

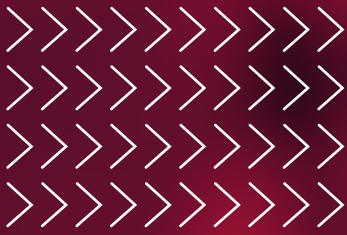


Optimising Opportunities for Youth  
Employment in Africa's Agri-Food System

# A Foresight for Systems Change Initiative

Discussion Paper October 2023





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This discussion paper has been produced by Systemic Link Consulting to support the workshop on optimising youth employment in African Agri-food Systems. It has been researched and written by Kristin Muthui and Jim Woodhill.

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The insights and messages reflected in sections 7 and 8 of this paper were generated by a group of 45 youth representatives from across Africa who participated in a foresight workshop in Mombasa in June 2023. The workshop was facilitated by Jim Woodhill, Marie Parramon-Gurney and Mine Pabari.

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This report has been developed through a participatory process with youth and other stakeholders combined with information collated by the research team. The information and messages in the document do not necessarily reflect the specific views, policies or positions of the Mastercard Foundation, Foresight4Food, FARA, or AGRA, nor of the organisations who participated in the foresight process.





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# Acronyms

<b>AGRF</b>	Africa's Food Systems Forum
<b>ACFTA</b>	African Continental Free Trade Area
<b>AU</b>	African Union
<b>CAADP</b>	Comprehensive Africa Agriculture Development Programme
<b>EAC</b>	East African Community
<b>ECOWAS</b>	Economic Community of West African States
<b>FAO</b>	Food and Agriculture Organisation of the United Nations
<b>FARA</b>	Forum for Agricultural Research in Africa
<b>GDP</b>	Gross Domestic Product
<b>HLPE</b>	High-Level Panel of Experts
<b>IFAD</b>	International Fund for Agricultural Development
<b>IFPRI</b>	International Food Policy Research Institute
<b>LMICs</b>	low- and middle-income countries
<b>MSMEs</b>	Micro, small and medium enterprises
<b>NGO</b>	non-governmental organisation
<b>SSPs</b>	Shared Socioeconomic Pathways
<b>SMEs</b>	small and medium enterprises
<b>SADC</b>	Southern African Development Community
<b>SSA</b>	sub-Saharan Africa
<b>SDG</b>	Sustainable Development Goal
<b>United Nations</b>	United Nations
<b>UNDESA</b>	United Nations Department of Economic and Social Affairs
<b>UNECA</b>	United Nations Economic Commission for Africa

# Executive summary

This discussion paper summarises relevant information on the African agri-food system in support of the **“Optimising Opportunities for Youth Employment in Africa, Foresights for Systems Change Initiative”**. The objective is to provide a future-oriented perspective on the opportunities and risks for youth employment in the sector. It is also intended to demonstrate the value of foresight and scenario analysis in contribution to food systems transformation, and provide perspectives which could support government policy, strategy and private investment in the African agri-food system. This work draws on the International Fund for Agricultural Development (IFAD) 2019 Rural Development Report on **“Promoting youth engagement and employment in agriculture and food systems”** and the High-Level Panel of Experts (HLPE) 2021 report on **“Promoting youth engagement and employment in agriculture and food systems”**. This report links the wider global issues addressed in the IFAD and HLPE reports to the implications for dignified and fulfilling work for young people in African agri-food systems. This work is a collaboration between the Forum for Agricultural Research in Africa (FARA), AGRA, and Foresight4Food, with support from the Mastercard Foundation.

**Section one** sets the scene for why youth employment in the African agri-food system merits special attention. Youth unemployment has gained prominence in international and national policy discussions, due to the large number of young people expected to enter a job market with few employment opportunities in the formal wage sector. While this youth bulge could be a boon for development, there are concerns about the abilities of many countries to create necessary enabling conditions to create dignified and fulfilling work for young people and reap the potential demographic dividend. At the same time, a number of concerning trends, including climate change, stagnant economic growth, resource scarcity, globalisation, concentration of monopoly power, technological change and an increasingly unstable geopolitical environment will transform the world in the coming decades. In light of such rapid change, uncertainties around meeting youth

unemployment demand, the extent to which climate change and an enabling environment will evolve to create opportunities for inclusive youth employment in the agri-food sector need further attention.

**Section two** summarises the foresight for food systems approach in thinking about critical uncertainties on the future of youth employment in the African agri-food system. Foresight offers two critical contributions: motivation and clarity for change by offering stakeholders a window into the future through scenario analysis; and helping break down the barriers of vested interests by facilitating the collective exploration of pathways for change that can balance individual and common interests.

**Section three** maps the African agri-food system and describes key food system transformation drivers in Africa, including the impact of rapid urbanisation; a growing population; changing consumer patterns; a rising demand for food; technology changes; and climate change. The agri-food system is transitioning from localised, short value chains, to longer supply chains connecting rural and urban areas. This food system in transition is characterised by:

- **Emerging duality within the producing sector:** although small-scale farming is the dominant mode of production, there is bifurcation within the sector, with the majority of farmers operating very small farms less than one hectare in size, and a smaller proportion operating larger farms of up to two hectares in size. Very small-scale farmers produce for their own consumption, and tend to be in remote areas, disconnected from national agri-food value chains. Small-scale farmers, already supplying the bulk of farm produce are poised to access the more modern and commercialised food channels that growing agri-food value chains offer.
- **Increasingly robust and dynamic wholesale and distribution sector:** Reardon et al. (2015) calculated that African food supply



chain volumes increased six to eightfold over 1970-2010 due to urbanisation and rising food demand, with most of the increase occurring in the past 20 years, alongside growth of small and medium enterprises (SMEs). Expansion of the rural to urban food supply chains has boosted the growth and development of regional centres and towns, which have grown into important nodes in the agri-food supply chain, agglomerating produce from agriculture regions.

- **Dynamic and diffuse processing sector:** as women increasingly work outside the home, demand for processed food has grown (Reardon et al., 2021). In sub-Saharan Africa (SSA), 85% of processors are unregistered or registered SMEs (Diao et al., 2018), engaged in minimal processing of grain flour, milk powder, edible oils and animal products. Meanwhile, retailing is dominated by the preparation and sale of processed foods such as prepared snacks, traditional dishes and drinks. Jobs in food processing are an important source of employment for women, young people and minorities, as they require relatively little initial investment.
- **A supermarket revolution yet to emerge in the retail sector:** domestic supermarkets emerged and expanded rapidly between 2002 – 2018, with a dramatic rise in the volume of sales averaging 41% per year growth, with expansion both into urban and rural areas. Although supermarkets and other large-scale actors are poised to continue growing if incomes continue to rise, informal retail outlets remain dominant, with up to 70% of households regularly purchasing their food from informal retailers and traders (Crush & Frayne 2014).
- **Widespread and entrenched dietary transformation in consumption:** reliance on prepared food is growing, and has become a vital aspect of urban life, due to long commutes and limited time for food preparation, limited cooking and storage space in cramped accommodation without kitchens, and daily wages leaving little capacity to buy ingredients (Allison et al., 2021). Despite significant dietary diversification, hunger, undernutrition and

micronutrient deficiencies remain prevalent, particularly in rural areas. Rural diets are changing towards higher consumption of ultra-processed foods with rising levels of overweight and obesity (Popkin et al., 2020).

- **Informality as a defining feature of the African agri-food system:** a significant proportion of SMEs in the agri-food system are unregistered or informal, meaning that informality is a distinguishing feature of the African agri-food system (Vorley, 2023). Although the assumption is that informality should be steered towards the formal and organised, an exclusive steering of policy and investment towards development of modern value chains with formalised contracts, standards and certifications, should not happen at the expense of addressing the priorities of food systems in the 'here and now' (Guarín et al., 2022).
- **Growing density of intra-African trade:** informal cross-border trade is important for food security, for example, in West Africa it accounts for about 30% of trade in staple foods. It is also an important source of employment, with about 43% of Africans deriving some of their income from informal cross-border trade (Afrika & Ajumbo, 2012).

**Section four** maps employment trends within the food system, with a focus on youth employment. Little data on agri-food sector employment exists, although agro-processing firms employ the largest share of manufacturing workers in low-income countries and are likely to expand in the future. Further:

- **On-farm work remains the most accessible occupation for young people:** data shows that on-farm work remains the most accessible source of employment for young people, since they likely have access to family land and do not require large amounts of investment to get started. As they gain marketable skills and accumulate capital, they reduce the amount spent working on the farm and diversify largely into self-employment activities into the agri-food system and non-agri-food system sector.

- **Youth, entrepreneurship and self-employment:** self-employment is higher in the age 25-35 category than in the 18-24 category, indicating that more mature youth who have acquired skills and capital to start their own income generating activities move out of farming and into self-employment. However, there is little evidence today that young people engage in agri-food system and non-agri-food system self-employment activities differently from their parents. There is little evidence that young people are significantly engaged with value chains, agribusiness firms or certification bodies, even in areas with higher levels of agricultural commercialisation (Flynn & Sumberg, 2021).
- **Young people live with economic precarity:** while very little data exists on the young people in the formal sector, a school to work transition study (2012-2013) carried out in 8 African countries found that, on average, only 18% of working youth were in regular employment. Of those with formal contracts, only 23% reported receiving paid annual leave, maternity/ paternity leave, social security coverage or any other employment entitlements. Hence, like older adults, young Africans work in precarious conditions defined by economic risk, instability due to seasonality of work, and a lack of social protections (Sumberg et al., 2020).
- **Inclusivity:** women and young people are more likely to be engaged in self-employment activities than in wage employment, since many household enterprise activities do not require large amounts of investment. African women have less access to wage employment, and women's farms and businesses are on average less productive than men's, reflecting disparities in access to land, capital, and financing, as well as earlier gender gaps in educational attainment (Beegle & Christiaensen, 2019). Very little comparable data on youth with disabilities exists, although studies suggest that young people with disabilities are at a disadvantage, with lower rates of school attendance and higher rates of unemployment (Cramm et al., 2014).

- **Spatial differences in youth employment:** in remote places, young people are more likely to leave school earlier and are less likely to engage in the non-farm sector, compared with people in more accessible places. About two thirds of rural youth in developing countries live in areas of high potential for agricultural production, and about one third in areas that have access to potential markets for agricultural products; however, about one third live in areas where agricultural potential is medium or low, and one third in areas with limited opportunities for commercial production (IFAD, 2019). Of particular concern, therefore, is the future livelihoods of young people living in remote areas with low agricultural potential.

**Section five** frames the future of youth employment within the agri-food system transformation framework. Youth employment depends on the overall economic opportunities in the economy. Youth specific investments should prioritise connectivity, productivity and agency (HLPE, 2021; IFAD, 2019):

- **Mindsets:** changing mindsets is crucial for transforming Africa's agri-food system and empowering youth. The past impacts present and future mindsets, which is shaped by events including colonialism. Examining collective and individual attitudes towards what is possible, desirable, equitable, and ethical is essential. Bringing together diverse stakeholders can help shift mental models and address power dynamics and social norms.
- **Recognition:** recognising youth as important political and social actors is essential. They have needs and demands that should be considered in decision-making, and their autonomy should be respected as they drive social change.
- **Connectivity:** youth specific investments should go to improving connectivity to markets, by investing in rural infrastructure and mobility, the expansion of information and communications technology (ICT) infrastructure and strengthening social networks. Investments in productivity should support education and the development





of marketable skills, as well as access to productive resources. Young women especially should be supported in completing their education and acquiring marketable skills.

- **Productivity:** many young people will continue to find work in the agri-food sector, with much of it remaining informal. However, challenges such as government hostility, low investment, and insecure working conditions will need to be addressed. In rural areas, increasingly the reality is not one of small-scale farming households, but of rural households who also farm (Woodhill et al., 2019). Investing in the productivity of young people should take a livelihood approach, with young people engaging in a multitude of both on-farm and off-farm activities, particularly in rural areas.
- **Agency:** young people's engagement in food-related economic activities is influenced by factors such as gender, ethnicity, education, and access to resources. They need support to overcome obstacles and build confidence in pursuing sustainable livelihoods.

**Section six** summarises emerging insights on how regional and global changes may have implications for youth employment in the agri-food system, namely:

- **Population dynamics:** the youth population is expected to rise in Eastern, Western and Central Africa. With higher rates of urbanisation, youth in Western and Central Africa are likely to find jobs in food manufacturing, distribution, and service industries, while youth in Eastern Africa are likely to find jobs in agriculture or rural food industries such as aggregation and transportation.
- **Agriculture productivity:** will depend on trends in climate change and land availability, with some crops, such as maize, seeing yield declines in Western and Central Africa, while yields may increase in Eastern and Southern Africa. Cropland availability, at 0.2 hectares per person in Africa, is expected to decline to roughly 0.17 hectares per person by 2050.



Low climate change challenges may lead to less population growth and efforts to reduce wildland conversion. High challenges may increase wildland conversion and population growth. The impact of technology is difficult to forecast due to lack of systemic data

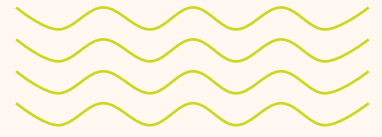
- **Economic growth:** typically, the agri-food system sector shrinks in relative size and importance as the non-agriculture sector grows. Hence, even as the total number of agriculture workers will increase across Eastern, Western and Southern Africa, agriculture workers will represent a smaller share of the overall workforce. Whether agricultural workers will find employment in other segments of the agri-food system will depend in part on growth in those segments of the economy, which are more difficult to track due to a lack of systematic data

**Section seven** outlines scenarios developed for optimising the future of youth employment in Africa's agri-food system. Scenarios were framed around:

- **Locally Linked:** Youth-led innovation for local food systems: positive local responses by African governments to a difficult wider global environment of climate disruption and global geopolitics with positive youth engagement. Opportunities for youth in the agri-food sector are supported by a highly supportive environment. Food systems are resilient, informed by indigenous knowledge and infrastructure to improve productivity and market access. Consumers have access to affordable, nutritious and locally produced food.
- **Big Tech Dominates:** Divided opportunities for youth in the agri-food system dominated by high tech and larger scale business: in a competitive world with poor governance, high tech corporate and foreign interests are out-competing more equitable and sustainable African development. In this world, inequalities and competition for resources are intense. Educated youth find work in high tech firms, while others are left out. Food prices are high, and the wealthy can afford healthy food, but the poor rely on unhealthy, ultra-processed foods.

- **Africa turns the tables:** Youth capture opportunities as Africa leads the way on changing the global food systems game: high levels of cooperation and good governance globally and across Africa enable a progressive response to global issues, with Africa using its resources to take a lead in agri-food systems innovation. The world acts decisively in cooperating to ensure equitable outcomes for all young people in the face of climate change. Investments in the African agri-food system creates dignified and fulfilling work and eliminates poverty and food insecurity. Resilient food systems are achieved through African-led research and equitable distribution of technology and inputs.
- **Collapse and Crisis:** Youth struggle in a collapsed agri-food system: failing governance at all levels makes it impossible to effectively tackle emerging pressures on the agri-food system, creating a severe downward spiral. Young people find precarious jobs in the unregulated informal sector or struggle to produce enough in the face of more severe climate extremes. Access to healthy food is determined by income. Many people try to leave, but migration is restricted as wealthy countries prioritise their own populations, resulting in atrocities and loss of life.

**Section eight** summarises pathways for change generated during the workshop. These are oriented around four key messages that came out of the workshop: incorporate youth perspectives in decision-making at all levels; integrate long-term and adaptive thinking supported by foresight; focus on politics and social mobilisation to make change possible; and a dual track approach that focuses both on enabling conditions for youth and on enabling conditions for sustainable development of the agri-food sector is necessary for transformative systems change to ensure decent work for young people in the African agri-food system.



# Introduction

The purpose of this discussion paper is to summarise existing information on the African agri-food system, including key trends and drivers that influence the evolution of the agri-food system; the structure of agri-food system; existing trends in youth employment in the agri-food system and; provide a framework and guiding questions to reflect on the future of youth employment within the context of agri-food system transformation. It is intended as background reading material to inform scenario building at the **“Optimising Opportunities for Youth Employment in Africa, Foresights for Systems Change Initiative”** workshop that will take place on June 13 – 16 June 2023 in Mombasa, Kenya. This work draws on the International Fund for Agricultural Development (IFAD) 2019 Rural Development Report on **“Promoting youth engagement and employment in agriculture and food systems”** and the High-Level Panel of Experts (HLPE) 2021 report on **“Promoting youth engagement and employment in agriculture and food systems”**. This report links the wider global issues addressed in the IFAD and HLPE reports to the implications for dignified and fulfilling work for young people in African agri-food systems.

With strong participation from youth, the objective of the foresight assessment is to provide a future-oriented perspective on the opportunities and risks for youth employment in the sector. The assessment will take a 20-year future perspective looking at the implications of key trends and uncertainties in the agri-food system. This participatory process seeks to create an opportunity for informed and meaningful dialogue between different stakeholder groups as well as to provide maximum opportunity for youth leadership and engagement in developing scenarios and assessing the implications of available information on the agri-food system. The exercise is intended to demonstrate the value of foresight and scenario analysis in contributing to food systems transformation, and provide perspectives which could support government policy, strategy as well as private and public investment in the agri-food system. In this way, the process will enhance

capacity for undertaking foresight by participating agri-food system stakeholders, including youth. Scenarios developed at the workshop will be presented at Africa’s Food Systems Forum (AGRF) in September 2023. Outputs of the process will further be targeted to those developing strategies and policies across governments, youth groups, funders and development organisations.

This work is a collaboration between the Forum for Agricultural Research in Africa (FARA), AGRA, and Foresight4Food, with support from the Mastercard Foundation. The Mastercard Foundation is funding this foresight study as part of a wider initiative to support foresight capabilities in African institutions. The initiative also contributes to Mastercard Foundation’s strategic shift towards intentional investment in system-wide transformational change processes to better help **“economically disadvantaged young people in Africa to find opportunities to move themselves, their families, and their communities out of poverty to a better life”**.

The rest of the report is structured as follows: Section one provides overall context on the rising interest and concern about the future of youth employment. Section two describes the foresight for systems change approach, and how taking longer-term perspectives can be useful in planning for and investing in actions for agri-food system change. Section three examines the African agri-food system in detail, including major trends that shape the food system, employment opportunities, and challenges in creating dignified and fulfilling work in a transforming system. Section four summarises emerging issues for consideration and proposes a framework for thinking about young people in relation overall food system transformation. Section five focuses on framing the role of young people. Section six examines future trends and their implications for youth. Section seven outlines scenarios for youth opportunities in the agri-food system and Section eight summarises pathways for change identified during the workshop.

# Section One

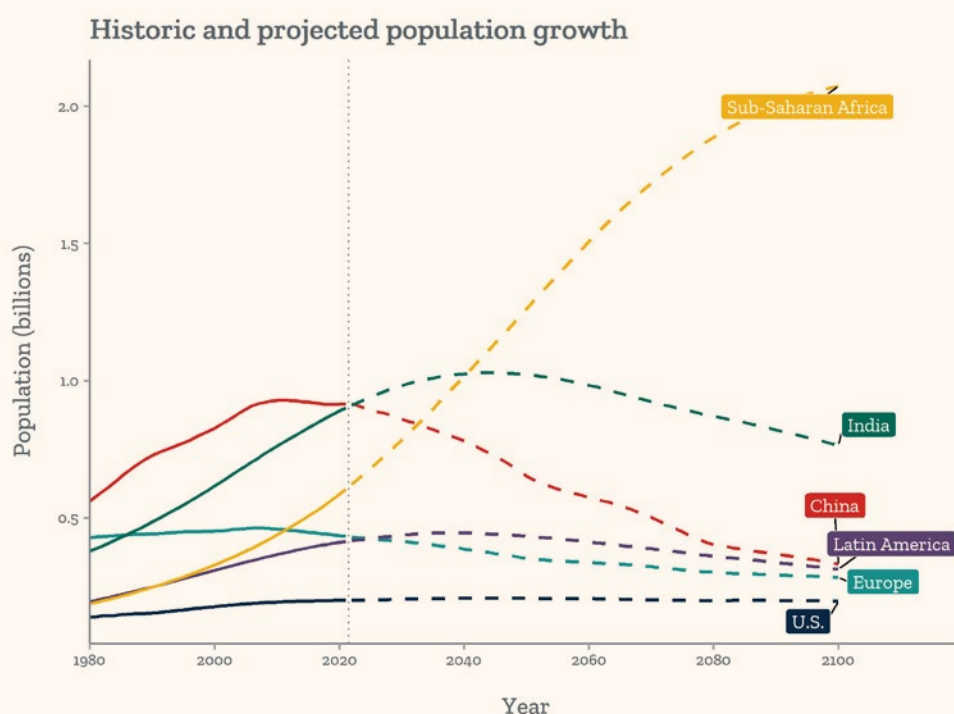
# 01

## Setting the scene: why are we talking about the future of youth employment?

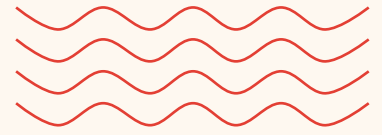
With a median age of 18.3 years old and growing at 2.8% per year, sub-Saharan Africa's (SSA's) youth population is the youngest and fastest growing population in the world, with the youth cohort (15-25) projected to double from 150 million in 2010 to more than 300 million by 2030 (World Bank &

IFAD. (2017)). Furthermore, a significant proportion of this future youth generation will be in rural areas, since even as migration and urbanisation are on the rise, the rural population is still expected to grow into the near future (Filmer & Fox, 2014).

**Figure 1:** Growth of the labour force (population aged 15-59 years-old), 1980-2100. 2023-2100 population forecasts are based on the United Nation's medium fertility projections. (Source: UN Population) Prospects, 2022.



While this youth bulge could potentially be a boom for economic development, there are concerns about the abilities of many countries to create the necessary conditions for this to occur, and particularly, the ability to provide dignified and fulfilling work that can absorb this labour force and reap the potential demographic dividend. Although youth unemployment has long been of international concern, the topic regained salience in 1990s, as the effects on youth opportunities of the extended recessions caused by the various currency and debt crises started to attract



attention. In response, the United Nations General Assembly adopted the World Programme of Action for youth in 1995, followed by the 1998 Lisbon Declaration on Youth Policies and Programmes that demanded the formulation of long-term, comprehensive, and cross-sectoral youth policies in all states by 2005.


Consequently, the African youth charter by the African Union was adopted in 2006 and became effective in 2009, with the aim of ensuring involvement and mainstreaming of youth issues into all policy development at the regional and national levels. To date, 42 (out of 55 countries) have signed up to the document, and 38 have ratified it, signaling their commitment to implement it at the national level through the development of new laws and policies and a ministry dedicated to the implementation and coordination of youth policy (Phillips & Perezniето, 2019). National youth policies enshrine decision-makers' ambitions to create opportunities for entrepreneurship, agriculture, civic engagement, empowerment, education and skills development in order to address youth unemployment. They also acknowledge youth specific issues around health, including nutrition and HIV/ AIDS, as well as crime, substance abuse, trafficking and conflict. Many youth policies also recognise the importance of addressing gender and disability in an effort to address youth specific challenges, while some are cognisant of inequalities between rural and urban youth, with commitments to allocate resources to rural areas for employment and training or to ensure equal access to sexual and reproductive health for both urban and rural areas.

