RWANDA: FROM DEVASTATION TO RESURGENT GROWTH AND TRANSFORMATION

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Rwandans: From Devastation to Resurgent Growth and Transformation

Kasim Ggombe and Richard Newfarmer

Rwanda has undergone an astounding transformation in the two decades since a civil war and massive genocide destroyed a large segment of the country’s population, left its government and political institutions in tatters, and its economy in ruins. Growth rates since 1995 – the year after the genocide -- have averaged 8 percent annually over this period, more than four times the decade before. Poverty rates have fallen, maternal health improved, and has infant mortality plummeted. Investments in infrastructure have produced transport systems, widened access to power, and provided cheap telecommunications. Once shattered government institutions – the customs services, standards agencies, telecoms regulation, and whole ministries – have been rebuilt and gained a reputation for efficiency and probity in administration that is today the envy of Africa.

To be sure, the country has not yet established political institutions commonly associated with western democracies. Even so, the government has sought to create other forms of citizen feedback that facilitates some policy adjustments. These include the annual “national dialogue”, citizen report cards, and a fairly open public discussion of aspects of economic policy. A wide literature has documented the post-genocide transitions, their success and shortcomings. However, the transformation in people’s lives and living standards has been remarkable.

How was it that a country could go from utter devastation into a high-growth economy? What were the building blocks of policy that contributed to this success – and what was the role of structural transformation? And looking forward in a new era of globalization, what economic activities can drive growth in Rwanda into the next decade? The answers can be found in examining the growth path of the Rwandan economy. Four features stand out: First, the government played a leading role in recovery and reconstruction period, and continues to do so today. Second, Rwanda has inverted the normal sequence of structural change in the development process, moving labor from agriculture to services and only now beginning to develop its manufacturing sector. Third, the government succeeded in establishing an impressive partnership with the international community that allowed the latter to provide finance and expertise in a pro-poor policy framework that the government was intent in implementing. Finally, the new activities it is developing – in labor intensive manufactures, ICT, agro-processing, tourism – tend to be niche markets, but these offer progressively high value added employment opportunities.

To elaborate these points, a first section of this paper describes briefly the pre-1994 policy regime and political economy to illuminate the difficulties of reconciling a country torn apart by civil and indeed tribal war. A second section reviews economic policy and outcomes in the two decades after 1995. It argues that policy coherence emerging from unusually capable leadership lies at the foundation of Rwanda’s success. A third section analyzes the patterns of growth peculiar to Rwanda – and finds that Rwanda is indeed engaged in structural transformation, but mainly by releasing labor from low-productivity job into higher productivity, mainly urban jobs. The International community has played a pivotal role through ODA – and Rwandans have used ODA wisely; this has meant building infrastructure, services, and up-grading traditional exports. A final section focuses on the future, outlining the new

1 See Kinzer, 2008; Crisafulli and Redmond, 2012; academic articles
industrial policies undertaken by the government and ways it is dealing with the challenges of diversification.

**History: From Independence to 1994**

Rwanda became an independent country after breaking away from the Belgian-controlled Ruanda-Urundi territory in 1962. Strife-torn elections brought to power the Hutus, over throwing the comprador tribal class of Tutsis who were a favored minority of the colonial powers. President Gregoire Kayibanda stirred ethnic conflicts, and in a forerunner to the genocide that was come unleashed periodic massive killing of Tutsis. Many Tutsis – including the family of Paul Kagame -- fled into neighboring Uganda and the DRC. In 1973, army general Juvenal Habyarimaba toppled Kayibanda’s regime, and proceeded to rule the country for the next 21 year, with no less repressive treatment of the Tutsi minority community. In 1986, Habyarimana issued a presidential order preventing the return of Rwandan refugees, a policy that led Tutsi refugees to form the Rwanda Patriotic Front, a rebel movement that fought against his regime.

A failed Tutsi-led coup in 1990 culminated into the Hutu Ten Commandments in which President Habyarimana ordered fresh killing of Tutsis and recruited youths into a militia group, the *Intarahamwe* – those who attach together to terrorize Tutsis. Succumbing to international pressure to make peace with the RPF, Habyarimana signed a cease fire agreement in 1993, what became known as the Arusha Accord which would have allowed the return of refugees. This and subsequent peace negotiations angered Hutu extremists. Habyarimana’s regime ended when his plane was shot down on April 6, 1994 on his return from Arusha where he had signed a peace agreement with the RPF. On 29th April 1994, a national radio announced May 5th as “clean-up day” on which the capital Kigali was to be “cleaned” of all Tutsis. This was the trigger of the massive genocide that saw 800,000 people slaughtered and close to two million others fled to then- Zaire, Tanzania and Burundi between April and July.

Early post-independence policy encouraged foreign investment and used public intervention to stimulate local production. The government in partnership with foreign investors created several tea plantation and factories. Industries typical of small landlocked countries were born in the period 1962-1975, including beer, soaps, cosmetics, furniture, some light textiles, and grain milling (Gathani and Stoelinga, 2012). Although the birth and expansion of the tea sector drove overall growth, later followed by the expansion of coffee, import substitution industrialization led to expansion of some manufacturing. GDP growth averaged 6.5 percent between 1973 and 1980.

By the mid-1980s, however, the export dynamism of the commodity boom dissipated and the government was reluctant to depreciate the currency, the Rwanda franc became progressively overvalued. The government reacted with import licensing arrangements, high import tariffs, and price controls. Economic growth slipped perilously close to a five years of growth recession, averaging 2.9 percent in 1980-1985, barely keeping up with population growth.

Deteriorating growth led to more state intervention and further growth erosion. Further declines in commodity prices at the end of the 1980s, and the beginning of the civil war in 1990/91 led to further budgetary pressures, price controls and distortions. The implementation of two of IMF programs including two massive devaluations and the abolition of official prices necessarily created a wave of price surges that severely undercut salaries and consumer purchasing power. The civil war culminated in the April-July 1994 genocide, and the economy contract by 50.2 percent. Businesses and
infrastructure were destroyed, agricultural production ceased, and the loss in capital was only exceeded by the loss in human lives.

