headcount index was gradually increasing from 65%. The slow economic growth and increasing income inequality have been the roots of poverty in Rwanda from 1992 to 2007. This period was characterized by the liberation war and internal conflicts (1990-1994), genocide against Tutsi (1994), the refugee crisis (1994-1998). Since then, the socio-economic conditions deteriorated very much and poverty was a very serious issue and which called upon various government interventions.

Over past two decades, the government of Rwanda have introduced a range of policies and strategies, which contributed significantly to the economic performance of Rwanda, such as the performance contracts at district levels, performance-based financing (PBF) of health services, an upsurge in the allocation of government expenses for the health subdivision and the initiation of compulsory mutual health insurance scheme for all Rwandan people (Saksena et al., 2011); the transformation of the Rwandan coffee sector allowing the increase in Rwandan exports (Guariso et al., 2011); land tenure regularization on investments, management of soil of biodiversity conservation measures have contributed very much to economic growth of Rwanda (Ali et al., 2011); the introduction of free 12 years basic education program (Nkurunziza et al., 2012); an intensive family planning (Kabano et al., 2013), and recently a performance base evaluation was introduced in all public institutions in Rwanda. All of those measures have produced satisfactory results in terms of improved health care, education for all and reduction of illiteracy for old people where Educational attainment improved over time.

However, since 2010 Rwanda has been recording the strong economic growth and improvements in household living standards. According to the BNR's statistics, between 2001 and 2011, Rwanda averaged an yearly progress rate of high than 8 %, and GDP raised by 60 % in real terms (BNR, 2010). Over the past two periods, the government of Rwanda has substantially developed the service sector, for the purpose of economic diversification, which made the share of agriculture in the GDP to decrease significantly even though it remains the main pillar of the Rwandan economy and poverty reduction as well in the fact the substantial increase in agricultural productivity contributes to the reduction of poverty. For example in 2011 as the effect of economic diversification, the households earning income from non-agricultural activity increased to 70% compared to 30% in 2001. The diversification of Rwandan economy required a huge amount of public investments in rural areas in irrigation projects particularly in the Eastern province and in the factories designed for the transformation of agricultural products so that the booming agricultural productivity. Moreover, the fertility rate has decreased over the past two

decades in decreasing the family size which in turn makes the poverty fall consistently (NISR, 2012).

Furthermore, the government of Rwanda has been introducing and implementing several socio-economic reforms for the aim of reducing poverty in Rwandan society since 1994. Rwanda in recent years has consistently developed and implemented its policies and strategies for poverty reduction encompassed in the framework called the Economic Development and Poverty Reduction Strategies (EDPRS) with sounding sharp measures including micro-insurance programs, public works programs, preventing and responding to macro shocks, financial distress and environmental degradation, tackling health problems, building strong administrative institutions for ensuring equal citizen rights, peaceful cohabitation and conflict resolution.

The first EDPRS was launched in 2008 for the period of five years and its implementation ended in 2012 and thereafter in 2013 after evaluating the implementation performance and results, the government of Rwanda launched EDPRS II in 2013 for again the period of five years which will end in 2018. Regardless of the big lessening in poverty over the past two decades, poverty is still high 39.1% of the Rwandan population still lives under the poverty line and 24 % cannot encounter for their most rudimentary food wants, which means that Rwanda has a lot to do in the perspective of poverty reduction (NISR and MINECOFIN, 2012). Therefore, they are various reasons why Rwanda can learn from China in terms of poverty reduction policies and strategies. Chine started by reforming rural areas through land redistribution and investing in agricultural infrastructure, developing agricultural technology, promoting science and technology, decentralization of powers and authorities to local government, developing global networks and opening its economy to international trade, etc.; those practices are very similar to the ones that Rwanda has been designing and implementing over past two decades.

3.2. Rwanda's vision 2020

Rwanda's Vision 2020 programme aims at making the country a middle-income knowledge-based economy and more prosperous, with high life expectancy, healthy people, educated people, and GDP per capita income of \$ 900 by 2020. To achieve this objective, it is important to put more focus on a active and innovatory private sector, quick knowledge and technical and vocational training, good governance, smart public finance management and a receptive and powerful public sector as a crucial devices for economic conversion (GOR, 2000).

