INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

SFS4YOUTH WORKING PAPER #17 JUNE 2026

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

Fantu Bachewe, Harriet Mawia, and Olufemi Popoola

CONTENTS

TABLES

FIGURES

EXECUTIVE SUMMARY

Agrifood systems (AFS) are central to employment, food security, and economic transformation across sub-Saharan Africa (SSA). As economies grow, urbanize, and experience changing food demand, AFS increasingly extend beyond farming to include processing and other downstream value chain activities. These transformations create new employment opportunities, particularly for youth and women, while reshaping labor markets and livelihoods. Understanding these changes is therefore essential for designing policies that promote inclusive growth, employment creation, and food system resilience.

This study examines the evolution of agrifood system employment in Ghana between 2000 and 2023. Using data from the International Labour Organization (ILO), the World Bank, and other national and international sources, the analysis documents trends in economic growth, population dynamics, urbanization, labor market outcomes, and employment across agrifood system segments. Particular attention is given to gender and youth dimensions of employment and their implications for inclusive development. The study contributes to the growing literature on agrifood system transformation by documenting changes in the composition of employment and identifying opportunities and constraints for inclusive participation in emerging value chains.

Ghana underwent substantial economic and social transformation during the study period. Economic growth accelerated, poverty declined significantly, educational attainment improved, and urbanization expanded rapidly. Population growth remained strong, with youth continuing to account for a large share of the population. These demographic and economic changes appear to increase the demand for food and generate new opportunities for employment throughout agrifood value chains. Rising incomes and expanding urban markets also contribute to increasing demand for processed, marketed, and convenience foods, creating opportunities for employment beyond primary agricultural production.

The study finds that AFS remains the largest source of employment in Ghana, accounting for approximately two-thirds of total employment. Agriculture continues to employ a substantial share of workers, particularly men and youth, but its relative importance has declined steadily over time. At the same time, employment in nonfarm agrifood system activities – including food manufacturing, trade, transportation, and food services – expanded considerably. These findings suggest that Ghana's labor market transformation is occurring not through a rapid exit from AFS but through diversification within them as value chains deepen and become more integrated.

The analysis also reveals important demographic patterns in AFS employment. Women are more concentrated in agrifood system employment than men and are particularly represented in nonfarm AFS activities such as trade and food-related services. However, women continue to face disadvantages in employment quality, financial inclusion, access to productive assets, and participation in formal employment. Similarly, youth remain highly dependent on AFS for their livelihoods. Although labor force participation among young people is lower and unemployment is higher than among mature workers, AFS – particularly farming – continues to provide employment for a large share of young people. These findings underscore the importance of AFS as a source of economic inclusion while highlighting the persistent barriers that women and youth continue to face.

Although the available data do not permit separate analysis of young women as a distinct population group, the combined evidence from this study and the broader literature suggests that they are likely to benefit substantially from the continued expansion of nonfarm agrifood activities. Food processing, marketing, food services, and other downstream value-chain segments are expanding in Ghana while already employing relatively large shares of women. Strengthening access to finance, productive assets,

business development services, skills, and digital technologies can therefore help translate ongoing agrifood transformation into more dignified and fulfilling employment opportunities for young women.

Employment outside agrifood systems also expanded during the study period, with the share of non-AFS employment increasing by four percentage points to 34.6 percent in 2017, reflecting Ghana's gradual structural transformation. Growth in non-AFS employment was stronger among men and mature adults than among women and youth, indicating that opportunities outside agrifood systems have expanded unevenly across population groups.

Overall, Ghana exhibits a relatively advanced stage of agrifood system transformation, characterized by declining agricultural employment, expanding nonfarm AFS activities, and gradual growth in non-AFS employment. Continued investments in agrifood value chains, infrastructure, market connectivity, access to finance, and entrepreneurship support will be essential to ensure that this transformation generates productive, inclusive, and resilient employment, particularly for women and young people.

1. INTRODUCTION

Food systems (FS) are "the sum of actors and interactions along the food value chain – from input supply and production of crops, livestock, fish, and other agricultural commodities to transportation, processing, retailing, wholesaling, and preparation of foods to consumption and disposal. Food systems also include the enabling policy environments and cultural norms around food" (IFPRI 2020, 6).[1] FS are critically important in low- and middle-income countries (LMICs), particularly in sub-Saharan Africa (SSA), where food production, processing, services, and other food-related activities account for a significant share of the gross domestic product (GDP) and provide livelihoods for the majority of the population (Davis et al. 2026; Davis et al. 2023; Christiaensen et al. 2021; Dolislager et al. 2021; IFPRI 2020; Townsend et al. 2017). Furthermore, progress in the nonfarm components of FS, such as food processing and services activities, also provides the predominantly agrarian SSA economies with an opportunity to transition out of primary economic activities.

FS in SSA are expected to contribute significantly to labor employment (AGRA 2022; SWAC/OECD 2021; IFPRI 2020). Several factors are expected to contribute to this expected growth, including rapid population growth, which calls for significant improvements in FS – particularly in the downstream segments of value chains, such as transportation, storage, processing, and marketing – in a subcontinent where such infrastructure is weak. This is critical to guaranteeing food and nutrition security for future populations in SSA (Marivoet and Alphonce 2025; Marivoet 2024; AGRA 2022; Kalibata 2021; SWAC/OECD 2021; IFPRI 2020). Urbanization and per capita income increase in SSA, which are often accompanied by changes in dietary patterns, the composition of foods demanded, and the extent of processing, are also expected to contribute to FS growth. In addition to increases in food production, these changes require an increasingly well-developed marketing infrastructure, including storage systems and cold chains, transportation, and markets (Marivoet and Alphonce 2025; Marivoet 2024; Mockshell 2023; de Bruin et al. 2021; Ambler et al. 2019; Tefft et al. 2017; HLPE 2017; Tschirley 2015; Mergenthaler et al. 2009). Changes in FS may also follow broader economic transformations, including input use intensification, technological changes in food production, and improvements in human capital and associated increases in labor productivity and other factors. Shifts in how food is produced, processed, marketed, serviced, and consumed are among the key elements of FS transformation. Although the degree of these factors' impact and the extent of FS transformation vary across countries depending on their stage of transition, these factors have a transformative impact on FS overall (Jayne et al. 2014).

Employment and job creation patterns are perhaps among the most important areas of the economy that may positively be affected by AFS transformation, and vice versa. Historical evidence shows that in growing economies, AFS transformation – particularly growth in the off-farm segments of food and agrifood value chains – provides ample employment and livelihood opportunities, particularly for women and youth. However, the extent, speed, and complementarity of the AFS transformation and employment and job creation vary across countries, depending on factors such as investments in FS transformation, workers' skill levels, and institutional capacity, all of which can be influenced by policies conducive to AFS transformation (SWAC/OECD 2021; Fanzo et al. 2021; Dolislager et al. 2021; Allen et al. 2016; Tschirley et al. 2015).

[1] In this definition, the "…other agricultural commodities" part may include forestry and logging, thus making the definition more applicable to agrifood system (AFS) than FS. Formally, AFS employment includes, in addition to food system activities, the production and processing of nonfood agricultural products. The analyses in this study include employment in AFS.

This paper examines employment within Ghana's AFS and the demographic shifts that have shaped it over the past two decades. It addresses four key questions: First, how have the drivers of AFS transformation – economic, demographic, and policy related – evolved during 2000–2023? Second, what characterizes Ghana's labor market, and how do employment outcomes vary by gender and age? Third, how important are AFS and their segments in total employment in Ghana? Finally, how do employment patterns within AFS differ across gender and age groups?

To address these questions, the study provides an overview of Ghana's economy to contextualize the evolution of its AFS. It examines demographic shifts, population growth, urbanization trends, and, importantly, the broader policy and socioeconomic environment that collectively shape the trajectory of AFS transformation. Using descriptive analyses, the study investigates labor market dynamics, profiles the employed population, and identifies key trends in FS/AFS employment. Importantly, the study focuses on disaggregated employment trends across FS/AFS components and analyzes patterns of employment within FS/AFS across gender and age – comparing women and men, and youth and adults – using tests of statistical significance to assess the differences and relationships that exist across these population groups. The analyses have important implications for policy solutions that can foster dignified and fulfilling employment opportunities for youth and promote inclusiveness in AFS employment.

By testing empirical predictions on patterns of employment growth and inclusiveness in Ghana's FS/AFS, the study adds to the growing literature on structural transformation and labor absorption in LMICs. It further identifies nodes within the value chain where gender- and age-related disparities persist, thereby informing targeted policy interventions. Conducted as part of the Strengthening Food Systems to Promote Increased Value Chain Employment Opportunities for Youth (SFS4Youth) project, this research also aims to generate strategic knowledge on current and future trends in FS transformation in Africa, highlight potential entry points for sustainable and equitable transformation, and answer critical macro-level questions on FS/AFS trends and recent developments and their impacts on the continent.

This paper is organized as follows. Section 2 discusses the methods and materials used in the study. Section 3 sets the context for AFS employment in Ghana by reviewing the relevant literature on the AFS policy environment as well as by examining other drivers of AFS employment, specifically, trends in Ghana's economy, population, and urbanization. Section 4 provides a brief overview of the labor market and discusses in detail AFS/FS employment trends in Ghana. Section 5 concludes.

2. DATA AND METHODOLOGY

This section first defines concepts, then describes the conceptual framework and the methodology used in the study. This is followed in the second subsection by a description of the datasets used.

2.1 Methods

Definitions

This subsection provides definitions of employment-related concepts. These definitions mostly derive from the International Labour Organization (ILO) (2026).

Working-age population: includes people above the legal working age, which may vary from country to country based on national laws and practices. However, to promote international comparability, the ILO (2026) defines the working-age population as "all persons aged 15 and older."

Labor force participation rate: defined as a measure of the proportion of a country's working-age population that engages actively in the labor market, either by working or looking for work. It is calculated as "the number of persons in the labor force as a percentage of the working-age population" (ILO 2026). The sum of the number of persons employed and the number of persons unemployed constitutes the *labor force*.

Number of employed: comprises all persons of working age, who during a specified brief period, were in paid employment (whether working or with a job but not working), or in self-employment (whether working or with an enterprise but not working).

Number of unemployed: comprises all persons of working age who were without work (not in paid employment nor self-employment) during the reference period, are currently available for paid employment or self-employment, and are seeking work (had taken specific steps in a specified recent period to seek paid employment or self-employment).

Unemployment rate: the number of unemployed people as a share of the labor force.

Youth: represents young people in a given age bracket. Different countries use different age brackets to categorize youth (such as 15–24, 15–30, 15–35). For comparability reasons, ILO defines youth as those in the 15–24 age category. However, the African Union (AU) uses the 15–35 age bracket to define youth. We could not use the AU categorization, as the ILO data used in the current study identifies youth as 15- to 24-year-olds.

Youth not in education, employment, or training (NEET): a percentage of the total youth population not in education, training, or employment. Thus, NEET serves as a broader measure of potential youth labor market entrants than youth unemployment, since it also includes young people outside the labor force not in education or training.

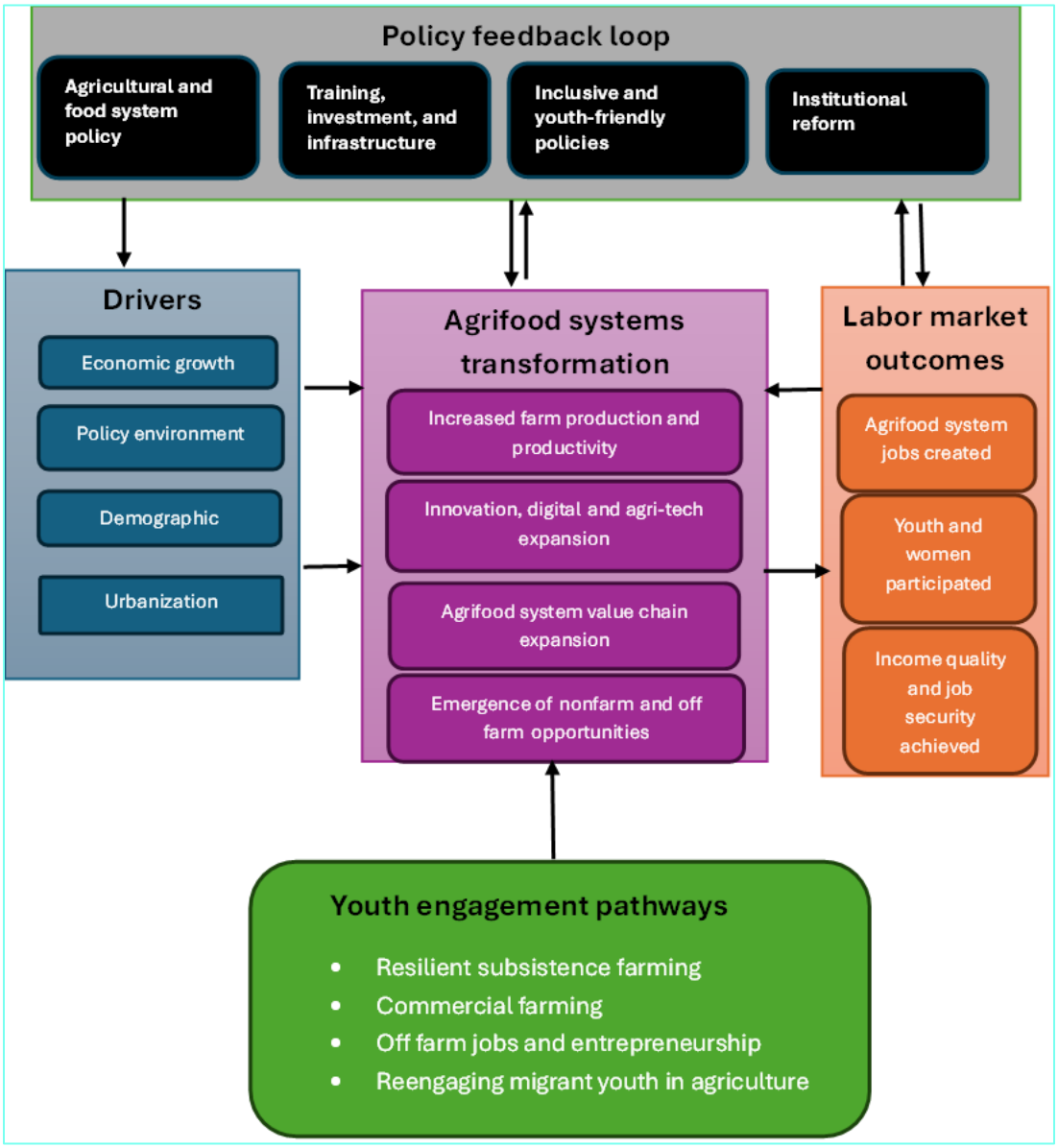
Conceptual framework

The conceptual framework of this study, depicted in Figure 1, illustrates the interplay among the policy feedback loop, drivers of AFS transformation, labor market dynamics, employment patterns, and pathways for youth engagement in agriculture and eventually AFS. Additionally, the framework highlights the interactions of various domains that ensure labor market outcomes such as employment in AFS, youth and women participation, income quality, and job security in Ghana (Meijerink and Roza 2007; Béné et al. 2019).

