

Policy Brief

Regional market integration within AfCFTA to further agri-food transformation and food security The case of the Republic of Rwanda

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Rwanda is famous for its remarkable socio-economic performance after the ravages of the Genocide against the Tutsis and moderate Hutus in 1994. Under the leadership of President Paul Kagame, Rwanda has followed a state-led development model with stunning results.

Despite these substantial accomplishments, Rwanda is still a low-income country with extensive poverty. Its agriculture is still of low productivity and highly vulnerable to climate change. Structural transformation has weakened as the rate of growth, job creation, and poverty reduction have slowed down. Food security is still a distant dream for millions. Agriculture must successfully transform,¹ if Rwanda is to realize its ambitious Vision 2035 of reaching middle-income country status and Vision 2050 of reaching high-income status.

Rwanda's state-led approach to focusing on food self-sufficiency as agricultural transformation has had good results but the approach is fast encountering diminishing returns. Instead, a holistic approach to agricultural transformation is required: an approach that embraces a more significant role for the private sector with access to expanding, lucrative, and competitive markets. In an era when geo-political tensions exacerbate supply chain disruptions, the African Continental Free Trade Agreement (AfCFTA) offers Rwanda the regional market opportunities it needs to power its structural transformation.



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Introduction

The Republic of Rwanda (Rwanda for short) rose from the ashes of the 100 days of Genocide² against the minority group, the Tutsis and moderate Hutus in 1994, to be one of the best performing economies of sub-Saharan Africa (SSA). At the height of the Genocide, its GNI/cap was US\$ 150; in 2021, it reached US\$ 850 (World Bank).³ The progress is not only in terms of income but also of various socio-economic indicators of wellbeing. The mission of President Paul Kagame has been to transform Rwanda.⁴

Not surprisingly, poverty peaked in 1994 at 78%, according to the GoR. Before the Genocide, poverty was rising; after, it fell. In the late 1990s, some 60% of households were classified as poor, with a higher rate among female-headed households at 62%, while for male-headed households, it was at 54%.⁵ The Genocide left millions of widows (34% are female-headed households); households headed by persons less than 20 years old; and by the old (above 60 years); orphans; and street children. (Sangano et al., 2003)

Against this grim backdrop, the achievements and challenges of the Kagame government stand out. The GoR Vision 2050 is to achieve middle-income status by 2035 and high-income status by 2050.⁶ The focus of this Policy Brief is whether and how regional market integration can enable Rwanda to achieve this Vision and thus strengthen food security.

Rwanda: GNI/CAP USD 850 (2021, current USD, Atlas method)—Brief background

Focus on improving governance increases national cohesion and resilience of a devastated country: The Genocide was horrific not only in terms of the thousands slaughtered and often by people they know; but also, the large-scale destruction of infrastructure; rupture of trade links; and the decimation of businesses and agricultural assets, to name only a few. This small,⁷ landlocked country could not rely on the natural mineral resource wealth of a vast country like Mozambique to bounce back. Instead, it relied on the national leadership to slowly but steadily recover from widespread disintegration. Distinctive in its approach

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1. What constitutes successful agricultural transformation are discussed at length in Tsakok, 2011. The two defining features of successful agricultural transformation are: (1) increases in productivity (output over input variously defined) sustained over two to three decades at least; and (2) sustained increases in income for the majority of farm/rural households.
 2. The genocide started when the Rwandan President Juvénal Habyarimana was killed: his plane was shot out of the sky on April 6, 1994. The president was a Hutu. The Hutus went on a rampage which engulfed the whole nation. Estimated death toll range from 800,000 to 1 million people. The Rwandan genocide ended in mid-July 1994 when the Rwandan Patriotic Front (Front Patriotique Rwandais; FPR) under Paul Kagame, gained control of the entire country. According to historians, the hatred between Hutus and Tutsis was rooted in the way they were treated under the Belgians, the colonizing power (1914-62), whose rule elevated the Tutsi minority; that is, they promoted Tutsi supremacy.
 3. Due to the COVID-19 pandemic, GNI/cap fell from US \$ 830 in 2019 to US \$770 in 2020.
 4. Paul Kagame was elected the third time in 2017 for another 7-year term, that is, he is president until 2024. He was elected by a landslide victory in 2003, 2010, and 2017. Many argue he was effectively in charge of government since 1994. There are some conspicuous critics who allege that the elections were rigged; that opposition members were intimidated or silenced; and that the President is an autocrat.
 5. What level of consumption or income constitutes the poverty line is not specified.
 6. For lending purposes, latest (July 01, 2022, fiscal 2023) World Bank country income classification (in US\$), using Atlas Method, is: low \$ 1,085 or less; lower middle-income \$ 1,086 to \$ 4,255; upper middle income: \$ 4,256 to 13,205; and high income is \$ 13,206 or more. <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>
 7. Rwanda is 26, 338 sq. km (10, 169 sq. ml); the fourth smallest country in the mainland of SSA; and the 149th largest country in the world. It is surrounded by Uganda to the north; Tanzania to the east; Burundi to the south; and the Democratic Republic of Congo (DRC) to the west. The largest country in the world is Russia at around 17 million sq. km.