**From Reconstruction to Economic Expansion: 1995-2015**

**Reconstruction: 1995-2000**

While the 15 years before 1995 had averaged less than 1% in economic growth, the 5 years to 2000 produced a rapid recovery and averaged more than 10%. Some part of this growth was a simple peace dividend associated with the reconstitution of agricultural markets and internal trade. But because of the vast destruction of capital, infrastructure and the loss of human skills, reconstruction was a far more ambitious and complex task. Elements included establishing social peace, providing emergency relief, rebuilding and staffing the institutions of government, particularly fiscal capacity. Central to these efforts was putting in place a coherent macroeconomic program and genuinely owned by the government. Even though it involved a greater degree of state leadership than many donors would have preferred, the absence of large private companies and paucity of wealthy entrepreneurs led them to supply substantial development finance and technical assistance. Rwanda was to become a text-book case of how to orchestrate a successful post-conflict reconstruction.²

The government undertook several measures to revive the economy and restore industrial production. Foreign exchange markets were liberalized, allowing exchange bureaus and commercial banks to exchange foreign currencies at market-determined rates, a move partly aimed at easing access to foreign currencies by the emerging private exporters. The government also pursued liberalization of coffee marketing, processing and export, removed export taxes and improved the export regulatory framework to allow for market-based transactions and revive the coffee sector, a major source of revenue. Price controls were terminated and state enterprises adjusted relative prices to phase out subsidies.

Political leadership was crucial. The provisional government of the RPF launched new efforts to build national unity, focusing on equal representation in parliament and elimination of ethnic identity cards that had been used since colonial time. Ethnic reconciliation and rehabilitation of social norms were necessary to lay foundation for economic recovery which had become an immediate priority as massive destruction of farms, livestock and economic infrastructure during the civil strife had decelerated the country’s economic growth. The government immediately began to work for the eventual repatriation of some 2 million ethnic Hutus that had fled into the DRC in the wake of the RPF takeover.

The strong leadership under the RPF attracted donor support and eventually revived investor confidence in the reconstruction agenda. In the aftermath of the civil war and genocide – mid-1994 to late 1995, donor assistance largely focused on emergency needs; approximately US$300 million was directed to humanitarian relief efforts in Rwanda and refugee camps in neighboring Uganda, Congo, Tanzania and Burundi where Rwandan refugees had fled during the civil conflict. As the emergency subsided, donors worked with the government to help reconstruct gradually economic and social institutions. Foreign aid shifted from humanitarian relief to reconstruction and development assistance to rebuild a strong economic and institutional base with focal attention of addressing country needs in education, health,

² The IMF in its paper on Post-Conflict reconstruction uses Rwanda as a key example illuminated best principles. See Gelbhard, et al 2015.
water, energy, transport and communication infrastructure. These paved the way for policy reforms that included revamping the public investment program, streamlining administrative structures and compiling economic statistics.

The government, even while taking a leading role in economic activity, encouraged the growth of private investment. A new investment code and one-stop investment promotion center were also established in 1998 to provide a conducive investment environment for both local and foreign investors. Forms of technical and financial assistance were also initiated, including loan guarantees and liberalization of selected economic sectors to attract private investment. The government launched a partial sell-off of state-owned enterprises that had largely dominated industry in the year before the civil war. The privatization campaign reached its peak in the period 1998-2000 when 55 state enterprises were earmarked for privatization, among these were coffee and tea factories, public utilities and the state-owned telecommunications company Rwandatel. Private investment in the mining sector culminated into tremendous increases in the production of cassiterite and coltan with the latter increasing from 147 tonnes in 1999 to 1,300 tonnes in 2000, constituting the country’s largest single export at the turn of the century.

The financial policy measures taken by the government during the recovery process were remarkably successful; GDP which had declined by half in 1994 grew by over 35 percent in 1995 and sustained an average growth above 10 percent per year in the subsequent five-year period. During the same period, inflation reduced substantially from 64 percent in 1994 to nine percent in 1996 before food demand from returning refugees and insecurity from some food producing regions caused inflation to skyrocket to 17 percent in 1997. Foreign aid had financed much of the recovery and development agenda, posing a risk to its stability and sustainability. In partial response to this challenge, the government pursued a prudent fiscal policy to raise domestic revenue through adjustment of tax rates and reforming tax and customs administration, ultimately raising the revenue-to-GDP ratio from four percent in 1994 to 10 percent in 1997. As part of the efforts to reduce the prevailing large budget deficit, public spending was cut by banning purchase of government vehicles, limiting budget allocations for ministerial travels among other measures. The enhanced revenue performance was partly responsible for the increase in government savings by one percent in the 1998-2000 period. The country grew by an average of 10 percent annually from 1996 through 2000.


In 2000, Paul Kagame, then Vice President and head of the army since 1994, became President after the resignation of Pasteur Bizimungu. With the adoption of a new constitution in 2003 that established a parliament and presidential system, Kagame won subsequent election victories to serve seven year terms in 2003 and again in 2010. Further political developments were undertaken, including improvements in the gacaca system (public hearings for alleged genocide perpetrators) with the aim of achieving faster reconciliation and restore Rwanda’s social fabric that was torn apart by the civil war and genocide. There was also progress in decentralization up to the sector level in order to bring services closer to the people and improve the service delivery channel. The country ensured equal political representation for women; female representation in the parliament has been over 60 percent since 2003, one of the highest in Africa. Although Rwanda has not implanted OECD-style democratic

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3 Sector (sub-district) is the third smallest unit of administration after village and cell.
principles, the country has made strides in forging a national Rwandan identity of two formerly warring ethnic groups and created opportunities for all ethnic groups in governance,4 has created one of the most corruption-free countries in Africa (see Transparency International, --), and established a highly ranked legal and regulatory environment (see World Bank Group, 2016b).