According to Ghana's Ministry of Food and Agriculture (MoFA), the government has launched major initiatives, such as the Feed Ghana Programme (FGP), designed to increase agricultural production, strengthen value chains, and create dignified and fulfilling work for youth across farming, processing, and agribusiness sectors, thereby anchoring transformation in practical employment outcomes (MoFA 2025). The FGP explicitly includes a youth employment component to foster business opportunities along agricultural value chains, targeting inclusive participation and dignified and fulfilling work for young women and men.

The government's initiatives and policies not only shape outcomes but also are reshaped by them, making it possible to trace the dynamic relationship among state interventions, youth participation, employment, and food security (Osabohien et al. 2020). Policies on agricultural finance, such as youth-targeted credit schemes and input subsidies, directly influence access to capital, a key driver of youth engagement in AFS (Pauw 2022). Similarly, land tenure policies, though still constrained by customary practices, remain central in shaping whether young people can enter agriculture, because secure land access has been shown to significantly determine youth participation (Amanor 2010).

Figure 1. Framework for achieving successful youth engagement in Ghana's AFS



Source: Authors' illustration.

Policy interventions also respond to Ghana's demographic and economic drivers, with relatively higher youth unemployment and rural-urban migration. There is increasing recognition that AFS must provide productive and technology-enabled pathways beyond subsistence farming to create off-farm employment opportunities. Youth-inclusive policies and adoption of agri-tech are essential to modernizing the sector and unlocking employment opportunities across the agrifood system, from digital extension and value addition to climate-resilient practices. The current report's four guiding research questions map directly onto the elements of this framework, which situates economic growth, demographic shifts, urbanization, and policy interventions in Ghana as key drivers of AFS change. Examining how these evolved between 2000 and 2023 helps establish the external conditions under which Ghana's AFS transformation is unfolding.

Additionally, the framework highlights the labor market as a transmission mechanism that shapes how structural drivers translate into employment opportunities for young people. The youth bulge and rapid urbanization increase demand for food diversity while simultaneously straining labor markets. By disaggregating labor outcomes by gender and age, it becomes possible to assess whether AFS offer inclusive pathways or reproduce inequalities (Filmer and Fox 2014). This aligns with the framework's focus on how transformation processes affect young people's livelihoods and aspirations. Furthermore, the framework stresses that AFS transformation spans multiple segments beyond primary agriculture, including processing, distribution, and retail. Measuring the share of total employment generated by the AFS and its segments indicates the system's importance in absorbing labor, particularly as economies diversify (Reardon et al. 2019; Dolislager et al. 2021). This directly maps the framework's pathways of transformation, whereby drivers reshape opportunities along the value chain.

Finally, the framework emphasizes youth engagement pathways and social differentiation. Identifying how employment within AFS varies across gender and age groups reveals who benefits from transformation and who risks exclusion (Quisumbing et al. 2014; Yeboah and Jayne 2018). In Ghana, these disparities are particularly pronounced. Gender disparities in access to productive resources such as land, credit, education, and market participation are well-documented and continue to constrain women's economic outcomes relative to men. Empirical evidence shows that women in rural Ghana often have limited access to land due to customary land tenure systems that privilege male ownership, which in turn affects their ability to use land as collateral for credit or to expand commercial farming activities. Analysis of land access in multiple regions of Ghana reveals that women frequently depend on male relatives for land access, face discriminatory practices in land allocation, and encounter difficulties securing formal credit because banks require land-based collateral disproportionately held by men (Akwensivie and Donkoh 2024; N-yanbini and Owusu-Ansah 2024).

These differentiated outcomes feed directly back into policy. MoFA has a decade-old Gender and Agricultural Development Strategy II (GADS II) of 2015 (MoFA, 2015). However, precise analogous and domestic programs have increasingly incorporated gender and youth dimensions. Sustained inequalities have weakened trust in one-size-fits-all interventions and driven demand for more inclusive policies. The prioritization of youth and women in initiatives such as FGP, and the evidence-based recognition (Kidido et al. 2019; N-yanbini and Owusu 2024) that targeted interventions are needed to improve access to resources and markets, illustrate how youth engagement pathways in FS both shape and are shaped by evolving policy frameworks that seek to enhance inclusive participation, strengthen livelihoods, and support broader transformation of Ghana's economy and AFS.

Computation of food systems and agrifood systems employment

Computation of employment in AFS/FS requires, among other things, identifying those engaged in the production, processing, transporting, and marketing of agricultural/food items, as well as those engaged in the supply of agricultural inputs and servicing of foods for consumption (IFPRI 2024). Typically, employment data is unavailable at such a disaggregated level. Davis et al. (2026; 2023) recommend a methodology that uses the ILO's International Standard Industry Classification (ISIC) two-digit aggregated employment data to estimate both AFS employment. This study implements that methodology.

This approach categorizes crop and livestock production and fishing and aquaculture as food production. Manufacturing of food products; manufacture of beverages; food and beverage service activities; and undifferentiated goods- and services-producing activities of households constitute food manufacturing and services, which are also part of FS. In addition to these components of FS employment, AFS employment adds those working in forestry and logging (nonfood production) and the manufacture of

nonfood agricultural items, such as tobacco products, textiles, leather and related products, wood and wood products, and paper and paper products.

As noted above, both FS and AFS employment are underestimates, because they exclude those engaged in the transportation, wholesaling, and retailing of agricultural goods; the supply of inputs for FS/AFS; and the disposal of food and agricultural wastes. In ILO (2025) or other databases that use two-digit ISIC classification, employment in trade and transportation is aggregated (including nonagricultural sectors). To isolate employment in FS/AFS transportation and trade, this method proposes applying the share of underestimated FS/AFS employment in total employment to calculate the FS/AFS share of transportation and trade employment, then adding those values to the underestimated sums above. We follow this procedure to derive the total shares of FS/AFS employment. However, these employment shares still miss other categories of workers (such as input suppliers) or underestimate FS/AFS employment. Therefore, caution is needed when interpreting the results, given both the adjustments required and the underestimation. Table 1 presents trends in the share of those employed in the 14 detailed categories described above, while Table 2 summarizes the aggregated FS/AFS employment categories.

Descriptive statistics

This study primarily employs descriptive analysis to document trends in key labor market indicators and to characterize the demographic profiles of employed individuals. In addition to presenting aggregate patterns, the analysis systematically examines differences in employment outcomes across population subgroups, particularly between women versus men and youth versus mature workers. To assess whether observed differences and relationships across these groups are statistically meaningful rather than driven by sampling variability, the study conducts a series of mean comparison tests (t-tests). These tests are used to evaluate the statistical significance of disparities in employment shares, sectoral allocation, and labor characteristics across population categories.

By formally testing group-level differences at conventional confidence levels, the analysis strengthens the credibility of the results and helps distinguish systematic structural patterns from random fluctuations. From a policy perspective, this statistical validation is particularly important, as it allows policymakers to interpret observed labor market disparities with greater confidence and to prioritize interventions toward groups for which differences are both substantively and statistically significant. As such, the combined use of descriptive analysis and inferential testing enhances the study's relevance for evidence-based policy design in the context of AFS and FS employment.

2.2 Data sources and description

The study covers the period 2000–2023. However, data are unavailable for a number of years for most employment-related variables. To address this limitation, we combine economy-wide and sector-level data series from the World Bank (2025) and the ILO (2025).

International Labour Organization and World Bank datasets

The ILO, the United Nations agency responsible for promoting decent work and setting international labor standards, compiles harmonized data on labor force participation, employment, and unemployment. For Ghana, we use disaggregated employment data obtained from the ILO (2025) for five survey years spanning 2000–2017. According to the ILO (2025), employment estimates for four of these years (2000, 2006, 2013, and 2017) are derived from the Ghana Living Standards Surveys (GLSS), while the 2015

estimates are based on data from the Ghana Labor Force Survey. Both the GLSS and the Labor Force Survey are conducted by the Ghana Statistical Service.[2]

The World Development Indicators database provides aggregate (economywide) measures for a wide range of variables, while the UN Department of Economic and Social Affairs, Population Division (UN Population 2025), provides trends in population and demographic characteristics. Section 3 of this study uses World Bank (2025) data to provide background information relevant to the issues investigated in Section 4. It highlights the performance of the aggregate economy and the importance of major sectors in the Ghanaian economy, trends in population growth and demographic shifts, and patterns of urbanization, all of which contribute to FS transformation.

Section 4 draws on World Bank (2025) and ILO (2025) datasets to provide brief descriptions of the labor force, unemployment, and other variables. Section 4 also examines FS/AFS employment trends and their components across gender and age – a central objective of this study.

Data limitations

The employment data used in this study (ILO 2025) permit disaggregation of labor-market outcomes by sex and by age group, allowing separate analyses of women and men, and of youth and mature people. However, the data do not allow simultaneous cross-tabulation by both characteristics. Consequently, the analyses cannot distinguish labor-market outcomes for intersectional population groups such as young women or young men. This limitation is particularly relevant given the study's broader objective of informing policies that promote dignified and fulfilling employment opportunities for young women. While the analyses provide important insights into gender- and age-related patterns separately, they cannot directly assess the labor-market experiences of young women as a distinct group.

Future research using micro-level labor-force or household survey data that permit simultaneous disaggregation by age and sex would enable a more comprehensive assessment of employment outcomes for young women and other intersectional population groups.

3. DRIVERS OF AGRIFOOD SYSTEMS EMPLOYMENT IN GHANA

This section reviews the literature and describes data relevant to drivers of AFS employment in Ghana, with the objective of providing background information and contextualizing the changes observed in AFS employment over the past two decades. The first subsection surveys the literature on government policies and interventions relating to AFS employment, particularly those focusing on youth engagement in AFS work, how successful those efforts were, and implications for future youth engagement in AFS. The second subsection studies trends in the three other drivers of AFS: economic growth, population, and urbanization. The description in this section relies on the World Development Indicators data (World Bank 2025) and UN Population (2025).

[2] The GLSS is Ghana's principal nationally representative household survey for monitoring living conditions and socioeconomic outcomes. The GLSS collects detailed information on households' demographic characteristics, education, health, labor market participation and employment, agricultural and nonagricultural enterprises, food and nonfood expenditures, household assets, housing conditions, and access to basic services (Ghana Statistical Services 2018).

3.1 Agrifood system employment and inclusive policies in Ghana

Ghana's FS policy environment has evolved significantly over the past two decades. Emphasis has grown on agricultural transformation, food security, climate resilience, and employment creation for women and youth. Agriculture remains central to Ghana's economy and livelihoods, particularly in rural areas (MoFA 2023a). Consequently, Ghana's FS policies have progressively shifted from a narrow focus on agricultural production toward a broader systems-oriented approach linking food security, nutrition, value chains, employment, and inclusive economic development.

The Food and Agriculture Sector Development Policy (FASDEP II) became the central framework guiding agricultural modernization and food security interventions in Ghana. FASDEP II focused on improving productivity, enhancing rural incomes, modernizing agricultural practices, and reducing food insecurity. FASDEP II was operationalized through the Medium-Term Agriculture Sector Investment Plan (METASIP), which supported the distribution of improved seeds, fertilizers, and other agricultural inputs to smallholder farmers (Wongnaa et al. 2026). Although METASIP contributed to measurable improvements in productivity and rural livelihoods, its outcomes were constrained by funding gaps, limited institutional capacity, and implementation weaknesses (IFAD 2012). To address some of these shortcomings, Ghana introduced the Ghana Agricultural Sector Investment Programme (2015–2022), which expanded support to agro-processing, storage infrastructure, market access, and value chain development in rural and peri-urban areas (IFAD 2014). However, emerging challenges such as poor diet quality, food safety concerns, rising unhealthy consumption patterns, climate vulnerability, and nutrition insecurity require a more integrated and holistic FS approach (Asante 2024; Malabo Montpellier Panel 2021). These evolving challenges have increasingly shaped policies linking FS transformation with youth employment and inclusive economic participation.