Multilateral organisations, such as the World Bank, in their 2007 **"Development and the next generation"** report (World Bank, 2007), explore the challenges of policymaking for improved youth outcomes. They recognise that youth is a process of transition into adulthood, and call for actions that broaden opportunities for young people, help youth to acquire capabilities, and provide second chances to correct missed opportunities at an earlier age. Numerous regional organisations, such as the Economic Community of West African States (ECOWAS), Southern African Development Community (SADC) and the East African Community (EAC) also have dedicated youth employment policies and programmes, seeking to promote youth

entrepreneurship, education and employment. Many of these strategies and plans rightly emphasise the need for creating enabling conditions through infrastructure investment and rural development, as well as empowering young people, through targeted skills development, access to land and finance, social protection and inclusion in policy dialogue. In many cases, policies and strategies were complemented by budgetary allocations, accompanied by bilateral and non-governmental organisation (NGO) donor funded programmes, dedicated to improving youth employment outcomes.

Nonetheless, although there is international and national desire to address the challenges of youth unemployment, few programmes show any evidence on effectiveness (Filmer & Fox, 2014). Overall, they fail to take into account the African labour market and youth employment prospects. This has led to a focus on the formal wage employment sector, which employs a fraction of the African labour force. Furthermore, they are informed by narratives that may be incomplete, and they miss important changes that have begun to take place on the African continent, particularly within the agri-food system. Specifically, many youth narratives are informed by the understanding that unemployment is the biggest challenge for young people, although data shows that young people in SSA are overwhelmingly financially independent by age 25, albeit with poor living standards and limited prospects for future career or income growth (Filmer & Fox, 2014). This points to the issue of underemployment, and consequent challenges of economic precarity, risk and insecurity, as well as broader challenges around creating dignified and fulfilling work and economic opportunities across national economies. Secondly, many of these narratives are informed by the concern that young people in rural areas seek to abandon farming and will migrate to urban areas, although data shows that rural young people temporarily migrate to secondary and tertiary towns in rural areas in search of employment opportunities to supplement farm income (Kessides, 2006).

Thirdly, they reflect underlying concerns that large youth populations can be destabilising to social order, with a potential uptick in criminality,



substance abuse and possibly even civil conflict. While data is scarce, the evidence points to the lost opportunities of young people who grow up in unstable countries, rather than the other way around (Berckmoes & White, 2014). Fourthly, they are hopeful that young people are uniquely positioned to embrace digital technology, and are uniquely poised to harness rapid technological change to create thriving businesses that will transform the continent's future. Although ICT infrastructure has greatly expanded the use of mobile and internet, access remains limited due to spatial differences and the high cost of use. Fifth, they deny young people agency, and although acknowledge the need for broad youth consultation and engagement in development processes, data shows that youth engagement, like other segments of the population, remains low. This points to the need to re-image political engagement processes, as well as strategies to increase both youth engagement as well as effectiveness of organising around systems change.

Lastly, these policies, although complemented by sectoral policies in agriculture, ICT and other sectors that highlight youth specific issues, rarely reflect a coherent, comprehensive vision for youth development, particularly in rural areas, where a significant proportion of young people live, and will continue to do so in the near future. Indeed, urbanisation and economic growth have already led to the transformation of the agri-food system, which has grown in volume and scope to feed an increasingly urban population. Fragmented land sizes and population pressure also mean that for many rural people, and young people in particular, farming is not the only, or the most important source of income. As a consequence, a narrow perspective, which views young people as either farmers or urban job seekers is increasingly unsuitable. This changing landscape therefore calls for a more holistic view of the agri-food system as a whole, since it is the primary sector on which many people depend for their livelihoods, often taking multiple roles as primary producers, or as part of increasingly complex value chains connecting rural markets to urban consumers, depending on their geographical location, capabilities and resource endowments.

At the same time, a number of concerning trends,

including increasing climate dysregulation, stagnant economic growth, resource scarcity, globalisation, concentration of monopoly power, rapid changes in technological advances and an increasingly unstable geopolitical environment will transform the world in the coming decades. In light of such rapid change, a number of growing uncertainties on the future of youth employment need to be examined. For many countries in SSA, these uncertainties are centred on the need to meet youth employment demand, particularly in relation to stagnant economic growth and delayed industrialisation. While industrialisation was the main mechanism by which countries rapidly transformed, this is increasingly unlikely, given vastly different historical trajectories and transformation in global supply chains due to technological innovation, international finance and global corporate governance (McMillian & Rodrik, 2014). The main challenge is therefore thinking about youth employment demand in relation to employment patterns across different sectors, and in particular, the types and scale of youth employment available within the agri-food system. Indeed, if premature deindustrialisation continues, the "traditional" pathway of economic development arising through manufacturing and services job growth, which provided the fuel for current day rich countries to achieve their level of prosperity, will not exist for current African youth. There will not be the release valve out of agriculture that was the driver of growth in China and Southeast Asia. As growing numbers of people comprise the agriculture sector, wage growth will be competed away by surplus labour.

Furthermore, while accelerating climate change threatens agriculture and ecological stability and food security, there are critical uncertainties to the extent to which countries will be able to transform their economies in order to become more resilient, with implications for both food security, sustainability and youth employment opportunities. Moreover, the ways in which agri-food system's transform to meet growing demands will have implications for rural economic development. Opportunities exist to catalyse wider rural economic development to generate non-agri-food sector employment opportunities for youth, but there are risks as well that growth and investment may be concentrated in urban areas at



the expense of more remote areas. There are also risks that marginalised or excluded groups including young women, may be further disenfranchised and excluded, leading to further entrenchment of gender and spatial inequalities. Attention therefore needs to be paid to understand key opportunities and risks for generating inclusive and quality youth employment across food value chains over the coming decades.

Lastly, while the need to create an enabling environment for youth employment is acknowledged in policy documents, there are uncertainties to the extent to which these ambitions can be translated into concrete actions that will create an environment for youth entrepreneurship to thrive, as well as opportunities for dignified and fulfilling work for young people. Attention therefore needs to be paid to the ways in which food system actors in general, and youth in particular, can mobilise and engage with decision-makers and other food system actors in order to influence systems change. This requires an acknowledgement and strengthening of young people's agency, as well as targeted support to enable young people to act as change agents in transforming food systems to improve

equity, nutrition, environmental sustainability, and resilience.

Given the uncertainties and turbulence in the world today, building resilience and sustainability in Africa's agri-food system requires the ability to engage with unknown and unpredictable futures – in both the medium and the long term. Decisions made today cannot be based on assumptions of stable trajectories and "business as usual". Identifying the different pathways the future may hold requires the ability to develop insights into the complex relationships in the wider political, economic, social, and technological system, as well as the ability and willingness to bring together multiple perspectives, insights, and knowledge systems in order to learn, adjust and adapt. Using the foresight for systems change framework, this discussion paper seeks to lay out the challenges, as well as opportunities that are emerging for youth employment within the African agri-food system. The information in this document is intended to support the use of futures thinking and scenario analysis to help stakeholders imagine how the future of youth employment in the agri-food system might unfold, in order to help them prepare for different possible futures.

## Section Two

# 02

## Taking a longer-term perspective: foresight for food systems change

How food systems change over the coming decades will have profound global implications for health, economic and social wellbeing and the environment, and therefore, the future of young people. Food systems are on an unhealthy, unsustainable and inequitable path compounded by the risks and uncertainties of climate change, and without deliberate, sustained action, will likely progressively lose their ability to provide dignified and fulfilling work or adequate nutrition for the people that depend on them. To help drive change, a deeper understanding of how the future might unfold and more insight about the options for taking action is needed – before crises hit. Foresight is a key tool that governments, private sector, and civil society can jointly use to better understand future risks and opportunities in food systems, explore possible futures and to adapt. Foresight has been used to guide long-term corporate strategic investments for companies such as the Royal Dutch/Shell Group,<sup>1</sup> as well as in national planning processes during critical times.<sup>2</sup> It involves anticipating trends and changes in food systems, exploring solutions and innovations, and creating foresight-backed scenarios and options to guide action.

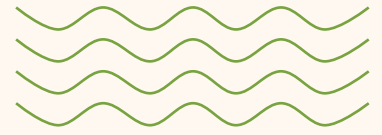
<sup>1</sup> Scenario planning alerted Shell's corporate leadership in advance about some of the most critical events in the 20th century: the 1973 energy crisis, the more severe price shock of 1979, the collapse of the oil market in 1986, the fall of the Soviet Union, the rise of Muslim radicalism, and the increasing pressure on companies to address environmental and social problems.

<sup>2</sup> Examples include the "Mont Fleur" scenario exercise, undertaken in South Africa during 1991–92, which, amid a deep conflict, brought people together from across organisations to think creatively about the future of their country.

### 2.1 Rethinking how change happens (and can be influenced) in complex adaptive systems

Foresight for systems change offers one approach to support transformational thinking and action for a more equitable and sustainable world. It uses futures thinking and scenario analysis to help diverse stakeholders imagine, together, how the future might unfold. This enables future risks and vulnerabilities to be understood and mitigated and opportunities for desired system transformation to be recognised and seized. Foresight analysis helps to create understanding about how key trends and critical uncertainties may impact on human and natural systems. It supports preparedness for different possible futures.





Foresight for systems change is based on an understanding that people and nature interact as complex adaptive systems. Human systems are inherently “sticky”. Vested interests and fear of the unknown bring resistance to innovation, resulting in a lack of effective responses to emerging issues. This is compounded by the difficulties of creating sufficient collective understanding and commitment across diverse interest groups for society to take transformative action. However, while change often seems slow and difficult, stuck or even regressing, there are endless positive examples of individuals, communities, groups and organisations working for a better world. People are unquestionably deeply capable of innovation, creativity, social organisation and activism.

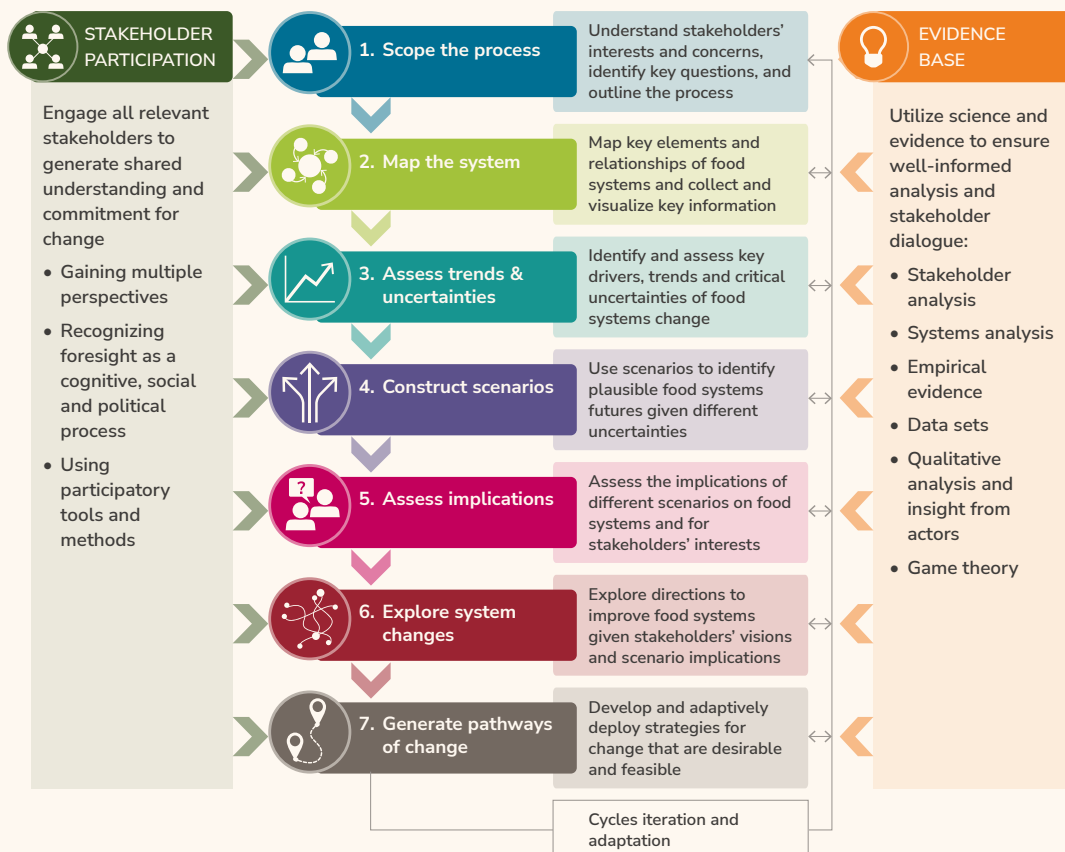
While foresight and scenario analysis are no panacea, it offers two critical contributions: motivation and clarity for change by offering stakeholders a window into the future, through which they can see how their longer-term interests and aspirations would be affected by different future scenarios; and helping break down the barriers of vested interests by facilitating stakeholders to collectively explore options and

pathways for change that can balance individual and common interests. Scenarios also help stakeholders come together to explore blind spots in current thinking and planning, revealing where investments should be made to improve outcomes.

## AN INTEGRATED APPROACH FOR FORESIGHT

The Foresight4Food Initiative<sup>3</sup> has developed a framework and process to guide foresight and scenario analysis for systems change. The framework (Figure 2) links a participatory process of stakeholder engagement with a strong scientific evidence base and the use of computer-based modelling and visualisation. Central is understanding how different stakeholders “see” the system they seek to transform. The approach starts by understanding the actors in the system – their actions, values and interests – and their motivation for engaging in foresight. It maps out and examines how social, technical, economic, environmental and political (STEEP) factors interact within a defined system, and how the system is influenced by the power dynamics between actors.

Figure 2: A framework for understanding foresight and scenario analysis for systems change.



<sup>3</sup> Foresight4Food is an international initiative that supports food system transformation processes by offering organisations scenario and foresight expertise, synthesising foresight work in agri-food and linking food systems foresight professionals worldwide. Foresight4Food's Secretariat is currently hosted by the Food Systems Group of the Environmental Change Institute of Oxford University.

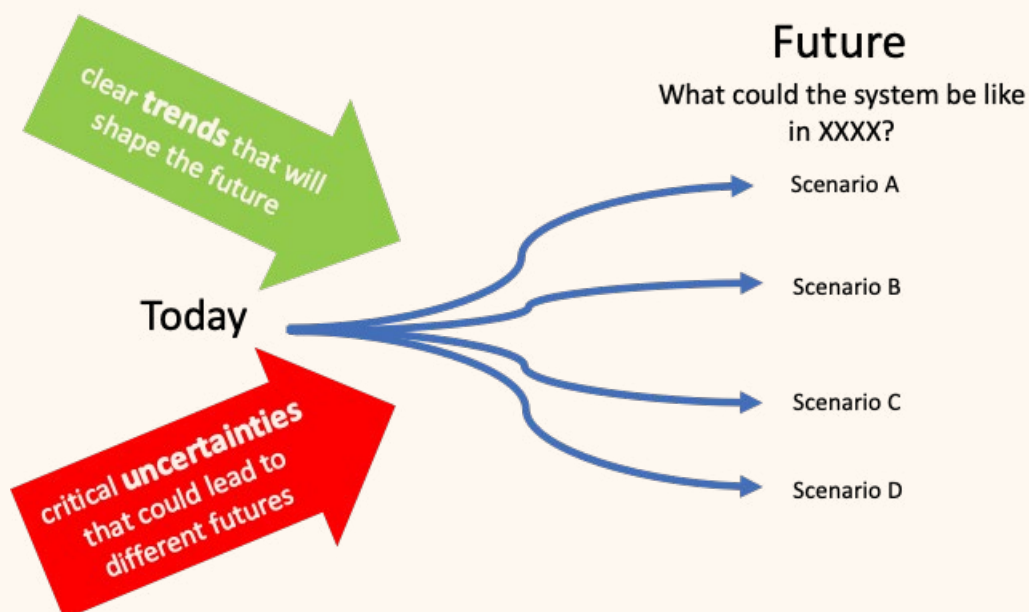


The systems framing leads participants to identify and assess key drivers, trends and uncertainties, to develop alternative future scenarios (Figure 2). The approach creates dialogue between stakeholders about their assumptions on how the future may unfold and what this implies for their visions and aspirations. The discussions that ensue provide a foundation for exploring what directions for systems change would be in the collective interest and how trade-offs or synergies between the specific interests of different groups can be best managed.

Developing and analysing future scenarios based on data about key trends and critical uncertainties

is central to the approach. This is often the most challenging yet insightful part of the process. It takes stakeholders “outside the box” to imagine how the future could be fundamentally different, with what implications. Scenarios are developed by identifying two independent critical uncertainties that then create a matrix of four different scenarios (Figure 3). Scenario story lines are then developed that outline what each of these four futures would be like. “Back casting” is used to look backwards from an imagined future scenario to construct the possible events and decisions that could have led to such a future.

**Figure 3:** Using key trends and critical uncertainties to identify future scenarios.

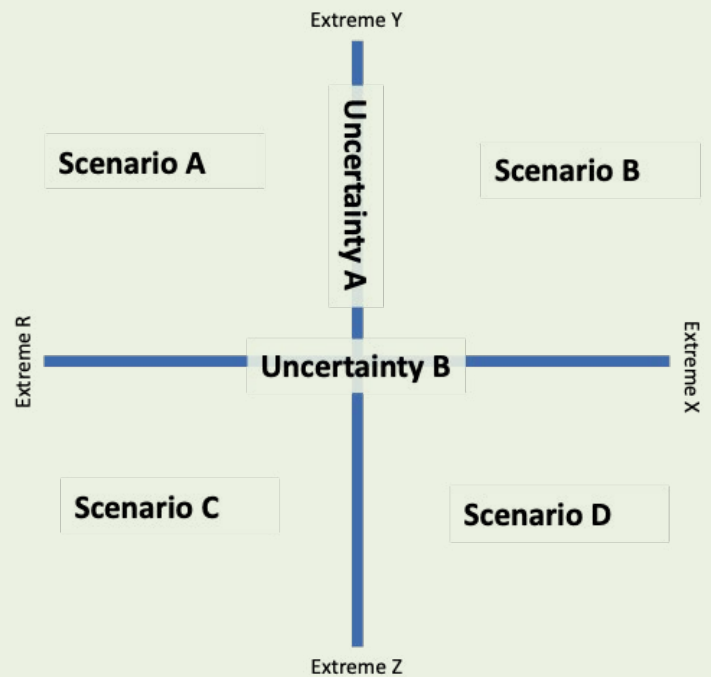




**The framework integrates four elements:**

- 01 A futures orientation** that invites stakeholders to develop a longer-term perspective on how the future may unfold and what this means for the decisions needed today to avoid future risks and build resilience into our systems.
- 02 Ways of thinking** about how change happens and can be nudged in complex systems – by linking theories and schools of thought on systems, complexity, socio-technical transitions, wicked problems, anticipatory governance, cognition, and human bias.
- 03 Practical methods** from strategic foresight, scenario planning, multi-stakeholder processes, soft systems analysis, and theory of change.
- 04 Participatory tools** for analysis and group facilitation, which enable participants to collectively analyse situations and data, create scenarios, engage in dialogue and critical conversations, build trust, and generate pathways of action.

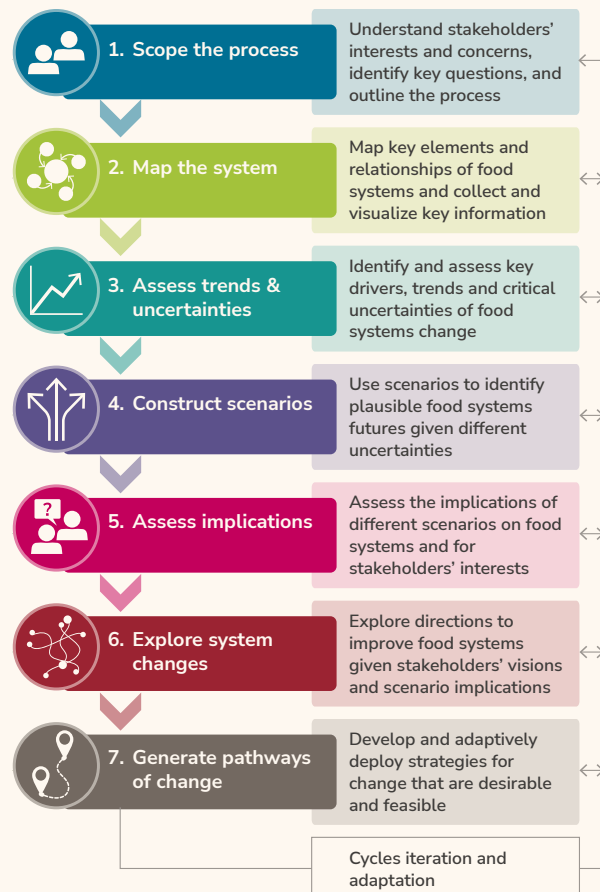
Figure 4: A scenario matrix based on two critical uncertainties.



**SEVEN STEPS FOR FACILITATING FORESIGHT FOR SYSTEMS CHANGE**

The Foresight4Food Initiative<sup>3</sup> has developed a framework and process to guide foresight and scenario analysis for systems change. The framework (Figure 2) links a participatory process of stakeholder engagement with a strong scientific evidence base and the use of computer-based modelling and visualisation. Central is understanding how different stakeholders “see” the system they seek to transform. The approach starts by understanding the actors in the system – their actions, values and interests - and their motivation for engaging in foresight. It maps out and examines how social, technical, economic, environmental and political (STEEP) factors interact within a defined system, and how the system is influenced by the power dynamics between actors.

Figure 5: Steps in facilitating a foresight for systems change process.