**Economic growth accelerates...and improves people’s lives**

Stable politics, prudent macroeconomic management, and a sound investment climate laid the groundwork for a dramatic turnaround in economic and social performance. Economic growth accelerated to a new plateau of growth (Figure 1). Rwanda has been cited among top performers in the World Bank’s doing business indicators. For example, the number of days it takes to register a business reduced substantially from 40 to 16 between 2003 and 2008. Economic growth from 1995-2015 averaged more than 8% annually, some four times the growth rate of the previous decade. Per capita incomes rose dramatically – in effect giving the average Rwandan an annual pay raise by [5%] or more.

**Figure 1  Rwanda’s High Growth Plateau**

![Figure 1: Rwanda GDP Growth 1981-2015](image)

Even discounting the rebound effects immediately after the devastation of 1994, Rwandan growth has been substantially better compared to many comparator countries in the region, including long-running star performers like Botswana. Figure 2 shows the implied catch-up in per capita incomes that Rwanda has managed to achieve.

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The proportion of people living below the national poverty line declined from 60.4 percent in 2001 to 56.7 percent in 2005, further reducing to 44.9 percent in 2010 and 39.4 in 2014 (Figure 3). Besides poverty reduction, the Government of Rwanda pursued inclusive growth policies which culminated into a reduction in inequality, measured by the GINI coefficient from 0.52 in 2006 to 0.49 in 2011. Growth in agricultural production contributed 35 percent of the poverty reduction between 2004 and 2014 while 10 percent of the reduction came from increased commercialization (World Bank, 2015).

Figure 2  Rwanda Rising Average Income

![Figure 2: Rwanda Rising Average Income](image)

Source: IGC staff based on WITS, WDI, and UNCTAD data

Figure 3  Growth facilitate dramatic improvement in the lives of Rwandans

![Figure 3](image)

Source: Minecofin.
Policy, Planning and Public Investment: the Centrality of Government

These results, remarkable in an African context, did not come easily. They were the result of hard work, coherent programs and steady day-to-day attention to implementation of government policy and public investment, much of it with donor-supported projects. Central to this success was period as a multidimensional planning process coupled with a system of monitoring actual implementation and performance contracts throughout the civil service.

Rwanda has a hierarchy of strategies that have informed policy (Figure 4). Vision 2020 is the long-term strategy; adopted in 2000, it aspired to bring the country to middle-income status by 2020, and has served as a foundation for the many subsequent medium- and short-term strategies and policies. It was constructed on six pillars, emphasizing productivity, trade, and building state institutions.

Figure 4 Rwanda’s hierarchy of planning and implementation strategies

Soon after the adoption of the Vision 2020 strategy, the first Poverty Reduction Strategy Paper (PRSP) in 2002 laid out several specific economic and social reforms. One of the major objectives of this policy commitment was to reduce the poverty ratio from 60 percent to 25 percent and raise per capita incomes from USD 250 to USD 1,000 (IMF Annual Performance Review, 2005). The implementation of the PRSP was to focus on six priority sectors of Agriculture, Human Development  Education, Human Development  Health, Economic Infrastructure, Human Resources and Capacity Building, Private Sector

Source: Newfarmer, Savini and Vigil, 2013

5 These were: (i) transformation of agriculture into a productive, high value, market oriented sector, with forward linkages to other sectors; (ii) development of an efficient private sector spearheaded by competitiveness and entrepreneurship; (iii) infrastructural development, entailing improved transport links, energy and water supplies and ICT networks; and (iv) promotion of Regional Economic Integration and Co-operation; (v) reconstruction of the nation and its social capital anchored on good governance, underpinned by a capable state; and (vi) comprehensive human resources development, encompassing education, health, and ICT skills aimed at public sector, private sector and civil society (GoR, 1999).
Development and Good Governance. This was later followed with the first EDPRS (EDPRS1) which was implemented between 2008 and 2012, centered on sustainable growth for jobs and exports as well as accelerated poverty reduction through public works, promotion of cooperatives, credit and direct support to the rural poor. The third program focused on promoting regional comparative advantage and good governance especially by reducing the incidence of corruption. In 2012, the government launched the second EDPRS2 to be implemented in the years to 2018 (see below).

Of the 73 targets proposed in the EDPRS1, 25 could be interpreted as being industrial policies focused on structural transformation and trade, including export growth, development of the financial system, measures to raise agricultural productivity, and infrastructure (power, roads and ICT). To achieve the export growth target, the EDPRS also set out specific programmes for each of four leading exports (tea, coffee, minerals and tourism) designed to increase productivity, volume and quality; these numbered 24 in total.6

Over this period, the government developed a sophisticated system of monitoring its own progress in achieving targets and implementing reforms and public investment. It now evaluates its own performance through four main channels that cascade down from general and comprehensive indicators economy-wide to specific and focused ones at the ministerial and project level, often with donor support and participation:

- The Government has organized about 12 Sector Working Groups to monitor delivery on the EDPRS and other indicators for each sector, usually with the participation of donors financing parts of the SWG’s program, and progress is reported back to the Ministry of Finance (and eventually to participating development partners).
- The Government organizes an Annual Leadership that where top levels of the government discuss the most pressing cross-cutting constraints, monitors progress on commitments taken in this forum, and outlines plans for the coming year.
- The Annual Action Plans (AAPs), derived from SSPs, and other commitments are monitored by the Office of the Prime Minister. Each institution produces an Annual Performance Report that provides information on the achievement of pre-set targets.
- In parallel, in a process that is becoming more and more streamlined, ministers are expected to deliver on “Imhigo” performance contracts, indicators for which are closely tied to the AAPs.