Ghana has built a layered architecture of policies and institutions to advance women's participation in its AFS. The Women in Agricultural Development Directorate, operating within MoFA since the 1970s, mainstreams gender across agricultural policies, delivers extension services tailored to women farmers and processors, and has channeled more than US$11 million in technology subsidies to women under METASIP II (2014–2017) (Malabo Montpellier Panel 2021). GADS II reinforces this by mandating that 40 percent of beneficiaries of subsidized agricultural input programs be women (MoFA 2015), with the Savannah Zone Agricultural Productivity Improvement Project allocating 50 percent of its beneficiaries to women smallholders (AfDB 2023) and certifying 180 women in farm mechanization through the Driving Seat Program, 60 percent of whom secured employment thereafter (Cele et al. 2020). On the financing and social protection side, the Microfinance and Small Loans Centre, established in 2006, directed 87 percent of its more than 24,500 beneficiaries between 2014 and 2019 to women, disbursing US$629,000 specifically to agribusiness projects (MoGCSP 2019; MASLOC 2023). The Livelihood Empowerment Against Poverty Programme reached 1.8 million beneficiaries over the same period, 56 percent of whom were women, generating measurable improvements in food consumption, agricultural input spending, and livestock ownership (MoGCSP 2019). The Ghana School Feeding Programme and Labour-Intensive Public Works Programme further strengthened women's agrifood position by sourcing food from women smallholders and providing seasonal agricultural employment to more than 50,000 women, representing nearly 60 percent of all beneficiaries (MoFEP 2022). Despite these gains, persistent gaps in land access, decision-making representation, and sociocultural norms continue to constrain the full realization of women's potential within Ghana's AFS (GCFSD 2022).

Youth employment has become a major priority within Ghana's broader development planning frameworks, despite youth's view of agriculture as low in profitability, limited in mechanization, and with poor

access to land and finance (Malabo Montpellier Panel 2023). In response, the Ghana Poverty Reduction Strategy (GPRS I and II, 2003–2009) represented one of the earliest efforts to explicitly position agriculture as a pathway for employment generation among young people. The GPRS was supported by the ILO and the United Nations Development Programme to expand access to modern farming tools, tractor services, agricultural credit, and technical and vocational education and training (TVET) opportunities with agrifood-related components. According to the Malabo Montpellier Panel (2023), a majority of the employment indicators monitored under the strategy showed measurable improvement during implementation. Building on this foundation, Ghana developed the Growth and Development Agenda (I and II, 2010–2017) to consolidate youth-focused interventions across government ministries and agencies into a unified national framework. During the same period, two major initiatives emerged, which included the Youth in Agriculture Programme (YIAP) and the Savannah Accelerated Development Authority. Both initiatives aimed to stimulate youth participation in commercial agriculture, particularly in northern Ghana and underserved rural regions.

The MoFA flagship interventions, including Planting for Food and Jobs (PFJ), Planting for Export and Rural Development, and Rearing for Food and Jobs, have expanded in scale, reflecting growing state commitment to agricultural transformation and employment creation. This is entrenched in the Investing for Food and Jobs (2018–2021) agenda (MoFA 2018). PFJ in particular has become one of Ghana's largest agricultural support programs, expanding from approximately 202,000 beneficiaries in 2017 to more than 1.7 million beneficiaries by 2020 (Malabo Montpellier Panel 2023). The National Youth Policy, initially introduced in 2010 and updated for the 2022–2032 period, provides the overarching framework for youth development interventions in Ghana. The policy identifies agriculture, entrepreneurship, technology, education, and employment as core pillars and explicitly positions modern agribusiness as a viable career pathway for young people (Ministry of Youth and Sports 2021). Complementing this is the National Employment Policy (MoELR 2014), which prioritizes agribusiness as a strategic sector for job creation and advocates stronger TVET systems, enterprise development, and private-sector-oriented skills training.

YIAP, launched in 2009, remains Ghana's flagship intervention for youth engagement in agriculture (Twumasi, Jiang, and Acheampong 2019). YIAP provides young farmers with access to land, subsidized inputs, tractor services, starter livestock, feed, and technical support, while also supporting agribusiness training and agricultural marketing (MoFA 2011). YIAP later evolved into the Youth in Agriculture and Aquaculture Programme, implemented under the second phase of PFJ in partnership with the Youth Employment Agency (YEA). The initiative reportedly engaged more than 11,000 youth in northern Ghana and the Volta Region, cultivating more than 28,000 acres of maize and rice production (MoFA 2023b). The YEA itself has become an important institutional mechanism for coordinating youth training, internships, and employment opportunities, with hundreds of thousands of young people benefiting from various skills and employment modules since its formal establishment through legislation in 2015 (Malabo Montpellier Panel, 2024).

Beyond government-led interventions, entrepreneurship and private sector support programs have expanded opportunities for youth participation in AFS. The National Entrepreneurship and Innovation Programme, introduced in 2016, has trained 45,000 entrepreneurs, funded 9,350 youth-led enterprises, and supported agribusiness startups through incubation, mentorship, and concessional financing (NEIP 2023). Similarly, donor-supported initiatives such as the Rural Enterprises Programme and the Next Generation Cocoa Youth Programme have strengthened youth entrepreneurship, financial inclusion, agribusiness innovation, and participation in agricultural value chains, including cocoa production and agro-processing. Introduced in 2025, the FGP is a four-year agricultural transformation initiative (2025–

2028) with six objectives spanning productivity, food security, value addition, agro-industry, export promotion, and job creation across key value chains, including cereals, vegetables, starchy staples, tree crops, and livestock (MoFA 2025). Notably, the FGP mainstreams the inclusion of women, youth, and persons with disabilities into commercial agriculture through a dedicated social safeguards framework, with a projected 2.6 million jobs and an estimated budget of GHS 302.21 billion by 2028 (MoFA 2025).

Despite these policy advances, several implementation challenges continue to limit the effectiveness and sustainability of youth employment interventions within Ghana's FS. Limited access to land remains a major constraint for young people seeking to enter commercial agriculture. Inadequate access to post-program financing, weak market linkages, and the absence of robust graduation and exit strategies for beneficiaries also undermine long-term sustainability. In addition, many youth-focused agricultural programs remain highly dependent on political cycles and donor financing, raising concerns about continuity and institutional stability (Malabo Montpellier Panel 2023). Furthermore, while Ghana's FS policies have historically prioritized food production and food security, newer challenges associated with nutrition, climate adaptation, food safety, and job creation and employment quality require more integrated policy responses. Current evidence suggests that future FS transformation in Ghana will depend not only on increasing agricultural productivity but also on sustained investment in youth employment, entrepreneurship, climate resilience, value addition, digital innovation, and inclusive agribusiness development (Asante 2024; Malabo Montpellier Panel 2021).

3.2 Socioeconomic drivers of agrifood system employment

Economy[3]

Ghana's GDP increased more than threefold from 2000 to 2023, from about US$20 billion to US$70.5 billion (in constant 2015 prices) (Annex Table 1). This represents an average annual growth rate of 4.6 percent. Growth was faster in the first half (2000–2007) of the period (5 percent annually) compared to the second half (2015–2023) (4.3 percent), largely due to a lower base in earlier years (Figure 1). This growth in Ghana's GDP outpaced the overall growth in SSA, where GDP growth averaged 3.8 percent per year over the same period, and average growth in the first half of the period far outpaced growth in the second half. This demonstrates that Ghana's economy demonstrated robust growth, surpassing regional trends, with a slight slowdown in the latter part of the period.

The sectoral composition of Ghana's economy has undergone significant changes between 2000 and 2023, with notable shifts that highlight the diversification in Ghana's economy away from agriculture. In 2000, agriculture was the dominant sector, contributing more than 35 percent of GDP, while services accounted for 29 percent. Services overtook agriculture as the largest sector in the economy in 2006. In 2023, services accounted for 42.5 percent of GDP, which is more than double the share of agriculture (21 percent), while industry accounted for about 30 percent of GDP, making it the second-largest sector (Annex Table 1). This implies that nonfarm sectors (industry and services) now account for nearly three-quarters of Ghana's GDP, reflecting the country's ongoing economic transformation.

Between 2000 and 2023, Ghana's per capita GDP doubled, increasing from US$1,020 to US$2,066 (in constant 2015 prices) (Annex Table 1). This represents an average annual growth rate of 2.2 percent, which was similar across both halves of the period. As expected, per capita GDP growth corresponds to the difference between GDP growth and population growth rates (see subsection below). GDP per capita growth is considerably faster in Ghana than the SSA average, where per capita GDP grew at just 1

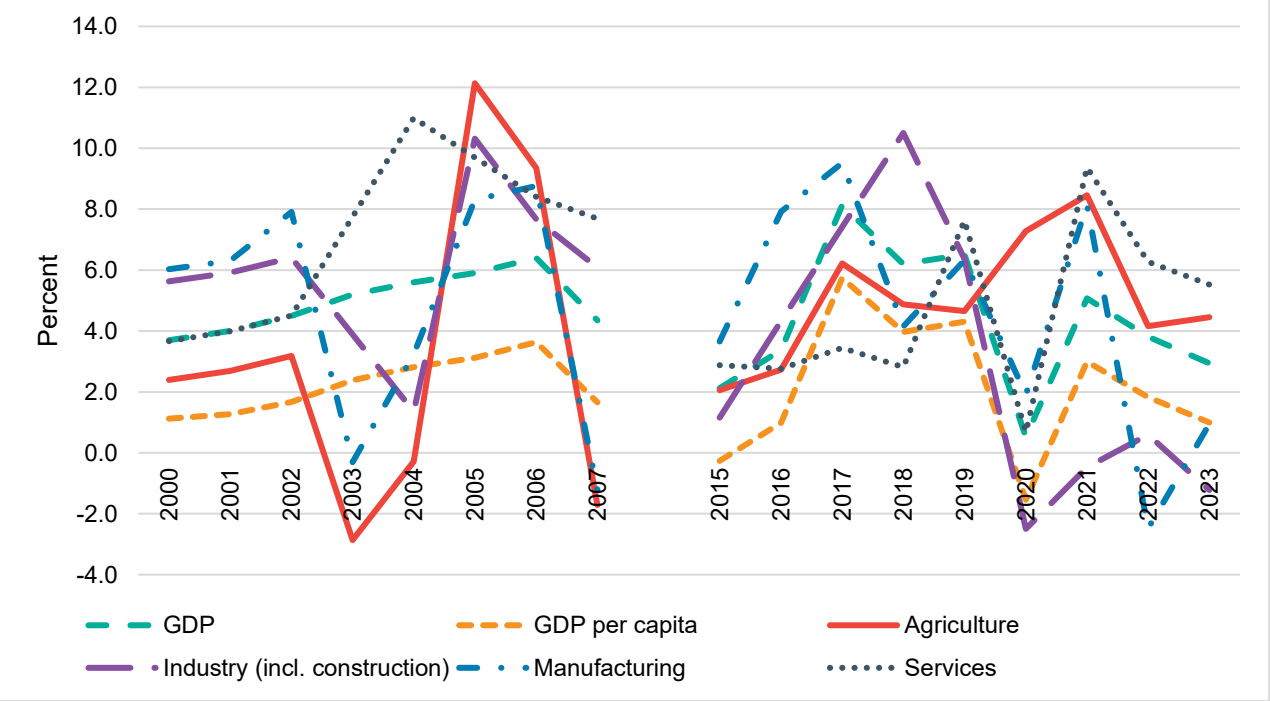
[3] Note that data on economic performance is unavailable for Ghana for the years 2008-2014.

percent per year. The contrast is clearer when comparing the trajectories of GDP per capita in Ghana and SSA. In 2000, Ghana's GDP per capita was 15 percent lower than the SSA average of US$1,200. By 2023, Ghana's per capita GDP was 30 percent higher than the SSA average.

This improvement in income levels is also reflected in the significant poverty reduction in Ghana, compared to slower and less dramatic progress in SSA overall. In 2005, 42.5 percent of Ghanaians lived below the US$2.15 per day (2017 PPP) poverty line. By 2015, this figure dropped to about 25 percent, reflecting an annualized poverty reduction rate of 4.1 percent. In contrast, SSA had higher poverty rates (49 percent in 2005 and 38 percent in 2015) and a slower rate of poverty reduction at 2.2 percent annually. This decline in the overall poverty measure, which is an important SDG indicator, is also accompanied by a decline in a complementary poverty measure, the Working Poverty Rate (SDG 1.1.1), which declined from 11.4 percent in 2014 to less than 9 percent in 2022 (ILO 2025).

Figure 2 provides details of the growth rates and shows, among other findings, that Ghana's economy grew fastest in 2017, primarily driven by rapid growth in the industrial sector. The economy declined in 2020, likely due to the COVID-19 pandemic, though there was a rebound in 2021. The figure also indicates that during the same (2000–2023) period, agriculture, industry, and services grew at average annual rates of 4.1, 4.3, and 5.8, respectively. The services sector recorded positive growth in all years, including 2020, when most sectors declined, the exception being agriculture, which increased considerably that year, perhaps because farmers and agricultural activities in rural areas experienced few disruptions due to COVID-19-related closures. Figure 2 also shows that growth in Ghanaian GDP mostly follows changes in services and industry sectors, particularly in the second half of the period, while GDP growth seems largely unaffected by swings in agricultural growth, such as in 2003 and 2005.

Figure 2. GDP and sectoral growth rate in Ghana, 2000–2022



Source: Authors' analyses of World Bank (2025) data.
Note: Sectoral growth rates for 2000 to 2007 were calculated from sectoral GDP shares based on estimates reported in the CIA World Factbook (CIA, various years). These shares are indicative and derived from national accounts data harmonized by the CIA; they are suitable for descriptive analysis and growth decomposition but may differ slightly from official national accounts or World Bank estimates.

Ghana's rapid income growth and poverty reduction have significant consequences for output demand and supply/employment in FS. As income levels rise and poverty declines, food consumption increases, especially because lower-income households have a higher income elasticity for food. Income increases also lead to a change in the composition of food demand, with greater consumption of processed foods, animal-source foods, and meals purchased outside the home, creating employment opportunities in nonfarm components of AFS (Melo et al. 2025; Almås et al. 2023; Reardon et al. 2021; Reardon and Timmer 2012; Deaton and Subramanian 1996), which is consistent with the observation that a growing share of income in Ghana is generated in nonfarm sectors. In particular, the decline in the share of agriculture, together with increases in agricultural value added per worker (World Bank 2025) observed in Ghana, implies that the share of agriculture in total employment is declining, as noted in Section 4. On the other hand, some expansion in the industry and services sectors is likely to be derived from growth in food manufacturing and services, leading to an increase in nonfarm FS employment. The interaction of these economic shifts will lead to changes in both the size and composition of FS employment, likely favoring nonfarm jobs over traditional farming roles.

