

Strengthening Food Systems to Promote Increased Value Chain Employment Opportunities for Youth

List of project publications



CONTENTS

1.	Introduction to the Project.....	2
2.	List of Publications	3
3.	Summary of Working and Discussion Papers, and Reports.....	5

1. INTRODUCTION TO THE PROJECT

Every year, tens of millions of African youth enter the job market but face difficulties in obtaining decent livelihoods, achieving food and nutrition security, and breaking the cycle of poverty for themselves and their households. Food systems represent the most practical launching point from which to generate new opportunities for this vulnerable target group, especially young women.

As part of the Mastercard Foundation's strategy on [Young Africa Works](#), this project aims to provide tested options for creating innovative, digitally savvy livelihood opportunities for youth, especially young women, while reducing postharvest losses across agrifood systems in Africa.

The project builds on the three key focus areas of the Regional Food Systems Initiative being implemented by the Mastercard Foundation's partners. These areas include improving market access and strengthening market linkages for smallholder farmers, particularly youth and women; reducing postharvest losses and improving the food safety and quality of key crops; and supporting inclusive market system development. The Initiative is being carried out in eight African countries: Ghana, Kenya, Mozambique, Nigeria, Rwanda, Senegal, Tanzania, and Uganda.

The research project aims to:

- Synthesize current evidence and approaches in inclusive market development, youth livelihoods, and the management of postharvest losses
- Contribute to strategic knowledge on current and future trends in food systems development in Africa and potential entry points for sustainable and equitable food systems transformation
- Analyze effective programmatic approaches for improving youth livelihoods through inclusive market development while reducing postharvest losses
- Provide technical assistance to the Mastercard Foundation's partners on indicators and baseline assessments of their Regional Food Systems Initiative

The project activities are organized around eight research themes; food systems dynamics, changing demographics of food systems, regional trade, inclusive markets and value chains, postharvest losses, digital tools, women's livelihoods, and youth livelihoods. All of the research activities integrate gender to enable more tailored interventions that equally address the needs of women and men.

2. LIST OF PUBLICATIONS

TABLE 1: BLOG posts related to project publications

No.	Title	Date	Link
1	Where Rwanda loses its beans, and why it starts before the harvest	July 2026	LINK
2	A phone in every pocket, a farming app in almost none: Kenya's quieter digital divide	July 2026	LINK
3	The self-sufficiency myth: why growing your own food will not, by itself, feed Africa	July 2026	LINK
4	Feeding Senegal in 2050: Why the population doubles, but the food has to triple	June, 2026	LINK
5	Growing Fast, Feeding Smarter: Tanzania's Food System Imperative for 2050	June, 2026	LINK
6	Are Africa's youth really fleeing the farm? The data says: not so fast	June, 2026	LINK
7	Dignified work for youth: applying an intersectional lens to youth in Northern Nigeria	December, 2025	LINK
8	Building Better Data, Better Policies: Training a New Generation of Youth Enumerators in Northern Nigeria	December, 2025	LINK

TABLE 2: Peer-reviewed journal articles

No.	Title	Journal	Date	Link
1	Food supply implications of healthy diet consumption in Senegal by 2050	Food Security	March 2026	LINK
2				

TABLE 3: Project Working Papers and IFPRI Discussion Papers

No.	Title	Date	Link
1	Intersecting gender and youth financial inclusion in agrifood systems: Evidence from northern Nigeria	August 2026	LINK
2	Changing demographics in Ghana's agrifood systems and implications for future youth engagement	June 2026	LINK
3	Can Local Procurement for Food Aid Foster Market Development? Evidence from Indirect Conditional Contracting in Uganda	June 2026	LINK
4	Pre- and postharvest losses and their correlates in the Irish potato value chain in Kenya	June 2026	LINK
5	Pre- and postharvest losses and their correlates in the millet value chain in Nigeria	April, 2026	LINK
6	Barriers and opportunities for youth in northern Nigeria's agrifood value chains: Findings from qualitative research	March, 2026	LINK
7	Assessment of potato tuber quality in Kenya: Baseline quality assessment survey report	December, 2025	LINK
8	The landscape of youth engagement in labor markets in Africa: Are youth driving structural transformation?	December, 2025	LINK