The Poverty Reduction Plan is prepared based on Rwanda's longstanding vision, interlocked in the Vision 2020 which includes the thematic areas including good governance, macroeconomic stability, human resource development, increasing productivity and employment opportunities, promoting regional integration and open market economy (Mann & Berry, 2016). Some of the Vision 2020 achievements indicate that

the previous target of GDP per capita of \$ 900 which was set in 2008 was then revised in 2012 to be \$1,240, due to favorable conditions and positive perspective. In the similar epoch the average GDP growth rate of 8% per year, life expectancy reached 55 years, infant mortality rate was declined from 107% to 50%, maternal mortality rate was reduced from 1,070 to 200, the population in extreme poverty was decreased from 64% to less than 10%, child malnutrition was reduced from 30% to 10% of the population, basic education enrollment increased from 72 to 100%, and the enrollment in tertiary education was increased from 1% to 6%, gender balanced in decision-making institutions increased from 10% to 40%, HIV/AIDS prevalence rate was decreased from 13% to 8%, malaria-related mortality rate was decreased from 51% to 25%, the growth rate of the industrial and services sectors increased from 7% to 11% and off farming jobs increased from 200,000 to 1,400,000 per year (GOR, 2000; MINECOFIN, 2007).

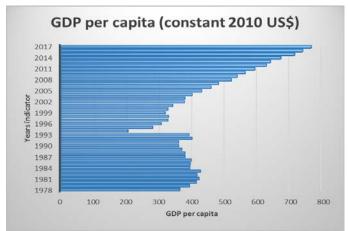


Figure 8. Trend of Rwanda GDP per capita (Constant 2010 US \$) **Source:** Computed from World Bank, (2018)

3.3. Rwanda's economic development and poverty reduction strategies

EDPRS stalks from Rwanda's Vision 2020 and encompasses medium-term activities which have to drive to the accomplishment of the Vision's objectives. The major aims of the vision is to accelerate Rwanda's development to become a middle-income state and generate a good quality of life for entirely citizen via continued average GDP growth of 11.5% and enhanced poverty lessening to be lower than 30% of the populace by the year 2020 (MINECOFIN, 2013).

The EDPRS is an important instrument for poverty reduction. The first EDPRS was covering the period of 2008-2012 defining the country's developmental objectives, high preferences, and strategies to accelerating the private sector development which will accompany the government and remains the major player and catalyzer for the economic growth. The EDPRS I was fully supported by Rwanda's development partners and it was designed to extend the PRSSP-III in order to enhance the three priorities areas such as growth for Jobs and exports; improved governance

and leadership, Vision 2020 *Umurenge* designed to impact rural development and hence poverty reduction; all for the end aims of reducing shocking poverty and inequality (MINECOFIN, 2013).

The continuous progress for Jobs creation and Exports leading aims at boosting economic progress by improving competitiveness, private investment and novelty, agrarian production, exports, and technology competencies. These need quit ambitious procedures to lesser the expenses for conducting business counting improvement of technical abilities and upgrade the schooling in science and technology to lessen the scarcity of trained labor and to increase private sector competitiveness capacity. Other urgencies comprise upgrading economic infrastructure, upgrade of the use of updated technologies, machine intelligence and expanding the financial division.

The Vision 2020 Umurenge is a major pillar for poor rural development and aims at addressing the extreme poverty and vulnerability. And that vision has three constituents: (i) public works which intend to make non agricultural work opportunities and the constructing of community properties and rural basic infrastructures; (ii) development of cooperative, and small and medium-sized enterprises (SMEs) to promote private enterprise; and (iii) providing social services and support to the landless households that are incapable to involve in public works agendas (RLDSF, 2012).

The prize of Governance and leadership aims at maintenance of peace and security; building strong and capable institutions; upgraded corabollation with entirely countries; advertising of equity and social justice, human rights and the rule of law; and delegation and service conveyance. It, however, accompaniments other continuing plans intended at making well-defined property rights, business enabling environment, well-organized public management, and the fighting against corruption (MINECOFIN, 2007). The EDPRS II of Rwanda is divided into five main clusters along with each cluster outlining its priority areas: Economic transformation, rural development, production and younger generation employment, responsible governance, foundational and cross-cutting matters (MINECOFIN, 2013).

The objectives of EDPRS I was, therefore to speed up growth and economic diversification with private sector led development, and decentralization of governmental administration in order make people participate in the decision-making process, accompanied by enhanced accountability. Since the launch of EDPRS, I in 2008, living conditions for Rwandan have been improving dramatically follow-on important reduction in poverty and income inequality. The household consumption increased by 2.5% per year and income inequality decreased by 44.9% in 2011 (NISR, 2012).

Under EDPRS I, tremendous socio-economic achievements have been made. The economy raised sharply, accompanied by important poverty lessening. Economic progress was motivated by an upsurge in agricultural

production, exports, and robust domestic demand. For a period from 2008 to 2012, the real GDP growing with an average of 8.2% per annum, with the per capita growth of 5.1% per annum. The increase of service sector output has been the core driver of economic progress in Rwanda under EDPRSI. The main areas of services expansion include telecommunications, wholesale and retail trade, and transportation. The service sector raised by an average rate of 10.0% per annum and contributed nearby 52% of national production throughout the EDPRS 1 period. The development of the service sector in Rwanda under EDPRS I considered for over half of total GDP progress of 53%. The industrial development was a key driver of Rwanda's economic growth whereby the industrial sector which has been growing at a rate of 9.8%, and contributed to the extent of 15.4% of national output and 20% of total growth for EDPRS I period. The agriculture industry grew at 5.4% through the scaled-up public investments for instance the crop-intensification programme (CIP), and the farming sector yielded 32.7% in GDP and 28% of total progress for the EDPRS I period. During such period, income inequality reduced significantly from 0.52 to 0.49 Gini coefficient (NISR, 2016).