This system was central to the growth achievements because, with a small and relatively weak private sector, the government has had to take a leading role not only in infrastructure development but also in developing and promoting productive activities. Central to this, as elaborated below, has been an ambitious program of public investment.

Patterns of Growth: Services before Manufacturing

Delving deeper into the underlying patterns of growth in Rwanda reveals patterns of growth that are both unusual and signal challenges to future growth. Three patterns of growth stand out: first, the investment and exports have contributed a relatively small share to growth, especially in the early period; second, the country invested in services in advance of manufacturing and it was a leading sector

6 This section is adapted from Newfarmer, Savini, and Vijil, 2013.
in growth for much of the last two decades; and finally, the importance of foreign savings in providing resources to finance growth.

In the period of reconstruction in the late 1990s, it was logical that rising private consumption would be one driver of growth (Figure 5). Even though after 2000, investment and exports begin to assume a new importance, rising private consumption remains important. In a way this is to be expected because of the high levels of subsistence poverty prevalent Rwanda.

Figure 5 Agriculture gave way to services and industry to power growth

But the composition of GDP changed dramatically relative to 1990. Industry, exclusive of manufacturing, led the growth dynamic, with services not far behind (Figure 5). Non-manufacturing industry reflected growth in mining, electricity and construction. These sectors stimulated services inputs such as engineering, architectural and legal services. Services also provide inputs into other activities as the economy expanded – particularly high value-added services such as telecommunication and finance. Retail trade and informal employment in urban services have absorbed many low skilled workers. Only later has the export of services become important, notably tourism. Bridging both the export and domestic market, transport too has increased substantially. Finally, service growth also reflects the growth government itself.

Steady increases in agricultural yields among domestic and export crops facilitated the sector’s expansion. Tea and coffee have grew relatively rapidly – at times aided by high prices after 2003 and until 2015. Tea and coffee exports grew by [---] annually from 2000 to 2015. Increases in domestic yields of food crops, in part powered on the supply side by increased investments in fertilizer and on the demand side by greater integration of the domestic market. The implementation of the National Agriculture Policy since 2004 and the Strategic Plan for the Implementation of Agriculture in Rwanda resulted into massive increases in yields for the main food crops; 225 percent for maize, 129 percent for
wheat, 90 percent for cassava, 66 percent for potatoes, 62 percent for beans and 34 percent for rice. In order to accelerate poverty reduction especially among the rural poor, government priorities were centered on the diversification of rural incomes into non-farm activities which contributed 16 percent of the poverty reduction achieved in the past decade (World Bank, 2013).

Manufacturing receded in importance in GDP. This was the result of a surge in growth in the other sectors that simply out-distanced the small manufacturing sector. No doubt too the unwinding of the very high levels of protection at the end of import-substitution period in the 1990s.

**Changing jobs: Structural Transformation**

Even so, as the process of urbanization and growth has accelerated over the two decades after 1995, a conventional picture of agriculture releasing employment to the urban wage sector has clearly become evident. Although recent information is not yet available, agriculture’s share of total employment has fallen from 89% in 2001 to 71% in 2001 (Figure 6a). Many of the new jobs were in the self-employed sector, amounting to 12 percent in 2011, up four fold from 2001. The private wage sector grew to become employ 14 percent of total employment.

**Figure 6** Structural transformation: Out of Agriculture into Services

Of the 8 percent annual growth in the 2006-2001 period, the World Bank calculated that about have was due to increases in output per worker (4%) and about half due to increases in labor productivity (3.9%). The increase in labor productivity, according to their calculations, was virtually all associated with these intersectoral shifts – structural transformation. Some 90% of the total gain in labor productivity during this period was associated with movement out of agriculture (Figure 7). Using a Shapley decomposition methodology of labor productivity changes (i.e., output per worker), the World Bank calculated that,
besides the dominant role for inter-sectoral shifts, increases in the capital-labor ratio accounted for 51% while TFP, the residual decreased by 41% (WBG, 2016a).

**Figure 7 Labor productivity rose with sectoral movement...and diversified employment**

This increase in labor productivity has been accompanied by a change in employment patterns. Particularly striking was the proliferation of off-farm part-time employment. In 2006, only 9% of farmers had secondary employment outside of agriculture; that figure a mere five years later jumped to 21% (Figure 7b). By 2011, 45% of all workers – farmers and non-farmers – had moved completely out of agriculture, up from 30% in 2006 who at least had a secondary job in agriculture (see WBG, 2016a). These are rough calculations and do not take into account many intervening variables, however, they do illuminate the fast pace of structural change in Rwanda.

**Public investment: A Leading Sector**

One reason why workers were able to find jobs outside of agriculture was the steady efforts of the government to invest in economy activities. Public investment typically comprised [half] or more of all investment in Rwanda in this two decades of growth. Financed in large measure by development assistance, the government took the lead in investing in roads, electric power, fixed line telecommunication and later internet backbone as well as schools and hospitals. One example is the government’s early decision to build the internet backbone that would link up virtually the whole country – and lay the basis for access to the global lines connected up via the EASSY cable through Uganda and Tanzania (Figure 8).
Recently, the government has devoted resources to expanding the electrical grid, built a large convention center to tap into the MICE business tourism, invested in new airplanes to make Rwandair into a regional carrier, and substantially up-graded and renovated the existing airport. It has continued to push forward plans to build a railroad connection through Uganda and Kenya to the coast, and bought land to eventually built a new airport.