Population

The relationship between population growth, demographic shifts, and AFS employment is critical for understanding how the labor force evolves and how changes occur in the quantity and types of food demanded. In the case of Ghana, the population growth dynamics reflect broader trends that affect various sectors, including agriculture, food distribution, and the labor market. Ghana's population increased by 73.5 percent from 19.7 million in 2000 to 34.1 million in 2023, with an average annual growth rate of 2.4 percent. Population growth plateaued at 2.8 percent around 2012 and declined thereafter. This population surge signifies a growing labor force and is likely to increase the demand for food outputs and services. Ghana's population growth rate is slower than the SSA average of 2.7 percent over the same period (World Bank 2025). This implies that Ghana's FS might face relatively less pressure from population size and expansion compared to other SSA countries, although the growth is still substantial.

Health conditions have also shown important changes, as manifested by health outcomes in Ghana (Annex Table 2). Notably, there has been a 25 percent decline in the crude death rate (from 10 to 7.5 deaths per 1,000 people) during the 2000–2023 period. In addition to contributing to a more productive labor force, health improvements could also influence food utilization patterns. As people live longer and have better access to healthcare, there may be greater emphasis on nutrition and dietary diversity, influencing both the quantity and the types of food outputs and services demanded, as well as the retail jobs that emerge.

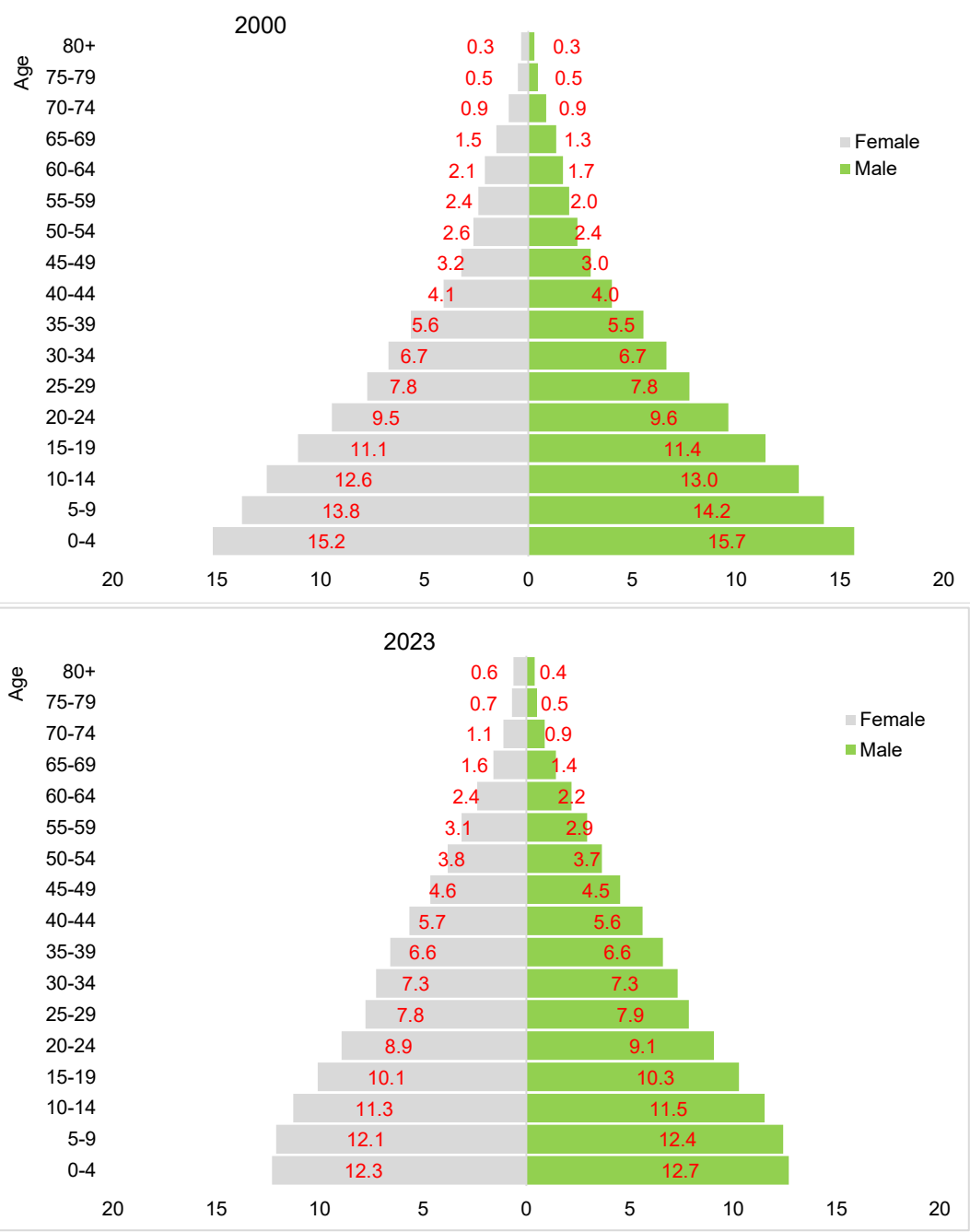
The demographic changes illustrated in Figure 3 align closely with the population growth trends discussed earlier. Between 2000 and 2023, the share of young people under 15 years of age decreased by 6 percentage points, while the decline among those ages 15–24 was modest at 1.6 percentage points. Notably, Figure 3 reveals that the share of all five-year age cohorts under 25 experienced a reduction during this period. In contrast, the share of five-year age cohorts of the population ages 25–64 increased by a total of 7 percentage points.

Overall, Ghana's working-age population grew by 90 percent, expanding from 11.3 million in 2000 to 21.6 million in 2023. This growth was slightly higher among men (92 percent) compared to women (89 percent). These demographic shifts, coupled with advancements in health services (United Nations 2024), contributed to an increase in life expectancy at birth and a significant reduction in the dependency ratio. Specifically, the youth dependency ratio declined sharply as many young people transitioned into the labor force (Annex Table 2). These demographic changes, along with the population increase,

are likely to have important implications on both the level and rate of adjustments required to meet changing food demand and labor supply dynamics.

Ghana's rapid population growth over the past two decades appears to reinforce the importance of AFS as a source of food and nutrition security and employment. Looking forward, continued population growth is expected to increase demand for food while simultaneously expanding the number of labor market entrants seeking employment opportunities. As the country's largest employer, the AFS is likely to remain central to absorbing a substantial share of this growing workforce, particularly through expansion of both farm and nonfarm agrifood activities (Losch et al. 2012; Yeboah and Jayne 2018).

Figure 3. Age structure of population in Ghana (percent), 2000 and 2023



Source: Authors' analyses using UN Population Department (2025) data.

Urbanization

Urbanization is a major driver of FS transformation, influencing food environments, consumer preferences, dietary patterns, and the spatial distribution of food demand (Mockshell 2023; Tefft et al. 2017; Seto and Ramankutty 2016). As urban populations expand and incomes rise, consumers increasingly demand purchased, processed, protein-rich, and convenient foods, creating new opportunities throughout agrifood value chains. Meeting this demand requires more extensive processing, packaging, storage, transportation, wholesaling, retailing, and food service activities, while the concentration of consumers in urban areas increases the need for efficient infrastructure and stronger market linkages. Consequently, urbanization encourages greater specialization and integration within FS, strengthening rural–urban value chain connections and expanding employment opportunities beyond the farm (de Bruin et al. 2021; Reardon et al. 2021; HLPE 2017; Reardon and Timmer 2012; Mergenthaler et al. 2009). As a result, urbanization is often associated with a growing share of employment in nonfarm AFS segments, even as the share of workers directly engaged in farming declines. At the same time, the transformation of FS can contribute to higher productivity and more remunerative employment within agriculture itself, despite agriculture's declining share of total employment (Christiaensen et al. 2021; IFPRI 2020).

Between 2000 and 2023, Ghana's urbanization rate averaged 3.7 percent per year, although it slowed from 4.1 percent during 2000–2007 to 3.3 percent during 2015–2023 (Annex Table 3). This rate is close to urbanization in SSA, where it averaged 4.1 percent during the same period (World Bank 2025). However, Ghana's level of urbanization is significantly higher than the SSA average. While 52 percent of Ghana’s population resided in urban areas during an average year between 2000 and 2023 (rising from 46 percent in 2000 to 57 percent in 2023), only 37 percent of the population in SSA resided in urban areas during the same period. Another distinctive feature of Ghana’s urbanization is the relatively low proportion of the urban population concentrated in its largest urban center, Accra, which, on average, accounted for 18 percent of the urban population. In comparison, on average 27 percent of the urban population in SSA lived in the largest city. Ghana’s urban population is more evenly distributed across various cities and towns, which helps mitigate pressures on social services, housing, and infrastructure in any single city. Annex Table 3 also highlights that urban residents’ access to basic services such as water, sanitation, and electricity was higher at the start of the period compared to the SSA average and has shown substantial improvements over the past two decades. This distributed urbanization pattern in Ghana offers significant potential for leveraging FS production and employment, creating opportunities to better integrate food production and market systems while enhancing job creation in urban and peri-urban areas.

In summary, rapid economic growth, population growth, favorable demographic shifts, and accelerating urbanization may have important implications for future AFS demand, supply, and employment in Ghana. Sustained GDP and per capita income growth and poverty reduction could lead to increases in overall food demand and gradual shifts consumption toward more processed, higher-value, and nutrient-dense foods, while rising agricultural productivity and the declining share of agriculture in GDP may be associated with a gradual reallocation of labor away from primary farming. At the same time, strong population growth and a rapidly expanding working-age population are likely to boost both food demand and labor supply, potentially requiring faster adjustments across AFS activities to absorb new workers and meet changing consumption needs. Improvements in health and longevity may further reinforce demand for dietary diversity and food-related services. The growing but spatially distributed urban population in Ghana is likely to intensify demand for convenient, processed, and marketed foods and strengthen the need for food logistics, processing, retail, and services, thereby creating opportunities

for growth in nonfarm AFS employment. Collectively, these trends suggest the potential for a gradual structural transformation of Ghana's FS, with possible shifts in employment toward higher-value and off-farm AFS activities, while on-farm employment becomes increasingly productive and competitive.

4. LABOR FORCE AND EMPLOYMENT

This section utilizes labor force and employment data from the World Bank (2025) and the ILO (2025) databases. The description of variables varies in temporal coverage based on data availability. The section comprises two subsections. The first subsection briefly outlines labor market variables, offering context for the analyses in the second subsection, which focuses on employment trends within FS/AFS. Unless stated otherwise, our discussions below highlight only statistically significant differences across different population categories.

4.1 Labor force participation and unemployment in Ghana

Labor for participation rate

The labor force participation rate in Ghana averaged 73.4 percent of the working-age population in the first half of the period (2000–2007), while it averaged 69 percent in the second half (2015–2023) (Figure 4). The average was 71 percent during the entire period (2000–2023).4 The following observations can be discerned from the trends in labor force participation rate in Ghana.

First, the labor force participation rate declined over the 2000 to 2023 period. The decline was slow but persistent among the general population, in which it declined by 5.7 percentage points (pp), while it was higher among women (7.3 pp) than men (4.1 pp). The labor force participation rate for young men declined considerably (by 10 pp), but it was less than the decline in the labor force participation rate of young women, which declined the most (by 15 pp). Second, the labor force participation rate is higher among men (74 percent) than women (68 percent). While the case is similar among young men and young women, the difference is considerably smaller among the latter two. Third, the gender gap in labor force participation rate increased over the period and the increase in the gap was considerable among youth (young men vs. young women) than it was in the general population (men vs. women), implying that the increase in the gap was lower among mature people than among youth. Finally, as can be gleaned from Figure 4, the labor force participation rate of youth, which averaged 46.4 percent during the period, is considerably lower than the general population and hence even lower relative to the labor force participation rate of mature people. Particularly, in any given year, the labor force participation rate of youth was at least 20 percent lower relative to the average population. Higher school attendance by youth may explain the lower labor force participation relative to the general population, while higher unemployment rates among youth could also be a contributing factor. While this gap is more likely due to a combination of the two factors, more investigation is needed, given the increasing gap in labor force participation of youth and the general population amid the declining unemployment gap between the two groups.

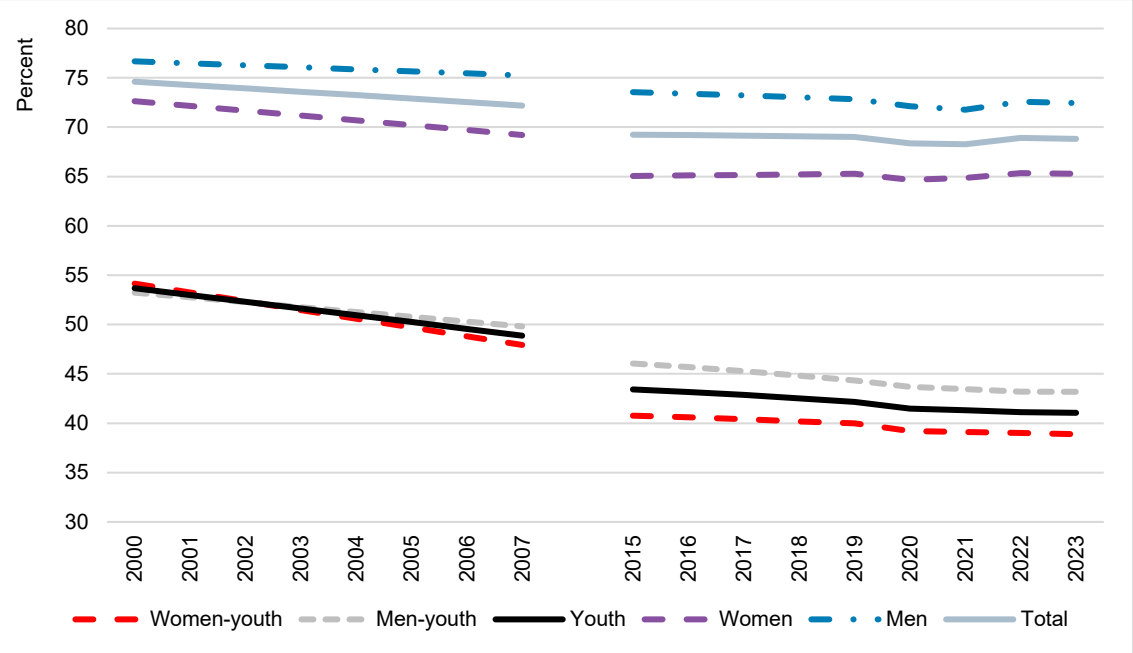
A comparison of Ghana's labor force participation rates with the average for SSA reveals that Ghanaian labor force participation rates are generally higher among the general population. For instance, labor force participation averaged less than 68 percent in SSA during the same period, and female labor

[4] Data on labor force participation and unemployment rates are unavailable for Ghana for the years 2008–2014.

force participation in Ghana was significantly higher. However, the case is the reverse when considering youth labor force participation, which was lower in Ghana, although the difference is small, albeit statistically significant, particularly among men. As in Ghana, SSA exhibits a decline in labor force participation over the period studied.