9	Implications of increased urbanization and consumer awareness on future food supplies in Tanzania	November, 2025	LINK
10	The changing demographics in Nigeria's food systems and implications for future youth engagement	October, 2025	LINK
11	Digital tool integration, biodiversity, and the potato value chain in Kenya: Results from a baseline survey	October, 2025	LINK
12	The impact of the African continental Free Trade Agreement: A continentwide macroeconomic assessment and distributional analysis in Nigeria and Rwanda	March, 2025	LINK
13	The political economy of food self sufficiency policies and food security in African countries	January, 2025	LINK
14	The changing demographics in food systems and implications for future youth engagement in Rwanda	November, 2025	LINK
15	Quantifying food losses in the beans value chain in Rwanda: Analysis and results from a baseline survey	April, 2024	LINK
16	Implications of urbanization, consumer awareness, and income trends on future food supplies in Senegal	April, 2024	LINK

TABLE 4: Research Notes and Project Notes

No.	Title	Date	Link
1	Financial inclusion for youth in agrifood systems: Gendered barriers and solutions in northern Nigeria	June 2026	LINK
2	Synopsis: Implications of increased urbanization and consumer awareness on future food supplies in Tanzania	February, 2026	LINK
3	Synopsis: Implications of urbanization, consumer awareness, and income trends on future food supplies in Senegal	February, 2026	LINK
4	Synopsis: The changing demographics in Nigeria's food systems and implications for future youth engagement	December, 2025	LINK
5	Digital tool integration, biodiversity, and the potato value chain in Kenya: Results from a baseline survey	December, 2025	LINK
6	Synopsis: Quantifying food losses in the beans value chain in Rwanda - Results from a baseline survey	December, 2025	LINK
7	Synopsis: The changing demographics in food systems and implications for future youth engagement in Rwanda	December, 2025	LINK
8	Conditional contracts in indirect local procurement of maize from small-holder farmers in Uganda: A study design to assess impacts	February, 2025	LINK
9	Use of Digital Tools in Kenya's Potato Value Chains: Qualitative perspectives from a field visit in Nakuru County	November, 2024	LINK

3. SUMMARY OF WORKING AND DISCUSSION PAPERS, AND REPORTS

1. Intersecting gender and youth financial inclusion in agrifood systems: Evidence from northern Nigeria.

Authors: Chibuzo Nwagboso, Jessica Heckert, Kalyani Raghunathan, Emily Myers, Olufemi Popoola, and Hauwa Kabir

Brief overview

The agrifood system employs one-third of the global workforce, yet young women and men continue to face persistent constraints to joining this workforce, including financial exclusion. Financial exclusion constrains agricultural employment by limiting young people's ability to engage in work and to scale operations. Yet the existing literature often overlooks how gender and youth intersect within these dynamics.

Using intersectionality theory and institutional analysis, this study examines barriers to financial access and adaptation strategies among young men and women (ages 18–30) in northern Nigeria's agrifood systems. The analysis draws on 61 semi-structured interviews and 51 focus group discussions with young women and men, alongside key informant interviews with financial service providers and market actors, across five northern Nigerian states with large populations that are “unbanked,” meaning not engaged with formal financial institutions.

Drawing on these qualitative data, the study reveals that formal and informal financial institutions jointly reproduce patterns of unequal gendered access. While young men leverage wider mobility and networks to secure trading capital, young women's restricted mobility and limited collateral confine them to small-scale processing with few growth prospects. Financial exclusion is further compounded by geography, insecurity, and the gendered structure of digital finance. Youth adapt to these institutional gaps through collective savings, trust-based credit, and in-kind payments. The study calls for gender-sensitive, digitally inclusive financial services that complement informal systems, offering an integrated institutional–intersectional framework for promoting inclusive agrifood systems transformation. Its central contribution is an institutional–intersectional analysis of financial exclusion in agrifood systems, showing how formal and informal institutions jointly, rather than separately, produce gendered patterns of access.