# Section Three

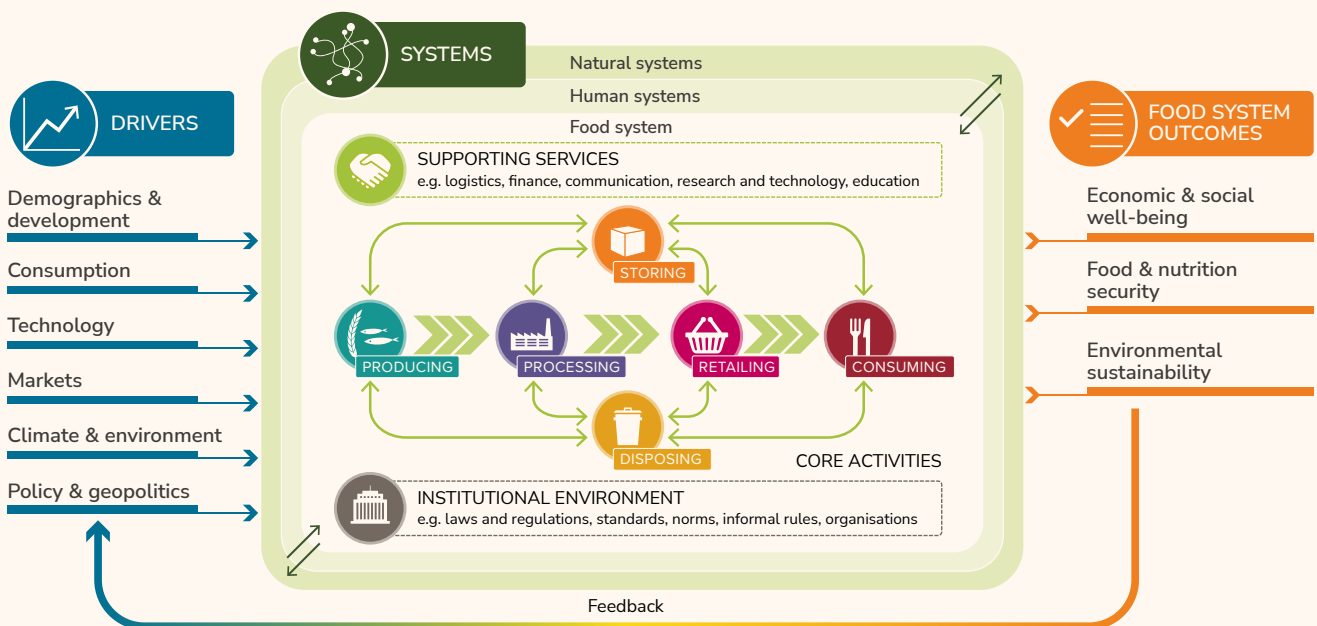
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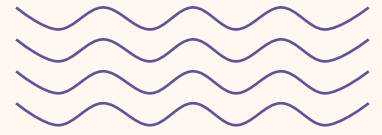
# Mapping the African agri-food system

Food systems have usually been conceptualised as a value chain, a set of activities ranging from production through to consumption (Posthumus et al., 2018). However, the increasing attention to unhealthy food, job creation, food security and food safety has demonstrated the need to expand the understanding of food systems beyond a simplistic value-chain model. The United Nations (UN) Sustainable Development Goals (SDGs) emphasise the interlinkages between eradication of hunger and poverty, sustainable use of natural resources,

promoting healthy and prosperous lives and social justice (UN, 2016), as well as their linkages, interactions and opportunities for synergy in meeting these goals. Furthermore, a food system approach looks beyond the food value chain and takes into account the outcomes of all job activities on the food system, including poverty reduction, dignified and fulfilling work, social welfare and food security. The food system, as understood in this discussion paper, is illustrated in Figure 6 below.

Figure 6: Conceptual model of a food system. (Source: Woodhill (2019)).





In order to transform today’s unsustainable food systems into more healthy, equitable, resilient and sustainable food systems with inclusive and equitable agri-food sector youth employment for dignified livelihoods, it is necessary to understand the composition of today’s food systems, as well as the primary drivers of change. Food systems are complex and dynamic, and often evolve in unpredictable ways. They are path dependent, as different components co-evolve over time, becoming mutually supportive, keeping current production and consumption patterns established and deeply embedded. However, they are also self-organised, with actors in the agri-food system maintaining, defending or incrementally improving the existing system according to their own interests. Food systems are also constrained, since actors operate within the existing overall institutional and business environment, and their evolution is subject to influence from powerful actors with vested interests. However, actors in the food system can coordinate with each other in order to shape the system – moving towards sustainable outcomes in the face of resistance to change. Lastly, food systems are unpredictable, and like all complex systems, may reach tipping points after which change is irreversible. Therefore, strategic policy options to activate sustainable change will have to “outsmart” vested interests, hidden agendas and conflicting objectives, and trade off short-term unsustainable achievements for longer-term sustainability, resilience and inclusivity (FAO, 2020).

### 3.1 Drivers of food system change in SSA

Food system drivers of change are of particular interest as they are responsible for shaping the future of agri-food systems. They are systemic in nature, influencing the state and dynamics of agri-food systems and their socioeconomic and environmental outcomes. Key drivers of food system change of interest are population growth, urbanisation, technology, climate change and environment, as well as institutions, policy and geopolitics.

They could impact the development of food markets and employment in the following ways:



**Expanding populations:** Over the next decades, the demographic transition, characterised by declines in infant mortality and fertility rates and resulting in a higher share of the working age population is expected to occur in low- and middle-income countries. In Africa, the working age population is projected to rise well into the mid-century, reaching 800 billion by 2050, which will be the largest share in the world (UNDESA, 2022). A significant proportion of this population will still be in rural areas, despite increases in urbanisation and migration (Filmer & Fox, 2014). At the same time, arable land is a finite resource, with cropland per capita declining as the population increases (FAO, 2016). The potential of this working age population to spur economic growth is significant, since fewer dependents mean a higher share of disposable income and savings. An increased number of women working away from home leads to diet change and an overall rise in demand for food, increasing the economic significance of food systems. However, these gains can only be achieved if the labour market is able to absorb these workers, and if infrastructure and enabling conditions make it possible.



**Urbanisation:** Urbanisation in much of the developing world is on the rise. The urban population share of SSA was 40% in 2018, up from 18% in 1970, and is projected to reach 47% by 2030 and 58% by 2050 (UN, 2019). In SSA, urbanisation has been occurring both due to natural growth as a function of high fertility rates (Kessides, 2006) as well as due to migration of workers from rural areas attracted to booming cities, fueled by natural resource booms and a rising demand for services and non-tradeable goods (Gollin & Jedwab, 2016). While the urbanisation discourse tends to focus on mega cities (populations of more than 1 million) a large share of the urban population resides in secondary and tertiary cities and towns. They form 50% of the urban population globally. An increasingly urban population is a major opportunity for small-scale farmers and entrepreneurs to sell their goods and produce, since households increasingly rely on markets and look for food that is easier to buy, prepare and consume. In Eastern and Southern Africa for example, 25% of the population is urban, but cities consume 48% of the food produced and sold in the countries (Tschirley et al., 2015).



**Dietary changes:** Changing consumer patterns and rising demand for food are already leading to shifts in employment within food systems, with an increase in the number of jobs in sectors such as transportation, wholesaling, retailing, processing and vending (Cohen & Garrett, 2009). Furthermore, rising incomes mean an increased demand for non-staple foods, with a shift to meats, fruits and vegetables, sugar and processed foods, resulting in the development of agri-processing systems and markets. Indeed, Africa's food systems are already transforming, and reorienting themselves towards domestic and regional provision to meet demands of growing towns and cities. This includes the emergence of trade via informal supply chains linking food producing areas, with regional assemblage nodes and urban food consuming areas. Indeed, urban centres in rural areas are growing faster than cities, providing a significant number of jobs in activities in the food value chain such as grading, processing, storage, packaging, transporting and wholesaling for consumption markets (Reardon et al., 2021).



**Technology:** New technologies continue to be introduced in agriculture, processing, storage, logistics and packaging, which will have direct influence on the organisation and structure of the food system. Investments in technology such as irrigation and mechanisation may be harnessed to reduce underemployment and seasonal labour constraints in the market, while the rise of labour-saving technology such as robots may have serious consequences for the food system, particularly a reduction in demand for unskilled labour in all segments (Reardon et al., 2018).

Digital technologies, and particularly mobile and digital platforms, are already changing food systems. Digital platforms have the potential to improve market access of small-scale farmers, increase access to information and finance, and create jobs through entrepreneurial opportunities in food markets. Furthermore, investments in telecommunication infrastructure and the affordability of mobile phones have extended

the availability of mobile phone services in rural Africa, and mobile money has become an important enabler of financial inclusion, particularly for women. According to the Global Findex Database, 55% of adults have a mobile money account—the largest share of any region in the world, 15% have a mobile savings account and 75% of mobile account owners use them to make third person payments (FINDEX, 2021). As a result, the private sector is already playing a major role in accelerating the development of promising technologies and solutions in the food and agriculture sector. Innovation funds, often in the form of grants, are now being used to create platforms for innovative activity by providing incentives to improve collaboration and the quality of services offered. Between 2016 and 2018, US\$ 19 million was invested in agriculture technology in Africa and agri-tech start-ups grew by 110% (Malabo Montpellier Panel, 2019). Nonetheless, there appears to be limited empirical evidence on the actual impacts of digitalisation on economic outcomes, although technology use is likely to intensify in the future.



### **Climate change and the environment:**

Climate change is a serious threat for the further development of food systems, in particular for small-scale farmers, low-income consumers and actors in the informal food market systems. A combination of climate change and rapid population growth increases water scarcity, outbreaks of pests and diseases, and greater variability of temperatures and rainfall (Jayne et al., 2017). These challenges will be compounded by the fact that SSA also faces growing land scarcity and degradation resulting from population pressures and unregulated urbanisation. Land scarcity is also driving up land prices in the region, restricting access to land, in particular for the youth (Ayele et al., 2018; Wossen & Ayele, 2018).



## A FOOD SYSTEM IN TRANSITION

The agri-food system has been growing and transforming rapidly over the past three decades in SSA. This has been in response to urbanisation, rising incomes and consequent changes in consumer demand and preference, as well as the introduction of investments and technology (Reardon et al., 2019). In response to these changes, the agri-food system has been evolving, transitioning from localised, traditional and short value chains with little value addition, to longer, more complex supply chains capable of moving large volumes of food with increasingly complex and diverse value addition.

The share of Gross Domestic Product (GDP) contributed by actors in the agri-food system was estimated to range from 40%-50%, demonstrating the importance of the midstream sector to national economies (AGRA, 2019). The composition of agri-food actors has evolved as well, moving from domination of a few state-owned enterprises before liberalisation and privatisation of Africa's agricultural distribution parastatals, to a proliferation of micro, small and medium enterprises (MSMEs), which account for up to 90% of all businesses in processing, transportation and trade as well as food services. Together, these MSMEs supply over 60% of all food consumed in SSA illustrating their importance as not only job and wealth creators, but also their critical role in maintaining food security (Reardon et al., 2019).

Approximately 80% of food consumption in Africa is from purchases by urban and rural consumers,

implying that the private sector handles 80% of Africa's food consumption. Furthermore, an estimated 96% of marketed farm output is supplied through domestic markets, meaning that export markets account for only 4%, showing the importance of domestic food value chains (AGRA, 2019). Experience from agri-food system transitions in other regions has shown that, as agri-food systems handle larger volumes of goods and materials, economies of scale and increasing competition, leads to the emergence of large firms, capable of making massive investments and consolidation in the value chain via the rise of supermarkets and large processors. This is accompanied by the exit of small firms, an increasing share of waged employment in the agri-food system, and a homogenisation of food supply.

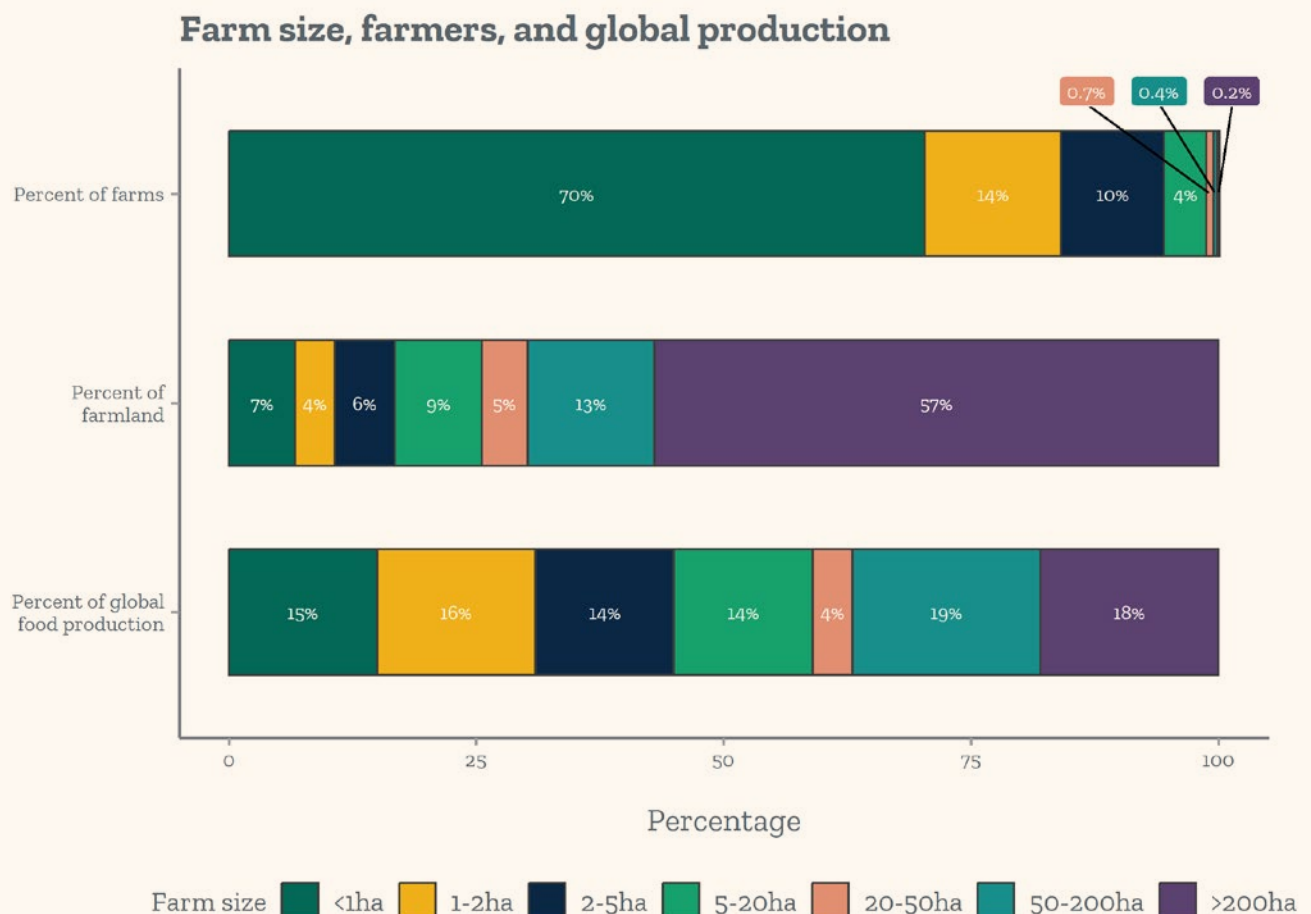
There are early signs of consolidation in the agri-food system, as Reardon et al. (2019) find that modern value chain segments such as supermarkets and large processors are beginning to merge in large cities, forming 10%-20% of the agri-food economy depending on the country and product. It is therefore likely that over the next coming decades, SSA will continue to witness a rapid evolution of food system, with increasing competition between large scale actors and MSMEs in the value chain. This creates both opportunities for agri-food system actors, but also necessitates reflection on how to ensure that it remains inclusive to the most vulnerable segments of the population, including young people, women and other marginalised groups. The key characteristics of the ongoing transition are outlined below.

## EMERGING DUALISM IN THE PRODUCING SECTOR

Farmers in SSA are predominantly small scale, due to small farm sizes, and increasing land subdivision. However, there are significant differences both in terms of farm size, productivity and access to markets that mean that farmers will experience food system transition very differently. Although data on farm size is scarce, (Lowder et al., 2016; 2019; Woodhill et al., 2022) estimate that globally, 84% of family farms are less than 2 hectares in size, occupying 12% of agricultural lands. However, even within small-scale farmers, there is a bifurcation in terms of productivity and size. Of all small-scale farms less than 2 hectares, 374 million farmers (70% of all farmers), operate very small farms of less than 1 hectare, producing largely for their own consumption, with any surpluses sold in local

markets, disconnected from national agri-food value chains. It is therefore likely that the remaining 20% of small-scale farmers with 1-2 hectares of land produce the bulk of commercially available food in low- and middle-income countries (LMICs) (Woodhill et al., 2023). Likewise, Gillier et al. (2021) find that, in a sample of African countries surveyed, the vast majority of farmers operate on less than a hectare of land, often supporting households of 5–8 people. Of these households, 80% have fragile livelihoods with poor access to productive resources, and thus must find off-farm opportunities to meet basic nutritional needs. Indeed, even after closing yield gaps, farm sizes are so small that only a small proportion can hope to achieve a living income from farming alone.

**Figure 7:** Percentage of farms, farmland, and food production, disaggregated by farm size. (Modified from Woodhill et al. (2020) based on data from Lowder et al. (2019), Ricciardi et al. (2018) and Herrero et al. (2017)).







Against the backdrop of increasing population pressure and fragmentation of farms, there is evidence of a countervailing trend. A new cadre of medium-scale “investor farmers” with land areas of 5–100 hectares is expanding rapidly (Jayne et al., 2016). These investor farmers are urban professionals or rural elite households (Sitko & Jayne, 2014) who already control 20%–50% of the total farmland in Kenya, Ghana, Tanzania and Zambia. Jayne et al. (2016) highlights that the share of arable land under the control of urban based households is rising, leading to rapid increases in land prices within 100 kilometres of urban centres. Often only a small proportion of the land acquired is initially used (Jayne et al., 2014). Such farms can help to stimulate local input and output markets, but the implications for local farmers are unclear. Given the continuing population growth in rural areas it seems likely that the consolidation of land in the hands of investor farmers will contribute to further marginalisation of poorer households (Jayne et al., 2014).

The available evidence suggest that it is this upper tier of small-scale farmers that are poised to access the more modern and commercialised food channels that growing agri-food value chains offer. Meanwhile, very small-scale farmers, who tend to be asset poor and living in remote areas, are unlikely to automatically benefit from increased agricultural commercialisation spurred by food demand and growing agri-food value chains. There are therefore concerns about the growing number of very small-scale farmers that will be increasingly unable to make a viable living from farming alone (Fan & Rue, 2020; Gneiting, 2018). Therefore, much more nuanced understanding of the diversity of small-scale farming is needed, along with a more integrated perspective of on and off-farm livelihood options.

## **INCREASINGLY ROBUST AND DYNAMIC WHOLESALE AND DISTRIBUTION SECTOR**

The growth and transformation of wholesaling and distribution can be attributed to urbanisation and infrastructure development, with the wholesale sector expanding rapidly in the last 50 years. Reardon et al. (2015) calculated that African food supply chain volumes increased six to eightfold over 1970–2010, with most of the increase occurring in the past 20 years. Old wholesale markets established by postcolonial governments were rapidly outgrown due to growth in population, and have been supplanted by informal markets, as well as large markets in secondary towns and trading centres established to feed urban food demand. These towns have grown into important nodes in the agri-food supply chain, agglomerating produce from agricultural regions for packaging, sorting, processing, wholesale and transport to urban areas. In some countries, there is also evidence of wholesalers bypassing traders and buying directly from farmers as well as providing a suite of services including credit, inputs and logistics support to farmers in a process known as disintermediation. Evidence of this shift has been found in situations as diverse as maize trading in Nigeria (Liverpool-Tasie et al., 2017) and rice and potato trading in India (Reardon et al., 2012), and is an early sign of consolidation and capital investment in value chain segments. Growth and consolidation along the value chain is thus likely to continue, and can be facilitated by investments in road, transport and market infrastructure, especially in secondary and tertiary towns.

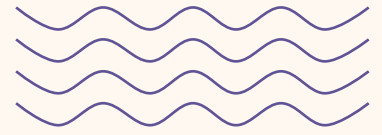


## **DYNAMIC AND DIFFUSE PROCESSING SECTOR**

Demand for processed food is fueled by the opportunity cost of women's time in cities and rural areas, as women increasingly work outside the home, as well as the diffusion of processing equipment and technologies (Reardon et al., 2021). In SSA, 85% of processors are unregistered or registered SMEs (Diao et al., 2018), engaged in minimal processing of grain flour, milk powder, edible oils and animal products. Meanwhile, retailing is dominated by the preparation and sale of processed foods such as prepared snacks as well as traditional dishes and drinks. Jobs in food processing are an important source of employment for women, young people and minorities, as they require relatively little initial investment. Food processing industries often form spontaneous clusters near the supply of raw materials and customer base, taking advantage of economies of agglomeration. Other forms of clustering and self-organisation include cooperatives, often organised by product processor and trader associations. They most commonly appear in dairy, such as in Uganda (Van Campenhout et al., 2021) or Zambia (Neven et al., 2017). Spontaneous clusters of SMEs are important for food systems, and are valuable entry point for engagement, investment and support to businesses in the agri-food sector. Small-scale processing can be further supported by addressing the constraints that SMEs face, especially on food handling skills and entrepreneurship training.

## **A SUPERMARKET REVOLUTION YET TO EMERGE IN THE RETAIL SECTOR**

In the retailing sector, domestic supermarkets emerged and expanded rapidly between 2002 – 2018, with a dramatic rise in the volume of sales averaging 41% per year growth, with expansion both into urban and rural areas. This occurred without significant foreign investment from multinational companies, with the expansion of supermarkets radiating from South Africa and Kenya into proximate countries in Eastern and Southern Africa, before gradually expanding into some West African countries such as Ghana, Nigeria and Senegal (Barret et al., 2022). For example, Africa's largest food retailer (South Africa-based "Shoprite") operates more than 2,800 outlets in 15 African countries and aspires to be "Africa's most accessible and affordable food retailer". Although supermarkets and other large-scale actors are poised to continue growing if incomes continue to rise, informal retail outlets remain dominant, with up to 70% of households regularly purchasing their food from informal retailers and traders (Crush & Frayne, 2014). Informal retailers are more convenient for the poorest consumers, being closer to where they live, offering credit and selling food in smaller and more affordable quantities (Peyton et al., 2015). This suggests that informality within the food system will remain an enduring feature, and policy and decision-makers should engage with informal agri-food markets and actors, recognising what informal food systems already do well and focusing on building partnerships for resilient and adaptive food systems (Vorley, 2023).