ILO (2025) labor force participation data for Ghana (2015 and 2017), which incorporates more groups than those in Figure 4, is summarized in Annex Table 4. The summary indicates that labor force participation rates for people with disabilities were considerably lower than those without disabilities (50 percent versus 71.7 percent), although this gap declined considerably during the period. Furthermore, the labor force participation rate in rural areas was slightly higher in 2015, while the rural–urban gap increased considerably in 2017. However, differences in labor force participation rates for these groups were not statistically significant.

Figure 4. Labor force participation rate in Ghana (percent), 2000-2023



Source: Authors' analyses using World Bank (2025) data.

Unemployment rate

Single-digit unemployment rates dominated Ghana during the period studied. Unemployment rates averaged 5.5 percent from 2000 to 2023 and 10 percent or higher only in 2000. The average was higher (7.4 percent) in the first half of the period, when it was still declining, than it was in the second half (3.8 percent), when it stabilized at a lower rate of unemployment. The following observations can be discerned from the summary on the unemployment rate (Figure 5 and Annex Table 4).

First, the average unemployment rate of women was slightly higher relative to men and the general population in both periods. However, these differences were not statistically significantly different from zero. Second, Figure 5 clearly shows that unemployment rates of the youth are considerably higher relative to unemployment rates of the general population and hence relative to mature people; these differences were statistically significant. Particularly, unemployment rates among youth averaged 12.5

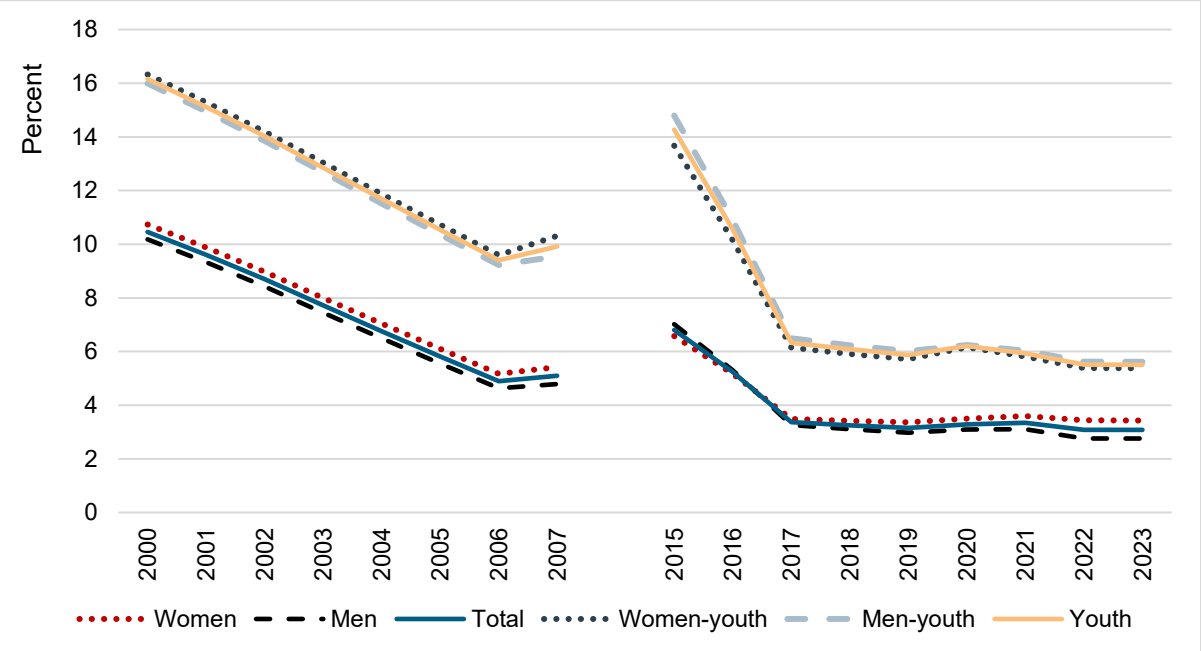
percent in the first half of the period and 7.4 percent in the second half. Young women experienced relatively higher unemployment rates, making them the most unemployed group in Ghana during the period studied. However, ILO (2025) data indicates that the NEET youth rate (NEET rate, SDG 8.6.1) declined from 25.6 percent in 2015 to 23 percent in 2017. Importantly, the NEET rate considerably declined (by more than 6 pp) for women while it increased among men (by 2.3 pp).

Third, Figure 5 shows a clear pattern of declining unemployment rates in Ghana during the period. Unemployment rates declined by about 7.4 pp among women, men, and the general population, while they declined by nearly 11 percentage points among youth, with a slightly faster decline among young women. However, there was a reversal in this general trend from 2006 to 2015, when unemployment rates strayed from the general pattern. Finally, unemployment rates during 2015 and 2017 were considerably higher in urban areas than in rural areas (Annex Table 4).

Beyond unemployment figures, significant gender disparities persist in the quality of employment and economic inclusion in Ghana. A substantially higher proportion of women (77 percent) are engaged in vulnerable employment compared with men (58 percent), reflecting their concentration in own-account jobs and contributing to family work with limited job security and protections. Women are also disproportionately represented in the informal sector (ILO 2025).

Moreover, women in Ghana have lower access to formal financial services compared with men. For example, fewer women hold bank accounts and have access to debit or credit cards, constraining their ability to save, borrow, and invest in productive opportunities (World Bank 2022). This economic exclusion is compounded by limited ownership of productive assets; restrictive social norms inhibit women's land ownership and use of property as collateral, further restricting access to credit and the growth of women-owned enterprises (Boateng and Poku 2019; Dery 2015). Entrepreneurial participation among women is also hampered by these constraints, with many female-controlled small enterprises operating primarily in informal contexts and facing barriers to scaling up due to limited access to capital, infrastructure, and discriminatory sociocultural norms (ILO 2025, Brookings Institution 2025).

Figure 5. Unemployment rate in Ghana (percent)



Source: Authors' analyses using World Bank (2025) data.

Despite progress in legal rights, women's political representation remains low: women hold only about 15 percent of seats in Ghana's national parliament, reflecting continued underrepresentation in decision-making arenas. Furthermore, the share of women in managerial and senior managerial positions in Ghana was relatively low, at 33.7 percent and 26.6 percent in 2017 (ILO 2025). These structural inequalities in employment quality, financial inclusion, entrepreneurial growth, and managerial and political representation indicate a need for policies that enhance women's access to quality employment, financial services, and productive assets; formalize and protect precarious work; and promote women's leadership and inclusion in governance.

Ghana performed slightly better in terms of unemployment rate relative to SSA, where the unemployment rate averaged 6 percent during the same period. Although differences in unemployment rates are statistically significant only among youth, the average unemployment rate was higher in SSA than in Ghana across all six population groups in Figure 5, as well as during both halves of the period studied (2000–2007 and 2015–2023). Furthermore, average unemployment stagnated in SSA during the period, declining by 3.5 pp between 2000 and 2023, which is less than one-half the decline in unemployment rates observed in Ghana during the corresponding period.

In summary, Ghana's labor force participation rate declined gradually between 2000 and 2023, while unemployment also fell substantially and remained relatively low by regional standards, implying that much of the growing labor force continued to find employment, likely through a combination of non-agricultural and agricultural activities, including employment in AFS. At the same time, the persistently lower labor force participation and higher unemployment rates among youth point to ongoing challenges in integrating young people into productive employment opportunities. Gender disparities remain particularly important. Although women participate extensively in economic activities, they are more likely to be concentrated in vulnerable and informal forms of employment and face greater constraints in accessing productive assets, finance, and business opportunities. Taken together, these patterns suggest that while Ghana's AFS has likely played an important role in absorbing labor and supporting employment growth during a period of economic transformation, significant challenges remain in improving the quality, inclusiveness, and productivity of employment, particularly for women and youth.

4.2 Agrifood system employment

Table 1 presents the distribution of employment shares across 14 subsectors within Ghana's AFS, alongside the share engaged in non-AFS sectors ("all others"). Table 2 aggregates these shares into four broader categories, providing a comprehensive overview of sectoral trends.

Agriculture and food production

The summary in Tables 1 and 2 show the critical role of agriculture within Ghana's AFS and the overall economy. Between 2000 and 2017, agricultural production accounted for 46.6 percent of total employment. Food production dominated this sector, while nonfood agricultural production – such as forestry and logging – contributed a marginal 0.6 percent on average to total employment.

Employment patterns across demographic groups reveal notable variations in the significance of agriculture. Among young people, agriculture accounted for 50.8 percent of total employment in an average year – the highest among population categories – followed by male workers at 50.3 percent. In contrast, agriculture was least significant for women, comprising only 43.3 percent of their total employment, while mature workers exhibited only slightly higher levels of agricultural employment, averaging

about 45.6 percent. This contrasts with trends in other SSA countries, where the share of mature people engaged in agriculture is higher than that of youth (Abay et al. forthcoming).

The trend in agriculture's share of total employment in Ghana is consistent with other countries in SSA, particularly with neighboring Nigeria (Abay et al. 2025; Bachewe et al. 2025). Over the study period, agriculture's share in total employment declined by 20.5 percent (11 percentage points [pp]), falling from 53 percent in 2000 to 42 percent in 2017. This decline was most pronounced among women (23.4 percent), followed by mature workers (23 percent) and men (17.3 percent). Youth recorded the smallest decline (10 percent).

Agrifood manufacturing and services

Food manufacturing and services on average accounted for 8.2 percent of total employment. This subsector experienced expansion from 5.4 percent in 2000 to nearly 9 percent in 2017. Growth in the share of those engaged in food manufacturing and services was most pronounced among youth workers, whose share of employment in this subsector almost doubled during the period (Table 1). The rate of growth of this subsector was slow relative to other countries such as Nigeria, where it grew by ten folds (Abay et al. 2025). These trends indicate that food manufacturing and services constitute one of the fastest-growing components of Ghana's AFS rather than merely an area requiring future attention. Continued expansion of this subsector reflects increasing urban food demand, dietary diversification, and growth in value-added food activities.

Workers engaged in the manufacturing of nonfood agricultural products – such as tobacco, leather, and wood – accounted for 1.4 percent of total employment on average. This subsector shrank from 3 percent in 2000 to 0.6 percent in 2017, or from an average of 1.8 percent during 2000–2005 to 1.1 percent during 2015–2017. The decline in nonfood manufacturing was about the same among youth and mature workers, while it was faster among women workers, whose share of nonfood manufacturing declined from 2.1 percent in 2000 to 0.3 percent in 2017.

Trade and transportation

Trade accounted for nearly 11.6 percent of total employment in Ghana during the 2000–2017 period, though there are notable gender and age disparities. The subsector was most significant for women, accounting for more than 17 percent of their total employment in an average year, followed by mature people (12 percent) and youth (9.2 percent), while the share of men employed in trade was the lowest at 5.5 percent. The share of employment in trade increased in the overall population by 2.2 pp between 2000 and 2017 and was highest in 2013, at 12.6 percent. The increase was faster among women (3 pp) and mature people (2 pp), while it stagnated among men.

Transportation, a relatively small sector, on average accounted for 2.2 percent of total employment and stayed the same for most of the period. Women's participation in agrifood transportation remained low at 0.2 percent. On average, transportation accounted for 4.2 percent of men's total employment, nearly 2 percent of young people's total employment, and 2.3 percent of mature workers' employment.