2. Changing demographics in Ghana's agrifood systems and implications for future youth engagement

Authors: Fantu Bachewe, Harriet Mawia, and Olufemi Popoola

Brief Overview

This report examines how demographic, economic, and structural changes have transformed employment within Ghana's agrifood systems over the past two decades and assesses their implications for future youth engagement. Recognizing agrifood systems as a major source of employment and economic transformation, the study investigates how population growth, urbanization, economic development, and policy reforms have reshaped labor demand across different segments of the agrifood system. Particular attention is given to employment opportunities for youth and women and the policy measures needed to promote inclusive agrifood systems transformation.

The analysis draws on labor force and macroeconomic data from the International Labour Organization, the World Bank, and other national and international sources covering the period 2000–2023. Using de-

scriptive analysis and statistical tests, the study examines trends in labor force participation, unemployment, and employment across farming, food manufacturing, trade, transportation, and other agrifood system activities, with results disaggregated by gender and age.

The study finds that agrifood systems remain the largest source of employment in Ghana despite a gradual decline in the share of agricultural employment. Employment growth has increasingly occurred in nonfarm agrifood activities, including food processing, trade, transportation, and food services, reflecting ongoing structural transformation within the sector. Women are more concentrated in nonfarm agrifood employment but continue to face constraints related to access to productive resources and quality employment, while youth remain highly dependent on agrifood systems for their livelihoods. The report concludes that continued investment in agrifood value chains, infrastructure, entrepreneurship, digital technologies, and skills development will be essential to ensure that agrifood systems transformation generates productive, inclusive, and resilient employment opportunities, particularly for women and young people.

3. Can Local Procurement for Food Aid Foster Market Development? Evidence from Indirect Conditional Contracting in Uganda

Authors: Gashaw T. Abate, Serge Mugabo, Kalyani Raghunathan, and Bjorn Van Campenhout

Brief Overview

This study examines whether local procurement by large institutional buyers can strengthen agricultural markets and improve outcomes for smallholder farmers. Focusing on Uganda's maize value chain, it evaluates a procurement policy requiring suppliers to source at least 20 percent of their maize directly from smallholder farmers through an indirect conditional contracting arrangement. The study investigates how this procurement model affects market access, prices, technology adoption, quality upgrading, and welfare among producers and intermediaries.

The analysis draws on survey data collected in 2024 from nearly 1,300 maize producers and almost 300 aggregators across six districts. By comparing areas where the institutional buyer operated with comparable areas where it was absent, the study estimates the effects of the procurement policy on farmgate prices, production practices, market participation, postharvest management, profitability, and household welfare using descriptive analysis together with econometric methods.

The findings show that indirect conditional contracting increased competition among intermediaries, resulting in higher prices for participating farmers while encouraging greater adoption of improved production inputs and postharvest quality management practices. Farmers earned higher net returns despite increased production costs, while aggregators invested more in quality improvement even though their marketing margins declined. The results demonstrate that procurement policies implemented through private intermediaries can reshape value chain incentives, stimulate investment, and strengthen local markets. At the same time, the study highlights the importance of carefully designing procurement mechanisms to maximize benefits while minimizing potential market segmentation and uneven distributional effects.

4. Pre- and postharvest losses and their correlates in the Irish potato value chain in Kenya

Authors: Fantu Bachewe, Geoffrey Baragu, Josue Niyonsingiza, and Olufemi Popoola

Brief Overview

This report provides one of the first comprehensive assessments of pre- and postharvest losses across Nigeria's millet value chain, focusing on producers, aggregators, and processors in Sokoto and Zamfara States. Given millet's importance as a climate-resilient staple crop, the study aims to identify where losses occur, quantify their magnitude, and examine the factors associated with food losses in order to inform interventions that improve food security, strengthen agrifood systems, and create employment opportunities for youth.

The analysis is based on a purposefully designed baseline survey conducted in 2024 covering millet producers and downstream value chain actors. The study applies an attribute-based measurement framework that captures both quantitative losses and quality-related losses throughout the value chain. Descriptive statistics are complemented by econometric analyses examining the factors associated with both the incidence and severity of pre- and postharvest losses.