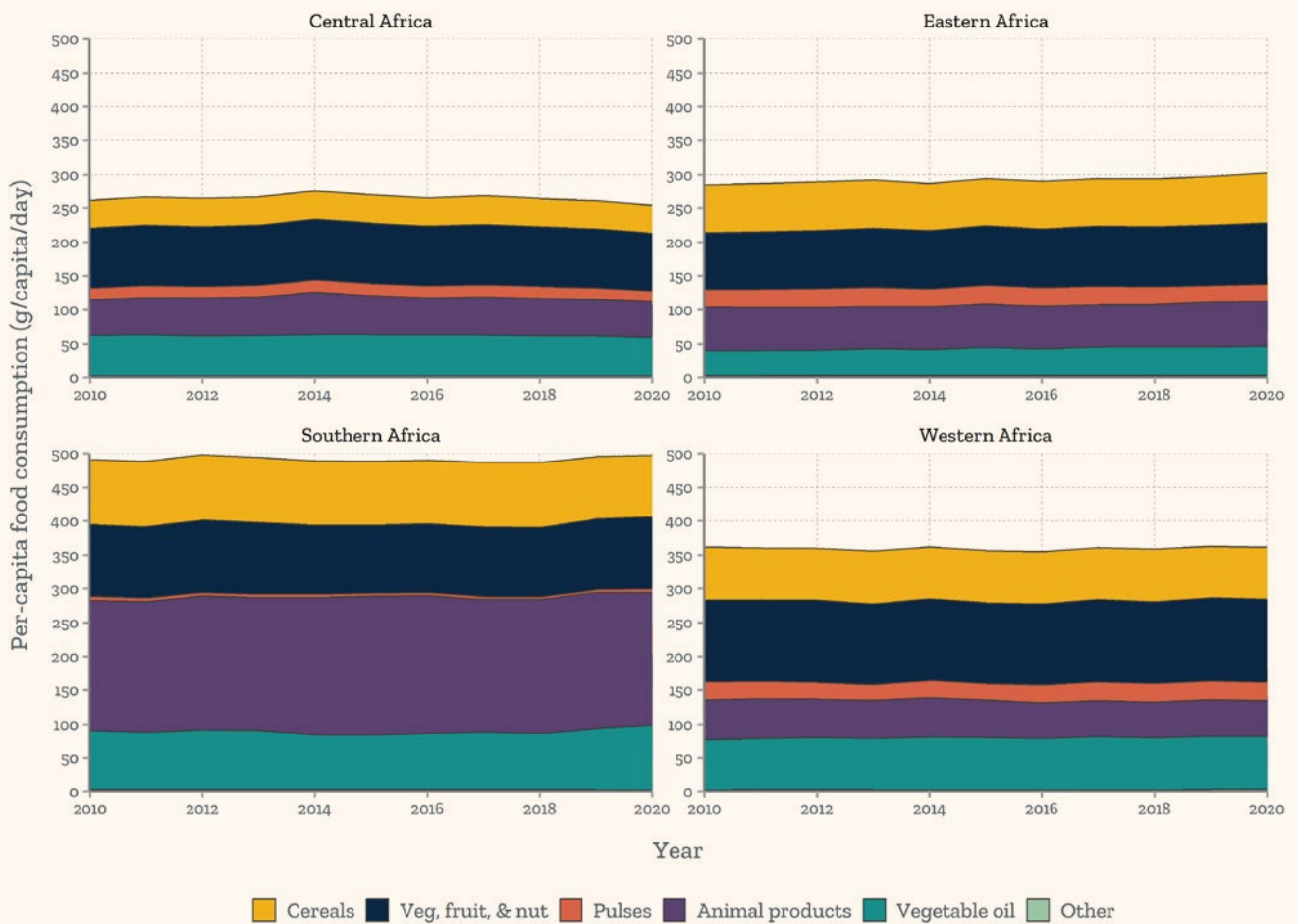
## WIDESPREAD AND ENTRENCHED DIETARY TRANSFORMATION IN CONSUMPTION

Reliance on prepared food is growing, and has become a vital aspect of urban life, due to long commutes and limited time for food preparation (Allison et al., 2021), limited cooking and storage space in cramped accommodation without kitchens, and daily wages leaving little capacity to buy ingredients. The poorest households spend

the highest share of their food budget on meals away from home, for example, 39% of food expenditure of the bottom quintile in Accra, Ghana, compared to about 25% for households in the highest expenditure category (Maxwell et al., 2000). More than half of Nairobi's two million slum dwellers buy ready-made food rather than cooking in their homes (Tacoli, 2016).

**Figure 8:** Trends in per-capita food consumption patterns by African sub-region between 2010-2020. Regional averages represent the population-weighted mean of all countries in the region. (Source: FAOSTAT Food Balances, accessed in 2023).

### Historic Food Consumption Trends: Sub-Saharan Africa



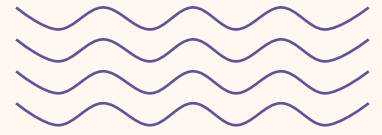
Source: FAOSTat Food Balance data  
Average per-capita food consumption of all countries in each region, with individual country averages weighted by country population.

Additionally, there has been diet diversification beyond grains, both in urban and rural areas. In Eastern and Southern Africa, for example, the share of non-grains in food expenditure was 66% in urban areas and 61% in rural areas (Tshirley et al., 2015). Nonetheless, hunger, undernutrition and micronutrient deficiencies remain prevalent, particularly in rural areas. At the same time rural diets are changing towards higher consumption of highly processed low nutrient quality foods with rising levels of overweight and obesity (Popkin et al., 2020). A particular challenge for policymakers is thus to ensure that the processed products offer value addition for healthy diets rather than moving towards ultra-processing to produce foods which are high in unhealthy fats, salt or sugar – especially since most of the associated economic activity in processing involves SMEs.

## **INFORMALITY AS A DEFINING FEATURE OF AGRI-FOOD SYSTEMS**

A significant proportion of MSMEs in the agri-food system are unregistered or informal, meaning that informality is a distinguishing feature of the African agri-food system (Vorley, 2023). The informal sector is entrepreneurial and dynamic, and comprises the biggest private sector and employer in most low-income countries. They are also closely interconnected with the formal economy in all stages of the food chain. Women and youth play a central role, as do other minorities that live with resource constraints and political marginalisation. Although food systems have been viewed through a structural transformation lens where informality evolves towards the formal and organised, an exclusive steering of policy and investment towards an assumed development of modern value chains with formal institution of contracts, standards and certifications, should not happen at the expense of addressing the priorities of food systems in the “here and now” (Guarín et al., 2022). Indeed, Reardon et al. (2021) conclude that donors and governments should not waste resources trying to force these enterprises into formal patterns or put in place services that these firms are already providing. Rather, they propose that support should focus on addressing the constraints that all MSMEs face, especially on food handling skills and entrepreneurship training.





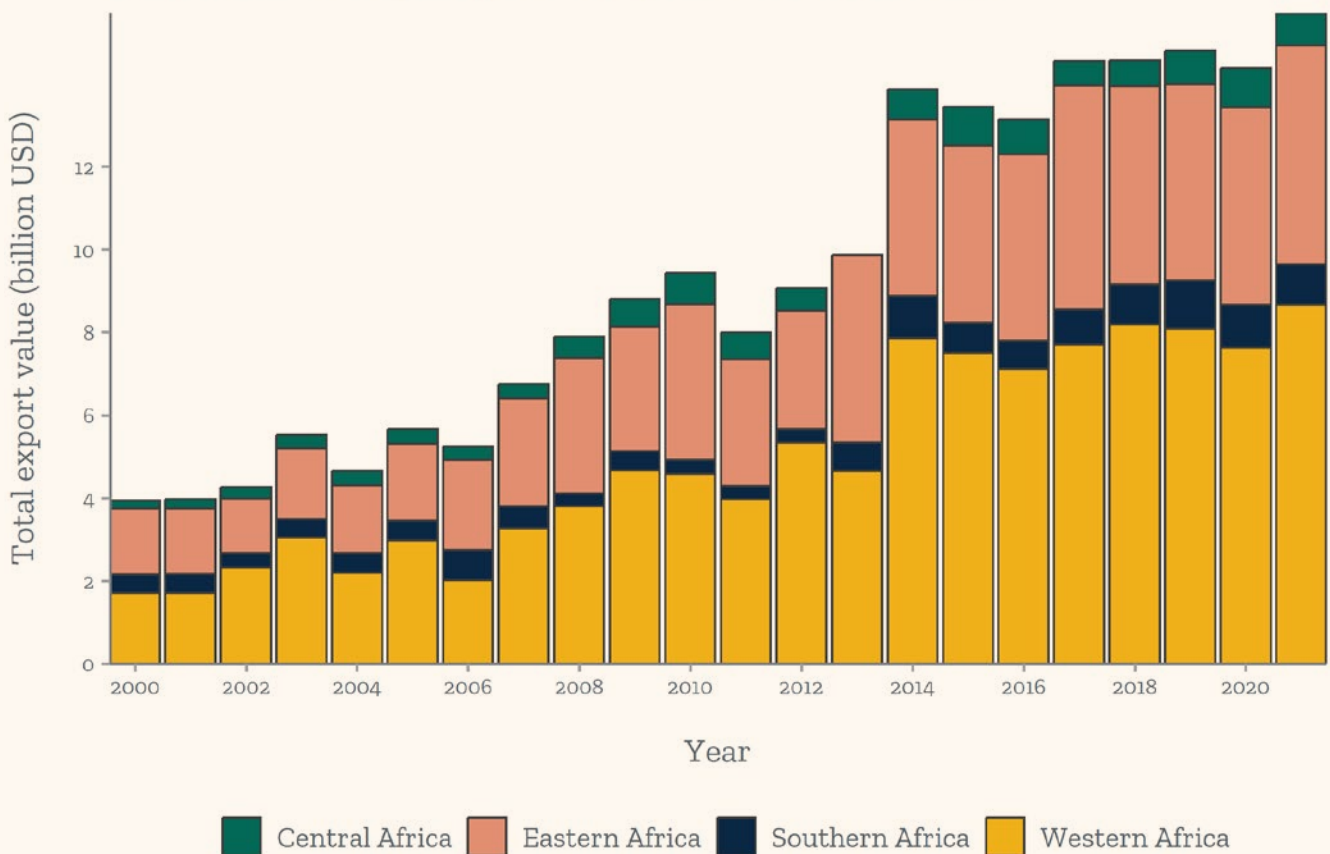
## GROWING DENSITY OF INTRA-AFRICAN TRADE AND SUPPLY CHAINS

Official trade statistics estimate that over the past decade (2009-2018) show that only 22% of African trade is with other African countries. However, this figure does not include informal trade, which is much higher. For example, Uganda estimates that informal trade with neighbouring East African Community (EAC) countries is around 86% of the value of official estimates to these countries (Ogalo, 2010), while Rwanda estimates that informal trade


with neighbouring countries is 51% higher than formal exports (Republic of Rwanda, 2018). Informal cross-border trade is important for food security, for example, in West Africa it accounts for about 30% of trade in staple foods. It is also an important source of employment, with about 43% of Africans deriving some of their income from informal cross-border trade (Afrika & Ajumbo, 2012).

**Figure 9:** Percentage of farms, farmland, and food production, disaggregated by farm size. (Modified from Woodhill et al. (2020) based on data from Lowder et al. (2019), Ricciardi et al. (2018) and Herrero et al. (2017)).

### Global Cash Crop Exports from Sub-Saharan Africa



Source: FAO Food Matrix



These estimates put in question the assertion that Africa is a net food importer (ADB, 2016), with a recent study by Liver-Pool Taise et al., (2020) showing that for SSA as a whole, the import share in food consumption (in quantity terms) ranges from 10% to 13%, depending on the measure used. Although 60% of rice and most of wheat are imported, they account for only 2.5% of all food consumption in tonnage terms (Awokuse et al., 2019). Locally available staples such as maize, cassava, sorghum, fruits, vegetables and meat are therefore largely domestically produced or imported from neighbours. Furthermore, supply chains in staple crops frequently traverse several countries, often through informal trade.

Although data remains sparse, it is clear that domestic and cross-border value chains play a critical role in food supply, and investments transport and market infrastructure will enhance intra-African trade. Furthermore, the implementation of the Africa Free Trade Area should target the reduction of illicit trade, smuggling and fiscal evasion, by lowering trade barriers, improving the efficiency of customs procedures, trade facilitation and reduce harassment and extortion at border crossings (Bouët et al., 2020).

## **FOOD SYSTEMS POLICY AND ENABLING ENVIRONMENT**

There is currently no African “food policy”. Instead, the agri-food system is shaped by policies in agriculture, food safety and public health, trade, environmental protection, climate and energy, economic and social cohesion, rural development and international development, employment and education. These policies are often developed largely in isolation from each other, by policy makers, researchers and various interest groups working within their specific policy area.

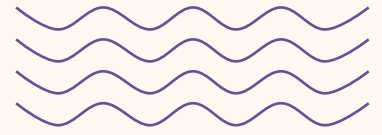
Policies at various governance levels are also disconnected from each other, and few attempts have been made to systematically link local-level

initiatives affecting food systems to policies adopted at the national or African Union (AU) levels. Food systems are therefore subject to imperatives that potentially conflict and counter-act each other, while major opportunities are missed to build on local initiatives in order to accelerate collective learning (AFSA, 2021). The lack of a coherent food policy, cutting across sectors and joining up different levels of governance, means that accountability is hugely dispersed. Nonetheless, coordinated approaches to food systems have begun to emerge, such as the Nairobi County food system strategy, which aims at providing affordable, accessible, nutritious, and safe food for all Nairobi City County residents, essentially by increasing food production, stabilising food supply and incomes, reducing food losses and providing good welfare for food consumers.

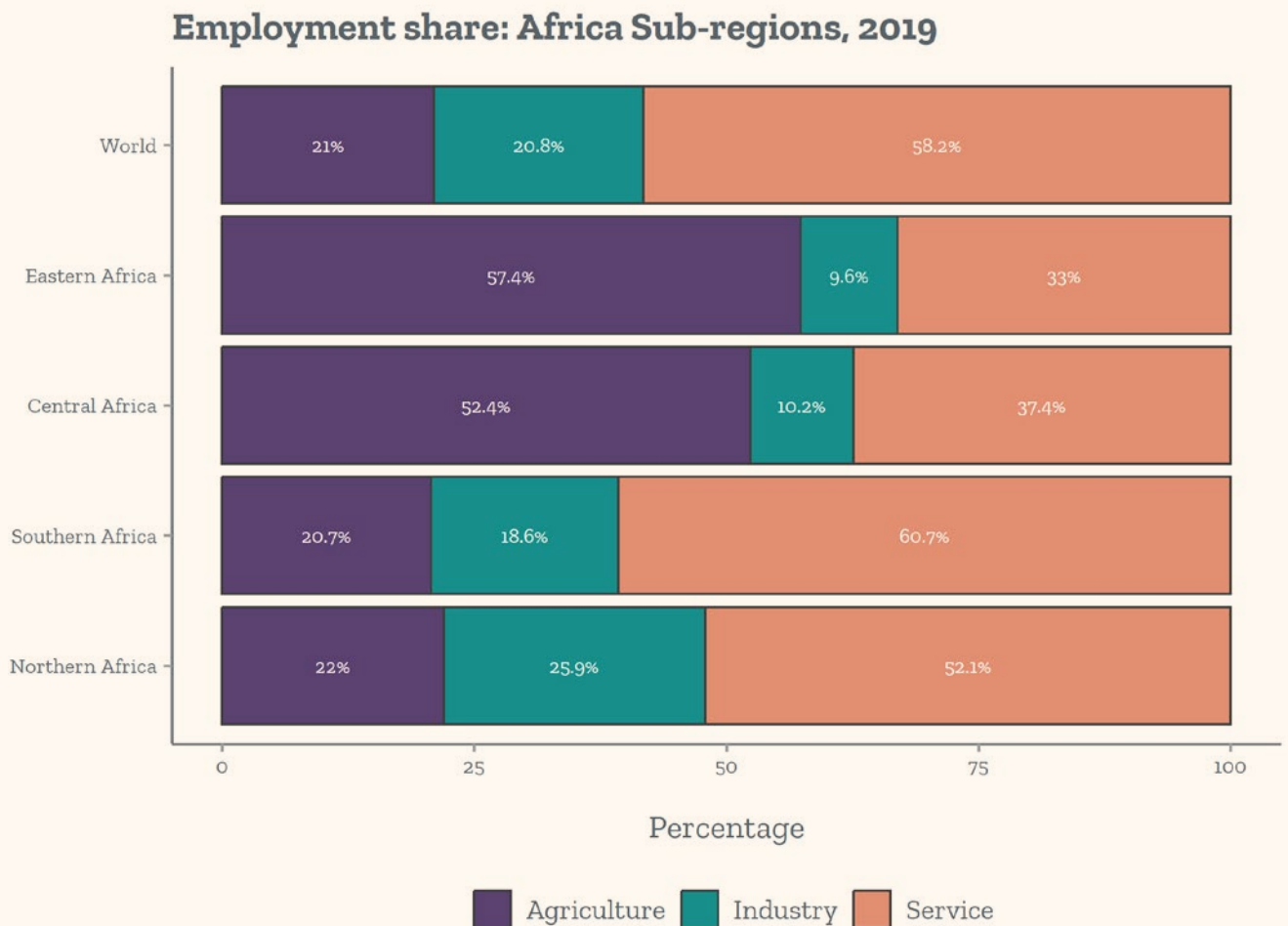
More broadly, data on governance indicators shows that countries in SSA have seen major improvements in governance and the business climate in general, although the degree of improvement varies from country to country. Strengthening policies that improve access to output markets, finance, information and infrastructure are critical, as are those that enhance access to technology, and input delivery systems (Mabiso & Benfica, 2019).

## **EMPLOYMENT**

In many SSA countries, the combination of rising incomes, urbanisation and economic diversification into non-agriculture sectors mean that the importance of the agriculture sector as a domestic employer is gradually declining. As Figure 10 shows, the services sector is thus the second most important employer after agriculture.



**Figure 10:** Share of workers employed in agriculture, industry, and service sectors of the economy in 2019. (Source: ILO, 2019).



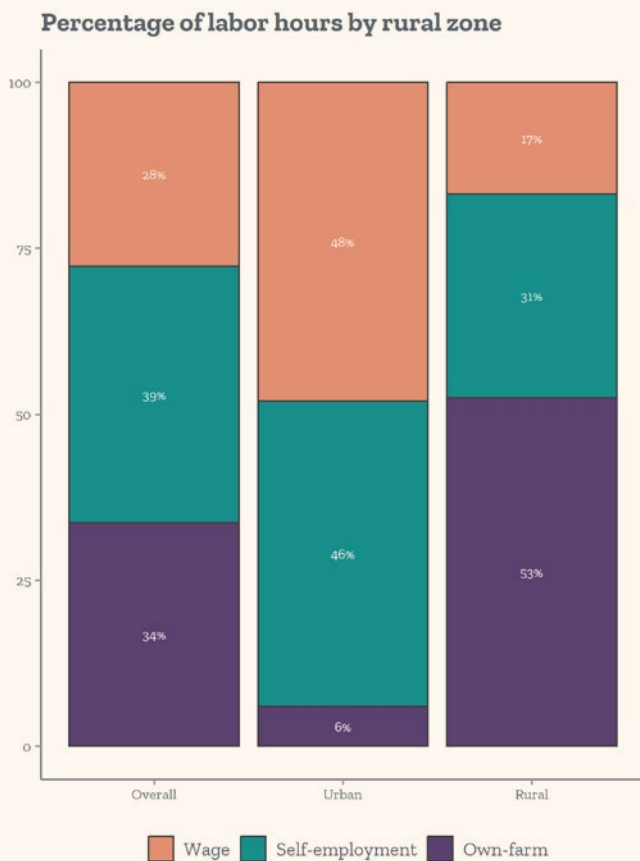
However, national level data on employment is not sufficient to explore jobs within the agri-food system and hides important nuances in how people work in low-income countries. In rural areas where smallholder farming is the main reported activity, it is usually not enough to sustain a household above the poverty line, so many people, especially in rural areas, work in more than one sector, depending on the season, seeking off-farm work opportunities during the dry season to supplement their farm incomes. Secondly, when farm incomes rise, demand for non-farm goods and services increase, creating opportunities for rural households to operate businesses providing necessary goods

and services. In urban areas, a shortage of wage employment in the formal sector means that many households are engaged in self-employment within the services and artisanal manufacturing sector.

Hence, as Figure 11 shows, on average, household surveys show that they do not spend the majority of their time on the farm, with full time equivalent at 37% in Africa on average. This proportion is highest in the rural areas, with households spending on average 53% full time equivalent hours on farm work. Secondly, self-employment is the dominant livelihood activity, averaging at 39% on average, with a higher proportion of reported full time

employment in urban areas as compared to rural. Self-employment activity is largely small scale, informal retail trade, agro-processing, artisanal manufacturing and the provision of services such as hairdressing, repairs and mobile phone services.<sup>4</sup>

**Figure 11:** Percentage of all labour hours worked in rural and urban areas. (Source: Dolislager et al., 2020).



This sector is highly dependent on household incomes from agriculture or wage employment, and thus is vulnerable to economic crises such as natural disasters, trade or transport shocks. Women find work more readily in the informal sector, largely due to low barriers to entry given

the little amount of capital needed. Lastly, wage employment makes up the smallest proportion, and is also concentrated in urban areas, at 32% full time employment<sup>5</sup>, as compared to 17% full time employment in rural areas. This is a reflection of the concentration of government and formal enterprises in urban areas, where employment opportunities are more likely to include the use of skills gained through education or training, and tend to be both more productive (monetary value) and better paid.

## JOBS IN THE AGRI-FOOD SECTOR: TRENDS

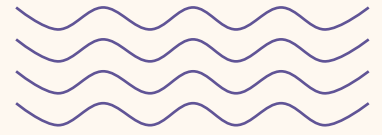
The agri-food system is a critical source of income and employment for a growing share of the population, particularly women, young people and socially and politically marginalised segments of the population. As demonstrated in the previous section, the agri-food system transition is well underway, with the proliferation of MSMEs along the agri-food value chain, as well as the emergence of secondary towns that serve as important nodes in the agri-food system as the rural-urban food supply chain continues to complexify and elongate. This transformation of food systems is already showing significant employment impact in agriculture and non-farm employment, and will continue to do so in the next decades.

Comprehensive data on employment in the agri-food system is scarce, and significant differences exist between rural and urban areas, and to explore impacts on employment, we draw on Dolislager et al. (2020) which used living standards measurement study (LSMS) survey data covering 178,794 households with 460,654 individuals in SSA (represented by Ethiopia, Malawi, Niger, Nigeria, Tanzania, and Uganda), Asia (Bangladesh, Cambodia, Indonesia, and Nepal), and Latin America (Mexico, Nicaragua, and Peru). Several of their results are of interest as elaborated on below.

<sup>4</sup> Employment in the farm sector consists of work on the family farm (own-farm employment) and farm wage employment (on the farms of others). Employment in the non-farm sector consists of self-employment (in a home-based enterprise or one outside the home of the owner and other family members working with him or her) and wage employment. Agri-food system employment is in agricultural and food product processing, logistics, wholesale, retail, and food service (such as food stalls).

<sup>5</sup> Full time employment refers to the time individuals in the labour force spend on an economic activity that is considered employment (Full Time Equivalent or FTEs). FTE takes into account actual hours worked, not just participation in a sector or type of activity. FTEs are estimates of the amount of time that an individual works in a particular activity, relative to a standard benchmark of 40 hours per week (FTE = 1.0).