is its priority not only on growth but also on building social cohesion and an accountable government. To heal a broken nation, the GoR promoted national reconciliation and peace. It emphasized building strong institutions to keep citizens in close touch. It replaced former municipalities with new territorial entities. These new entities were replicated at every level— province, district, and village level sector administrations. Throughout this new institutional structure that reaches deep down to villages, the Rwandan Patriotic Front, the dominant party, is present to implement the national government's priorities and policies. Government officials at all levels are also bound by a detailed personal performance contract (*imihigo*) with the President of the Republic. This centralized, top-down approach has proved to be an effective performance management tool. To strengthen the administration's commitment to serving the people well, the GoR has instituted a national dialogue and a leadership retreat.⁸

Commitment to zero-tolerance for corruption increases donor financing of Rwanda's vast development agenda: Rwanda's zero-tolerance approach to corruption has made Rwanda a highly favored recipient of donor financing, one of its primary sources of development finance. According to Worldwide Governance Indicators, Rwanda ranks 71st percentile globally in its control of corruption indicator, far ahead of low- and lower-middle income countries and ahead of the average ranking for upper-middle-income countries. (WBG, July 2020). Receipts of official development assistance have averaged 17% of GDP annually, nearly 5% more than the average SSA-IDA countries and nearly double the average of low-income countries. Since Rwanda's development financing needs are vast, Rwanda's priority on governance is proving to be central to its progress towards realizing its Vision.

Significant and steady progress on multiple aspects of poverty reduction before COVID-19 hit: From 2001-2017, extreme poverty rates (at US\$ 1.90/day) have been falling from around 77% to 56%; at the national poverty line, the reduction has been from nearly 59% to 38%. Inequality is high in Rwanda but has declined: the Gini coefficient, which stood at 0.51 (2001), declined to 0.43 (2017). Several indicators of health status also improved. For example, maternal mortality fell from 750/per 1000 live births (2005) to 210/per 1000 (2015); compare this rate to 362/per 1000 for Kenya (2014) and Uganda at 336/per 1000 (2016).⁹ The total fertility rate for women aged 15-49 declined from 6.1 per woman (2005) to 4 per woman (2015); compare this rate to 3.9 in Kenya (2014) and 5.4 in Uganda (2016). These improvements are partly the result of the improved status of women under the Kagame Government. Child health also improved with progress in child nutrition indicators. Under 5 years old, mortality declined from 152/1000 live births (2005) to 50 /1000 (2015). The latter rate is somewhat lower than in Kenya at 52/1000 (2014) and in Uganda at 64/1000 (2016). The stunting rate has declined from 51% to 38% (2005-2015), but it is still higher than in Kenya and Uganda, at 26% and 29%, respectively. Stunting afflicts nearly 50% of children in the bottom 40% compared to 20% in the top quintile. (WBG, July 2020) Access to improved water sources, sanitation, electricity, and housing conditions progressed significantly between 2011-17. Despite these substantial improvements, poverty is still extensive, especially in rural areas. More than 90 % of the poor are rural, especially in the Southern, Western, and Eastern provinces.

8. The national dialogue is an annual forum to allow all citizens have direct access to the most senior leadership in government. It is known as *umushyikirano* in Kinyarwanda. The leadership retreat, known as *Umwiherezo*, brings together leaders from central and local governments, parliament, and private sector to assess the last year's achievements and discuss priorities for the year to come. Both fora are chaired by the President of the Republic.