The study finds that food losses are widespread and concentrated primarily at the production stage, with preharvest and on-farm postharvest losses accounting for the largest share of total losses. Technology adoption, improved storage and transportation practices, education, and household assets are associated with lower losses, while weather shocks substantially increase both pre- and postharvest losses. The findings emphasize the need for integrated value chain interventions combining improved technologies, climate adaptation, infrastructure investments, and advisory services. The report also identifies important opportunities for engaging youth and young women in postharvest service provision, thereby contributing simultaneously to food loss reduction, income generation, and agrifood systems transformation.

5. Pre- and postharvest losses and their correlates in the millet value chain in Nigeria

Authors: Fantu Bachewe, Geoffrey Baragu, Josue Niyonsingiza, Olufemi Popoola, Ismael Adeniji, Samson Dejene Aredo, and Kalyani Raghunathan

Brief Overview

Food losses remain a major constraint to food security, rural livelihoods, and agrifood system efficiency in sub-Saharan Africa, yet evidence on macro/household level food losses across entire value chains is limited. This study examines pre- and postharvest losses along the millet value chain in northwestern Nigeria, focusing on producers, aggregators, and processors in Sokoto and Zamfara – two key millet-producing states. Using baseline survey data collected in 2024 from 595 producers, 166 aggregators, and 81 processors, the study applies an innovative methodology that captures both quantitative losses (physical grain losses) and qualitative losses (quality deterioration and related price reductions), enabling estimation of losses in both volume and value terms.

The findings show that millet losses are widespread, with the largest losses occurring at the producer level during preharvest and on-farm postharvest stages. Total losses average approximately 9 percent of production volume and 6 percent of production value. While aggregators experience relatively low losses, processors face notable challenges during storage, transport, and handling. Common causes of losses include spillage, pest infestation, moisture exposure, and inadequate handling practices.

Losses vary significantly across locations and demographic groups, with producers in Zamfara experiencing higher losses than those in Sokoto. Youth and male producers also incur greater overall losses, highlighting the need for targeted interventions. Econometric analysis shows that higher education, greater asset ownership, larger farm size, and adoption of improved transport, storage, and processing

technologies significantly reduce losses, while climate-related shocks increase them. The study underscores the need for integrated, value chain-wide interventions to reduce food losses and strengthen the resilience and productivity of Nigeria's millet sector.

6. Barriers and opportunities for youth in northern Nigeria's agrifood value chains: Findings from qualitative research

Authors: Hauwa Kabir, Emily Myers, Chibuzo Nwagboso, Salisu Hassan, Olufemi Popoola, Jessica Heckert, and Kalyani Raghunathan

Brief Overview

Africa's rapidly growing youth population—half of whom will be young women—underscore the need for the inclusion of youth in the design of programs and policies that promote sustainable livelihoods through gender-sensitive approaches. Despite being engaged in agricultural value chains (AVCs), few youth have access to dignified and fulfilling work. Many of the barriers that youth face are reinforced by gender norms. Addressing the barriers can help transform AVCs to be more inclusive of youth and ensure both young women and young men have access to improved livelihood opportunities.

This report presents findings from a qualitative research study on the barriers and opportunities young women and young men experience in participating in key AVCs in northern Nigeria. It investigates youth's participation in key AVCs, their perceptions of dignified and fulfilling work, facilitators and constraints to youth participation in AVCs with an emphasis on gender norms, and youth experiences with financial services.

The study finds that young women and young men participate in processing and marketing in different ways. Gender and religious norms reinforce constraints to participation in AVCs, particularly among Muslim women. For instance, young women are discouraged from working outside the home and are largely confined to home-based traditional processing activities, where they can be supervised and remain separated from non-familial men. Such concerns about unsupervised interactions with non-familial men further limit young women's participation in public AVC roles, e.g., selling goods in the town market. Such norms are often enforced by husbands or parents and are compounded by domestic and childcare responsibilities. Nevertheless, some young women circumvent these constraints. For instance, non-Muslim or internally displaced young women are not subject to these norms, some challenge gender norms despite social criticism, and others participate indirectly in AVCs through arrangements such as hired labor. Young men may also participate in some aspects of processing, particularly when it involves mechanization, as using equipment is seen as a man's domain. As for marketing, young men predominantly sell raw agricultural products in bulk. Young women typically purchase raw goods from men and process them into various food products for home-based sale.