Thanks to impressive success and the experience gained from EDPRS I, the government of Rwanda launched the second phase of EDPRS in 2013. The EDPRS II (2013-2018) focuses on four priorities including economic transformation which is designed to stimulate rapid economic growth with targeted 11.5% of growth rate and hence change Rwanda's economic structure; rural development which aims at upgrading the livings of rural populace across land consolidation and rural settlements, agriculture, rural finance, youth employment through jobs creation by increasing the shift from agriculture to services or non-farm jobs and shaping the competitive skilled labour, and good governance which focuses on public accountability, transparency, and effective service delivery. emblematic goal of EDPRS II is all about accelerating progress towards making Rwanda a middle-income country and a good living condition for the whole Rwandan population and accelerate poverty decrease trend to be low than 30% of the populace of Rwanda. This goal will undoubtedly achieve thanks to the fact that the government is fully committed and determined to that goal as it demonstrated by the gradual increase in national budget from \$260 million in 1998 and \$1,768.3 billion in 2015- 16 fiscal year whereby 64% of the national budget was domestically financed, and recently the national budget for the 2017-18 fiscal year is 80% domestically financed (MINECOFIN, 2013).



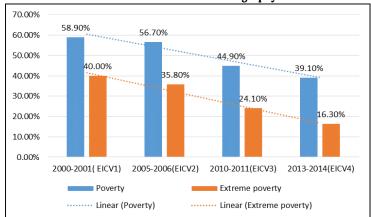


Figure 9. *Situation of Rwanda's Poverty Reduction in Rwanda* **Source:** Computed from National Institute of Statistics of Rwanda (NISR),(2015)

3.4. Understanding Rwanda's economic growth patterns since the 2000s

Rwanda's economic growth is just explained by many factors including the strengthened private sector development, counting the progress of socio-economic infrastructure, liberalization of trade, and restructurings and capability improvement in PFM, restructurings focused on upgrading the business environment, promotion of the exports sector and privatization of state- owned enterprises. The Rwanda's economic growth success was driven by sharp development of private sector, particularly the progress in the services sector where growth of 40% of growing in real Gross Domestic Product (GDP) went beyond the government's expectations. Another driver of Rwanda's economic growth is the increase in agricultural output since 2008 accounting for 20% of the total increase in consumption.

The large finance injection of Official Development Assistance (ODA) to Rwanda and the overhaul in agricultural activity, construction, and services sectors were the major key drivers to the Rwandan economic growth. The construction sector has been the more driver growth and employment, and itself accounted for 6 % of GDP and it raised at 10 % per year during the previous decade. Transport, communications, and tourism were also other major engines of economic progress over the last decade. In addition to this, the joining of East African Community (EAC) created numerous growth opportunities especially in the agro-processing and manufacturing industries, and transborder commercial activities, this regional economic integration contributed to the level of 14 % of nominal GDP in 2007 and hence made Rwandan economy to be much competition (RoR, 2017). The rapid growth and expansion of the Rwandan economy also were due to the large increase of public investment over the last decade which contributed a significant share in GDP growth to 20 % of GDP in 2000 and to 26 % in 2007 (World Bank, 2016). The public investments were largely supported by snowballing domestic resource enlistment and an increase in outside support. The key priorities in public

expenditures include infrastructure and human resource development, strengthening public administration, military and security system. Since the creation of the Rwandan Revenue Authority in 1997, considerable efforts were made in snowballing government incomes, from 11.4 to 13.7 % of GDP respectiverly in 2001 to 2007, and to 13.9 % in 2008, thus subsequently reducing the dependence on international aids (MINECOFIN, 2012).

The economic growth in Rwanda since the 2000s has led to an increase in employment opportunities, agricultural production. Agriculture output increased from 18% in 2006 to 25% in 2011. This increase in agricultural productivity continues to contribute so much in elevating the standards of living for many Rwandan population over the last decade, and thus this social improvement was accompanied by a significant fall in poverty and inequality with the Gini coefficient decrease throughout Rwanda, from 0.52 in 2006 to 0.49 in 2011 (NISR, 2012; World Bank, 2016; World Bank, 2013)

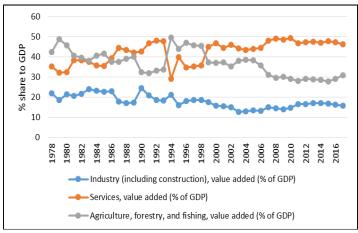


Figure 10. Contributions of Rwanda's economic sector to GDP **Source:** Computed from World Bank, (2018)