Table 1: Detailed agrifood system and all other employment, by gender and age (percent)

		Food production		Nonfood production	Food manufacturing & servicing				Agricultural (Nonfood) processing					Transport and trade		Non-AFS
	Year	Crop & livestock	Fishing and aquaculture	Forestry and logging	Manufacture of food products	Manufacture of beverages	Food and beverage service activities	Undifferentiated goods for HH own use	Manufacture of tobacco products	Manufacture of textiles	Manufacture of leather and related products	Manufacture of wood and of wood products	Manufacture of paper and paper products	Trade	Transport	All others
Total	2000	49.1	3.0	1.0	3.0	0.0	0.0	0.0	0.1	0.3	0.3	0.8	0.1	9.5	2.2	30.7
	2006	54.4	1.3	0.4	6.1	0.0	0.0	0.3	0.0	0.4	0.2	0.6	0.0	12.0	2.2	22.1
	2013	44.3	1.0	0.3	3.1	0.4	3.7	0.4	0.0	0.6	0.1	0.6	0.0	12.6	2.6	30.2
	2015	34.2	1.2	0.7	6.5	0.7	4.1	0.5	0.0	0.7	0.1	0.7	0.0	12.2	1.7	37.0
	2017	41.0	0.8	0.5	5.3	0.8	2.6	0.0	0.0	0.3	0.1	0.2	0.0	11.6	2.2	34.6
Female	2000	48.4	2.6	1.0	4.4	0.0	0.0	0.0	0.1	0.2	0.1	0.5	0.1	13.7	0.6	28.4
	2006	52.4	0.4	0.3	9.9	0.0	0.0	0.3	0.0	0.2	0.0	0.1	0.0	18.1	0.3	18.0
	2013	42.1	0.1	0.1	5.0	0.4	6.5	0.5	0.0	0.6	0.0	0.2	0.0	19.4	0.1	25.1
	2015	28.1	0.5	0.7	11.0	0.9	7.0	0.6	0.0	0.6	0.0	0.3	0.0	17.9	0.0	32.4
	2017	39.4	0.1	0.4	9.1	0.7	4.6	0.0	0.0	0.1	0.0	0.2	0.0	17.1	0.2	28.2
Male	2000	49.8	3.4	1.0	1.6	0.0	0.0	0.0	0.1	0.3	0.5	1.1	0.2	5.3	3.7	33.0
	2006	56.6	2.3	0.6	2.1	0.0	0.0	0.3	0.0	0.5	0.3	1.1	0.0	5.6	4.1	26.5
	2013	46.7	1.9	0.4	1.1	0.5	0.7	0.3	0.0	0.6	0.3	0.9	0.0	5.3	5.3	35.8
	2015	41.2	1.9	0.6	1.3	0.4	0.7	0.4	0.0	0.7	0.3	1.2	0.0	5.5	3.5	42.1
	2017	42.7	1.5	0.6	1.2	0.8	0.5	0.0	0.0	0.4	0.2	0.3	0.0	5.8	4.3	41.6
Youth	2000	48.1	3.5	1.0	2.9	0.0	0.0	0.0	0.0	0.4	0.5	0.8	0.1	8.2	2.0	32.6
	2006	58.8	1.5	0.3	5.5	0.0	0.0	0.4	0.0	0.4	0.4	0.4	0.0	8.2	2.6	21.5
	2013	53.5	1.3	0.2	2.8	0.4	4.0	0.6	0.0	0.9	0.1	0.4	0.0	9.4	1.5	24.8
	2015	37.4	0.0	0.8	8.7	0.0	4.8	1.0	0.0	0.6	0.0	0.7	0.0	11.0	2.2	32.8
	2017	45.8	1.0	0.6	5.3	0.5	3.5	0.0	0.0	0.5	0.1	0.1	0.0	9.4	1.4	31.9
Mature	2000	49.3	2.9	1.0	3.0	0.0	0.0	0.0	0.1	0.2	0.3	0.8	0.1	9.8	2.2	30.2
	2006	53.5	1.3	0.5	6.2	0.0	0.0	0.3	0.0	0.4	0.1	0.6	0.0	12.8	2.1	22.2
	2013	41.8	0.9	0.3	3.2	0.5	3.6	0.3	0.0	0.5	0.1	0.6	0.0	13.5	2.9	31.7
	2015	33.6	1.3	0.6	6.1	0.7	4.0	0.4	0.0	0.7	0.1	0.7	0.0	12.3	1.7	37.7
	2017	39.8	0.7	0.5	5.3	0.8	2.4	0.0	0.0	0.2	0.1	0.3	0.0	12.2	2.4	35.4

Source: Authors' analyses using ILO (2025) data.
Note: AFS = agrifood system; HH = household

Nonfarm agrifood system employment

The nonfarm AFS subsector – comprising food manufacturing and services, nonfood agricultural manufacturing, trade, and transportation – contributed considerably to total employment, accounting for 22.4 percent of total employment over the period studied. The contribution of nonfarm AFS to total employment increased considerably – from 16 percent in 2000 to 23 percent in 2017 or by 43.2 percent (Table 2).

A significant proportion of women workers in Ghana – more than 30 percent on average – were employed in nonagricultural AFS during this period. Women's participation increased the fastest during the period, by 63.3 percent (12.4 pp) between 2000 (19.5 percent) and 2017 (32 percent). The share of women engaged in nonfarm AFS was more than 30 percent of total employment since 2013, far from levels of other population groups. The share of mature workers employed in nonagricultural AFS followed women, at 23 percent on average during 2000 and 2017 and increased by 43.5 percent (7.2 pp) between 2000 and 2017.. On average, 20.5 percent of youth workers were engaged in nonfarm AFS during the same period and the proportion of youth employed in nonfarm AFS also grew considerably at 40.5 percent (by 6 pp) between 2000 and 2017. In contrast, men had the lowest participation (14 percent on average) and the lowest growth rate of 6.4 percent (less than 1 pp) in the share employed in the nonfarm AFS subsector. These trends highlight the increasing role of nonfarm AFS employment in absorbing women and youth into Ghana's evolving labor market.

Overall agrifood system employment

AFS accounted for an average of 69 percent of total employment of Ghana's overall population between 2000 and 2017, though it declined by 5.6 percent (3.9 pp) during this period. This trend in AFS employment is driven by two opposing dynamics: a significant decline in the share of agriculture in total employment and a concurrent increase in nonfarm AFS employment – a 10.9 pp reduction in agricultural employment that exceeded the 7 pp increase in nonfarm AFS employment over the same period. Furthermore, this movement indicates that non-AFS (all other sectors) increased by 3.9 pp (12.7 percent) during the same period. These shifts underscore the structural transformation of Ghana's labor market, where employment opportunities are increasingly shifting from agriculture to nonfarm AFS and non-AFS sectors. Furthermore, this increase in nonfarm AFS employment in Ghana was significantly higher than the rates observed in other SSA countries, such as Rwanda and Nigeria. This suggests that in the coming decades, the contraction in agriculture will likely be offset by a rapid expansion of employment opportunities in Ghana's nonagricultural AFS sectors – consistent with trends expected in transforming economies (Davis et al. 2026, 2023; Abay et al. forthcoming; Bachewe et al. 2024, 2025; AGRA 2022; SWAC/OECD 2021; IFPRI 2020).

Over the 2000–2017 period, AFS employment constituted 73.6 percent of women's total employment, 71.3 percent of total youth employment, 68.5 percent of total mature worker employment, and 64.2 percent of total male employment. Further disaggregation reveals additional demographic trends. Among women, the share of AFS employment increased only slightly (by 0.3 percent or 0.2 pp), which was driven by a 12.4 pp rise in nonfarm AFS employment and a 12.2 pp decline in agricultural employment. Youth participation in AFS increased at the highest rate of 0.7 pp (1.1 percent), reflecting a 5.3 pp decline in agricultural employment and a 6 pp increase in nonfarm AFS employment. This implies that women and young people's engagement in non-AFS (other sectors) increased during the period.

Mature people experienced a decline in AFS employment of 5.1 pp (7.3 percent). Their engagement in nonfarm AFS increased by 7.2 pp, while engagement in agriculture declined by 12.3 pp (23 percent) between 2000 and 2017. AFS employment among men declined fastest by 8.6 pp (nearly 13 percent) owing to a 9.4 pp (17.3 percent) decline in agricultural employment and a 0.8 pp (6.4 percent) increase in the share employed in nonfarm AFS.

Table 2: Agrifood system and all other employment, by gender and age (percent)

	2000	2006	2013	2015	2017	Average	t-test (signifi-cance)
Agrifood system							
Total	69.3	77.9	69.8	63.0	65.4	69.1	
Female	71.6	82.0	74.9	67.6	71.8	73.6	***
Male	67.0	73.5	64.2	57.9	58.4	64.2	
Youth	67.4	78.5	75.2	67.2	68.1	71.3	*
Mature	69.8	77.8	68.3	62.3	64.6	68.5	
Food system							
Total	66.7	76.3	68.2	60.9	64.3	67.3	
Female	69.6	81.5	74.0	66.0	71.2	72.5	***
Male	63.8	70.9	61.9	55.0	56.9	61.7	
Youth	64.6	77.1	73.5	65.1	66.8	69.4	*
Mature	67.2	76.2	66.8	60.1	63.6	66.8	
Nonfarm AFS							
Total	16.1	21.6	24.2	27.1	23.1	22.4	
Female	19.5	28.9	32.6	38.3	32.0	30.3	***
Male	12.8	14.1	15.1	14.2	13.6	14.0	
Youth	14.8	17.9	20.1	29.0	20.8	20.5	*
Mature	16.5	22.5	25.4	26.7	23.7	23.0	
All others							
Total	30.7	22.1	30.2	37.0	34.6	30.9	
Female	28.4	18.0	25.1	32.4	28.2	26.4	***
Male	33.0	26.5	35.8	42.1	41.6	35.8	
Youth	32.6	21.5	24.8	32.8	31.9	28.7	*
Mature	30.2	22.2	31.7	37.7	35.4	31.5	

Source: Authors' analyses using ILO (2025) data.

Notes: ***, **, and * signify that the two groups t-tested for difference are statistically significantly different at 1%, 5%, and 10% levels.

In conclusion, Ghana's AFS remains a major source of employment, but its composition has changed substantially over the past two decades. The share of employment in agriculture declined steadily, while nonagricultural AFS activities – including food processing, trade, transport, and food services – expanded in importance. This transformation has been accompanied by broader improvements in labor market conditions, including declining unemployment rates and continued growth in labor demand outside primary production. Women remain more concentrated in AFS employment than men, particularly in nonfarm AFS segments, while youth continue to rely heavily on the AFS as a source of livelihood despite lower labor force participation rates and persistently higher unemployment. These patterns suggest that Ghana's employment transformation is occurring not through a rapid exit from AFS, but through diversification within them, with nonfarm AFS activities playing an increasingly important role in job creation and livelihood opportunities.

The findings position Ghana between highly agriculture-dependent economies and more diversified labor markets observed elsewhere in SSA. While agriculture continues to account for a substantial share of employment, the growing importance of nonagricultural AFS activities reflects the expansion of agrifood value chains associated with economic growth, urbanization, and changing food demand. Compared with the continental estimates reported by Davis and colleagues (2026, 2023), Ghana exhibits a more pronounced role for nonfarm AFS employment, highlighting the country's ongoing AFS transformation. At the same time, persistent gender disparities in employment quality, financial inclusion, and access to productive assets indicate that the benefits of this transformation are not evenly distributed. Strengthening women's economic inclusion, improving opportunities for youth, and supporting the continued development of agrifood value chains will be critical for ensuring that Ghana's AFS contributes to inclusive growth, employment creation, and FS resilience in the years ahead.

5. CONCLUSION AND POLICY IMPLICATIONS

This study examined the evolution of employment in Ghana's AFS between 2000 and 2023, focusing on demographic patterns, labor market conditions, and structural changes in the composition of employment. During this period, Ghana experienced substantial economic growth, poverty reduction, urbanization, and demographic change, all of which influenced the structure of employment within the economy and AFS. Understanding how these forces shaped AFS employment is particularly important because the sector remains a major source of livelihoods and continues to play a central role in food security, income generation, and economic transformation.

The findings indicate that Ghana's AFS remains the dominant source of employment. Despite a gradual decline in its share of total employment, agriculture continues to employ a large proportion of workers, particularly youth and men, but agriculture's relative importance has fallen over time. At the same time, employment in nonfarm AFS segments – including food and nonfood (agricultural goods) manufacturing, trade, transportation, and food services – has expanded, reflecting the growing importance of agrifood value chains beyond primary production. These changes are consistent with broader patterns of structural transformation observed across developing economies, where urbanization, rising incomes, and changing consumer preferences increase demand for food processing, distribution, and food-related services.

The continued expansion of nonfarm agrifood-system activities – including food processing, trade, transportation, and food services – is one of the most encouraging findings of this study. These downstream segments provide growing opportunities for employment beyond farming and, according to the broader literature, are likely to offer important entry points for women and youth. Policies that strengthen these value chains while addressing constraints to finance, skills, productive assets, and entrepreneurship can therefore help translate agrifood-system transformation into more dignified and fulfilling employment opportunities.

The study also highlights important demographic dimensions of AFS employment. Women remain heavily engaged in AFS and are particularly concentrated in trade and other nonfarm AFS activities. However, they continue to face disadvantages in employment quality, access to finance, ownership of productive assets, and participation in formal labor markets. Youth remain strongly dependent on AFS employment, yet they experience considerably lower labor force participation rates and higher unemployment rates than mature workers. These patterns suggest that while the AFS continues to absorb a substantial share of Ghana's labor force, challenges remain in creating productive, remunerative, and inclusive employment opportunities. The findings of this study suggest several policy interventions that

could help address these constraints and fully leverage the contribution of AFS to sustainable development, economic transformation, and employment generation.

First, Ghana should strengthen support for nonfarm AFS activities that are increasingly driving employment growth. Investments in food processing, storage, transportation, logistics, wholesale and retail markets, and food services can create employment opportunities while improving the efficiency and resilience of FS. Expanding these segments is particularly important given continuing urbanization and changing food demand patterns.

Second, greater attention should be given to improving employment opportunities for young people. Although youth remain highly engaged in AFS, many young people appear to face difficulties transitioning into stable and productive employment. Expanding technical and vocational training, entrepreneurship support programs, digital skills development, and access to land, finance, and other productive resources can help young people participate more effectively in emerging agrifood value chain opportunities.

Third, policies aimed at reducing gender inequalities should remain a priority. Improving women's access to land, financial services, productive assets, business development services, and market information can enhance their productivity and earnings. Strengthening legal protections and reducing barriers faced by women-owned enterprises would also contribute to more inclusive AFS growth.

Fourth, Ghana's experience highlights the importance of adopting a broader AFS perspective in employment and development policy. Rather than focusing exclusively on agricultural production, policymakers should recognize the growing role of downstream and upstream agrifood activities in generating employment and economic opportunities. Integrating objectives related to employment generation, food security, nutrition, gender equality, youth inclusion, and economic transformation within a coherent AFS framework will be essential for ensuring that future growth is both inclusive and sustainable.