These findings inform potential solutions to mitigate the constraints youth face to participating in AVCs. This includes gender transformative approaches to challenge norms that restrict young women's ability to pursue livelihood opportunities and other promising solutions that can be paired with gender transformative approaches. The development of systematized cottage industries may facilitate young women's entrance into AVCs in a way that works with existing gender norms. Stronger mentorship programs and financial services responsive to youth needs may also bolster young women's and young men's participation in AVCs in northern Nigeria.

7. Assessment of potato tuber quality in Kenya: Baseline quality assessment survey report

Authors: Geoffrey Baragu, Sedi Anne Boukaka, and Carlo Azzarri

Brief Overview

Potato is the second most important staple crop in Kenya after maize, supporting food security and providing livelihoods for millions across the value chain, including over 800,000 smallholder farmers. However, fragmented marketing systems, inadequate post-harvest infrastructure, and limited access to quality inputs constrain sector performance and result in significant post-harvest losses. This qualitative study analyzes potato tuber quality among 233 farmers in Nakuru and Nyandarua counties and traders in six major markets across Kenya. The findings establish a baseline for potato quality at the farm level and in major markets, tracking individual shipments to assess quality degradation during transit due to poor market conditions and logistical bottlenecks. Results show that potato quality is already compromised at the farm gate, but damage intensifies post-harvest, with skin abrasions more than doubling and rotting increasing threefold as produce moves along the value chain. These losses are compounded by limited quality-based sorting and inadequate storage infrastructure, including negligible use of cold storage. The study also demonstrates that traditional handling practices and poor infrastructure are greater drivers of loss than transport distance. This research concludes that most economic losses stem from identifiable failures in infrastructure, handling, access to information, and quality governance - many of which can be mitigated through digital tools. Digital tools can enhance farmer-buyer linkages, promote digital education and advisory services -also through collaboration with Farmer Service Centers, encourage cold storage via digital incentives. These recommendations position digital tools as a catalyst for transforming the potato value chain, both directly and indirectly mitigating post-harvest losses while boosting resilience and incomes.

8. The landscape of youth engagement in labor markets in Africa: Are youth driving structural transformation?

Authors: Kibrom A. Abay, Meseret Wondale, Josphat K. Korir, Fantu Bachewe, Mesele Araya, and Clemens Breisinger

Brief Overview

This study assesses the landscape and evolution of youth engagement in labor markets in Africa, focusing on three important countries—Ethiopia, Kenya, and Nigeria—which together account for 40 percent of Africa’s youth population. We also examine whether Africa’s youth are driving structural transformation. To do so, we combine nationally representative data and surveys spanning more than two decades (from the 1990s to the 2020s). We situate the analysis within the region’s pressing youth unemployment challenge, where annual labor-force entrants surpass job creation. Our findings show that, despite substantial heterogeneities across countries, largely due to sectoral composition of economies, youth remain engaged in agriculture almost as much as adults. While labor continues to gradually shift out of agriculture, it has moved overwhelmingly into services rather than industry, reinforcing the unique pattern of structural transformation in Africa. More importantly, exit rates from agriculture are similar for youth and adults, except in Ethiopia, where youth are leaving agriculture at slightly higher rates than adults. In Ethiopia and Kenya, the entry rate into services is higher among young women, while entry into industry is higher among young men, suggesting distributional and equity implications of Africa’s ongoing structural transformation. These findings offer important insights and challenge simplistic views that youth are leaving agriculture in “droves” as well as the sometimes-embroidered perceptions of their role in that transformation. We discuss the implications of these findings for sustaining inclusive employment opportunities and argue that agriculture should remain central to job creation efforts in Africa.