3.4.1. Governance and leadership

The Government of Rwanda adopt a strategy of zero tolerance concerning corruption and Rwanda ranks better in the world but however, it is still needed to reinforce governance leadership, however much more necessities to be done in the domaine institutional capacity development. A key area of governance improvements in Rwanda has been Public Financial Management (PFM) whereby improvements focus on skilss development accounting, auditing and supply chain management, administration of public investment at different levels of government. The Government has taken serious measures to reform its key public institutions in order to improve the service conveyance to the private sector including (i) merging in 2008 several government institution in one entity called "Rwanda Development Board"; (ii) creation of Commercial Registration Services Agency (CRSA), (iii) streamlining land registration transactions through a newly created Office of the Registrar of Land Titles;

and (iv) establishment of agencies incharge of promoting investment and exportation activities (Richard et al., 2013).

The decentralization Policy of the government of Rwanda is a paramount factor of good and sustainable governance. To build a flexible governing system allowed very much the monitoring and accountability of public servants' action through service charters. The government efforts in promoting transparent and accountable governance system were sustained by a number of government policies which in turn produced great results in terms of the country's competitiveness, economic growth and the public sector's effectiveness. These tremendous efforts allowed Rwanda to be ranked 7th most efficient government globally in 2015, and in the same year Rwanda was classified among the seven least corrupt countries in Africa (WEF, 2017). According to the assessment done by the Rwandan Governance Bord on leadership efficiency, corruption level, transparency and accountability in the public sector, Rwanda gained 79.04 % of positive view and progress (RGB, 2014).

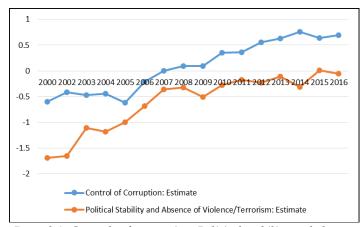


Figure 11. Rwanda's Controle of corruption, Political stability and absence of violence **Source**: Computed from World Bank, (2018b)

3.4.2. Social and human development

Whereas Rwanda's social indicators remain weak and a lot of improvements still to be made, remarkable improvement has been achieved since the late 2000s in various domains counting gender equality, adult literacy, admissions in primary and secondary schooling, basic health services, and the deterrence of the spread of HIV/AIDS. The involvement of women in decision-making institutions and in other positions of influence is now about 60 %, and education for all in primary and secondary education with the initiation of free and compulsory twelve years basic schooling has increased to above 90%, with equality amid boys and girls (United Nations, 2015). Free and compulsory vaccination rates for children and other trends of are trends under the Millennium Development Goals (MDG) have been among the highest in sub-Saharan Africa. In general poverty incidence and extreme poverty decreased from 60.4 per cent in

2000/2001 to 56.9 per cent in 2005/2006, a decrease of 3.5 % points and 41.3 % to 36.9 % in 2005/2006, the inequality as measured by Gini coefficient was slightly increased from 0.47 to 0.51 respectively in 2000/1 to 2005/6 (NISR, 2007). The current speeding up of economic progress, predominantly in the agrarian sector, and the adoption of social protection plans in EDPRS, are predictable, with donor funding.

The home grown solutions such as "one cow per family programme" which was initiated and launched by H.E Paul Kagame the president of Rwanda in 2006, is aimed at enhancing social protection and thus fighting against the severe malnutrition especially among the children and as a mechanism to reduce poverty in rural areas and boost agricultural output, and thus contributing to improve the livelihood and nutrition among rural poor population. The majority of Rwandan population is still living in rural areas whereby 85% of the people live in rural areas with around 80% solely live on modest agriculture for their livelihood (NISR, 2012; Bizimana et al., 2012). Around 350, 000 cows have been distributed by 2017 (RAB, 2017).

However, In 2003, the government of Rwanda introduced the famous countrywide Community-Based Health Insurance Scheme which significantly contributed to the upsurge in admittance to health care and make poor Rwandan people afford health care. Adhesion to this scheme is family based, where compulsorily all family members have to be enrolled. The ministry of health of Rwanda reported that in 2010, the coverage of Mutual Health Insurance attained the level of 91 % (Makaka *et al.*, 2012). In 2009, Rwanda introduced the free and compulsory 9 Year Basic Education (9YBE) for all young children between the age of 7 and 15, and as result, the primary school enrollment rose to 91.7% (Action Aid, 2012).

Rwanda has continuously made dramatic improvement in terms of welfare, schooling, and healthcare. In 2015, Rwanda performed well in health improvement, scoring 85.1 and ranking 7th in Africa. Rwanda has the highest primary and secondary schools enrolment rate in Africa and is one of the best-performing countries in fighting against corruption in Africa. Rwanda has been making numerous social changes by investing in people as its important resources, and in 2015Rwanda's education scored 84.75% points (RGB, 2014; WEF, 2015).