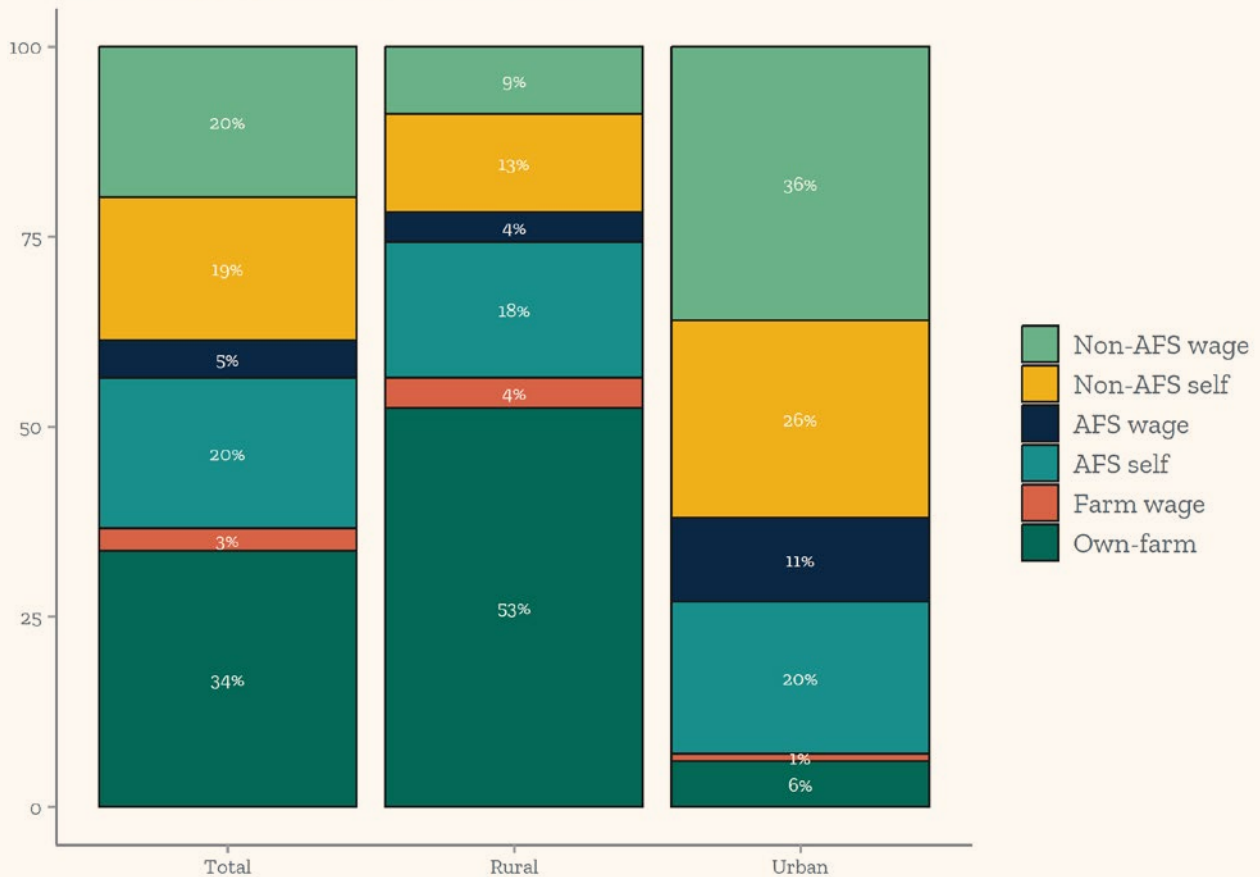
## WAGE EMPLOYMENT IN THE AGRI-FOOD SECTOR IS INSIGNIFICANT

Only 4% of rural workers are employed as farm workers in Africa, compared to a global average of 10%. Generally, farm wage work in total FTEs is a minor share overall, equally for all age groups. This is consistent with the pattern observed in farm size and structure, with farms worldwide split between large, capital intensive commercial farming operation and small to micro-family farms. The potential growth of farm wage labour appears limited, and findings correspond with evidence showing that large scale land acquisitions do not provide employment on any significant scale,

tending to create enclaves of capital-intensive, monocrop farming with minimal linkages to the local economy (World Bank, 2010). The low share of agri-food system wage jobs corresponds with the structure of the agri-food sector, which is in transition, and largely characterised by MSMEs and a large number of informal workers across the value chain. As agri-food systems complexify and consolidate into larger, more capital-intensive firms, the share of wage workers in the sector would be expected to rise accordingly.

**Figure 12:** Percentage of all African labour hours worked in agri-food system and non-agri-food system sectors in rural and urban areas, and overall. (Source: Dolislager et al., 2020).

### AFS Employment by Rural Zone



Very little data on the number of workers within the agri-food sector exists, although survey data shows that, of those employed in the food sector in low-income countries, 91% are employed in agriculture and 9% in food services and manufacturing

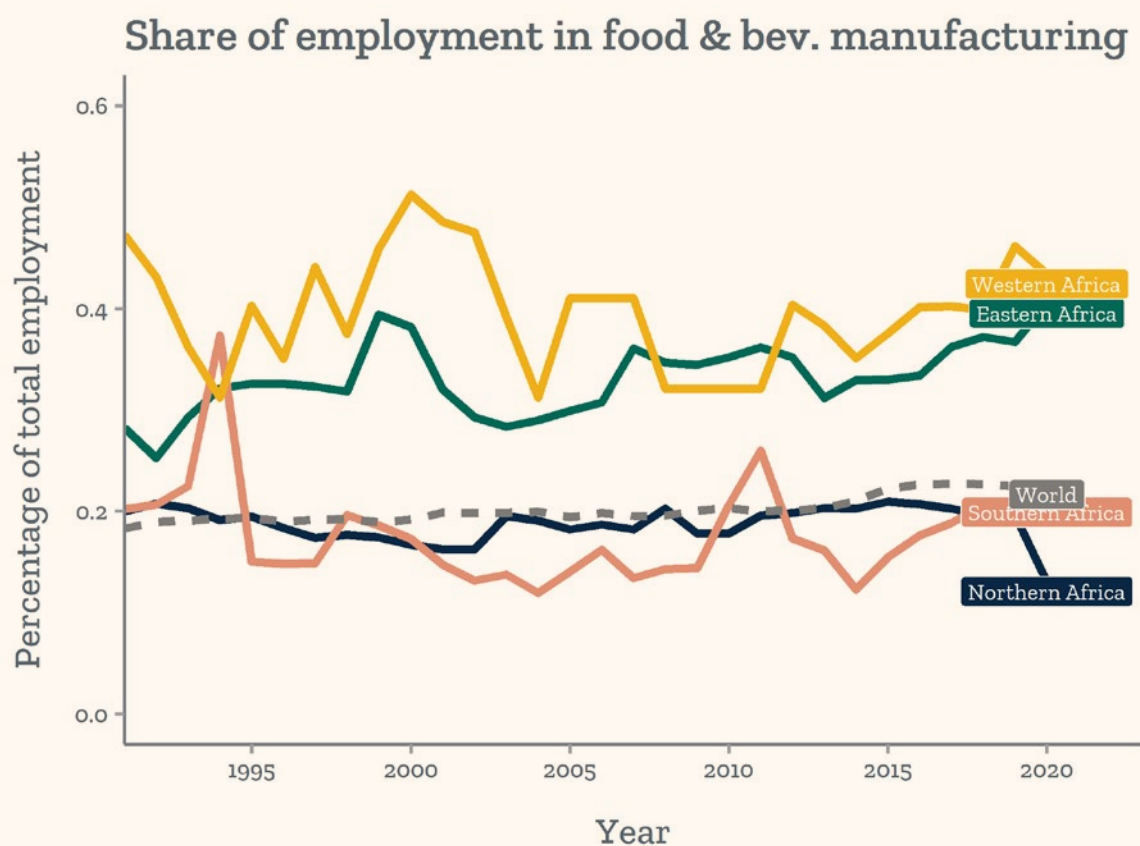
(Townsend et al., 2017). Within the agri-food system sector, food marketing (services) takes the largest share, followed by food processing and food-away-from-home. The job creating potential of these sectors is elaborated on below.

## JOB IN FOOD PROCESSING AND SERVICES

The food processing sector consists of activities such as milling grains, oilseed pressing, and other light processing activities. Although largely informal, formal food processing sector firms employ the largest number of workers out of all manufacturing activity in SSA. Food processing industries are particularly important for job creation, as they are more likely to be located outside of primary cities, and more than other industries, tend to create forward and backward linkages with food and non-food system activities. Additionally, they are labour intensive, and rely on unskilled labour from

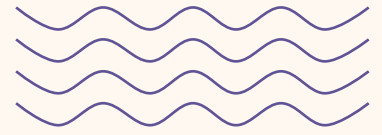
women and young people. This therefore leads to the conclusion that agriculture, and particularly agribusiness manufacturing will play a dominant role in absorbing the growing labour force and young people in SSA over the coming decades (Losch, 2016). Based on food demand growth, the agro-processing sector is projected to continue growing significantly over the medium term, although evidence is scarce on the exact number of jobs the sector creates, largely due to the informal nature of agro-industries.

Figure 13: Share of employment in food and beverage manufacturing, 1990-2020. (Source: UNIDO).



The development of activities in food services and marketing (e.g., transport, storage, wholesale, retail) is closely linked to urbanisation and the reliance on markets for gaining access to food. Allen et al. (2018) foresee that food service activities will continue to grow and provide the largest number of non-farm food jobs in the years to come in West Africa. In urban areas, food services and food-away-from-home account for 57% of all urban

food economy jobs in West Africa (Ibid.). The food-away-from-home segment is closely associated with incomes and is projected to grow faster than other food segments (Staatz & Hollinger, 2016). The sector is highly important for women's employment and generates high value added, also on imported products, and creates strong linkages with other food sources providing regular demand for other food system activities (Tschirley et al., 2016).



### 3.3

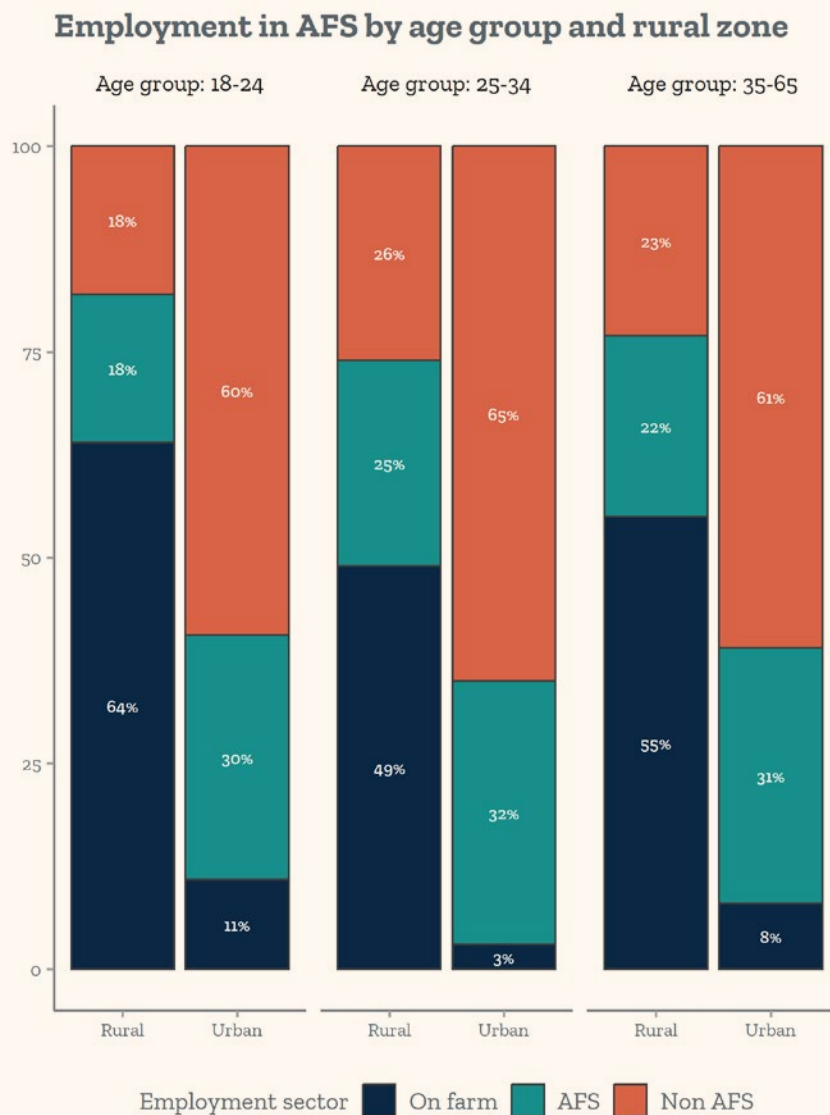
## Youth employment in the agri-food system

Young people’s participation in the agri-food system mirrors that of adults. Survey data shows that the agri-food segment is important for youth employment, including of women.

### YOUTH AND FARMING

As Figure 14 shows, full time employment in the agri-food system rises from 23% to 27% in young people, while farm work declines from a peak of 44% to 23% correspondingly. Hence, the trend shows that on-farm work remains the most accessible source of employment for young people. As they gain marketable skills and accumulate capital, they reduce the amount spent working on the farm and diversify their activities into the agri-food system and non-agri-food system sector.

**Figure 14:** Share of African labour hours worked on farms and in other agri-food system and non-agri-food segments of the economy, disaggregated by rural zone and age group. (Source: Dolislager et al., 2020).



While the notion that young people are disadvantaged because they do not “own” land is common in the policy literature (AGRA, 2015; FAO, 2010), there is some evidence that, between rental and family land, it is not at all obvious that constrained access to land is a significant issue. Other studies, (Djurfeldt et al., 2019) show that land rights do not discriminate against youth headed households in general. Other major constraints in youth-led agriculture households seem to revolve mainly around labour resources, and primarily around family labour, where the larger family sizes of older households explain the discrepancy in access to labour (Sumberg & Flynn, 2020). While there is little evidence that young people are abandoning agriculture, those that do want to pursue farming as a career envisage more mechanised forms of agriculture, with aspirations to taking on managerial roles and hiring labour (Yeboah et al., 2020).

## YOUTH AND ENTREPRENEURSHIP

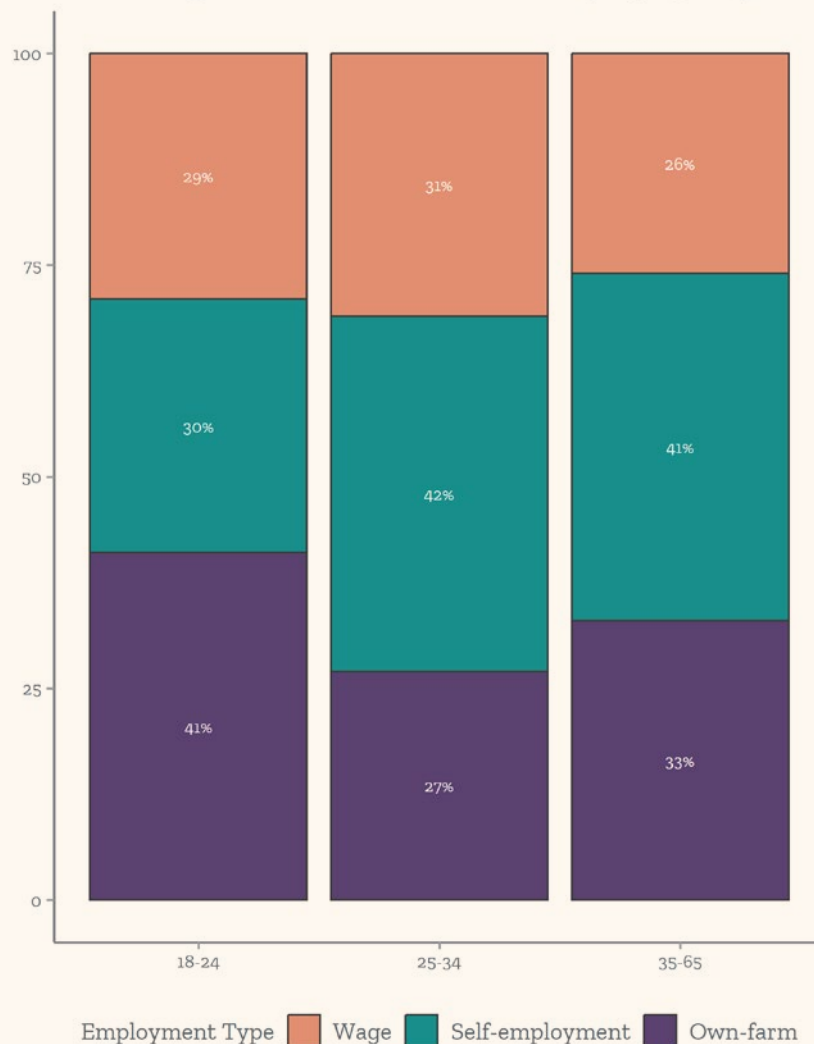
Similar to adults, a large proportion of youth are self-employed. As the figure shows, wage work in all age categories takes the lowest proportion of full-time employment, while self-employment jumps from 30% at 18-24, peaking at 42% at 25-35. This indicates that more mature youth, who have acquired skills and capital to start their own income generating activities move out of farming and into self-employment.

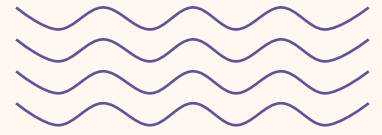
However, surveys show that resource requirements are generally low, limited by the small scale and nature of activities. Indeed, there is little evidence today that young people engage in farming, agri-food system or non-agri-food system self-

employment activities differently from their parents. In rural areas, many young people acquire farming skills and land from their parents, and practice agriculture for their own consumption and sale, engaging in the off-farm economy depending on seasonal labour demands. Within the agri-food system, there is little evidence that young people are significantly engaged with value chains, agribusiness firms or certification bodies, even in rural areas with higher levels of agricultural commercialisation (Flynn & Sumberg, 2021). Much of this activity is carried out at small scale, requiring little skill, low investments and minimal technology, with very few signs of specialisation within segments.

**Figure 15:** Percentage of African labour hours worked on own-farms, in self-employment, or in wage labour, disaggregated by age group. (Source: Dolislager et al., 2020).

**Percentage of labor hours worked by age group**

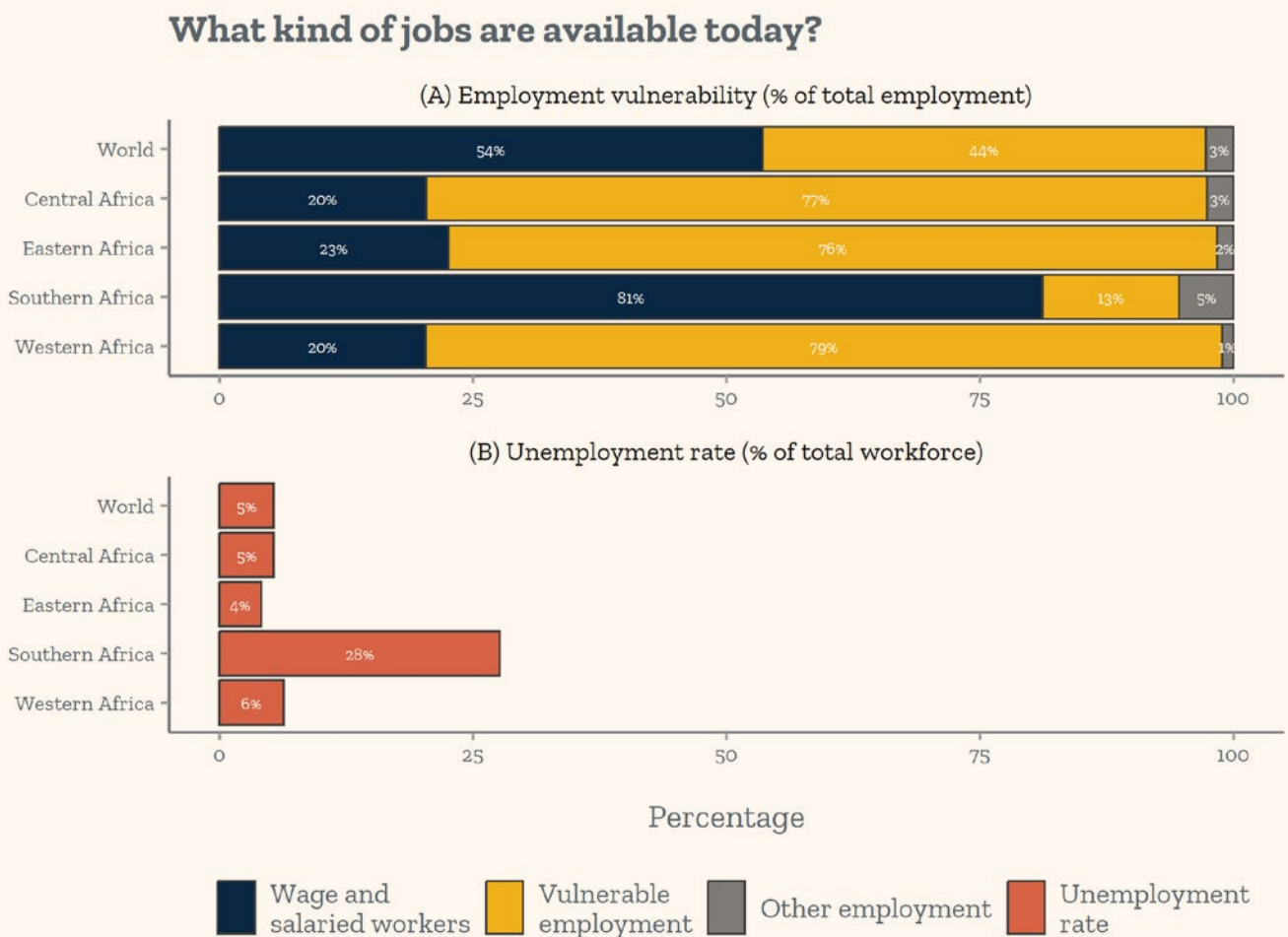




## YOUTH AND DIGNIFIED AND FULFILLING WORK

Formal sector employment in SSA makes up a very small share of total employment, with jobs largely concentrated in urban areas. As illustrated in figure 16, wage employment accounts for less than 30% of jobs in Eastern, Western and Southern Africa, with the remainder of workers as self-employed or contributing family workers in small businesses or farms (ILO, 2018).

**Figure 16:** (A) Percentage of workers in salaried or vulnerable employment. Other employment category represents any gaps between the sum of salaried and vulnerable employment and 100% of workers. (B) Unemployment rate as a percentage of the total workforce.



While very little data exists on the young people in the formal sector, a school to work transition study (2012-2013) carried out in 8 African countries found that, on average, only 18% of working youth were in regular employment (ranging from around 12% in Benin, Liberia, Madagascar, Malawi and Togo, to 42% in Tanzania). Of those with formal contracts, only 23% reported receiving paid annual leave, maternity/ paternity leave, social security

coverage or any other employment entitlements. Furthermore, gender disparities exist, with more men than women reported being in formal employment, with 22% of men compared to 15% of employed young women. Nonetheless, young people with tertiary education were four times more likely to be in stable employment compared to other young people.

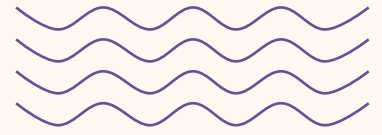
Hence, like older adults, young Africans work in precarious conditions defined by economic risk, instability due to seasonality of work, and a lack of social protections (Sumberg et al., 2020). Young people work in conditions where they must carry all risk associated with their income activity, often in high-risk, low reward situations, especially in the farming sector. Secondly, they must deal with instability of income, due to the seasonal nature of rain-fed agriculture, as well as casual daily labour activities (Filmer & Fox, 2014). Thirdly, they work without any form of social protection, since self-employed workers are not covered by labour and social protection laws, and in instances where they are, enforcement mechanisms are weak. Lastly, as the gig economy spreads, many more people will find jobs as contract workers, dependent on technological platforms that set the number of hours they work, and the prices that they can charge. These three dimensions of precarity cut across both the rural and urban economies, although seasonality may be more important in rural areas, and lack of protection for workers in informal business may affect more people in urban areas.