9. Implications of increased urbanization and consumer awareness on future food supplies in Tanzania

Authors: Marivoet, Wim; Alphonse, Roselyne

Brief Overview

This study Tanzania's food system (FS), which currently is facing increasing pressure from rapid population growth, urbanization, and shifting consumer preferences toward more nutritious and diverse foods. This study examines how these trends will affect national food supply requirements by 2050 and identifies key policy priorities for achieving an efficient, sustainable, and equitable food system transformation.

Using census data (2012–2022) and the 2020/21 National Panel Survey, the analysis projects food supply needs under two healthy diet benchmarks: the EAT-Lancet Reference Diet (ELRD) and the Hypothetical Micronutrient Adequate Diet (HMAD). Tanzania's population is projected to grow from 59.8 million in 2020/21 to 138.1 million by 2050, with the urban share increasing from 34.5% to 55.4%. This demographic shift implies that a smaller rural workforce will need to supply food to a larger and more urban population, requiring major productivity gains and stronger rural–urban linkages.

Current diets are heavily dominated by cereals and sugar and lack sufficient fruits, vegetables, dairy, eggs, and animal-source foods. Providing healthy diets for all by 2050 would require total annual food supplies to more than double—from about 24 million tons today to 52 million tons under ELRD or 62 million tons under HMAD—together with substantial shifts toward nutrient-dense foods. Meeting these targets will require large but feasible yield improvements, reductions in post-harvest losses, expanded processing and cold storage, and environmentally sustainable intensification. While many priority foods align with Tanzania's Agriculture Master Plan (2024), several nutrient-rich foods and post-harvest loss reduction remain underemphasized, highlighting the need for a more nutrition-sensitive and coordinated policy approach.

10. The changing demographics in Nigeria's food systems and implications for future youth engagement

Authors: Fantu Bachewe, Kwaw S. Andam, Harriet Mawia, and Olufemi Popoola

Brief Overview

This study begins by pointing out that food systems (FS) play a critical role in employment creation in sub-Saharan Africa, as they must expand to meet rising food demand driven by population growth, urbanization, and income growth. Beyond farming, growth in food processing, trade, and services also support structural transformation by enabling labor shifts out of primary agriculture. However, the pace and nature of FS transformation and its employment impacts vary across countries, and monitoring systems remain limited.

This study examines changes in employment within Nigeria's FS using data that spans over the past two decades, with a focus on youth and gender inclusion amid demographic growth and economic change. Nigeria's working-age population grew by nearly 90 percent between 2000 and 2023, while youth unemployment remained high, positioning the agrifood system as a key source of potential job creation. Using national living standards survey data, the analysis documents a major employment shift away from on-farm agriculture toward nonfarm food system activities. Between 2003 and 2022, agriculture's share of total employment declined from 58 percent to 35 percent, while nonfarm agrifood employment rose from 12 percent to 33 percent. Women and youth drove this expansion, particularly in food trade and processing.

The study links these trends to economic growth, urbanization, policy reforms, and regional insecurity, noting uneven progress across regions. While recent policies signal a move toward an FS approach, weak coordination and limited investment constrain impact. The study concludes that a broader FS strategy – centered on employment quality, youth entrepreneurship, gender equity, and institutional alignment – is essential to harness Nigeria’s demographic dividend and support inclusive growth.

11. Digital tool integration, biodiversity, and the potato value chain in Kenya: Results from a baseline survey

Authors: Sedi Anne Boukaka, Baragu Geoffrey, and Carlo Azzarri

Brief Overview

This study indicates that potato farmers in Kenya face multiple constraints along the value chain, including limited access to quality inputs, inadequate storage facilities and post-harvest handling tools, volatile prices, and weak market information systems. These challenges are compounded for women and youth due to persistent gender and social inequalities persistent in rural areas. Digital tools are expected to address several of these constraints by improving access to agricultural information, weather forecasts, and best practices. Yet, adoption and effective use of such tools in agrifood value chains in Sub Saharan Africa remain limited.

This study assesses the impact of digital tool adoption and targeted support on socio-economic and agricultural outcomes in Kenya’s potato value chain, building on an ongoing digital integration program implemented by WFP’s Farm to Market Alliance. The evaluation compares agripreneurs (Farmer Service Centers, FSCs) receiving digital integration training and their associated farmers served with a control group of FSC receiving standard training and their associated farmers served, focusing on the effects on farm livelihoods, income generation, job creation, youth employment, and gender inclusion.