3.4.3. Public investments management

Through the EDPRS, public investments to, amid other goals, upgrade infrastructure development and decrease the expense of conducting business, the administration of public investments has arisen with a high significance action in the restructuring agenda of the government of Rwanda. In early 2009, a new public investment policy that was put in place with the aims of selecting and implementing rational public investment projects. As a result of this policy, public investments have grown quickly, funded by snowballing domestic resource mobilization and outside funds (IMF, 2011).

The report from the World Bank show that the stock of external private capital augmented from \$ 1,404.1 in 2013 to \$1,752.0 million in 2014. FDIs

has become progressively significant as a most important source of investment funds accounting for 22.1% of Gross Fixed Capital Formation (GFCF) in 2014 from 16.7 in 2013. The FDIs contributed to the Rwandan economic growth to the extent of 14.1%. In 2014, Foreign Private investment was driven by ICT, Mining and Finance and Insurance activities, with 70.2 % for the total inflows in GDP (World Bank, 2015).

According to the WEF report (2015) on doing business and global competitiveness, Rwanda was among the leading economies in Africa in policy and structural reforms. Open Knowledge International's Global Open Data Index (2015) ranked Rwanda as a country with the most available open government in Africa. In 2016, it was noticed that Rwanda has created the most favorable business environment with simplified modalities for registering and starting new businesses, reduced time for issuance of various permits. Access to credit and financing were also eased by permitting banks the right to scrutinize credit situation of all borrowers and the loans granted be reported to the BNR. Further, Rwanda decline the number of required trade papers and improved its joint border movement procedures through ICT (WEF, 2016).

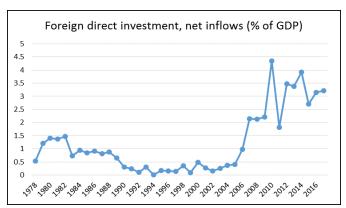


Figure 12. *Rwanda's FDIs, net inflows* (% *of GDP*) **Source:** Computed from World Bank, (2018)

4. Policy lessons from China for Rwanda

After having understood China's successful reforms and fight against poverty, we need to draw some lessons from China's poverty alleviation strategies for Rwanda, it is noteworthy to know that China is dissimilar from Rwanda especially in the size, many natural resources, better geographical location, the high rate of economic progress realized in the previous 35years, and a substantial industrial development, high innovations and creativity with a robust leadership managerial system, the capability to organize resources for poverty lessening programmes. However, Rwanda has made considerable progress in fighting against poverty it is on the right track in terms of development since 1994s, it is lagging behind China and other many other emerging Asian economies.

4.1. Lessons for Rwanda: Economic development strategy and enabling environment

In general China's economic development approach and additional connected policy measures such as reforms in strategic markets and institutions served as the cornerstone for poverty lessening fight in China. In overall, the China's poverty decrease strategies and schemes have focused in every single very poor rural area of the state and made China's economic progress more pro-poor. Therefore, China's stable and sustainable economic growth can serve as an economic role model for Rwanda in many different ways for the poverty alleviation purposes.

China's advance strategy over 35 years encompassing growth of agriculture set as a precedence at little levels of incomes and a opportune move to labor-intensive production industries. In the early 1980s, China started to promote township and key village projects, and in the same period it then create special economic zones in Shangai and Shenzhen and a number of other sites to stimulate foreign direct investments (FDI) to develop labor-intensive production industries and technology transfers. Rwanda can follow the Chinese economic development model putting more efforts into attracting FDI which in turn provide unlimited labor supply and are very important in boosting economic growth and exports (Chen et al., 2015). It is in this perspective that Rwanda has improved private sector progress, counting the enlargement of socio-economic infrastructure, liberalization of trade, and reforms and capacity development in PFM, upgrading in the business environment, promotion of the exports area, privatization of state-own enterprises, and intensifying reforms in different domain in line with poverty reduction.

Rwanda needs to learn from China whereby the development strategy is based on political stability, economic and conducive socio-economic environment. However, the agricultural reforms for poverty reduction have been the most successful and catalyzer in the economic growth of China. Ravallion & Chen, (2007) indicated that the Chinese agricultural growth is appraised to have donated four times more to poverty lessening likened with the increase in both manufacturing and in services; and similarly Rwandan agricultural growth supply more to poverty reduction than growth driven by other economic sectors such as services and manufacturing (Diao et al., 2010).

The quick agrarian growth in China since late 1970s has been determined by a number of sharp measures such as redistribution of resources from heavy weight industries into farming subdivision and following with upsurge in farmhouse prices, distribution of agricultural land to individual households, and boosting in the volume of agrarian inputs such as fertilizers, chemicals, plastic films, electricity and complemented by strong irrigation system. Agricultural development in China has also been powered by a huge and enabling internal market for agricultural produce and effective pricing system. Given the upsurge in agricultural production and incomes, the rural areas population in china

were stimulated to differentiate their actions into non-agricultural activities for the purpose of increasing their income (Ling *et al.*, 2013).