## **INCLUSIVITY**

The share of hours worked in agriculture were about the same for men and women, but men were more likely to be employed off their farm in agricultural wage work. Further, women are more likely to establish household enterprises. As highlighted earlier, this is because many household enterprise activities do not require large amounts of investment, including in the agri-food system, thus the barriers to entry are low. As a consequence, women, young people and marginalised people find employment within this sector. In all countries, as youth get older, they are more likely to work, although the share of women working lags behind men, especially in the higher-income group.

Women face specific difficulties in accessing productive employment (World Bank, 2012), and Africa is no exception. Early marriage and childbirth interrupt human capital development and reduces income earning prospects later; they also contribute to high maternal mortality rates.

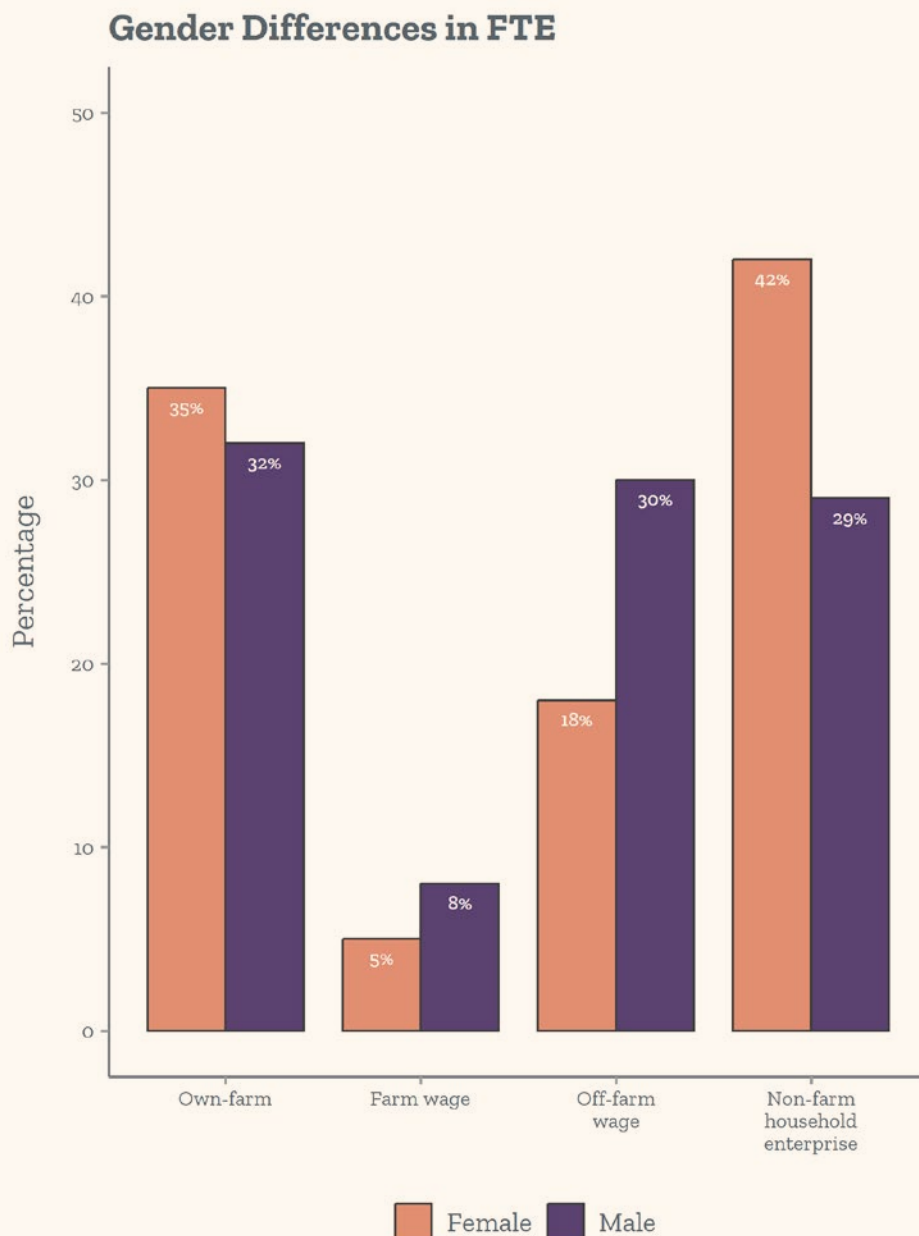




Once they enter the labour force, African women have less access to wage employment, and women's farms and businesses are on average less productive than men's, reflecting disparities in access to land, capital, and financing, as well as earlier gender gaps in educational attainment (Beegle & Christiaensen, 2019). Women face harassment at their place of work if it is outside the home. Women also face discrimination

due to social norms around acceptable activities for women as well as underestimation of their potential. Lastly, very little comparable data on youth with disabilities exists, although studies suggest that young people with disabilities are at a disadvantage, with lower rates of school attendance and higher rates of unemployment (Cramm et al., 2014).

**Figure 17:** Percentage of African labour hours spent working on farms, wage labour, or other enterprises, disaggregated by gender. (Source: Dolislager et al., 2020).

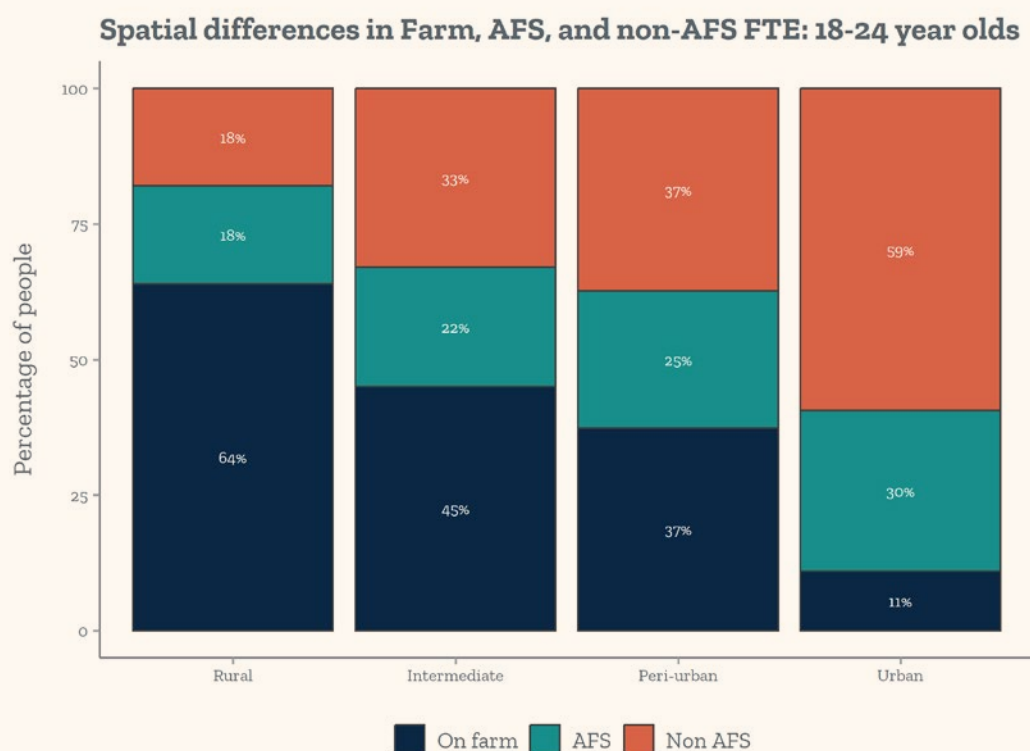


## SPATIAL DIFFERENCES

Lastly, important spatial differences in youth employment can be observed. This is confirmed by survey findings, as Abay et al. (2021) find that opportunities for young people in SSA are largely shaped by economic remoteness and agricultural potential. Therefore, in remote places, young people are more likely to leave school earlier and are less likely

to engage in the non-farm sector, compared with people in more accessible places. As expected, this is because the non-farm economy is more diversified in relatively more accessible places, offering a larger set of options for economic engagement, as compared to more remote areas.

**Figure 18:** Spatial differences in labour hours worked on farms, elsewhere in the agri-food system, and in non-agri-food system jobs for African 18-24-year-olds. (Source: Dolislager et al., 2020).



About two thirds of rural youth in developing countries live in areas of high potential for agricultural production, and about one third in areas that have access to potential markets for agricultural products; however, about one third live in areas where agricultural potential is medium or low, and one third in areas with limited opportunities for commercial production (IFAD, 2019). Of particular concern, therefore, is the future livelihoods of young people living in remote areas with low agricultural potential.

What seems clear from the available data, is that while the non-farm segments in food systems on their own are not a solution to the future jobs crisis, it can make a significant contribution, particularly in the first stages of the transition of the food system, which many low-income countries have

now entered. Furthermore, although declining in significance for rural households, the agriculture sector will need to absorb over 62 million workers in the coming decades, or about 38% of the labour force over the next 10 years (Fox & Gandhi, 2021). Although strong growth in the agri-food system and non-agriculture sector, declining birth rates and longer periods spent in school will reduce this number, it is unlikely that the labour force in agriculture will shrink in the coming decades, simply because employment in the agriculture sector in SSA represents the part of the labour force that cannot find wage employment or start a business (Fox & Gandhi, 2021). Improving productivity in the agriculture sector will thus remain a crucial part of livelihood improvements, as well as increasing access to markets and investment in rural infrastructure.



## Section Four

# 04

## Youth and agri-food systems: framing the issues

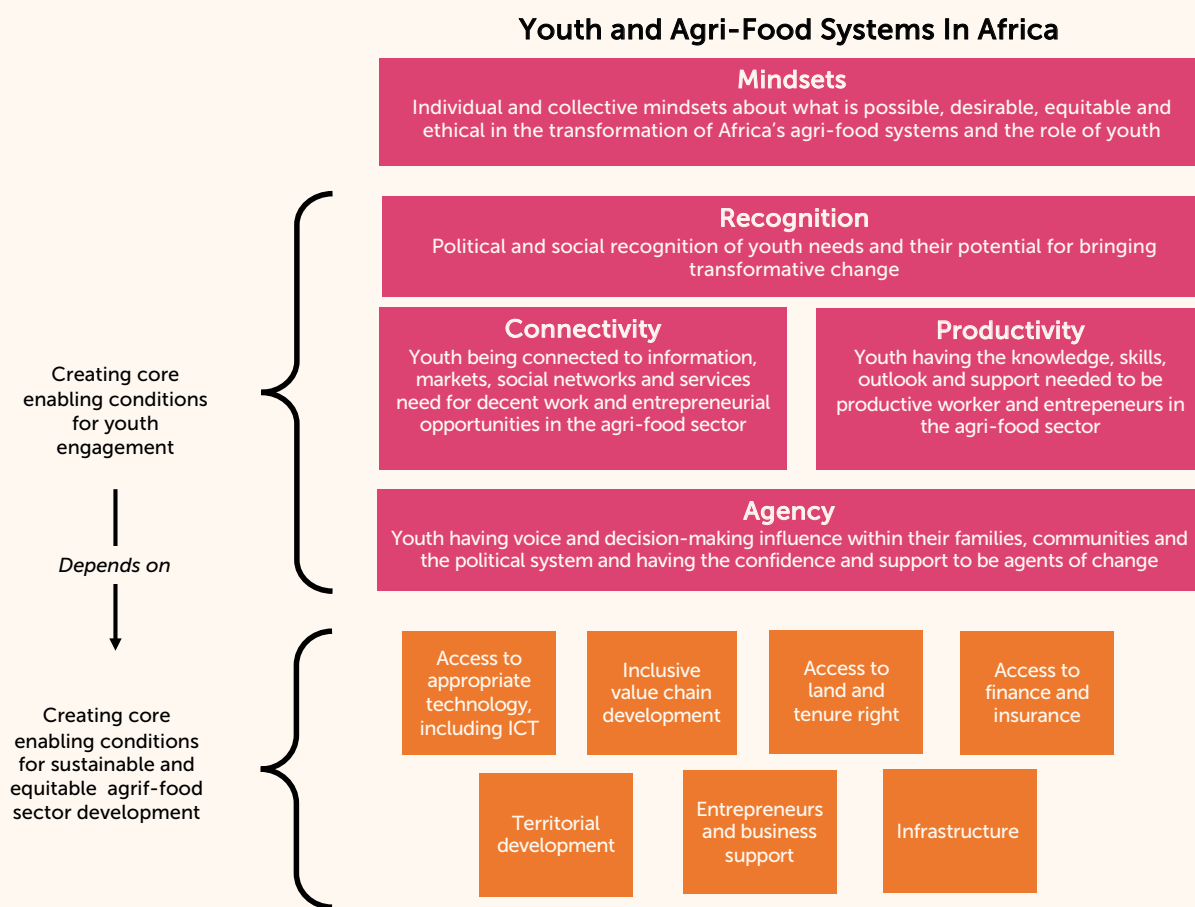
Youth is a time of transition from dependent childhood to adulthood, with economic independence, often achieved through employment, as a critical aspect of this transition. Young people, at the beginning of their working careers, are seen as an optimal investment to channel their capacity for innovation, tech-savviness, openness and appetite for risk into entrepreneurial activity that will unleash economic growth and create opportunities for dignified and fulfilling work. There is also considerable interest in harnessing and mobilising the energy of young people, as both producers and consumers within the food system, as agents of change for food systems transformation towards more equitable and sustainable outcomes.

However, in thinking about young people within the food system, it is important to remember that young people in SSA face a constrained set of opportunities under the same conditions that older generations operate under. As Section three and four illustrated, Africa's food systems are in transition, and are growing rapidly to meet urban food demand, with the formation of MSMEs, and the creation of new jobs along the agri-food value chain. Consequently, it is likely that many of these

young people will find opportunities within the agri-food system in the coming years. Many rural youths, particularly in remote areas, however, will continue to depend on agriculture as their main livelihood activity. Nonetheless, young people's employment opportunities will depend on the overall economic opportunities in the economy, which depends on the extent of economic transformation and income.

Therefore, above and beyond initiatives that specifically target youth, priority should be given to broader structural issues which have the potential to deliver better and larger results, for both young people and others. Therefore, creating core enabling conditions for youth engagement depends on creating enabling conditions for sustainable agri-food sector development. Furthermore, young people face a specific set of challenges due to their transitional stage, when acquiring marketable skills and capital is necessary in order to transition into adulthood. Figure 19 illustrates the role of young people in relation to overall food system transformation. Mindset change and the recognition of young people as agents of transformative change is also necessary (HLPE, 2021; IFAD, 2019; Woodhill, 2019).

**Figure 19:** Youth and the agri-food system in Africa: framing the issues. (Adapted from HLPE, 2020; IFAD, 2019; Woodhill, 2019).



Source: Adapted from IFAD 2019, HLPE 2021

Engaging and empowering young people to co-create their future within an existing system that is constrained by many challenges is frequently highlighted in discussions on improving overall opportunities and conditions in the agri-food system. Such challenges include inadequate infrastructure, ICT services and public services, weak land tenure rights, low access to finance and insurance, and weak governance. Hence, improving value chain coordination and territorial development in an inclusive manner would significantly improve opportunities for all food system actors, including young people as a group. While some specific youth related interventions may be necessary in addressing agri-food system constraints, investments in these basic pillars of development would benefit all agri-food system actors.

Secondly, food systems are dynamic, self-organising systems, and like all systems with multiple agents acting in their own interests,

contain opportunities to improve governance and coordination processes in order to facilitate innovation for systems change. However, a shift from the existing format of agri-food systems in order to pursue sustainability, equity and resilience can be met with resistance from incumbent actors. Furthermore, the embedded nature of technology, misaligned institutional settings, individual attitudes, political economy factors, infrastructure rigidities and misaligned research and innovation processes may undermine systems transformation, in favour of a continuation and intensification of existing industrial food and farming production models, which benefit powerful, incumbent players in the food system, often at the expense of long-term sustainability and equity (Conti et al., 2021). This therefore requires the creation of leadership and alliances to foster innovation and change, that is informed by the political economy and existing power relations of food systems. This requires mindset change, and the recognition of young people as agents of transformative change.

Lastly, young people as a group face a specific set of challenges due to their transitional stage, where acquiring marketable skills and capital is necessary in order to transition into adulthood. These needs are discussed in detail below.

## MINDSETS

Mindsets refer to established sets of attitudes and beliefs that govern individuals and communities. Systems change requires an examination of collective and individual mindsets on what is possible, desirable, equitable and ethical in the transformation of Africa's agri-food system and the role of youth in this process. The past impacts present and future mindsets, which is shaped by events including colonialism. Power asymmetries and inequalities are linked to Africa's colonial history and need examination. African cultures and values need re-evaluation, since colonialism has influenced them. Current systems limit freedom and agency, sustained by institutions like education, business, church, and media. Mental models are crucial in perceiving and interacting with the world. Changing them is necessary for addressing power dynamics and social norms. Shifting mental models is best done through foresight, bringing together diverse stakeholders.

## RECOGNITION

Political and social recognition of youth needs and their potential for bringing transformative change. Political recognition means that young people are taken seriously as political actors, with needs and demands that should be integrated into political decision-making and planning. Social recognition of young people means respecting the autonomy of young people, as independent, capable actors to drive social change and transformation. Survey data shows that African youth participate less actively than adults in local policy processes and national politics (Afrobarometer, 2017), although rural youth, like rural adults, are in contact with their local leaders more than their urban counterparts. Overall, however, the levels of participation in policy processes are generally low throughout Africa (less than 40% in most countries). Although there is a general belief that greater civic and political participation leads to better policy outcomes,

further reflection is needed on effective forms of political engagement and influence that young people can engage in.


## CONNECTIVITY

Improving connectivity to markets is critical, particularly for young people living in remote areas with few options in the non-agri-food sector. Hence, investments to facilitate rural mobility, investments in rural infrastructure to improve access to energy, water and sanitation services, as well as the expansion of ICT infrastructure and social networks is critical to support young people in the agri-food system.

### Investments to facilitate rural mobility:

As highlighted in Section four, a large proportion of young people live, and will continue to live in remote rural areas that are disconnected from the rest of the country. For these young people, there are limited options in the non-agri-food system sector, while the benefits of agriculture commercialisation are unlikely to improve their outcomes due to isolation. Despite fears of mass migration out of rural areas, emerging evidence shows that young people often migrate from remote rural areas to other rural towns and urban centres in search of seasonal economic opportunity to supplement farm incomes. Furthermore, evidence shows the significance of migration (rural to urban as well as international) as a mechanism for improving the livelihoods of youth and their families (IOM, 2018). Further, general mobility is seen as a key to unlock economic opportunities for rural youth in Africa (Porter, 2002). Therefore, investing in mobility between rural areas and peri-urban and urban centres may prove to be worthwhile and could facilitate the forward-backward linkages between agriculture and non-agricultural sectors in these urbanising areas. Thus, it would be prudent to make investments that improve the infrastructure of semirural and peri-urban areas and especially those that link remote areas with secondary and tertiary towns.

**Investments in ICT:** Investment in telecommunications infrastructure and the availability of affordable feature phones has extended the availability of mobile phone services to rural areas in Africa, implying the wide availability



of internet and telecommunications services to previously unserved populations. Nonetheless, the cost of operating a mobile phone remains prohibitively expensive in many countries (ITU, 2017), and is out of reach for young people who are under or unemployed. Additionally, they do not overcome other infrastructure challenges, such as inadequate and erratic power supply, making it difficult for young people in rural areas to remain connected via technology. While future growth in the use of ICT in SSA is indeed expected, the advantages of the technology will not be realised automatically. Interventions to increase access to ICT among rural youth as well as to enhance their skills in using ICT for expanding their opportunities and taking advantage of available opportunities will be necessary if the digital dividend is to be coupled with the demographic dividend in rural Africa. These include innovation hubs, training and funding mechanisms for innovation and entrepreneurship.

**Social networks:** Networks and know-how are particularly important for urban youth seeking to land their first real job. Youth from small towns or rural areas, or from excluded groups, may not have these networks, leading to a longer period of transition. Social networks can be built and developed through engagement in community youth groups, which would also be areas for young people to continue developing critical socio-emotional skills such as perseverance, confidence, curiosity and communication (Filmer & Fox, 2014; Fox, 2019).

## PRODUCTIVITY

Young people need to develop marketable skills and gain access to productive assets in order to fully make use of the opportunities available to them within the agri-food system. As shown in Section four, many opportunities today, and in the near term, will be in income generating activities in the agri-food system. Furthermore, much of this activity remains in the informal sector, with young people facing similar constraints as other actors within the informal sector, including hostility from government agents, low levels of investment, and insecure working conditions with few social protections. Furthermore, informal sector activities in the agri-food system, such as retail food preparation services are an important

source of income for young people, women and other politically and economically marginalised people, and thus merit more attention for equity and inclusivity. Given that informality will remain a defining feature of the agri-food system, investments should focus on addressing the constraints that all MSMEs face, especially on food handling skills and entrepreneurship training, rather than formalisation.

Although many young people in SSA are economically independent by age 25 (Filmer & Fox, 2014), these types of activity, sometimes labelled **“survival entrepreneurship”** are at very low levels of productivity, with limited prospects for future growth or transition into more productive work. In rural areas, increasingly the reality is not one of small-scale farming households, but of rural households who also farm (Woodhill et al., 2022). Investing in the productivity of young people should be considered in terms of a livelihood approach, with young people engaging in a multitude of activity, both on farm and off the farm, particularly in rural areas. Increasing productivity can be facilitated by making investments in education and marketable skills, facilitating young people’s access to productive resources, particularly in the agriculture sector, and working with the informal sector to improve working conditions. In more detail:

**Education:** Although universal primary education was greatly expanded in the last decades, school completion rates remain very low. For many young people, especially in rural areas, financial difficulties or a lack of interest in school put an early end to their formal education. Dolislager et al. (2020) estimate that 57% of youth aged between 15-17 in SSA work during some part of the year, and by age 15-19, 30% of young people have already dropped out of school and are working full time. In surveys carried out with young people in rural areas, Yeboah et al. (2020) find that young people link their poor school performance to the paid or unpaid work that they did while studying, and express dismay about their inability to continue in education or training which, they believe, would have opened the prospect of skilled work or formal employment. Not surprisingly, studies find that child labour in SSA is also associated with lower school attendance and achievements (Filmer & Fox, 2014), and thus poorer labour market outcomes.

**Marketable skills:** Outside of formal education, the acquisition of marketable skills is critical for young people during their transition into work. Many “soft” skills valued by employers are usually learnt through experience, not through formal education or skills development. As a consequence, the transition from school to work is challenging, with young people worldwide experiencing difficulties integrating into the job market. For young people with a university education, this transition period may take form of numerous, short-term contracts, internships and apprenticeships, before eventually settling down into gainful employment. For young people in rural areas, this transition period takes form of apprenticeship and learning by doing with friends, family and community members. Indeed, surveys of rural youth (Yeboah et al., 2020) find that young people in rural areas express disappointment with formal education, and usually acquire basic marketable skills from unpaid work with friends and relatives. This takes the form of skill acquisition in food processing, farming or jobs in the off-farm sector such as hairdressing or construction work.