Baseline findings in this report show that potato production is widespread among sample households, with 87 percent engaged in cultivation, predominantly preferring the Shangi variety. While households cultivate an average of 4.5 crops, women face clear disadvantages in asset ownership, particularly land and smartphones, which may constrain access to advanced digital tools. Digital tool use is common but largely limited to communication, social media interaction, and financial applications, with low uptake of agriculture-specific tools. Minimal baseline differences between FSCs and households served by BDEC-trained and non-BDEC-trained FSCs emerge, suggesting a strong basis for causal inference in the upcoming randomized controlled trial. Overall, the findings highlight the central role of FSCs—especially digitally trained ones—in bridging digital gaps and improving service delivery, while underscoring the need of targeted interventions to enhance inclusivity and maximize the impact of digital integration in the potato value chain.

12. The impact of the African continental Free Trade Agreement: A continentwide macroeconomic assessment and distributional analysis in Nigeria and Rwanda

Authors: Fousseini Traoré, Pierre Mamboundou, Insa Diop, and Abdourahmane Sy

Brief Overview

This study explores Africa's trade restrictions and their impact on food security. Africa remains the least open continent due to tariffs, non-tariff barriers, and poor infrastructure, limiting both intra- and extra-regional trade. Yet, intra-African trade, including informal cross-border exchanges, which is pervasive in

Africa, has been shown to enhance food security by stabilizing markets and improving food access. Despite this potential, food security in Africa has worsened over the past decade. Nearly 600 million Africans are projected to be chronically undernourished by 2030, jeopardizing SDG2.

In response, many advocate for food self-sufficiency through local production and trade restrictions. Proponents argue this reduces dependency and shields consumers from volatile global markets. Critics, however, highlight the benefits of trade liberalization, including access to diverse and affordable foods and market stabilization.

This report finds that the impact of the AfCFTA will be positive although limited. As most African countries are already trading under preferential regimes within Regional Economic Communities (RECs), only extra-RECs trade flows are significantly affected. Trade diversion effects from partners outside of Africa are observed (up to -1.68%), and trade creation within the continent (up to 18.48%). Like the macroeconomic impacts (on GDP growth and trade), the effects of the agreement on poverty are also limited, with more positive effects observed in Rwanda compared to Nigeria, the two countries analyzed in the microsimulation work. A gender bias is present in the results: households led by women benefit less from the agreement compared to those led by men (further details available in the [working paper](#)). Given the high level of transportation costs in the continent, significant gains can occur if transport margins are reduced in addition to the implementation of the AfCFTA. In that case, the abovementioned positive (negative) results are amplified (dampened).

13. The political economy of food self sufficiency policies and food security in African countries

Authors: Antoine Bouët, Fousseini Traoré, Pierre Mamboundou, Insa Diop, and Abdourahmane Sy

Brief Overview

This study revisits the long-standing debate on achieving food security and reducing the number of undernourished people, with a particular focus on the concept of food self-sufficiency. The study explores the pros and cons of relying on local production and promoting it through various policy measures, such as restrictive trade policies, as a strategy for food security. The study uses both qualitative and quantitative analysis, to reach the conclusion that food self-sufficiency is neither a necessary nor a sufficient condition for food security. The study also finds that while public support to agriculture can help achieve food self-sufficiency, its impact is not linear, and beyond a certain threshold, diminishing returns are observed. Overall, different approaches can achieve food security, and there is no “one-size-fits-all strategy.” International or regional trade can contribute to food security and stabilize domestic food markets, as regional production is usually less volatile than domestic supply.