9. GNI/cap in Kenya: US\$ 2010 (2021); in Uganda: US\$ 840 (2021) compared to Rwanda at US\$ 850 (2021)

Women empowerment substantially improved under the Kagame Government, although stiff barriers still exist: Another distinctive feature of Rwanda's transformation is the Kagame Government's commitment to gender equality. Key measures include: (1) a revised constitution that reserves a 30% quota for women in decision-making positions; (2) the inclusion of gender as a cross-cutting issue in Rwanda's national policy strategy documents; (3) a stand-alone national gender policy (2010); (4) a girls' education policy (2008); and (5) gender-sensitive land reform requiring joint titling of female and male partners' land, and gender-equality inheritance forms. The improved status of women is already benefitting women, as evidenced in the world's highest representation of women in parliament; gender equality in primary and secondary school enrollments; significant improvements in maternal health outcomes; and expanded women's access to land and finance that requires land as collateral. Despite such impressive progress, women continue to face stiff barriers in five broad areas: (i) quality of and remuneration for economic participation; (ii) higher education concerning completion at the secondary level, participation in tertiary level, as well as in technical and vocational training; (iii) lower representation of women at sub-national levels of government; (iv) gaps in access to productive assets in agriculture and entrepreneurship; and (v) elimination of gender-based violence (GBV) and violence against children.

Critical drivers of Rwanda's socio-economic performance since the early 2000s

The strengths and limitations of a robust state model of socio-economic development: Rwanda's government stands out as a strong state laying the foundations of high and inclusive growth. After the turmoil of 1994, the GoR created a secure and stable framework within which it invested heavily. Rwanda has one of the highest public sector investment-to-GDP ratios in the world. Public investment rose from 5% of GDP to an average of 15% in recent years. In so doing, it substantially improved Rwanda's ranking in the global Logistics Performance Index. Public investment focused on expanding and upgrading modern transport and infrastructure (particularly for meetings, international conferences, and events, referred to as MICE; air transportation, and hotels). Together with GoR's priority on governance and a mission-oriented government administration, these measures resulted in GDP/cap growth that averaged 5% per year since the early 2000s, with poverty being substantially reduced. But the state's role needs to be recalibrated to promote more private sector investment and domestic savings. There are two main concerns.

- One is the sustainability of public investment financed primarily by official development assistance (ODA). As Rwanda's GDP grows, ODA inflows have been reduced from 20% of GDP (2000-10) to around 12% (2011-18). As aid flows have slowed down, and inflows of FDI have not replaced them to finance the high public investment program, primary deficits have increased from 2-3% of GDP in the early 2010s to 5-6% of GDP. As of 2019, public and publicly guaranteed debt stood at 58.5% of GDP, up from 21.5% in 2012. (WBG, July 2020).
- Two, the goal of agricultural transformation equated as food self-sufficiency is fast reaching its limits, although the government's direct intervention in farming has produced some excellent results. Agricultural productivity grew significantly; total factor productivity (TFP) rose by 2% per year; agricultural growth averaged more than 5% per year since the early 2000s, and value-added rose by more than 5% over the past 15 years. The public intervention focused on stabilizing and expanding terraces, promoting better-adapted fertilizers and better seeds, extending the irrigated area, and improving farmer skills. Despite these, Rwanda's agricultural value added per worker

is lower than its regional peers; there is a significant gap between farm and non-farm productivity. Agricultural growth required expanding cultivation, but there is very little additional land. Put simply, agricultural resources—scarce land and plentiful labor—should produce higher-value crops in which Rwanda has a comparative advantage. To do so, smallholders must have access to expanding markets where they can sell their crops profitably.

Essential features of agricultural policy and performance: The Strategic Plan for Agriculture Transformation (PSTA 4) is the GoR's flagship plan for developing this critical sector. Agriculture generates over 30% of GDP; over 50% of goods export revenues; and 70% of total employment (Technical Assessment, 2018). The Kagame Government's vision is to transform this primarily subsistence agriculture into a knowledge-based, value-creating sector that will ensure nutrition and food security by 2024. In this small, densely populated country—an estimated 538 persons per sq. km (2020)¹⁰—some 52% of the total land is considered suitable for agricultural production, and 90% is on hillsides. The key measures which the GoR undertook to promote production and productivity on its scarce land include:

1. Crop Intensification Program (CIP, 2007) jointly addresses technology, land, and water issues. The CIP incentivizes producers by granting vouchers to adopt a package of higher-yielding crop technologies that bundle together improved seeds, fertilizers, and irrigation. Partly as a result, average fertilizer use increased from 4.2 kg/ha in 2007 to 29 kg/ha in 2012:¹¹
2. Land consolidation is an integral component of the CIP. Farmers of a given area must grow certain priority staple crops, such as maize, rice, beans, cassava, wheat, Irish potato, and soybean. By growing the same crops, their land can be consolidated. These consolidated lands can benefit from various services such as the delivery of seeds and fertilizer; extension; mechanization, post-harvest handling and storage facilities, and access to input and output markets.
3. The National Land Policy (2004) laid down the foundation of land tenure reform. It was followed in 2005 by the Organic Land Law, which specified the procedures to register land, administer land titles, and guide land use and development. Land administration to implement these procedures was set up. From 2009-13, the Land Tenure Regularization Program (LTRP) successfully registered 98% of land parcels in the country.
4. The National Land Law (2004) also prohibited land fragmentation below roughly 0.75 ha since that level is deemed necessary to provide a farm family's basic nutritional requirements.
5. Water control through irrigation is an important program of Rwanda's CIP. The Irrigation Master Plan (2010) identified a potential irrigable area of nearly 600,000 ha. GoR has irrigated around 3% of this total, almost 25,000 ha (2010).¹² By 2020, the total land under irrigation was estimated at nearly 67,000 ha. (MINAGRI, 2020-21)