In line with agricultural development and transformation of rural household revenues, a various valuable lessons from the quick development of agriculture which contributed to poverty alleviation in China can be pinched for Rwanda. China's poverty lessening programs have a robust emphasis on rural settings and agrarian development has been led by the government. An increase in the reallocation of resources to agriculture industry for instance investment in irrigation and rural roads, and upsurges in farmhouse prices for agricultural products and hence incomes. Moreover, enabling and supporting internal market is also essential to safeguard farmhouse prices through government backing, for example the subsidies on farmhouse input, government investments in rural infrastructures, homebased price assistance and trade safeguard which are important ingredients for agricultural growth and poverty decrease.

Following the contribution of farming to poverty lessening, at lowincome levels the poverty alleviation programs should focus first of all on agrarian development, especially agrarian growth in the poor and remote areas. Therefore, given the upsurge in revenues, more focus should be attributed to the improvement of manufacturing industries and service sector so as to expand farmhouse incomes and offer a feasible market for sustained agrarian development.

China's open door policy constitutes a major lesson to draw for Rwanda, whereby it important to create local foreign trade corporations and then decentralize the decision making process about exports and imports to local administrations or such external trade corporations. It is also necessary to create and many special economic zones and border open cities for the intention of attracting exports and FDIs. It is also necessary for Rwanda to introduce tariffs, quotas, and licensing and lessening or removing all restrictions on exports and imports. Further, it is also worthwhile to smooth and liberalize foreign exchange.

China's growth is on a gradual track than any other country in the world. Chine is heavily investing in research and development, placing creativity and innovation any the center of its development. The Chinese public expenditure on research and development accounts for 15% of the world's total, and Rwanda needs to learn from this impressive Chinese development practice.

Rwanda must learn from China on how to address the constraints of productivity through fiscal and financial dressing in order to have rapid and sustainable growth. China has gained a high increase in productivity through the development of the agricultural area, accompanied by the development of township and village enterprises and restructured of state-owned enterprises. Rwanda can strengthen its manufacturing and service sectors, develop its agro-food processing industry, expanding exports of

vegetables and beverages and diversifying through exports can support Rwanda to upsurge productivity and scale up into worldwide markets.

The productivity and economic growth in China have been tremendously pro-poor and sustained by sharp market reforms, and the improvements in agriculture and service sectors can help Rwanda reduce poverty. In order to have rapid and sustainable growth and eradicate poverty, Rwanda needs to learn from China, by engaging in the development of human capital with intensive and continuous investment in education and improving quality of education so as to produce the required skilled labour force, especially in core fields such science, technology, engineering, and mathematics (STEM). Another important focus for Rwandan human capital development is technical and vocational education and training (TVET), filed in Rwanda needs to continue supporting and develop. China's achievement in increasing the skilled labor force required to adopt various types of technology, and thus create the conditions for investments in manufacturing, especially in this domain, Rwanda has a lot to absorb from China's experience in order to implement new technologies and thus create jobs and hence diversify its economy. In order to sustain growth and human capital, it is important to have a viable health system. In this regard, Rwanda needs also to learn from China experience of having high-quality healthcare and broadening health care accessibility, especially in rural areas.

4.2. Lessons for Rwanda: Particular poverty policies and projects

The Chinese government played a key and distinguished role in poverty alleviation and economic development. The successful poverty lessening strategies and programs in China have been distinguished by the government's solid commitment and will power in fighting against poverty and the government's ability in call up a big amount of resources for poverty lessening programs. In addition to this, the government-led poverty reduction has been fuelled by the establishment and performance of solid poverty reduction institutions and a snowballing amount of supports earmarked by the government for poverty reduction through well managed of poverty reduction funds. The market liberalization pointed out the best interests of poor people China's success against. In support of this policy, the farmers were given market incentives included in the institutional reforms. However, Rwandan farmers can dramatically appreciate this good policy (Qu, 2017).

China's poverty lessening strategies and programs are singularly distinct with government-led and development-oriented, pick out the very poor countryside settings and poor families, focusing on countryside infrastructure projects. China has performed a foremost role in poverty lessening by deploying resources for poverty decrease and instituting particular national poverty institutions, and the government is competent of pledge large-scare poverty alleviation projects as a result for reducing poverty occurrence significantly in a comparatively to small period.

Rwanda can study from the Chinese performance by creating particular institutions for poverty reduction and by distributing more funds for countryside development and poverty decrease programs. The government of Rwanda can reinforce its public administration system for improved project management dimensions by establishing specially designed poverty reduction institutions with specialized skills and continuous training in poverty reduction strategies rather than be contingent mostly on outside consultants.