Thus, it is paramount to make investments to promote further education of all young people. An important aspect of this is investment in long-term, skills development programmes for young people, that can equip them to take advantage of emerging opportunities within an evolving agri-food system. This includes fundamental, transferable skills such as literacy, numeracy, problem solving, communication and negotiation, and agency (Arias et al., 2019). Investments should also be made in agri-food system specific skills, including business management, accounting and recordkeeping, and tech literacy, which would help young people use increasingly sophisticated means of communication and advice such as digital extension services. Furthermore, it is critical to pay particular attention to young women (15-17 years) to enable them to complete their secondary school education and beyond, since higher levels of education are negatively correlated with early marriage and motherhood. Lastly, programmes should be designed to support young mothers to complete their education.

**Productive assets:** Given that a large proportion of young people will continue to live in rural areas, investments in improving agricultural productivity remain paramount. This includes investment in research, agricultural research and development and in market access to farm inputs, which have been shown to result in increased agricultural productivity. Furthermore, some evidence has shown that rural youth do not have adequate access to productive assets, hence investments should be made in facilitating access to productive assets, especially agricultural land, water and equipment. Beyond that, investing in climate-proofing agriculture is paramount to ensure resilience in the sector, given that climate change predictions present scenarios in which African agriculture will be more exposed to climate shocks and is likely to be more vulnerable if the necessary investments are not made sooner rather than later (Brooks et al., 2019).

Secondly, a significant proportion of young people in peri-urban and urban areas will find self-employment in the agri-food system, typically in food services or small-scale processing. Further, informality may mean they lack collateral/financial reserves to be able to expand. It is thus critical to work with informality, and opportunities to provide infrastructure and investments upstream as well as downstream, including supporting workers with planning, infrastructure and food-handling skills. Social protection programmes can be used to enable people (of all ages) to enter markets on less exploitative terms and from a position of greater security (Sumberg et al., 2021). Lastly, when designing programmes to support youth entrepreneurship, it is important to distinguish between underemployment and employment in low-paying jobs and analysing them in a disaggregated fashion matters to inform different strategies and investments needed to address these issues (IFAD, 2019). While there is little convincing evidence that youth entrepreneurship is a pathway to employment for young people<sup>6</sup>, investments and training in entrepreneurship are better targeted at older youth who have acquired skills and knowledge to run businesses.

<sup>6</sup> Most businesses operate at a subsistence level and do not create new jobs for others (OECD Development Centre, 2018p. 5). This is not surprising, as (a) successful entrepreneurs, who employ a significant number of employees on a formal basis are rare, only about 2%–5% of the labour force in developing countries, and (b) they tend to be over 30 years old (Fox & Kaul, 2018).

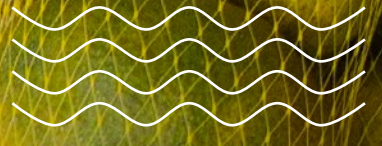


## AGENCY

The expansion of agency is expressed in various domains of life, including relationships, work and consumption. As young people transition into adulthood and independence, their decision-making power increases, as do their responsibilities and accountability to others. Indeed, youth surveys show that young people aspire to better futures, hoping to gain access to more productive assets, continue their education, and raise families. In the case of young people in rural areas, migration does not figure particularly prominently in their imagined futures or future plans (Yeboah et al., 2020). However, the dynamics of youth engagement in food system-related economic activities is shaped by other identities, attributes and circumstances, including gender, ethnicity, economic geography, socio-economic position (including migrant status), educational attainment, and access to productive resources. Furthermore, their agency is restricted by overarching power structures and economic processes of food systems (Sumberg et al., 2019). Youth are therefore likely to need support to overcome structural obstacles, access resources, acquire skills, build confidence, and feel empowered to create, build and pursue new,

sustainable and productive livelihoods, depending on their specific attributes and circumstances (Glover & Sumberg, 2020).

**Empowerment:** Socio-emotional skills for economic and social integration, and active citizenship, are equally important, to nurture confidence, help find opportunities, work with others in various roles and negotiate better outcomes, including better working conditions. This is even more important since many young people will find work on small-scale household farms and firms, where working conditions are characterised by precarity and informality, with little infrastructure or investments that support safety or decent work conditions (Vorley, 2023). This is especially a challenge in sectors such as food processing and retail services, which are overrepresented by women and young people. Hence, there is need to support the capacity of people to defend what is working and improve what is not, using evidence, advocacy and organisation. Approaches will need to be adapted, especially in situations where informal actors are wary of visibility.



# Section Five

# 05

## Emerging insights from the data

Given the complex interdependencies between agri-food system drivers, system nodes, and outcomes, examining data across several domains can provide insight into how regional and global changes may have implications for youth employment in the agri-food system. Below, we explore recent trends and proffer possible forecasts for several drivers – organised into the domains of (i) population dynamics and urbanisation, (ii) agricultural productivity, and (iii) economic development – to explore emergent insights from the data on agri-food system functioning and youth employment.

### **DOMAIN 1: POPULATION DYNAMICS**

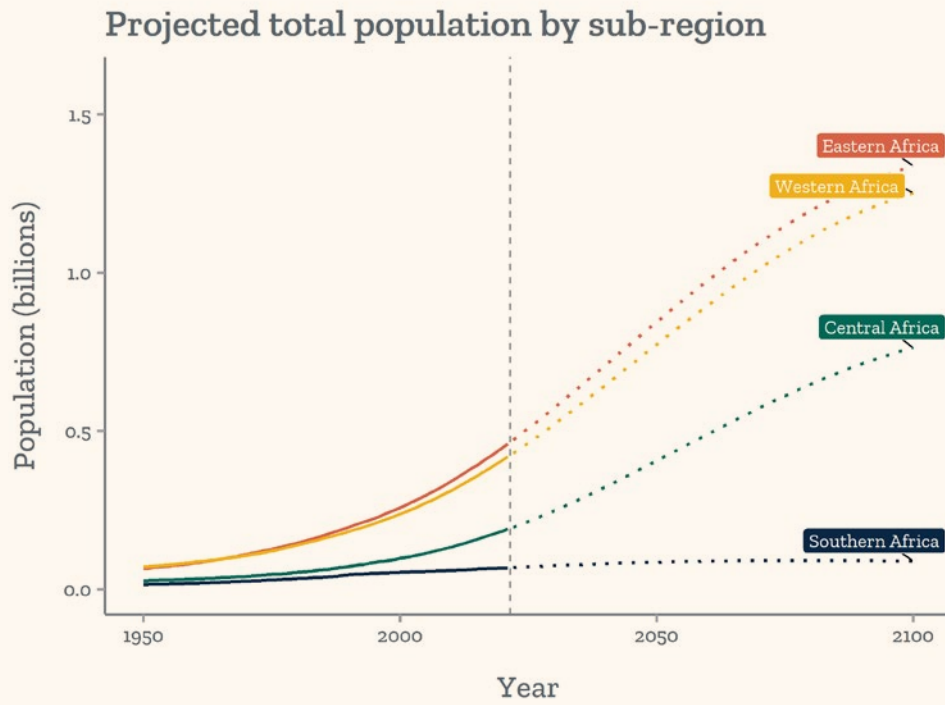
Population growth is a factor with resounding effects on agri-food system functioning. Over the coming decades, the population in SSA is expected to grow exponentially to the point where it will rival the size of large global population centres such as China and India. Eastern and Western Africa, already the most populous regions in SSA, are expected to grow to nearly one billion people each by 2050 (Figure 20). Central Africa is expected to grow to approximately 500 million people by 2050, while Southern Africa's population is expected to undergo modest growth over the same period.

Population growth has two direct effects on the functioning of the agri-food system. Population growth means a larger potential labour force for

nodes of the agri-food system, such as production, food manufacturing, and food service jobs. At the same time, a growing population means greater demand for food, which may, in turn, tax cropland resources or necessitate a higher degree of regional and global trade.

Population growth and urbanisation among youth in SSA will have a large impact on the available agri-food system labour force, and which agri-food segments experience the largest growth in youth employment. Figure 21 demonstrates that as expected, the largest growth in youth population is expected in Eastern and Western Africa, Central Africa will see modest growth, and Southern Africa will experience very little growth in the youth population. Eastern and Western Africa differ in expected spatial distribution of youth – by 2050, the majority of youth in Western, Central, and Southern Africa will live in cities, while the majority of youth in Eastern Africa will continue to reside in rural areas as they do today. The implication of this trend is that more Eastern African youth will find agri-food system employment in agriculture or in other rural-centred food jobs such as aggregation and transportation, given that agri-food system employment is concentrated in rural areas. The more highly urbanised youth in Western, Central, and Southern Africa may be more likely to find agri-food system employment in food manufacturing, distribution, and service industry jobs.

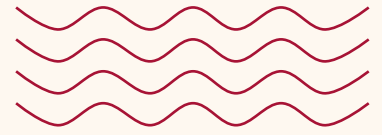
**Figure 20:** Historic and projected total population in SSA, 1950-2100, aggregated at the sub-regional level. Population projections are based on a medium-fertility model. Sub-regional values are calculated as the sum of their constituent countries. (Source: UN Population Prospects, 2022).



**Figure 21:** Projected youth population (18-35-year-olds) in SSA, 2010-2050, aggregated at the sub-regional level and disaggregated by urban and rural populations. Sub-regional values are calculated as the sum of their constituent countries. The projections in this figure are based on the Shared Socioeconomic Pathways (SSP) scenario 2, which assumes moderate challenges to climate change adaptation and mitigation. These figures are generated using data available on the SSP database hosted by the IIASA Energy Program at <https://tntcat.iiasa.ac.at/SspDb>.







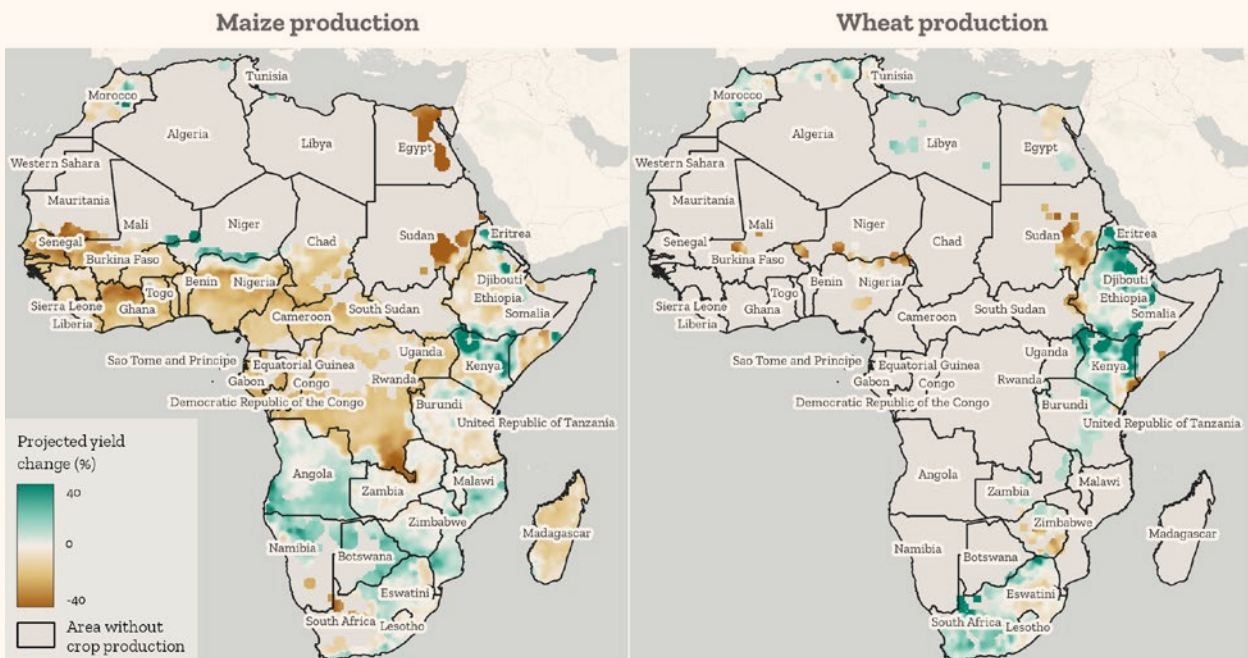
## DOMAIN 2: AGRICULTURAL PRODUCTIVITY

Agricultural production, a key driver of the scale and variety of employment in the agri-food system, is highly dependent on biophysical conditions and technology. This is especially true in SSA, where many farmers are dependent on adequate rainfall, soil fertility, and available cropland to grow food, and where access technologies for mechanised farming and precision agriculture is not widespread at this time. The projected impacts of climate change on environmental conditions are likely to impact agricultural productivity substantially. Additionally, population growth and the ways in which societies mitigate, or fail to mitigate, and adapt to climate change will likely affect the cropland available for farming. Together, these factors will substantially shift how agricultural production in SSA affects agri-food system employment.

In a climate change scenario in which global average temperatures increase between 2.4-4.4°C or more

above pre-industrial levels by 2100, crop growth conditions are expected to lead to a reduction in maize yields across Western and Central Africa (shown in brown), and large swathes of Eastern Africa compared to average yields for 1986-2013 (Figure 22). Simultaneously, Southern Africa and some areas of Eastern Africa are expected to see a rise in maize productivity (shown in turquoise). Wheat, a less-commonly farmed crop, is expected to fare better under this climate change scenario, with yields expecting to rise across large areas in Eastern and Southern Africa compared to recent average yields. Due to a dearth of large-scale data on technology use in farming and experiences in climate-smart agriculture, it is difficult to discern precisely how technological innovations and adaptation measures will avert some of the more extreme declines in maize, a key staple crop throughout the region.

**Figure 22:** Projected impacts of climate change on maize and wheat production in Africa in 2069-2099, compared to production in 1986-2013. The prediction model assumes a 2.4-4.4°C warming scenario. (Source: Intergovernmental Panel on Climate Change, 2022).



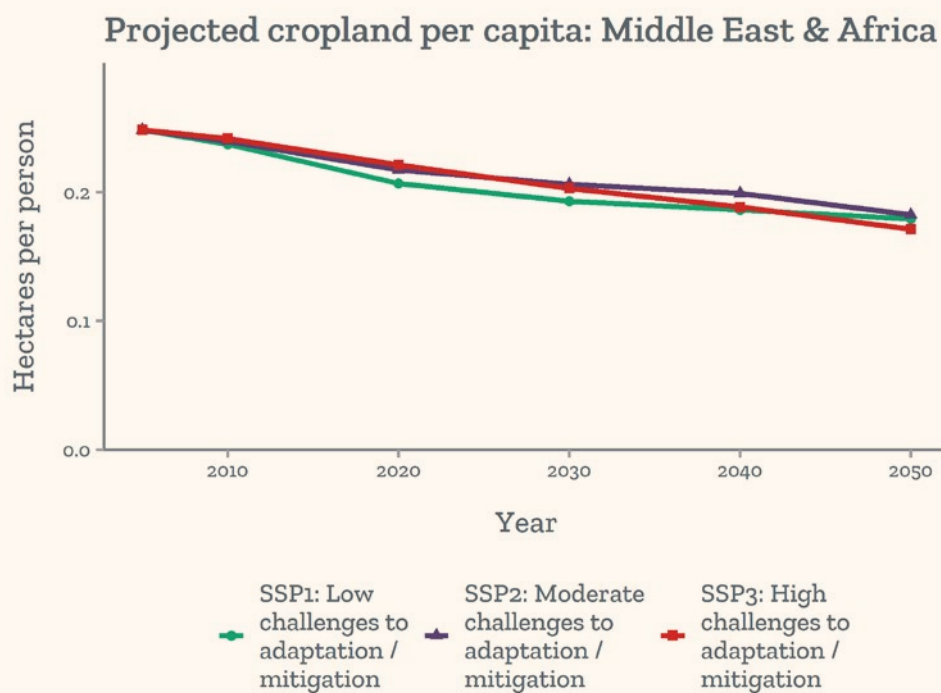
Cropland availability is another factor that influences agri-food system employment. More available cropland may mean that a higher proportion of the population works within the agri-food system by working on their own farms. It may mean more jobs available in rural areas for young people

without access to their own land yet. Additionally, the ability of farmers to work larger plots of land may enable them to adopt technologies that improve agricultural productivity, such as through mechanisation. As Figure 23 indicates, per capita cropland in Africa and the Middle East is low

and expected to get lower as societies grow in population and work to mitigate and adapt to climate change.<sup>7</sup> As of 2020, there is approximately 0.2 hectares of farmland available per person in the region. The three Shared Socioeconomic Pathways (SSPs), with their unique and differentiated assumptions about outcomes like population growth and deforestation, show a relatively narrow range of future values of per capita land availability,

at roughly 0.17 hectares/person by 2050. A scenario with low climate change challenges may be associated with a lower rate of population growth and a push to reduce conversion of wildlands into croplands, while a scenario with high climate change challenges may involve a high rate of conversion of wildland into cropland but also a high rate of population growth.

**Figure 23:** Projected changes in per-capita cropland in Africa and the Middle East in various climate change adaptation scenarios. This figure is based on the Shared Socioeconomic Pathways (SSP) database hosted by the IIASA Energy Program at <https://tntcat.iiasa.ac.at/SspDb>.

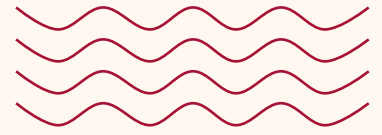


### DOMAIN 3: ECONOMIC GROWTH

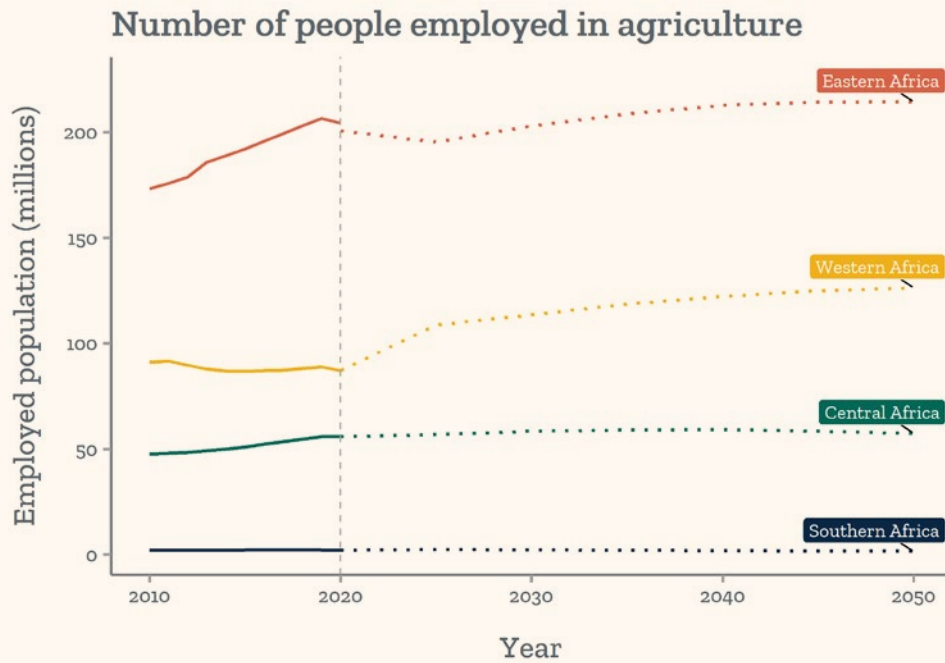
The agri-food system has been an economic engine for many economies in SSA. However, overall economic growth has also been associated with decreasing reliance on the agri-food system to drive economies. This has implications for whether the agri-food system will sustain its role in providing employment for large sections of the population. Figures 24 and 25 demonstrate that even as the total number of agricultural workers will increase across Eastern, Western, and Southern Africa, agricultural workers will represent a smaller share of the workforce overall. The figures below are out of step with expected population growth due to growth in non-agricultural components of the economy.

Non-agricultural growth has led to agriculture playing a less prominent role in overall employment than it has in the past. Considering how this trend may look moving into the future, economies in SSA may see growth in both population and their economies at large, but the declining share of agricultural employment may lead to only modest growth in the total number of people employed in agriculture. Whether agricultural workers will find employment in other segments of the agri-food system will depend in part on growth in those segments of the economy, which are more difficult to track due to a lack of systematic data.

<sup>7</sup> SSP cropland models are pre-packaged at the aggregated geographic scale of Middle East and Africa, and it is not possible to disaggregate below that geographic level.

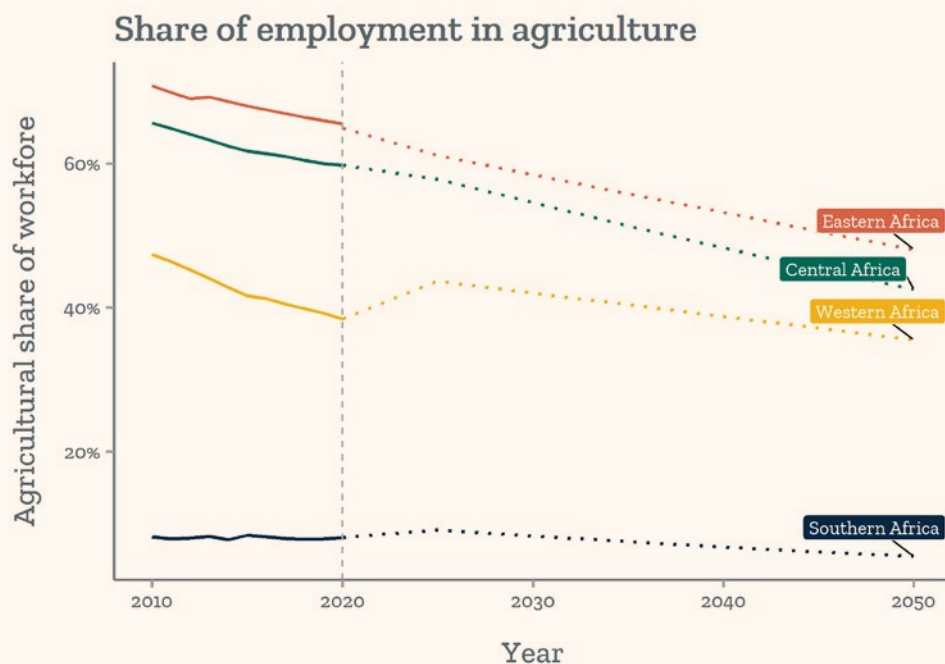


**Figure 24:** Number of people employed in agriculture, aggregated at the sub-regional level. Solid lines represent historic data from the World Bank WDI. Dotted lines represent predictively modelled data based on GDP per capita and population change over time from Shared Socioeconomic Pathways (SSP) scenario 2, which assumes moderate challenges to climate change adaptation and mitigation. Sub-regional values are calculated as the sum of their constituent countries. This figure is based on the SSP database hosted by the IIASA Energy Program at <https://tntcat.iiasa.ac.at/SspDb>, World Bank WDI, and Mathematica calculations.




Data source: World Bank WDI, SSP, Mathematica Calculations

**Figure 25:** Agricultural share of workforce, represented as percentage of all employment. Dotted lines represent predictively modelled data based on GDP per capita and population change over time from Shared Socioeconomic Pathways (SSP) scenario 2, which assumes moderate challenges to climate change adaptation and mitigation. Sub-regional values are calculated as the weighted mean of their constituent countries. This figure is based on the SSP database hosted by the IIASA Energy Program at <https://tntcat.iiasa.ac.at/SspDb>, World Bank WDI, and Mathematica calculations.