Aside from these large project, the government has mounted a steady flow public investment in urban infrastructure, particularly in Kigali, and in agriculture, notably in irrigation and terracing. It has used two state-owned companies – Crystal Ventures and Horizon – to invest in productive activities to develop the market. Some activities, such as the Serena Hotel, have later been privatized, but these two companies maintain a portfolio of commercial activities, including, for example, dairy. In recent years, the government has turned its attention to leveraging its investments through public-private partnerships. For example, the government has signed several MOUs with private power developers to build generation capacity. In summary, these investments have been a driving force in economic growth.
To a large measure, public investment explains the substantial growth in industry, particularly construction. Whether it is road construction, urban infrastructure, or digging trenches for internet cables, all are labor-intensive activities that have contributed to growth and productivity gains.

**The Critical Role of Foreign Savings**

Foreign savings have been an important source of investment finance. Over the period, 2000-2015, foreign savings amount accounted for [---]% of investment finance. Of these foreign savings, the greatest percentage originated in official development assistance. What differentiates Rwanda from most other aid recipients is how well the country has used development assistance. Because of its low levels of corruption – Rwanda ranks [second best] in Africa on the Transparency International Corruption Index behind [only Mauritius] – and its capacity to implement a public investment program, Rwanda has managed to channel virtually all of foreign savings into productive investment.

**Figure 9** Foreign savings have financed a large share of investment

One weakness in the financing pattern for investment has been the relatively low portion of foreign direct investment in Rwanda, at least until recently (Figure 10). Foreign investment can bring much needed capital, technology and management skills. Perhaps more important, MNCs have access to regional and global value chains that now constitute the greater share of world trade.\(^7\) This is understandable. Rwanda has neither an abundance of mineral and petroleum riches to attract resource-seeking investment, a large market to attract market-seeking FDI, a particularly skilled labor force that would be looking to employ cheap labor, nor easy access to coastal ports that would otherwise give it a transport cost advantage. To the contrary, transport costs are high.

Recent data indicate that Rwanda is having at least some success in attracting FDI. The country has received substantial new investment in services – finance, mobile telephony, and tourism – and is now beginning to receive some investment in manufacturing.

**Looking to the Future: Challenges, Trade, and Industries without Smokestacks**

The government in 2013 launched an ambitious program for the next five years to keep Rwanda on a path of becoming a middle-income country by 2020. The objectives were indeed “stretch goals”: Specific targets to be achieved by 2018 include per capita income of $1,000, 30 percent poverty incidence and reducing the proportion of the population in extreme poverty to below nine percent. These were seen as milestones towards achieving Vision 2020 objectives: Nearly double per capita income to US$1240 by 2020, reduce poverty to under 20% and eliminate extreme poverty, add 1.8 million new off-farm jobs with 35% of the population living in cities; increasing private investment (including foreign) to more than 15% of GDP, and increasing import payments with export earnings from 42% to 75% by 2017 (Figure 11).
Achieving these goals hinges critically on developing new sources of growth and development finance. On the one hand, easy gains in agricultural productivity and movement to off-farm employment in public investment–related services are likely to be diminishing. On the other, official development assistance is unlikely to be as available in the future as it has been in the past. So, growing exports and attracting more private foreign savings have moved to the forefront of Rwanda’s development agenda. This will not be easy. Several persistent deficiencies in the structure of Rwandan trade have long concerned the government:

- Despite considerable progress, Rwanda remains heavily dependent on three commodity exports: coffee, tea and minerals. These three constitute [about half] of the country’s export earnings. This level of concentration has contributed to large swings in terms of trade and volatile growth performance.
- Value-addition in commodity exports, though much improved relative to the 1990s, still remains low and therefore constitutes an opportunity for growth.

### Source: Minecofin, EDPRS2

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8 Reliance on ODA can also expose the country to political winds in donor countries. For example, donors sharply cut aid in 2012 aid following allegations by the United Nations of Rwanda’s involvement in the DRC civil war, and this reduction because a negative shock that reduced GDP growth to 4.7 percent in 2013.
- Rwanda is in a low-trading neighbourhood, at least for merchandise. All countries in the East African Community (EAC) have low trade shares of GDP, underscoring the importance of the regional integration agenda.
- New products that Rwanda exports, the critical green shoots of future diversification, have a low survival probability in foreign markets.
- Rwanda, as noted, has so far attracted less FDI than other countries in Africa, a reflection of its small market and geographic isolation. This has truncated opportunities to participate in regional value chains. \[\text{update graph and let's see whether this still holds...}\]

These problems, of course, reflect the hard realities of being a poor country, with a small market in a socially volatile neighborhood. But much as general economic policies have led to dramatic improvement in growth in recent years, so, too, policies in the area of trade can help address these deficiencies.

**Figure 12  Rwanda and its neighbors trade less with each other and with the world**

![Trade Share of GDP (ave 2009/2008)](image)

Source: IGC staff based on WITS, WDI, and UNCTAD data

**General Policies to Expand Trade**

The government has developed programs to reshape the domestic productive environment. First, power is unreliable in supply and expensive; power costs of 20 KW/second are potentially harmful to the manufacturing sector, so it has develop a medium term expansion program for domestic generation that includes adding \[---\] MW to installed capacity in the next five years. Second, transportation costs are a huge tax on competitiveness. Transport costs from Mombasa port to Kigali add roughly 50% to prices for imports and exports. Investing in in-land cargo transportation facilities would reduce the cost of cross-border trade, increase the competitiveness of Rwanda’s exports — by reduction in transport costs for export products and cost of imported inputs into the manufacturing sector.
Already, Rwanda has made exceptional progress in improving the business environment. Its ranking has progressively improved on the World Bank’s Doing Business scale from 139 in 2009 to 52 in the 2013 rankings (it is one of the top three countries in Sub-Saharan Africa and the top-ranked low income country), though this effort has yet to be requited with large private investment inflows. Rwanda’s low ranking on the “trading across borders” sub-index (158 in 2013), partly because of high transportation costs, is a clear manifestation of the constraints (World Bank Group, 2012).