14. The changing demographics in food systems and implications for future youth engagement in Rwanda

Authors: Fantu Bachewe, Harriet Mawia, and Josue Niyonsingiza

Brief Overview

This study explores demographic trends within Rwanda’s FS employment, examining the evolving patterns of who is and isn’t engaging in FS, as well as broader socio-economic factors. The study finds that unemployment rate in Rwanda was twice the Sub-Saharan Africa (SSA) average and has generally been increasing over time. This trend is particularly pronounced among youth and women. The share of FS in total employment declined during the study period. The study reveals significant gender inequities whereby unemployment rates were relatively higher for women and a share of women employed in low-

skill and farming jobs was larger. Youth workers faced similar inequities. These findings have important policy implications. Deliberate action is needed to establish gender equity in terms of skill levels of jobs. Policies enacted to achieve near gender-equity in high-skill jobs provide a good steppingstone to reduce the gender gap low and in medium-skill jobs. Second, interventions that support women's roles in the home can ameliorate some of the factors that contribute to women's lower rate of participation in labor force.

15. Quantifying food losses in the beans value chain in Rwanda: Analysis and results from a baseline survey

Authors: Luciana Delgado, Josue Niyonsingiza, and Fantu Bachewe

Brief Overview

This study identifies stages in the beans value chain in Rwanda where food losses occur and measures the extent of losses along these stages. Food losses adversely affect producers' income, cause inefficient use of scarce resources, and thereby contribute to climate change and food insecurity in SSA. The study reveals that food losses accounted for 44% of the volume of beans produced and 28.5% of the value. Producers bore the highest share of losses, both in volume and value, while aggregators accounted for the lowest share. Three-quarters of the volume of food losses occurred at the pre-harvest stage and one-quarter at post-harvest. However, post-harvest losses were relatively higher in value terms. Pests and diseases are identified as the primary causes of pre-harvest bean losses while several factors (threshing, drying, winnowing, sorting, storing, transportation, and selling) contributed for post-harvest losses.

Some inferences can be made from these results regarding interventions that can ameliorate some of the pre- and post-harvest food losses. Furthermore, understanding the roles, challenges, and contributions of youth and female producers is also essential for fostering sustainable and inclusive agricultural practices. In the context of the overall project under which this research report is produced, the study provides valuable insights for those engaged in providing interventions intended to reduce pre- and post-harvest losses. Particularly, the results of this study provide evidence supporting the engagement of youth as change agents to reduce food losses, given that the project focuses on engaging youth, particularly young women, in employment across the agri-food systems, particularly in reducing food losses.

16. Implications of urbanization, consumer awareness, and income trends on future food supplies in Senegal

Author: Wim Marivoet

Brief Overview

This study examines the implications and potential entry points to improve Senegal's food systems (FS) following expected trends in demography, consumer awareness, and income growth. The study estimates that providing the Senegalese population with a healthier diet in 2040 and to help address current hidden hunger, total food supplies need to triple. The study indicates that the required increase in total food supplies should mainly come from productivity gains across the entire Senegalese FS. Particularly, future supplies of animal source foods (ASF), fruit, and vegetables should increase significantly not only because of low current consumption levels (i.e., hidden hunger) but also because micronutrients derived from these items cannot be easily obtained from other foods. The study indicates that since women and young people are already engaged or could be attracted to livestock, fishing, and horticulture, the upgrading or further development of these subsectors presents an excellent opportunity to create more equitable FS. This not only entails that public policies and investments correct for existing inequities in

access and control over productive resources, such as land, credit, information, and technology, but also that restrictive social norms are addressed to improve effective agency.

This publication has been prepared in the context of the Strengthening Food Systems to Promote Increased Value Chain Employment Opportunities for Youth partnership with the Mastercard Foundation. It is a five-year initiative running between 2022 and 2027 to gain insight into the latest trends and challenges in agrifood systems, and how addressing market inclusion and post-harvest losses can enable dignified and fulfilling livelihoods for young women and men. The views expressed do not necessarily represent those of the Foundation, its staff, or its Board of Directors. Unless indicated, these publications have not been independently peer reviewed. Any opinions expressed here belong to the author(s) and are not necessarily representative of or endorsed by IFPRI.

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

A world free of hunger and malnutrition

IFPRI is a CGIAR Research Center

1201 Eye Street, NW, Washington, DC 20005 USA | T. +1-202-862-5600 | F. +1-202-862-5606 | Email: ifpri@cgiar.org | www.ifpri.org | www.ifpri.info

© 2026, copyright remains with the author(s). All rights reserved.