An effective lesson that Rwanda can learn from experience of China is that for poverty reduction programs directly pick out poor families is more operative than indirectly pick out poor households via rural enterprises which offer occupation occasions for poor families, as they will be additional expenses for monitoring the poverty effects of the enterprises.

Additional lesson connected to enterprise development in China is that the government poverty programs can emphasis originally on small-scale agro-processing enterprises used by domestic farmers equipped with the basic manufacturing technology and administration competence in the poor settings. The delivery of financial assistance for instance subsidized credits should be accompanied by technical teaching and administration support. As countryside infrastructures are important for incomegenerating doings handled by poor families, the major part of Chinese poverty supports has been utilized for countryside infrastructure projects, mostly on countryside roads, upgrade of land, potable water, and irrigation, that has donated a considerable deal to an upgrading in agricultural production and family incomes.

The poverty reduction institutions in China have also operated with poor families on biogas and sun stoves by offering funds and technical provision, in this perspective, Rwanda has also created the Business Development Agency (BDF). Rwanda has to consider that a greater amount of poverty lessening supports are necessary to be distributed to countryside infrastructure plans, particularly on countryside roads, upgrading of land and irrigation, so as regards to offer marketplace admittance and essential environments for farming productivity for poor how valuable lessons for Rwanda.

The government of Rwanda should always make need assessment for development and poverty projects. The Chinese performance in poverty reduction also indicates that even at little levels of revenue, with very limited government economic means and shocking large-scale poverty, development-focused programs pointing poor settings can be successful. It is significant to note that in order to allocate effectively and efficiently the scarce resources, it is a must to improve the production conditions. However, with the decline in poverty incidence and increases in income, poverty programs would be constantly targeting more poor societies and poor persons, straight revenue transfer can also be initiated and more determinations should be formed to shape the capacity for the poor groups and poor persons.

4.3. The lesson for Rwanda: Learning for innovation and capacity building

The central significance of human capital and capacity building for poverty reduction and sustainable development and for the sake of building a harmonious society, China has implemented developmentoriented poverty reduction projects which are consistent with the scientific and technological advancement. Research in science and technology played a key role in poverty reduction in China. In the early 1980s, the publicly funded autonomous think-tank group and much other influential research in the reform process were created, studying the local experiment and merits with the Household Responsibility System (HRS) that in provided recommendations that convinced national policymakers on the motive of scaling up. China's pro-poor policies depend on the level of empowerment and participation of poor people in the reform process. Since the late 1970s, China has built and maintained a strong public administrative system to make a global capable state. Indeed, the administration and leadership of townships and rural villages have been more accountable for their economic development (Herbst, 2000; Clapham et al., 2001; Van de Walle, 2001).

4.4. The lesson for Rwanda: Asset creation

The development necessitates investment in physical capital for instance the plants, machinery, raw materials, etc. these are fundamental to industrial production. Investment in significant technology and machine intelligence is also significant due to the fact that technology is frequently personified in capital goods for example plants and machinery. Growth is ultimately linked with the investment in capital and labor and upgrading the output from these factors of production via the procedures of innovation and technological assimilation. However, possessing the assets such as land, machinery, property, plant & equipment perform a key role in increasing the opportunities for development and access to finances which in turn can allow more households the opportunity to invest.

The land settlement should be regarded as most important in reducing rural poverty, and China proceded for the distribution and consolidation of land which consequently brought a qualitative change in incomes of the countryside populace because rural poverty is usually mostly observed among the landless and small farmers. Rwanda largely possesses poor physical infrastructure, while are very crucial to growth. In this regard, impressive lessons are to be drawn from China's advancement in physical infrastructure through dramatic investment in physical capital for instance roads and highways, railways, and telecommunication assets (Rosen & Hanemann, 2009).

4.5. Rwanda and China poverty cooperation focus areas

Poverty collaboration between China and Rwanda is a reciprocal studying process even it uneven and imbalanced. There is now a extensive range for Rwanda-China collaboration in poverty decrease. The Chinese Government has started providing development and technical and financial assistance to Rwanda by supporting agricultural projects and by offering loans and grants, scholarships for long-standing and short-course training for expertise sharing. China is increasing its support, trade and investment plans which as well have poverty impact in Rwanda. As China is strengthening its global influence, there is, yet, a hope for upgrading on the current collaboration, and more significantly, there will be boundless prospective for increasing poverty collaboration between China and Rwanda.