A further policy implication concerns the composition of future employment growth within agrifood systems. As Ghana's economy continues to transform, policies should place greater emphasis on expanding downstream AFS activities – including food processing, trade, transportation, and food services – which are likely to generate an increasing share of new employment opportunities. Although the available data do not permit separate analysis of young women, the broader literature suggests that strengthening these value chains, while addressing barriers to finance, skills, productive assets, and entrepreneurship, can promote more inclusive, dignified, and fulfilling employment for women and youth.

Overall, the evidence suggests that Ghana's AFS will continue to play a central role in employment creation and economic development. Harnessing its full potential will require policies that support both agricultural productivity and the continued expansion of nonfarm agrifood activities while ensuring that women and youth can participate fully in the opportunities created by ongoing AFS transformation.

ABOUT THE AUTHORS

Fantu Bachewe, Research Coordinator, Development Strategies and Governance Unit (DSG), International Food Policy Research Institute (IFPRI)

Harriet Mawia, Research Officer, DSG, IFPRI

Olufemi Popoola, Research Analyst, DSG, IFPRI

ACKNOWLEDGMENTS

The authors would like to thank the Mastercard Foundation for their support in reviewing this report. Additionally, the authors would also like to thank Claire Davis and other members of IFPRI's Communications and Public Affairs Division for copyediting and related publication services.

REFERENCES

Abay, K. A., Bachewe, F.N., Chamberlin, J., and Korir, J. K. Forthcoming. *Challenging the Narrative: Youth and women are not rapidly exiting agrifood systems in Sub-Saharan Africa.* IFPRI Discussion Paper. Washington, DC: IFPRI.

Abay, K. A., Wondale, M., Korir, J. K., Bachewe, F.N., Araya, M., Breisinger, C. 2025. *The landscape of youth engagement in labor markets in Africa: Are youth driving structural transformation?* IFPRI Discussion Paper 02382. Washington, DC: IFPRI. https://hdl.handle.net/10568/178454

AfDB. 2023. Ghana - Savannah Zone Agricultural Productivity Improvement Project (SAPIP). https://projectsportal.afdb.org/dataportal/VProject/show/P-GH-AAZ-001

AGRA. 2022. *Africa Agriculture Status Report. Accelerating African Food Systems Transformation* (Issue 10). Nairobi, Kenya: Alliance for a Green Revolution in Africa (AGRA).

Akwensivie, G. A. And Donkoh, P. 2024. *Women, land ownership and access to credit: Salient observations from rural Ghana*. Paper presented at the FIG Working Week 2024, Accra, Ghana, 19–24 May 2024. International Federation of Surveyors (FIG). https://www.fig.net/resources/proceedings/fig_proceedings/fig2024/papers/ts07h/TS07H_akwensivie_donkoh_12782.pdf

Allen, A., Howard, J., Kondo, M., Jamison, A., Jayne, T., Snyder, J., Tschirley, D.L. and Yeboah, F.K. 2016. *Agrifood Youth Employment and Engagement Study*. East Lansin, Michigan State University. https://www.isp.msu.edu/files/4814/7249/7008/AgYees_Report_FINAL_web.pdf.

Almås, I., Haushofer, J., and Kjelsrud, A. 2023. The Income Elasticity for Nutrition: Evidence from Unconditional Cash Transfers in Kenya. *NBER Working Paper* No. 25711.

Ambler, K., Sylvan, H., Ricardo, L, Mywish, M., and Phoebe, S. 2019. *Measuring employment in the agri-food system: Existing data and directions for future research*. Project Note. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/p15738coll2.133542

Amanor, K. S. 2010. Family values, land sales and agricultural commodification in South-Eastern Ghana. *Africa*, *80*(1), 104-125. https://www.academia.edu/download/96996455/amanor_2010_landghana.pdf

Asante, F. A. (2024). Ghana: Processes and outputs associated with the UN Food Systems Summit. Stocktaking Report September 2023. Washington, DC: International Food Policy Research Institute. https://hdl.handle.net/10568/140481

Bachewe, F., Andam, K., Mawia, H., Popoola, O. 2025. *The changing demographics in Nigeria's food systems and implications for future youth engagement***.** SFS4YOUTH Working Paper 8. Washington, DC: International Food Policy research institute. https://hdl.handle.net/10568/177513.

Bachewe, F., Niyonsingiza, J., and Mawia, H. 2024. *The changing demographics in food systems and implications for future youth engagement and government priorities in Rwanda.* SFS4YOUTH WP 3. Washington, DC: International Food Policy research institute. https://hdl.handle.net/10568/162766.

Béné, C., Oosterveer, P., Lamotte, L., Brouwer, I. D., De Haan, S., Prager, S. D., ... & Khoury, C. K. 2019. When food systems meet sustainability–Current narratives and implications for actions. *World development*, *113*, 116-130. https://doi.org/10.1016/j.worlddev.2018.08.011

Brookings Institution. 2025. *Are Ghana's Women More Entrepreneurial Than its Men*? https://www.brookings.edu/articles/are-ghanas-women-more-entrepreneurial-than-its-men/

Boateng, S., and Poku, K. O. 2019. Accessing finance among women-owned small businesses: evidence from Lower Manya Krobo Municipality, Ghana. *Journal of Global Entrepreneurship Research*, 9(5).

Cele, L., I. Adelfang-Hodgson, M. Boateng, and E.M. Abio. 2020. "Empowering women through mechanisation: Where are the opportunities?" Rural 21, 41-43. https://www.rural21.com/fileadmin/downloads/2020/en-01/rural2020_01-S41-43.pdf.

Central Intelligence Agency (CIA). Various years. *The World Factbook: Ghana*. Washington, DC: Central Intelligence Agency.

Christiaensen, L., Rutledge, R, and Tylor, E. 2020. Viewpoint: The future of work in agri-food. *Food Policy* 99 (2021) 101963. https://doi.org/10.1016/j.foodpol.2020.101963.

Christiaensen, L., de Weerdt, J., and Kanbur, R. 2021. *Shifting rural-urban dynamics in sub-Saharan Africa*. Oxford University Press.

Davis, B., Mane, E., Gurbuzer, L.Y., Caivano, G., et al. 2026. A new estimate for global and country-level employment in agrifood systems. *World Development*, 203 - 107296. https://doi.org/10.1016/j.worlddev.2025.107296.

Davis, B., Mane, E., Gurbuzer, L.Y., Caivano, G., Piedrahita, N., Schneider, K., Azhar, N., Benali, M., Chaudhary, N., Rivera, R., Ambikapathi, R. and Winters, P. 2023. *Estimating global and country-level employment in agrifood systems*. FAO Statistics Working Paper Series, No. 23-34. Rome, FAO. https://doi.org/10.4060/cc4337en.

Deaton, A. and Subramanian, S. 1996. The Demand for Food and Calories. *Journal of Political Economy*. 104 (1), 133–162.

de Bruin, S., Dengerink, J., and van Vliet, J. 2021. Urbanization as driver of food system transformation and opportunities for rural livelihoods. *Food Security*, *13*(4), 781-798.

Dery, I. 2015 Access to and control over land as gendered: Contextualising women's access and ownership rights of land in rural Ghana. *Africanus*. 45 (2)

Dolislager, M., Reardon, T., Arslan, A., Fox, L, Liverpool-Tasie, S., Sauer, C., and Tschirley, D.L. 2021. Youth and Adult Agrifood System Employment in Developing Regions: Rural (Peri-urban to Hinterland) vs. Urban, *The Journal of Development Studies*, 57:4, 571-593, DOI: 10.1080/00220388.2020.1808198.

Fanzo, J., Haddad, L., Schneider, K.R., et al. 2021. Viewpoint: Rigorous monitoring is necessary to guide food system transformation in the countdown to the 2030 global goals. *Food Policy* 104, 102163. https://doi.org/10.1016/j.foodpol.2021.102163.

Filmer, D., and Fox, L. 2014. *Youth employment in sub-Saharan Africa*. World Bank Publications.

GCFSD. 2022. Ghana Food Systems Summit Dialogues Synthesis Paper. Accra: Ghana Commissioned Food Systems Dialogues (GCFSD). https://ndpc.gov.gh/media/GHANA_FOOD_SYSTEMS_SYNTHESIS_PAPER_1_-*final*-ss-_1.pdf.

Ghana Statistical Services. 2018. *Ghana Living Standard Survey*. Accessed from: https://microdata.statsghana.gov.gh/index.php/catalog/97

HLPE. 2017. *Nutrition and food systems Rome: A report by the high-level panel of experts on food security and nutrition of the committee on world food security*.

International Food Policy Research Institute (IFPRI). 2024. *Food Systems*. Accessed on 13 Feb 24 from: https://www.ifpri.org/topic/food-systems.

IFPRI. 2020. *2020 Global Food Policy Report: Building Inclusive Food Systems*. Washington, DC: International Food Policy Research Institute. https://doi.org/10.2499/9780896293670.

IFAD. 2012. *Ghana Country Programme Evaluation*. https://www.ifad.org/documents/38714182/39712661/ghana2012.pdf?utm_source

International Fund for Agricultural Development (IFAD). (2014). *Ghana Agriculture Sector Investment Programme (GASIP): Design completion report*. IFAD. https://webapps.ifad.org/members/eb/111/docs/EB-2014-111-R-7-Project-Design-Report.pdf

International Labor Organization (ILO). 2026. *ILOSTAT database description: Labor force statistics (LFS, STLFS, RURBAN databases)*. Accessed from: https://ilostat.ilo.org/methods/concepts-and-definitions/description-labour-force-statistics/.

ILO. 2025. *ILOSTAT database*. Accessed from: https://ilostat.ilo.org/data/#.

Jayne, T.S., Ferdinand, M., and Traub, L. N. 2014. *Africa's Evolving Food Systems: Drivers of change and the scope for influencing them*. IIED Working Paper. IIED, London.

Kalibata, A. 2021. Transforming food systems is within reach. *Nature Food*, 2, 313–314. https://doi.org/10.1038/s43016-021-00291-z

Kidido, J. K., Bugri, J. T., & Kasanga, R. K. (2019). Gender dimensions of youth access to agricultural land under customary tenure system in the Techiman traditional area of Ghana. *J. Plan. Land Manag*, *1*, 81-103

Losch, B., Fréguin-Gresh, S., and White, E. T. 2012. *Structural Transformation and Rural Change Revisited: Challenges for Late Developing Countries in a Globalizing World*. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/633201468003009411

Malabo Montpellier Panel. 2024. Ghana Case Study in Youth Ahead: Policy Innovations to Create Opportunities for Young People in Africa's Agrifood Systems Report. Kigali: AKADEMIYA2063. Ghana_Case_Study_Youth_Ahead_Policy_Innovations_to_Create_Opportunities_for_Young_People_in_Africas_Agrifood_Systems.pdf

Malabo Montpellier Panel 2023. Case Study Ghana, in Bridging the Gap: Policy Innovations Policy Innovations to Put Women at the Center of Food Systems Transformation in Africa Report. Kigali, Rwanda: AKADEMIYA2063

Malabo Montpellier Panel. 2021. "Case study Ghana, in Connecting the dots: Policy Innovations." In *Connecting the dots: Policy Innovations for Food Systems Transformation in Africa*. Dakar: AKADEMIYA2063. https://www.mamopanel.org/media/uploads/files/Case-study-Ghana_KnQSUNJ.pdf.

Marivoet, W. and Alphonce, R. 2025. *Implications of increased urbanization and consumer awareness on future food supplies in Tanzania*. SFS4Youth WORKING PAPER 9. International Food Policy research institute. Washington DC.

Marivoet, W. 2024. *Implications of urbanization, consumer awareness, and income trends on future food supplies in Senegal*. SFS4Youth WORKING PAPER 1. International Food Policy research institute. Washington DC.

MASLOC. 2023. MASLOC - Microfinance and Small Loans Centre. https://www.masloc.gov.gh/.

Melo, P., Abdul-Salam, Y., Roberts, D., Gilbert, A., Matthews, R., Colen, L., Mary, S., Gomez Y Paloma, S... 2015. Income Elasticities of Food Demand in Africa: A Meta-Analysis; *European Commission* 27650 EN; doi:10.2791/661366.

Meijerink, G., and Roza, P. 2007. *The role of agriculture in economic development* (Vol. 4). Wageningen, The Netherlands: Wageningen UR. https://edepot.wur.nl/690

Mergenthaler, M., Weinberger, K., and Qaim, M. 2009. The food system transformation in developing countries: A disaggregate demand analysis for fruits and vegetables in Vietnam. *Food Policy*, *34*(5), 426-436.

Mockshell, J. 2023. Rapidly urbanizing food environments in Africa: Policies for achieving food and nutrition security. https://www.welthungerhilfe.org/global-food-journal/rubrics/agricultural-food-policy/unhealthy-africas-cities-consume-an-unbalanced-diet

MoELR. 2014. National Employment Policy. Accra: Ministry of Employment and Labour Relations (MoELR), Government of Ghana. https://www.ilo.org/ wcmsp5/groups/public/---africa/---ro-abidjan/--- ilo-abuja/documents/publication/wcms_373458. pdf.

MoFEP. 2022. Medium Term Expenditure Framework (MTEF) for 2022 - 2025, Ministry of Gender, Children And Social Protection, Programme Based Budget Estimates for 2022. Accra: Ministry of Finance and Economic Planning (MoFEP), Republic of Ghana. https://mofep.gov.gh/sites/default/files/pbb-estimates/2022/2022-PBB-MOGCSP.pdf.

Ministry of Food and Agriculture (MoFA), 2025. *Feed Ghana Programme (FGP): A four-year agricultural transformation programme (2025-2028)*. Government of Ghana.

MoFA, 2023a. Planting For Food and Jobs phase II (PFJ 2.0). Government of Ghana. http s://mofa.gov.gh/site/index.php/107-pfj-2-0/472-planting-for-food-and-jobs-phase-2-pfj-2-0.