Finally, the government (along with other EAC members) could revisit trade policies that inadvertently disadvantage exports. This includes:

- **Reducing the costs of trading and removing non-tariff barriers in the EAC.** Despite the removal of tariff barriers within the EAC, non-tariff barriers (NTBs) shackle trade growth (see Cadot, et al [2013]). Progress on removing the 35 NTBs that EAC ministers had agreed to remove has been halting.

- **Improving incentives for private investors to export.** The tariff regime shapes relative price incentives to private producers, and high tariffs tend to make it more profitable to produce domestically than for export, biasing productive towards import substitution, usually with a cost penalty in growth. Frazer (2012) calculated that when Rwanda lowered its tariffs on intermediate inputs from an average of about 12% to 7%, exporting firms increased their sales abroad by 5-10%.

- **Liberalising trade in services.** Even though Rwanda is among the most open of EAC countries in services trade and has benefited from that openness, markets with the EAC are still highly segmented. The lack of competition in EAC telecommunications markets in the past, for example, has conferred a dominant position on MTN in Rwanda, mirrored by dominant producers in other EAC countries, and this has led to restrictive pricing that has impeded the expansion of the competitive fringe of operators (Argent and Pogorelsky, 2011). Similarly, lingering EAC restrictions on professional services are a regional brake on technological absorption and growth in the region and derivatively on Rwanda (Brenton and Gözde, 2012). The recent efforts of the government to eliminate roaming charges has reportedly led to greater cross-border communication at lower cost.

**Trade and Industrial Policy**

At the center of the government’s industrial and trade strategy is an effort to diversify the economy, create new activities, and add value to traditional products. Past efforts are beginning to pay dividends. Rwanda export portfolio, like the rest of East Africa, has become more diversified, if still concentrated on forward processing of raw materials (Figure 13).

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9 See Newfarmer and Sztajerowsky (2012) for a literature review of some 15 recent econometric studies dealing with tariff liberalisation and economic growth.
The government is pursuing an ambitious program of industrial policies over the next two years, with the objective of reducing the current account deficit through a more rapid growth of exports and greater import substitution. Medium term policies are designed to promote exports and reduce imports in several sectors: textiles, garments and leather industry; agriculture export crops; agri-business; construction; livestock; wood industry; minerals; tourism; and ICT. In agriculture, it seeks to reduce imports through increasing sugar and rice production. It has a major objective increasing the proportion of fully washed coffee which increased to 50 percent in 2015 from 21 percent in 2010 to rise gradually and reach about 80 percent over the next two years (GOR, 2016). In construction it seeks to expand cement production. Plans are in place to raise the production of the national cement company six fold to 600,000 tonnes per year.

To stimulate manufacturing exports, the government has set up a Special Economic Zone in Kigali and designated sites in other cities to follow suit. It has set up an export growth facility in the Rwandan Development Bank (BRD) to promote exports. Moreover, it has set up an export promotion fund. Targeted areas include processed food, and the development of textiles, garments and leather industry as well as beginning to to export cut flowers soon. It also has plans to export laptops assembled in Rwanda.

The objective is to accelerate the move toward high-value sectors. The most successful and promising of these are labor intensive light manufactures, horticultural products and agro-processing, Information and Communication Technology (ICT), tourism, and services, particularly tourism.

**Labor-intensive light manufactures**

The government has attracted Chinese investment to set up pioneer firm in textile manufacture. It is located in the industrial zone. *(Information to be added.)*

**Horticulture and Cut Flowers**

The National Export Strategy (2010-2015) highlighted export diversification as a key priority, focusing on agro-processing in non-traditional sub-sectors including horticulture (MINICOM, 2011). Horticultural products have increased in importance, pitching from 13,700 metric tonnes in 2008 to 25,600 metric tonnes in 2012 (World Bank, 2015). Nonetheless, the export base remains highly narrow and the economy is hungry for further diversification. Investment incentives targeted to horticulture in particular and export development in general include dedicated land sites for investment, cold chain development including Kigali pack house at the National Agricultural Export Development Board (NAEB) and access to finance, notably through the export growth facility (EGF) managed by Rwanda Development Bank (BRD). The six months of rainfall is ideal for horticulture farming; the wet and cool climate in the high-altitude North and West are convenient for temperate fruits, big-headed roses and herbs, while avocados, beans, chillies and Asian vegetables thrive well in the sunny and warm South and East.

The government plans to expand revenue from horticulture from the $3 million in 2009 to $9 million in 2015. There are however no major horticulture exporters in the country partly because of the difficulty in maintaining optimal quantities and standards. Besides the high cost of obtaining an organic license implies that majority of horticulture farmers are not licensed organic farmers - even though an estimated 85% of them use organic inputs and practices (MINICOM, 2011). Limited land for expansion, inadequate knowledge among value chain players on proper crop cultivation, fertilizer and pest management, post-harvest handling and export procedures further plague the horticulture sector. In order to bridge the knowledge and skill gap, the government has stepped up efforts to train farmers on agricultural and agronomic practices through the One Acre Fund. There is potential for Rwanda to maximize revenues from horticulture by reducing the cost of airfreight between Kigali and international markets which are among the highest in the region. With airfreight costs substantially reduced, Rwanda will position herself to serve the increasing demand for fresh fruits and vegetables in the EAC region and the DRC. Physalis are grown in the high-altitude regions of Rwanda and present potential to feed the high demand from Europe and the Middle East – currently supplied by Colombia. Avocado, an oil fruit grown by over 500,000 smallholder farmers has potential for agro-processing into avocado oil. The government has committed to horticultural development through:

- Earmarking cites for horticultural cultivation and investing in agricultural land information systems and irrigation facilities.
- Developing a cold chain system including Kigali pack house to be completed by end of 2016 to support 120 square meters of cold rooms and storage capacity of 35 metric tonnes. Four regional collection centres in Musanze, Kamonyi, Rulindo and Ngoma, each with a capacity of 7-10 metric tonnes, will also boost agro-processing.
• Modern facilities managed by MAGERWA at Kigali International Airport, with a cold-storage capacity of 30 metric tonnes, with four hectares of customs clearance and cargo handling equipment rental available.