A more systematic knowledge sharing and technology transfer should be more essential and the starting point for poverty cooperation between Rwanda and China. It vital to expand the effectiveness of the short-courses and long-standing training for Rwandan youth whereby the development professionals and experts from China, who generally have skills on China's poverty lessening and development involvement or on sure practical field, may have inadequate information of poverty in Rwanda, Alternatively, the professionals from Rwanda can discover it hard to comprehend the definite Chinese strategies and programs for poverty reduction. This is why a mutual cooperation and learning from each other between Rwanda and China is necessary. The hands-on training focus on the function of farming expansion services, progress, and administration of small-scale countryside enterprises, medical and agrarian insurance for the countryside poor, building and maintenance of minor countryside infrastructure plans, construction of township and key village projects, intrinsically technical familiarity can be used more straightforwardly in Rwanda. The cooperation between Rwanda and China will definitely focus on providing support to the knowledge platforms and centers of excellence between the two countries as a means of speeding up the exchange of technology especially in the agricultural sector.

As we have discussed before, China needs to cooperate with and learn from Rwanda in particular and Africa in general. Rwanda has marked higher growth performance in the last decade towards improved economic governance. The new cooperation prospects between Rwanda and China is being dictated by the increasing demand for natural resources from emerging economies including China. As Rwanda has a major deficit in infrastructure, the top priority must be given to the development of rural and urban infrastructure as the calyser of regional and African integration needed by the African Union, it is important to stress that thanks to that urgent growth of development infrastructure, China will be the top service provider and development partner. The collaboration between China and Rwanda should be reinforced in terms of direct investment and trade, the Chinese Government should offer further technical and financial assistance

for poverty lessening in Rwanda throughout augmented training and capacity building exercises, collaborative research and discussion and throughout improved support effort in poverty alleviation for Rwanda.

Recent Forum on China-Africa Cooperation (FOCAC) highlighted the major areas for Africa-china cooperation including trade and investment, China-proposed belt and road initiative, youth employment and development, poverty alleviation, exchanges in culture and art, education, sports, strengthening the media, women and young people, sharing of knowledge, develop and strengthen institutions and governance, promoting peace and stability in Africa, environmental management (H.E Xi Jiping opening speech, 3rd September 2018).

5. Conclusion and policy recommendation

5.1. Conclusion

China's poverty reduction strategies and programs for poverty reduction over the last 35 years have been miraculous. This dramatic progress against poverty in China was induced by a high speed of economic development, pro-poor growth strategies and the government's strong commitment against poverty. The Chinese government-led poverty programmes have had a substantial influence on the increase of incomes and capabilities of the poor communities and poor persons in rural areas. Throughout a procedure of studing and capacity building and via the collaboration with global development partners, China's poverty reduction policies and programs have become more sharing and demand-oriented, with an snowballing prominence on capacity building for the poor societies and poor persons, and for poverty lessening agencies.

As long as the eradication of poverty is a serious concern for Rwanda, learning from China has got important implications for Rwanda fighting against poverty. The government-led and development-targeted poverty programs have donated to poverty lessening in China by upgrading countryside infrastructure and hence enlightening the production situations in poor rural settings. The government poverty programs have also delivered small-credits and workshops to the poor, which stretch to increase their revenues and enhance their capacities. It would naïve to say that Rwanda can copy and paste all China's growth and poverty reduction experience because they have a different history, culture, and geographical settings, but however it has to create its own conditions or continue homegrown solutions to define its own growth path.

5.2. Recommendations

Rwanda and China have to deepen economic reforms by restructuring their economies and facilitating the broad pro-poor growth. The effective attraction of foreign direct investments (FDI) is a major weapon to galvanize economic growth and encourage affordability, which is essential to promote integration into the worldwide economy. In addition to this,

FDIs are usually fostered by novel technologies and strong management skills that strengthen economic transformation. It is also important to explore and take advantage of lucrative foreign markets by increasing participation in the global economy. Rwanda must diversify its economy in order to deepen economic transformation important to inclusive growth and poverty lessening catalyzed by industrialization. The development of social and physical infrastructure is important to sustaining economic progress and poverty reduction and should be set among top priorities.

Rwanda itself should learn from the Chinese approach to setting short-term priorities for poverty reduction and sustainable progress. It is therefore important to stress that implementing policies that aim at increasing households income, creating more employment opportunities, agricultural productivity, rural recapitalization would extend services and support, countryside credit and financial services to micro and small-scale enterprises which are key to rural poverty eradication.

Rwanda should continue strengthening schedules to upgrade the standard of life of the poor and stabilize lives of the populaces in the rural settlements by safeguarding admittance to elementary health services, primary schooling, water and sanitation facilities, energy and housing facilities. Another Chinese example which can serve as an important recommendation for Rwanda is the establishment of training and occupation opportunities for unqualified younger generation and enablement of the trained youth to involve in income-generating doings. Beyond the middle to longer term, it is indispensable to expand the economy and to increase the proportion of productive investment in Rwanda in order to attain sustainable progress and poverty lessening. The rate of savings must be increased in order to boost domestic investment, Attracting foreign investors must be strengthened. More specifically, efforts must be concentrated on high influence productive ventures which can lead to the real transformation in a comparatively short period.

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