Such agricultural policy support did contribute to the average growth rate of 5.5% per year (2007-17) and substantial poverty reduction. The focus on staples for the domestic market and on achieving food self-sufficiency was validated by the food crisis of 2008. However, subsistence farming still prevails, and agriculture has the lowest productivity of all sectors, e.g., setting economy-wide labor productivity at 100 (2017), the level in

10. Compare this population density (persons per sq. km) to India at 464 persons (2020); and Bangladesh at 1265 persons (2020).

11. The average level of fertilizer use in SSA was around 15 kg/ha (Tsakok and Guedegbe, 2019). Few smallholders use 50kg/ha (Guedegbe and Doukkali, 2018), which is the Abuja Declaration target. (NEPAD/CAADP)

12. In 2010, areas irrigated: marshland: 22,554 + hillside: 1,482 + other small-scale irrigated areas 100 = 24,136 ha. (MINAGRI, 2010).

agriculture: 37; in mining: 309. There are also indications that the TFP in agriculture has slowed down. Moreover, the slowdown since 2011 in productivity in capital-intensive sectors and, therefore, in overall structural transformation is emerging as a significant problem of Rwanda's development. In terms of the level and the growth rate of TFP, Rwanda underperforms relative to its peers with similar incomes. (WBG, July 2020)

Slowing down of structural transformation is problematic for achieving the GoR Vision 2035: The slowing down of structural transformation means that the rate at which the non-farm sector was able to absorb surplus farm labor declined; thus, the non-farm sector was able to absorb only 50% of the workforce added to the economy in 2011-17 as compared to 84% in 2001-11. (WBG, July 2020). This slowing down is problematic because densely populated Rwanda has a high population growth rate of around 2.5% per year (2020), with youth increasingly searching for good jobs. An estimated 40% are in the 14-35 age bracket; over 50% of the population is under 20 years old, and the median age is 22.7 years old. Within Kigali, youth constitute over 53% of the population. (Wikipedia, Youth in Rwanda) Typically, youth would be looking for higher paying jobs with careers. Currently, the primary source of employment is still subsistence agriculture. Job creation in formal and informal firms has slowed. For example, the number of formal firms between 2013-16 declined by nearly 1000. Also, only 3% of these firms grew by over 20% over three consecutive years.

COVID-19 pandemic was a major blow but with substantial concessional aid and a resilient economy, recovery started in 2021: Like the rest of the world, Rwanda suffered from the global COVID-19 pandemic. With the imposition of lockdowns and market dislocations, GDP fell by 3.4% in 2020, Rwanda's first recession since 1994. The GoR launched a vigorous vaccination campaign: over 69% (8.94 m) received at least one dose, including 63% of people being fully vaccinated (8.25 m); and 27% (3.57 m) of people received one booster dose as of April 13, 2022. (World Bank, Overview) Confirmed cases total 132, 239; and deaths, 1 466. (JHU, Corona Virus Center, Jan 2022) The poverty rate increased by 5.1% (2021) compared to the no-COVID scenario. Fortunately, favorable weather assisted the agricultural recovery in 2021. The recovery was also in industry and services, partly due to the fiscal support given in the second quarter of 2021 to firms and households affected by the pandemic. Rwanda is expected to grow at an average of 7.5% in 2022-23. (World Bank, Jan 2022) However, this projection is subject to downside risks, particularly the resurgence of COVID, vulnerability to weather and climate shocks, and rising fiscal imbalances.

Climate change poses an existential threat to a people heavily dependent on agriculture: Temperature rises in decades have exceeded the global average. Since 1970, the temperature has risen by 1.4° C and, in some scenarios, is projected to increase by 2° C by the 2030s. Rainfall has become more intense; droughts, floods, and landslides have become more frequent. For a hilly country that has converted critical watersheds and water catchment areas into agricultural land (which often means the building of terraces), such frequent landslides are destructive to livelihoods and lives. Moreover, such land conversion has destroyed streams and reduced water reserves, making Rwanda more vulnerable to droughts. Witness the drought of 2016 that brought famine to the eastern and southern regions of Rwanda and much of East Africa.¹³ Rwanda is highly susceptible to climate

13. In August 2021, the Rwanda Meteorology Agency warned that parts of the Eastern and Southern Provinces would likely face unusual dry spells similar to those in 2016, 2010 and 1996. (The New Times, Nov 2021)

change, as indicated by its ranking at 124 in the ND-GAIN index (2020) with a score of 42.¹⁴

Moving Rwanda beyond recovery towards Vision 2035: A holistic approach to exploiting the One-Africa market opportunities of the AfCFTA.