• Improving feeder roads, electricity supply and reliability and air connectivity.

• Export growth facility to increase access to subsidized finance by potential exporters.

• Investment in irrigation has increased area under irrigation from 6,000 ha in 2006 to 45,000 ha in 2016 (NAEB, 2016).

<table>
<thead>
<tr>
<th>Location</th>
<th>Land size</th>
<th>Intended activity</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nyacyonga (10 km from Kigali)</td>
<td>20 hectares</td>
<td>Flower development</td>
<td>Appropriate for middle altitude roses; basic production infrastructure on site.</td>
</tr>
<tr>
<td>Gishwati</td>
<td>80 hectares</td>
<td>Apple growing</td>
<td>Highly fertile volcanic soils; cool and high precipitation; favourable for temperate fruits.</td>
</tr>
<tr>
<td>Gishari</td>
<td>60 hectares</td>
<td>Flower development; rose production.</td>
<td>Good for intermediate roses; close to Muhazi lake for irrigation.</td>
</tr>
<tr>
<td>Gashora</td>
<td>250 hectares</td>
<td>Vegetable development.</td>
<td>Near Akagera river; irrigation development underway; highly fertile soils.</td>
</tr>
<tr>
<td>A plot in KSEZ</td>
<td>7 hectares</td>
<td>Wholesale market for fresh produce</td>
<td>Located in Kigali Special Economic Zone; GoR seeking developer.</td>
</tr>
</tbody>
</table>

Source: National Agricultural Export Development Board (NAEB)

**Information and Communication Technology**

*Information and Communication Technology (ICT)* has expanded greatly in recent years, attracting 47 percent of foreign direct investments between 2008 and 2011 (BNR, 2012) and contributed three percent of GDP in 2014. The sector has received policy focus under the multi-phase National ICT Strategy and Plan (NICI): the first phase (NICI 1, 2001-2005) focused on institutional, legal and regulatory reforms, liberalization of the telecom market and reducing entry barriers. The second phase (NICI 2, 2006-2010) was centered on establishing world-class communications infrastructure as a backbone the country’s communication needs. The major goal in the third phase (NICI 3, 2011-2015) was to develop ICT for improved service delivery in both the private and public sectors. Under NICI 3, the government aimed to use ICT to build a highly skilled and knowledgeable labor force (skills development), stir competition and innovations in the private sector (private sector development), empower communities through improved access to information (community development), improve efficiency and service delivery in government operations (e-Governance) and secure the country’s cyber space and information assets (cyber security).

ICT continues to grow rapidly and drive innovations in several sectors, posing great growth potential for the economy. The government is a major consumer of ICT services through its line ministries and authorities. One of the main landmark digitization initiatives was the establishment of electronic and
mobile declaration (e-declaration and m-declaration) of tax returns in the Rwanda Revenue Authority in 2011. The success of this initiative was backed by the recently (2015) introduced mobile payment for taxes, both initiatives ultimately saving taxpayers time and transport cost that would be incurred in declaring and paying taxes. The regulatory agency – Rwanda Development Board (RDB) has worked closely with technology solutions companies to earmark the digitization of 100 services including application for birth certificates, registration, school examination fee payment among other key services. The education sector has also embraced ICT by designing online learning platforms and a private-public partnership between GoR and technology company Postivo BGH in 2014 to set up a laptop factory in Kigali and sell laptops to schools. The development of mobile apps like the Helath Information Management Systems (HIMS), RapidSMS and e-Diagnosis in the Health sector has eased knowledge sharing and patient tracking by health service providers. In the Agriculture sector, Fertilizer Voucher Management System helped to smooth the distribution of fertilizers to farmers; farmer uptake rose by 11% between 2013 and 2014. Other market platforms like e-Soko help farmers to access real-time price information for agricultural produce.

**Services Exports**

*Services* is another area where Rwanda could generate new activity. Rwanda, like many other African countries, has benefited from a leapfrog from the 20th-century fixed-line technology directly into the 21st century mobile technology. Mobile phone subscriptions rose 63 percent in 2013 to 70 percent in 2014 while 4G LTE was rolled out in November 2015 with an ambitious target of connecting 95 percent of the population by mid-2017. In the financial services sector, the digitization agenda has seen tremendous modernization of service delivery and emergency of pro-poor and efficiency-augmenting financial innovations. Between 2011 and 2014, mobile payments subscriptions increased from 639,673 to 6,480,449 between 2011 and 2014 and the value of transactions increased from 51 million to 691 million francs. Mobile money – a financial product that allows users to make financial transactions via the mobile phone – was introduced in February 2010 and has since then revolutionized financial inclusion and payments efficiency; mobile money users shot up from nearly 200,000 in 2010 to over 1.4 million in 2012 (RDB, 2015). Partnerships between Mobile Network Operators (MNOs) and commercial banks have taken pace to leverage market potential among the formerly unbanked people especially in rural communities. Unexploited opportunities still exist for Rwanda to achieve its goal of being the ICT hub of the East African Community, expand its export of ICT services in the region and increase competitiveness of exports.