MoFA. 2023b. "About Ministry of Food and Agriculture (MoFA)." MoFA, Republic of Ghana. https://mofa.gov.gh/ site/about-us/about-the-ministry.

MoFA, 2018. Ministry of Food and Agriculture. *Investing for Food and Jobs (IFJ): An agenda for transforming Ghana's agriculture (2018-2021)*. Government of Ghana. https://mofa.gov.gh/site/images/pdf/National%20Agriculture%20Investment%20Plan_IFJ.pdf

MoFA. 2015. Gender and Agricultural Development Strategy II (GADS II). Accra: Ministry of Food and Agriculture (MoFA), Republic of Ghana. https://faolex.fao.org/docs/pdf/gha191457.pdf.

MoFA. 2011. Ministry of Food and Agriculture (MOFA), Republic of Ghana—Youth in Agriculture. https://mofa.gov.gh/site/programmes/youth-in-agriculture.

Ministry of Youth and Sports. 2021. National Youth Policy (2022-2032). Accra: National Youth Authority (NYA), Ministry of Youth and Sports, Government of Ghana. https://www. nya.gov.gh/nyadocuments/downloads/NYP_22. Pdf

MoGCSP. 2019. Ghana's report: Progress on Implementation of the Beijing Platform for Action. Accra: Ministry of Gender, Children and Social Protection (MoGCSP), Republic of Ghana. https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/CSW/64/National-reviews/Ghana-en.pdf.

National Entrepreneurship and Innovation Programme (NEIP) 2023. A Government of Ghana Initiative. https://neip.gov.gh/.

N-yanbini, N. N. and Owusu-Ansah, J. K. (2024). Women's land access and gendered outcomes in northern Ghana. *Journal of Land and Rural Studies*, *12*(2), 198-218. https://doi.org/10.1177/23210249241237033

Osabohien, R., Matthew, O., Olurinola, I., and Aderounmu, B. 2020. Agricultural transformation, youth participation and food security in Nigeria. *AIMS Agriculture and Food*, *5*(4), 911-919. https://www.academia.edu/download/104371250/477915367.pdf

Pauw, K. 2022. *A review of Ghana's Planting for Food and Jobs program: Implementation, impacts, benefits, and costs*. Food Security, 14, 1321–1335. https://doi.org/10.1007/s12571-022-01287-8

Quisumbing, A. R., Meinzen-Dick, R., Raney, T. L., Croppenstedt, A., Behrman, J. A., and Peterman, A. 2014. Gender in agriculture. *Springer*, *102072*(444).

Reardon, T., Liverpool-Tasie, L. S. O., and Minten, B. 2021. Quiet Revolution by SMEs in the Midstream of Value Chains in Developing Regions. *Food Security* 13(6): 1577–1594.

Reardon, T., Echeverria, R., Berdegué, J., Minten, B., Liverpool-Tasie, L. S. O., Tschirley, D., and Zilberman, D. 2019. Rapid Transformation of Food Systems in Developing Regions: Highlighting the Role of Agricultural Research and Innovations. *Agricultural Systems*, 172: 47–59.

Reardon, T., and C. Timmer, C.P. 2012. The Economics of the Food System Revolution. *Annual Review of Resource Economics* 4: 225–264.

Seto, K. C., and Ramankutty, N. 2016. Hidden linkages between urbanization and food systems. *Science*, *352*(6288), 943-945.

SWAC/OECD 2021. Food system transformations in the Sahel and West Africa: implications for people and policies. *Maps & Facts*, no. 4. April 2021.

Tefft, J., Jonasova, M., Adjao, R., and Morgan, A. 2017. *Food Systems for an Urbanizing World*. World Bank Group and the Food and Agricultural Organization of the United Nations.

Twumasi, M.A., Y. Jiang, and M.O. Acheampong. 2019. Determinants of agriculture participation among tertiary institution youths in Ghana. *Journal of Agricultural Extension and Rural Development*, 11 (3): 56-66.

Townsend, R., Benfica, R., Prasann, A., and Lee, M. 2017. *FUTURE of FOOD: Shaping the Food System to Deliver Jobs. International Bank for Reconstruction and Development*. The World Bank. Washington, D.C.

Tschirley, D.L., Snyder, J., Dolislager, M., Reardon, T., Haggblade, S., Goeb, J., Traub, L., Ejobi, F. and Meyer, F. 2015. Africa's unfolding diet transformation: implications for agrifood system employment. *Journal of Agribusiness in Developing and Emerging Economies.* 5, 102–136. https://doi.org/10.1108/JADEE-01-2015-0003.

United Nations, Department of Economic and Social Affairs, Population Division 2025. *Data Portal*, custom data acquired via website. United Nations: New York. Accessed on 24 February 2025. https://population.un.org/DataPortal/.

United Nations. 2024. *World Population Prospects 2024*. Accessed in January 2025, https://population.un.org/wpp/.

Wongnaa, C. A., Babu, S., and Awunyo-Vitor, D. 2026. Political economy of planting for food and jobs input subsidy policy process in Ghana: An application of the Kaleidoscope Model. *Cleaner and Circular Bioeconomy, 14*, 100217. https://doi.org/10.1016/j.clcb.2026.100217

World Bank. 2025. *World Development Indicators*. Accessed on 24 February 2025: https://databank.worldbank.org/source/world-development-indicators/.

World Bank. 2022. *Social Sustainability and Inclusion Profile: Ghana*. https://documents1.worldbank.org/curated/en/099205006172233419/pdf/P1709520bb3db404f0bd260ad2dd66b3237.pdf

Yeboah, F. K., and Jayne, T. S. 2018. Africa's Evolving Employment Trends. *Journal of Development Studies*, 54(5): 803–832. https://doi.org/10.1080/00220388.2018.1430767

ANNEXES

Annex Table 1. Performance of aggregate economy and importance of major sectors in Ghana

Year	GDP (billion constant 2015 US$)	GDP per capita (constant 2015 US$)	Value added in sector (as % of GDP)				Annual % growth					
			Agriculture, forestry, and fishing	Industry (incl. construction)	Manufacturing	Services	GDP	GDP per capita	Agriculture, forestry, and fishing	Industry (incl. construction)	Manufacturing	Services
2000	20.1	1,020.2	35.3	25.4	9.0	28.8	3.7	1.1	-	.	.	.
2001	20.9	1,033.1	35.2	25.2	9.0	29.2	4.0	1.3	-		.	.
2002	21.8	1,050.3	35.1	25.3	9.0	29.2	4.5	1.7	-	.	.	.
2003	22.9	1,075.4	36.5	25.2	9.0	29.1	5.2	2.4	-	.	.	.
2004	24.2	1,105.7	38.0	24.7	8.7	28.7	5.6	2.8	-	.	.	.
2005	25.7	1,140.2	37.5	25.1	8.7	28.9	5.9	3.1	.	.	.	.
2006	27.3	1,181.6	28.3	19.4	9.5	45.5	6.4	3.6	.	.	.	.
2007	28.5	1,201.2	27.3	19.5	8.6	47.2	4.3	1.7	-1.7	6.1	-1.2	7.7
2015	49.4	1,711.3	20.0	31.1	11.1	40.5	2.1	-0.3	2.1	1.2	3.7	2.9
2016	51.1	1,728.1	20.8	27.7	10.8	43.9	3.4	1.0	2.7	4.3	7.9	2.8
2017	55.2	1,827.3	19.6	30.0	10.2	43.5	8.1	5.7	6.2	15.6	9.5	3.4
2018	58.6	1,899.8	18.1	31.2	10.1	43.7	6.2	4.0	4.9	10.5	4.1	2.8
2019	62.5	1,981.6	17.3	31.1	10.2	45.1	6.5	4.3	4.7	6.4	6.3	7.6
2020	62.8	1,951.1	18.9	29.9	11.0	45.2	0.5	-1.5	7.3	-2.5	1.9	0.7
2021	66.0	2,009.4	19.7	28.4	10.9	45.3	5.1	3.0	8.5	-0.5	8.1	9.4
2022	68.5	2,046.0	19.5	31.5	11.5	42.8	3.8	1.8	4.2	0.6	-2.5	6.3
2023	70.5	2,066.4	21.1	29.5	11.2	42.5	2.9	1.0	4.5	-1.2	0.9	5.5

Source: Authors' analyses using World Bank (2025) data.

Annex Table 2. Population and demographic structure trends in Ghana, 2000-2023

Year	Population (millions)	Population growth (annual %)	Proportion out of total population (%)								Death rate, crude (per 1,000 people)	Life expectancy at birth, total (years)	Dependency ratio (% of working-age pop.)	Dependency ratio, old (% of working-age pop.)	Dependency ratio, young (% of working-age pop.)
			Women	Men	Ages 0-14	Ages 15-24, women	Ages 15-24, men	Ages 25-64, women	Ages 25-64, men	Ages 65 and above					
2000	19.67	2.5	50.4	49.6	42.3	10.7	11.1	17.1	15.7	3.2	9.9	58.2	83.4	5.9	77.5
2001	20.20	2.7	50.3	49.7	41.8	10.8	11.1	17.2	15.9	3.2	10.0	58.1	81.9	5.9	76.1
2002	20.76	2.7	50.3	49.7	41.4	10.8	11.2	17.3	16.1	3.2	9.7	58.6	80.5	5.9	74.6
2003	21.33	2.7	50.3	49.7	40.9	10.8	11.1	17.5	16.4	3.3	9.5	59.1	79.2	5.8	73.3
2004	21.91	2.7	50.3	49.7	40.6	10.8	11.0	17.7	16.7	3.3	9.5	59.2	78.0	5.8	72.2
2005	22.50	2.7	50.3	49.7	40.2	10.7	11.0	17.9	16.9	3.3	9.2	59.8	77.0	5.8	71.2
2006	23.10	2.6	50.2	49.8	40.0	10.6	10.8	18.1	17.2	3.2	9.1	60.0	76.1	5.7	70.4
2007	23.71	2.6	50.2	49.8	39.7	10.5	10.7	18.4	17.5	3.2	9.0	60.2	75.2	5.7	69.6
2015	28.87	2.4	50.1	49.9	38.9	9.3	9.5	19.9	19.2	3.1	7.8	63.2	72.4	5.4	67.0
2016	29.55	2.3	50.1	49.9	38.7	9.3	9.5	20.0	19.4	3.2	7.5	63.9	72.0	5.4	66.5
2017	30.22	2.2	50.1	49.9	38.4	9.3	9.4	20.1	19.5	3.2	7.4	64.0	71.3	5.5	65.8
2018	30.87	2.1	50.1	49.9	38.2	9.3	9.4	20.2	19.6	3.3	7.4	64.1	70.7	5.6	65.1
2019	31.52	2.1	50.1	49.9	37.9	9.3	9.4	20.3	19.7	3.3	7.1	64.7	70.1	5.7	64.5
2020	32.18	2.1	50.1	49.9	37.6	9.3	9.5	20.4	19.8	3.4	7.4	64.1	69.5	5.8	63.7
2021	32.83	2.0	50.1	49.9	37.3	9.4	9.5	20.4	19.9	3.5	7.6	63.8	68.7	5.9	62.9
2022	33.48	1.9	50.1	49.9	36.9	9.4	9.6	20.5	20.0	3.6	7.6	63.9	68.0	6.0	62.1
2023	34.12	1.9	50.1	49.9	36.6	9.5	9.6	20.6	20.1	3.6	-	.	67.4	6.1	61.3

Source: Authors' analyses using World Bank (2025) data.

Annex Table 3. Urbanization and access to services

	Urban						
	Population (% total)	Population in largest city (% of urban)	Population growth rate	Access to electricity (% of urban)	Access to basic drinking water (% of urban)	Access to clean cooking fuels and technologies (% of urban)	Access to basic sanitation services (% of urban)
2000	43.9	19.3	4.2	80.5	79.6	14.1	11.5
2001	44.6	18.9	4.2	78.9	80.0	15.1	11.5
2002	45.3	18.5	4.2	79.5	80.8	16.3	12.5
2003	46.0	18.1	4.2	76.9	81.7	17.5	13.5
2004	46.6	17.8	4.1	80.7	82.5	18.7	14.5
2005	47.3	17.4	4.1	78.4	83.4	20.2	15.5
2006	48.0	17.1	4.1	80.7	84.2	21.7	16.5
2007	48.7	16.8	4.0	82.7	85.1	22.8	17.5
2015	54.1	16.8	3.6	88.4	92.2	36.4	26.0
2016	54.7	17.0	3.6	89.8	93.1	37.9	27.0
2017	55.4	17.4	3.4	90.0	94.0	39.3	28.1
2018	56.1	17.7	3.3	89.9	94.9	40.7	29.2
2019	56.7	17.9	3.2	93.8	95.8	42.0	30.3
2020	57.3	18.1	3.2	94.6	96.7	43.1	31.4
2021	58.0	18.3	3.1	95.2	97.7	44.5	32.5
2022	58.6	18.5	3.0	95.0	98.4	45.7	33.7
2023	59.2	18.6	3.0	.	.	.	.

Source: Authors' analyses using World Bank (2025) data.

Annex Table 4. Labor force participation and unemployment

Population categories (%)	Labor force participation (%)		Unemployment rate (%)	
	2015	2017	2015	2017
Total	69.3	71.3	6.8	3.4
Gender				
Women	65.5	69.5	6.6	3.5
Men	74.1	73.4	7.0	3.3
Age				
Youth	43.4	46.4	15.2	6.2
Mature	77.3	82.7	5.3	2.6
Disability status				
With disability	26.4	50.1	6.0	.
Without disability	70.7	71.7	6.8	3.4
Area type				
Rural	69.9	76.2	4.7	1.5
Urban	68.7	67.1	8.7	5.2

Source: Authors' analyses using ILO (2025) data.

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. This publication has 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 sustainable world free of poverty, 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