Sustainable, high productivity agricultural growth is essential to achieve high-income status by 2050: “No country has succeeded in its industrial development without a prior (or at least simultaneous) agricultural revolution. Neglecting agriculture in the early stages of development is neglecting development.” (Timmer, 2015)¹⁵ As worldwide historical experience¹⁶ repeatedly shows, Rwanda cannot achieve high-income status without successfully transforming its agriculture from low productivity subsistence to an increased productivity sector. As discussed above, the GoR has not neglected agriculture, and agriculture has grown. But it is still predominantly subsistence and low productivity. It is still far from GoR’s vision of a knowledge-based, value-adding sector that will ensure nutrition and food security for all. So, what has been missing in its approach?

How GoR’s agricultural transformation approach should be strengthened: To date, the focus of GoR’s agricultural policy has been on staples for food self-sufficiency. One can argue that this focus was sound after the devastation of the Genocide in 1994. Still, continuing low agricultural productivity shows that the policy emphasis on input and land intensification has reached diminishing returns. Farmers will not invest in continuing productivity growth unless they profit from it; if they do not, increased productivity growth will hurt them through a price collapse. A more holistic approach is required considering both the supply and demand sides for raising agricultural productivity growth sustainably and inclusively. What connects both supply and demand are markets. The Africa Continental Free Trade Agreement (AfCFTA)¹⁷ offers African governments a timely and historic opportunity to exploit geo-politically friendly regional markets for their development.

A better balance between the state as doer and the state as an enabler is required of government: Rwanda has followed a state-led development model and has shown impressive results. The state’s role is critical, but what is urgently called for is a rebalancing of its role. Rwanda has this historic opportunity to power its transformation through regional market integration. For a small, landlocked country, facilitating access to Africa-wide markets will enable Rwanda’s private sector, including smallholders and agri-businesses, to improve their productivity and competitiveness through economies of scale. These enterprises require scale economies to become competitive and profitable. The Kagame Government has improved logistics and the business environment. In recent years, it has also made substantial progress in reducing non-tariff barriers (NTBs). But trade costs have

14. The ND-GAIN (Notre Dame Global Adaptation Index) summarizes a country’s vulnerability to global challenges in combination with its readiness to improve resilience. For comparison, Norway, a high-income country, had rank 1, with a score of 75.4. A low-income country which had the highest score of low-income countries, Tajikistan ranked 103, with a score of 46.1. A higher score is better. The lowest score was 26.7, rank 182 for Chad. (ND-GAIN Country Index, 2020).

15. This view has been expressed elsewhere too. For example: “Rwanda has ambitions for future growth and development, and agriculture must provide a solid foundation for such aspirations – no country has developed without building on its agricultural base.” (Technical Assessment, 2018)

16. This historical fact does not apply to oil exporting countries like Saudi Arabia and city states like Singapore.

17. The AfCFTA was brokered by the African Union and signed by 44 of its 55 member states in Kigali on March 21, 2018. Implementation was launched on January 01, 2021. As of May 2022, 43 of the 54 signatories had deposited their instruments of ratification with the chair of the African Union Commission. (African Business, July 08, 2022)

remained stubbornly high. The reform agenda includes, but goes well beyond, measures in agriculture and agribusiness. It includes such diverse measures as promoting human capital formation, increasing the efficiency of delivering energy, improving the efficiency of trucking firms, and the delivery of services impacting trade facilitation and cross-border trade services.

Conclusion

Rwanda's socio-economic performance shows the strengths and limitations of equating agricultural transformation to food self-sufficiency. Under the leadership of President Paul Kagame, Rwanda pursued a state-led approach to development. It has had the macro stability, governance, and concessional finance needed for peaceful and purposeful development. Much has been accomplished but growth and poverty reduction have slowed down. Unemployment is high—around nearly 19% after the pandemic; and food insecurity is still prevalent. For a small country like Rwanda to transform, increased emphasis on access to expanding markets is essential to reach scale economies and become competitive. AfCFTA offers Rwanda regional market integration opportunities to power its agricultural and structural transformation in the years ahead.

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