**Tourism**

*Tourism* has also been of great economic benefit to the Rwandan economy; it has been the single most important source of foreign inflows since 1999, surpassing the combined traditional exports – coffee, tea and unprocessed minerals (World Bank, 2015; Daley and Gereffi, 2016). The government has thus placed emphasis on the sector by supporting improvements in tourism infrastructure to increase annual tourism visits, a move that raised tourism revenue by 35 percent between 2008 and 2011. Of recent, priorities have focused on medical tourism with an aim of making Rwanda the medical tourism hub of the EAC region. Investment in high-class and specialized hospitals like the Rwanda Military Hospital (RMH) where patients from the EAC region and beyond could come for high-quality medical services is expected to particularly boost medical tourism and generally raise tourist arrivals and revenue. Notwithstanding numerous challenges in realizing this goal, Rwanda has the potential to attract medical
tourists from the Democratic Republic of Congo (DRC) where health services are relatively less efficient. Improved digitization of tourist services and marketing of tourist attractions to potential regional and international tourists is still missing and holds great value-addition potential. Construction and renovation of accommodation units like hotels is also on the rise especially in Kigali, which might bring down the cost of accommodation and raise tourist arrivals in future years.

To promote tourism, it has invested heavily in the national airline, RwandAir – including the purchase of two airbuses. It is focusing on MICE tourism (meetings, incentives, conferences and events), and will finish the Kigali Convention Centre (KCC). Tourism is proving to be one of Rwanda’s highest potential export-oriented service sector, generating about a third of the total export of goods and services earnings. It is a sector in which Rwanda’s strengths are the safety, comfort and stability of the country. The government has adopted a MICE strategy aimed at making Kigali a hub for major regional and international conferences. The opening of the Kigali Convention Centre is scheduled for June 2016 and together with new upscale hotels being built, will provide high quality rooms for up to 6000 guests by end year. With their new routes to India and China, Rwandair is also part of these plans in bringing guests from afar as well as stimulating trade. Revenues from MICE tourism were US$39 million in 2015 and projected to increase significantly in 2016/2017 as more than 20 international events are expected to be hosted in Rwanda (see Government of Rwanda, 2016 “Letter of Intent” for IMF Standby May 25).

Conclusions

Rwanda has achieved remarkable rates of socio-economic transformation since the end of the civil war and genocide that tore apart its economic muscle and social fabric in the early and mid-1990s. Recovery and development processes have for long been based upon building sound political and institutional structures to foster unity and reconciliation in once a highly fragile state. An effective, on-the-ground and corruption-intolerant political system has provided a conducive ground for the success of public policy and a conducive investment climate attractive to both local and foreign investments. The government of Rwanda has exhibited strong commitment to poverty-reducing economic growth by initiating pro-poor policies to raise the income and productivity of the poor, registering tremendous decline in poverty and inequality. Donor support has also been an invaluable source of funding throughout Rwanda’s recovery and development phases. Going forward, the economy will have to devise measures to reduce over reliance on foreign aid and its associated exposure to external growth shocks. Strategies to diversify the export base, improve domestic revenue collection and lower the cost of energy and transport would increase the robustness of the country’s economy and aide in the realization of a middle-income status envisioned in the country’s Vision 2020.

While trade has played a role in Rwanda’s success over the last decade, its potential for contributing to growth has barely been tapped. With judicious continued action in these four areas, together with other on-going reforms, trade can inject renewed dynamism into growth. Combined with continued supportive inflows of foreign savings, Rwanda could well move its growth plateau from the 6-8% range of the past decade towards East Asian standards of 8-10% annual growth in the coming decade.
References


Annex

Table 1: Rwanda Economic Performance Indicators: Five-year Average 1981-2015

<table>
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</thead>
<tbody>
<tr>
<td>GDP Growth (%)</td>
<td>2.7</td>
<td>1.5</td>
<td>-3.9</td>
<td>10.3</td>
<td>7.5</td>
<td>8.3</td>
<td>7.1</td>
</tr>
<tr>
<td>Agriculture Value-added Growth (%)</td>
<td>1.2</td>
<td>-0.08</td>
<td>-1.56</td>
<td>10.1</td>
<td>6.24</td>
<td>4.9</td>
<td>4.9</td>
</tr>
<tr>
<td>Industry Value-added Growth (%)</td>
<td>4.28</td>
<td>0.42</td>
<td>-7.68</td>
<td>10.42</td>
<td>9.52</td>
<td>9.1</td>
<td>10.3</td>
</tr>
<tr>
<td>Manufacturing Value-added Growth (%)</td>
<td>2.32</td>
<td>3.56</td>
<td>-13.68</td>
<td>7.1</td>
<td>9.1</td>
<td>6.46</td>
<td>4.83</td>
</tr>
<tr>
<td>Services Value-added Growth (%)</td>
<td>3.8</td>
<td>3.8</td>
<td>-2.6</td>
<td>10.8</td>
<td>4.8</td>
<td>11.2</td>
<td>8.5</td>
</tr>
<tr>
<td>Inflation (CPI, %)</td>
<td>6.6</td>
<td>2.4</td>
<td>13.9</td>
<td>5.4</td>
<td>6.8</td>
<td>8.4</td>
<td>4.3</td>
</tr>
<tr>
<td>GDP per capita (current USD)</td>
<td>267.4</td>
<td>329.4</td>
<td>246.0</td>
<td>249.9</td>
<td>226.6</td>
<td>462.0</td>
<td>662.2</td>
</tr>
<tr>
<td>Export Growth (Goods and Services, %)</td>
<td>6.9</td>
<td>-1.3</td>
<td>-10.3</td>
<td>8.8</td>
<td>27.0</td>
<td>3.0</td>
<td>18.9</td>
</tr>
<tr>
<td>External Debt/GDP Ratio (%)</td>
<td>17.04</td>
<td>26.58</td>
<td>67.64</td>
<td>69.38</td>
<td>78.68</td>
<td>15.38</td>
<td>21.48</td>
</tr>
<tr>
<td>FDI Net Inflow (Current USD, millions)</td>
<td>14.3</td>
<td>15.9</td>
<td>3.0</td>
<td>4.4</td>
<td>5.9</td>
<td>75.4</td>
<td>203.8</td>
</tr>
</tbody>
</table>

*Source: Author’s calculation based on data from World Bank and IMF reports.*
Source: WBG, 2016 CPIA Scores