Data source: World Bank WDI, SSP, Mathematica Calculations



# Section Six

# 06

## Scenarios for the future of decent work in the agri-food system

As illustrated by COVID-19, extreme weather events, volatile food prices and the geopolitical fallout from the Ukraine-Russia war, turbulence and uncertainty are increasingly the norm. It is impossible to predict the future, but it is possible to use scenarios to explore different ways in which the future might unfold. Such scenario thinking helps to be more aware of future risks and opportunities and to bring imagination and creativity into ambitions, visions and goals for the future.

Scenario analysis and generating visions for the future go hand-in-hand. Scenarios enable deeper thinking on what might be shaping the future and what could enable or constrain the realisation of a vision for the future. Developing scenarios is also a powerful way of bringing diverse stakeholders together to explore assumptions about the future and to create a shared understanding of what they see as more or less desirable futures.

This section describes four possible futures for youth employment in the African agri-food system over the next 20 years. They are neither predictions, nor are they meant to be definitive. They are presented in order to stimulate debate on how we can shape youth employment in the agri-food system, and to inspire deeper reflection on necessary investments and changes needed to bring about desirable outcomes. The scenarios are

a result of research, analysis and discussions in a workshop by a group of young people comprising entrepreneurs, researchers, policy makers and youth organisations advocating for action on climate change, trade integration and other critical issues for the future of the African agri-food system.

The main message from this work is that, based on trends in population growth and economic development, it is likely that the majority of young people in Africa will find work in the agri-food system. The agri-food system is in transition, growing and expanding to meet rising demand. This creates many opportunities for producers, entrepreneurs and businesses. However, the quality of work young people can expect within the agri-food system is uncertain, and depends on how agri-food system actors respond to trends such as climate change, global trade, new technology in the context of a growing population. Through concerted and deliberate action, it is possible to transform Africa's agri-food system to create a resilient, sustainable system that provides decent work as well as healthy and nutritious food for Africa's future generations. Ultimately, the future depends on the choices we make today. The message of the scenarios is, as primary actors, we have the opportunity to shape the future that we want.



*At the “Optimizing Opportunities for Youth Employment in Africa’s Agri-Food Systems”<sup>8</sup> workshop, participants foresaw four possible outcomes over the next twenty years. These are:*

- **Locally Linked:** Youth-led innovation for local food systems
- **Big Tech Dominates:** Divided opportunities for youth in the agri-food system dominated by high tech and larger scale business
- **Africa turns the tables:** Youth capture opportunities as Africa leads the way on changing the global food systems game
- **Collapse and Crisis:** Youth struggle in a collapsed agri-food system

Rather than predicting the future of youth employment in the African agri-food system, the aim of these scenarios is to provide a simple framework for possible trajectories in order to start a conversation.

### *The paths that will be taken depend on answers to the following questions:*

**What will be the (rural) youth employment demands over the coming decades?** Exact numbers cannot be predicted, and while there are already significant changes that have resulted in a downward revision of the overall expected number, it is still quite certain that Africa will be home to the largest population of working age people by 2050. This means that a large number of young people in rural areas will be looking for gainful work in the next decades.

**How are employment patterns across different sectors in Africa’s economies likely to change given differing trajectories for economic development?** The future of youth work depends on the fundamental structure of the economy. How is the economy likely to change over the coming decades?

### **What are the likely mega-trends and uncertainties for Africa’s agri-food system to 2050, and what are the implications for employment?**

A set of mega-trends were identified through literature review and workshop discussions, including climate change, geopolitical instability, technology, natural resource degradation, dietary trends and others, which are expected to influence agri-food system outcomes.

### **What types and scale of youth employment could there be in different parts of the agri-food system (production to consumption) given differing scenarios for the future of African economic development and food systems?**

The African agri-food system is in transition, with the emergence of numerous SMEs in the midstream. Growth and consolidation may see the emergence of monopolies, while deliberate policy may sustain flourishing SMEs. How will trends, investments and policy shape its future trajectory?

<sup>8</sup> The future for youth in Africa’s Agri-food systems was held in June 2023 in Mombasa, Kenya, and brought together African youth representatives, youth leaders and experts in Africa to discuss the future for youth in Africa’s AFS. The workshop summary report can be found [here](#).

### **In what ways could the agri-food sector provide quality employment opportunities for marginalised or excluded groups including young women?**

Decent work will depend on the overall structure of the agri-food system, which will be influenced by trends. However, uncertainties and threats will have a greater impact on women, young people and marginalised groups. How can policy makers and other agri-food system actors ensure that everyone finds decent, meaningful work under increasingly challenging circumstances?

### **How could the agri-food sector help to catalyse wider rural economic development to generate non-agri-food sector employment opportunities for youth?**

The development trajectories of other countries have shown that rural areas are sometimes neglected in favour of urban development. Is this the best choice for the African agri-food system, and how can we make investments and policy choices to ensure equitable development in both urban and rural areas?

## **UNCERTAINTIES AND WHY THEY MATTER**

A core part of scenario analysis is identifying the critical uncertainties that could lead to different futures. This section details twelve critical uncertainties identified during the foresight workshop which could lead to very different futures for Africa's agri-food system with profound implications for the opportunities and wellbeing of youth.

**Dietary trends:** Food preferences are influenced by income, food cost, and awareness of consumption. As income increases, people eat less starchy staples and more fruits, vegetables, animal protein, sugar, and vegetable oils. However, marketing and trade liberalisation have led to increased consumption of cheap, ultra-processed foods, resulting in overnutrition and related diseases (Popkin et al., 2020). Dietary trends in Africa will be shaped by the extent to which healthy, nutritious food is available and affordable, particularly for the rural and urban poor, who will continue to substitute cereal staples and nutritious food for cheaper, ultra-processed alternatives. Overall affordability and availability of food will be determined by our ability to increase food production by investing in resilient agriculture, innovation and infrastructure. Sustained pressure on governments will be necessary to strengthen food system governance to limit corporate influence on food price, quality and nutritional content.

**Climate resilience:** Africa is vulnerable to climate change due to its reliance on rainfall for agriculture. Despite having a low contribution to greenhouse gas emissions, the continent has suffered significant losses, including increased drought frequency and duration, heavy rainfall and flooding, and heat stress. These effects put food systems in danger and threaten the livelihoods of millions of people (IPCC, 2022). African countries must invest in climate change adaptation to avoid reduced food production, heat-related mortality, decreased labour productivity, flooding, and water scarcity. Sustainable and inclusive development can reduce human suffering and economic losses by integrating climate adaptation into social protection programmes, investing in resilient infrastructure, practicing conservation agriculture, managing water resources, protecting natural resources, and increasing insurance coverage. Diversifying livelihoods and agriculture, and relocating populations may also be necessary.

**Scale of wider economic development outside the agri-food sector:** Despite economic growth in many African countries in the 2000s, formal jobs and manufacturing have not materialised. Rural migrants often find precarious work in informal services and small-scale manufacturing. Despite urbanisation many African economies still depend on agriculture and



exporting raw materials. Industrialisation was once the primary way to transform countries, but it is less likely now due to technology, the diffusion of global supply chains, and changes in international finance (McMillian & Rodrik, 2014). If premature deindustrialisation continues, the “traditional” pathway of economic development arising through manufacturing and services job growth, which provided the fuel for current day rich countries to achieve their level of prosperity, will not exist for current African youth. There will not be the release valve out of agriculture that was the driver of growth in China and Southeast Asia. Young people in rural areas will likely continue to work in agriculture, competing for dwindling resources and lower wages. To achieve sustainable growth, investments in infrastructure, education, finance, and supporting SMEs in the agri-food value chain are crucial for inclusive economic opportunities.

**Geopolitical stability and cooperation:** The world’s stability is threatened by changing power structures and relationships, rising populism, authoritarianism, and climate change. New technologies and higher military expenditure open new avenues for conflict. Disputes over natural resources and inadequate mechanisms for cooperation are contributing to growing instability (Mach et al., 2019; NATO, 2020). Climate change is expected to heighten the risk of geopolitical instability, as both local and international conflicts occur over access to water and other essential resources. Climate migrants are expected to increase, while wealthy nations increasingly view food and water scarcity in developing countries as a threat to their security (European Parliament, 2017). Domestic collaboration and local food production can help, but multilateral organisations are needed to address conflict, climate driven disruption and population displacement for geopolitical stability.

**Scale of foreign and corporate influence:** The agri-food industry is becoming more concentrated, with a few large corporations controlling every aspect of the supply chain (IPES-Food). This trend is driven by globalization and trade liberalisation, and is expected to intensify as

technology companies gain more market share. As technology companies gain more power, producers and consumers become increasingly reliant on them, potentially leading to unsustainable practices (Sexton et al., 2018). In Africa, there is evidence of consolidation, emergence of large retailers and distributors, and land concentration by local elites and foreign companies. Food systems are expected to become more centralised, leading to the exclusion of small farmers and increased competition from processed foods. Proprietary technologies could worsen inequalities for both consumers and producers, as a few companies dominate the market. This could lead to global corporations controlling products, prices, wages, and working conditions for workers and consumers in the industry.

**Global trade:** The global economy is linked to trade and finance, which affect food systems. International trade is important for meeting food demand, but it can be risky for countries that rely on food imports. African countries are particularly vulnerable due to their dependence on commodities for foreign exchange and food imports. Price fluctuations will continue to have an impact on national budgets, investments, and food security (FAO, 2022). Future trends will depend on the ability of commodity-reliant countries to diversify their economies. Encouragingly, COVID-19 has led to more self-sufficiency and shorter supply chains. They also depend on the ability to renegotiate fairer rules of international trade such as the World Trade Organisation Agreement on Agriculture, which seeks to eliminate agriculture subsidies to limit market distortions. Recent studies have shown that many agricultural subsidies can be repurposed to enhance equity, resilience and sustainability in agri-food systems (FAO, UNDP, UNEP, 2021), although this will depend on agreements reached in international trade negotiations.

**Regional trade in Africa:** According to official trade statistics, only 22% of African trade occurred with other African countries between 2009 and 2018. However, this number likely underestimates



the amount due to informal cross-border trade that is not recorded in national statistics. The future of African regional trade hinges on the successful implementation of the Africa Free Trade Area, which is expected to increase formal trade and potentially decrease informal trade through the elimination of import duties and simplification of customs procedures. However, achieving this success depends on removing trade barriers, improving customs efficiency, and addressing issues of harassment and extortion by customs officials, which disproportionately affect women (Bouët et al., 2020). Implementation must also be inclusive to avoid locking out informal traders. Measures such as bans on exporting staples in response to international food price shocks will hinder regional trade and integration.

#### **Degree of African food self-sufficiency:**

New data reveals that African countries rely less on food imports than previously thought. Locally grown staples like maize, cassava, fruits, vegetables and meat are the primary source of calories for SSA, with imported food making up only 10%-13% of food consumption (FAOSTAT, 2019; Liverpool-Taise et al., 2020). If current trends persist, African consumers will increasingly access food from other parts of the continent as cross-border trade grows, causing domestic food supply chains to lengthen. Thus, investments that enhance the connectivity and efficiency of domestic value chains, including transport, wholesale, and retail markets, will determine African food self-sufficiency. However, in response to spikes in international food

prices, governments may resort to export bans of domestically produced food. Nevertheless, the ability of African countries to maintain agricultural production in the face of both population growth, natural resource degradation, and climate change will determine African food security.

**Technological disruption:** Innovations such as digitalisation and biotechnologies have the potential to transform global food systems. However, current research and development investments are mostly concentrated in high-income countries, with venture capital funds increasing their investments (Agfunder, 2021). This trend is expected to continue, with larger middle-income countries playing a bigger role, while African countries remain marginalised and become technology takers (Fuglie et al., 2020; UNESCO, 2020). Digitisation in the fields of biotechnology and gene editing can enhance productivity and resilience, but it may also concentrate corporate influence and displace unskilled labour. This can lead to the casualisation of labour and exclusion of marginalised individuals, which poses a significant challenge for adapting to climate change. Privacy, data ownership, control, and vulnerability to cyberattacks are also concerns. The benefits of these technologies will depend on the institutional frameworks governing them, ensuring that small-scale producers' needs are met, civil rights are enforced, contracts are respected, and ownership is protected, including intellectual property rights. Transparent rules and an effective legal system are essential to creating an inclusive and fair future for all.





### **Resilience to human, animal and plant disease and pest outbreaks:**

The COVID-19 pandemic highlights the potential for more frequent pandemics and epidemics in the future, due to factors such as transboundary diseases, encroaching agriculture, antimicrobial resistance, and increased animal product production (UNEP & ILRI, 2020). Weak global coordination and inadequate resources in African countries pose further risks. Intensifying agriculture and homogeneity may also increase the likelihood of major outbreaks. Future trends depend on improving international collaboration, information exchange and prevention strategies. They also depend on investments in developing, adapting and sharing technologies to address the root causes of proliferation of pests and diseases. Ultimately, they depend on preserving ecosystems and transitioning from input intense monocrop agriculture into sustainable agriculture that respects agroecological principles.

### **Enabling environment for youth in the agri-food sector:**

African institutions have the potential to facilitate youth involvement in the agri-food sector. However, policy decisions aimed at addressing the overlooked areas of informal markets are crucial. The World Bank noted that informality in these markets leads to instability, insufficient investment, and low wages in 2019 (World Bank, 2019). Historically, African governments neglect informal markets, assuming that they need to be eliminated in order to achieve development. Informal entrepreneurs are thus

vulnerable to “dis-regulation” which is the arbitrary application of the law and extraction of payments by officials, strongmen and political leaders (Vorley, 2023). Future trends will thus depend on the extent to which governments and development organisations will be able to work constructively with informality, by creating partnerships with informal sector actors, investing in skills and infrastructure, and implementing policies and regulations that recognise the importance of informal sector actors, supporting and protect their capabilities.

**Degree of good governance:** Recent data regarding governance indicators reveals that the African continent has made significant progress in improving governance and the business environment, with those that have made greater improvement showing stronger economic performance (Mabiso & Benfica, 2019). Future trends in good governance depend on the financial resources dedicated to policy and institutional reform, as well as political will and pressure from constituents. The digitisation of government services, as well as other measures to ensure greater government transparency will enhance accountability. Furthermore, new technologies allow for new forms of advocacy and organising, which may enhance good governance.

## SCENARIOS THAT EMERGED FROM THE FUTURE OF YOUTH EMPLOYMENT IN THE AFRICAN AGRI-FOOD SYSTEM

Using different combinations and extremes of the critical uncertainties, the foresight workshop participants explored four different possible scenarios. Rigorous foresight processes are often developed with substantial stakeholder consultation over months, these scenarios were developed relatively quickly within the workshop context. Consequently, the scenarios presented here are indicative to illustrate how different the future could be, depending upon the policy decisions of governments, the impacts of climate, geopolitics, combined with the behaviours of consumers and

businesses. The goal of the scenarios is to identify what could be more or less desirable futures, the factors that could lead to these and the pathway of policy and action required to minimise future risks and optimise opportunities for positive change.

Scenarios are often developed by selecting just two critical uncertainties, in this case it was felt that many different uncertainties interrelate in giving rise to the different scenarios. The table below provides a very indicative overview of how the different uncertainties might play out in each scenario.

**Table 1:** Uncertainties identified to inform scenario building.

Uncertainty	3 Locally Linked	2 Big Tech Domination	4 Turning the tables	1 Collapse and crisis
Diet quality for health and environment	High	Medium	High	Low
Resilience to climate change	Medium	Medium	High	Low
Resilience to human, animal and plant disease and pest outbreaks	Medium	Medium	High	Low
Scale of wider economic development and employment outside the agri-food sector	Medium	Medium	High	Low
Degree of good governance	High	Medium	High	Low
Geopolitical stability and cooperation	Medium	Medium	High	Low
Scale of foreign and corporate influence	Low	High	Medium	Medium
Degree of African food self-sufficiency	High	Medium	High	Low
Regional trade in Africa	Medium	Low	High	Low
Global trade	Low	High	High	Low
Technological disruption	Medium	High	High	Low
Enabling environment for youth in the agri-food sector	High	Low	High	Low



## Broadly, the scenarios were framed around

- 01 Positive local responses by African governments to a difficult wider global environment of climate disruption and global geopolitics with positive youth engagement;
- 02 In a competitive world where poor governance, high tech corporate and foreign interests are winning over more equitable and sustainable African development;
- 03 High levels of cooperation and good governance globally and across Africa enable a progressive response to global issues, with Africa using its resources to take a lead in agri-food systems innovation; and
- 04 Failing governance at all levels makes it impossible to effectively tackle emerging pressures on the agri-food system, creating a severe downward spiral. Each scenario and implications are described in detail.

## LOCALLY LINKED: YOUTH-LED INNOVATION FOR LOCAL FOOD SYSTEMS

In an increasingly turbulent global context, beset with geopolitical tensions and struggling global institutions many African governments have turned towards innovative policies to support local food systems and their connection with urban areas. The difficult global context has constrained Africa's wider economic development and the agri-food sector remains a key employment sector. Some progress towards renewable energy has been made globally, largely driven by the private sector, and climate change is being partly controlled, however

extreme weather events are having a significant impact on agricultural productivity. In this context, a new generation of younger politicians have radically rethought Africa's development trajectory. A core focus is on ensuring a sufficient, healthy and reliable food system for all. Driven by a highly activist youth contingent, and recognising the risk for social instability, governments have developed a highly innovative set of programmes to engage youth in transforming food systems.

### Scenario One: Locally Linked – Youth-led innovation for local food systems

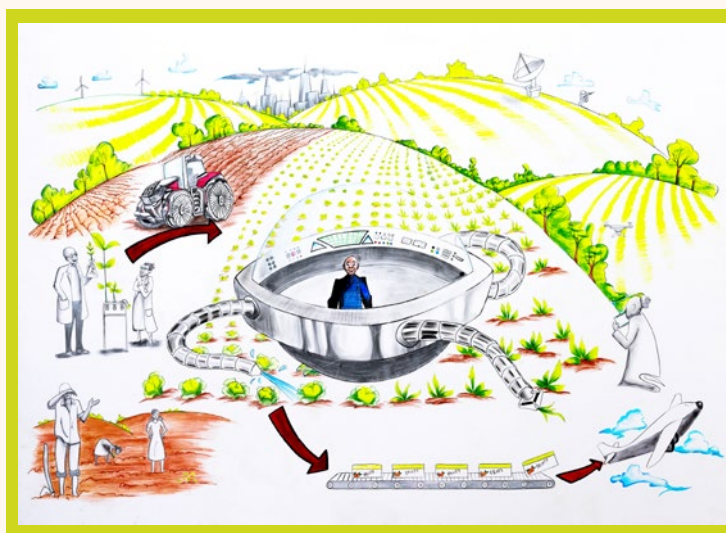
In an increasingly turbulent global context beset with geopolitical tensions and struggling international institutions, many African governments have turned towards innovative policies to support local food systems and their connection with urban areas. The difficult global context has constrained Africa's wider economic development, and agri-food systems remain a key employment sector. Some progress towards renewable energy has been made globally, primarily driven by the private sector, and climate change is being partly controlled, however, extreme weather events are having a significant impact on agricultural productivity. In this context, a new generation of younger politicians have radically rethought Africa's development trajectory. A core focus is ensuring sufficient, healthy, and reliable food for all. Driven by a highly activist youth contingent and recognising the risk of social instability, governments have developed a highly innovative set of programmes to engage youths in transforming agri-food systems.



### **Scenario two: Big Tech Dominates** – Divided opportunities for youth in agri-food systems dominated by high-tech and larger scale businesses.

Large tech companies, foreign investors, and foreign governments seek to capture wealth from Africa's natural resources and large youth workforce. In an increasingly volatile global context, with climate extremes and geopolitical instability, there is a scramble for resources. In a world of growing inequality, those with wealth

seek to protect themselves from an increasingly unstable environment with high tech solutions. A small proportion of Africa's youth who have education and skills can find good jobs in larger firms and high-tech companies. However, increasing automation in the food sector means there are limited numbers of such jobs. Governments across the planet have failed to create the governance systems needed in an increasingly turbulent world. Weak regulations drive short-term opportunistic markets that exacerbate inequalities and resource degradation. Low-tech agri-food systems for poorer consumers function in parallel to the high-tech system focused on wealthier consumers and exports.



### **Scenario three: Africa turns the tables** – Youths capture opportunities as Africa leads the way in changing the global agri-food systems game.

Geopolitical turbulences and extreme heat events during the 2020s led to the establishment of a new global compact for the future. Youths have become increasingly vocal about these issues. The Ukraine crisis triggered a re-evaluation of Africa's potential for food production. African governments, supported by

international financial institutions and foundations, developed a 15-year plan for Africa, reshaping the investment strategy for agri-food systems. Building on early innovation by young African entrepreneurs, a global profile was designed for healthy value-added food from Africa. A worldwide social media campaign ignited global enthusiasm about young Africans making a positive impact, which subsequently evolved into a highly effective marketing strategy for African products. A reformed CGIAR system enabled a massive investment in appropriate and accessible technology and an enabling environment for the MSME sector, allowing smaller operators to compete with larger scale enterprises. Economically, Africa turns the corner with its growing population, creating demand for industrial products and services – this wider economic growth increases the demand for higher-value food products creating significant opportunities in the sector. Dignified and fulfilling work opportunities outside agri-food systems mean less under-employment with increased wages in the agriculture sector. Labour-reducing technologies make farming more attractive for young entrepreneurs.





## Scenario four: Collapse and Crisis – Youths struggle in collapsed agri-food systems

A lack of investment in climate resilience and an unregulated food sector driven by short-term profits has led to a severely degraded resource base, with agricultural production constantly affected by extreme weather events, and increased disease outbreaks.

The food sector has marketed cheap, high-energy, low-nutrient food. This, coupled with growing inequality, has led to an escalating triple burden of undernutrition, obesity, and nutrient deficiency. Food prices are high and

fluctuate dramatically due to the disruptive impact of climate-related extreme weather events on food production. Poorer groups are forced to consume cheap, low-quality food, and their life expectancy is decreasing. The lack of wider economic opportunities means that many youths are trying to make what living they can out of agri-food systems, which are struggling to meet the demands of an African population that has doubled. In an informal and unregulated environment, low wages and exploitation are common. Poor economic opportunities lead to migration, increased corruption, violence, and social instability. In response, country governments are resorting to draconian measures to maintain political stability.



### *How did we get here?*

- **Young people became actively engaged in political leadership:** Frustrated by deteriorating conditions, young people began to form networks, using technology to connect across class and geographic divide. They articulated their demands and vision for a more inclusive and equitable future, demanding a place at the decision-making table. Mobilised and highly activist, they were able to make governments accountable .
- **There was no serious global coordination on climate change adaptation:** Geopolitical coordination deteriorated, so globally-driven responses remained weak. Companies developed biotechnologies and other innovations that could be used to adapt to some of the effects of climate change.
- **Scale of wider economic development outside the agri-food sector remained weak:** Geopolitical tensions and extreme weather events led to a global slowdown in growth and a decline in foreign direct investments. This resulted in slow growth in the non-agri-food sector, with few jobs available.
- **Governments created an enabling environment for youth:** Investments in education were made, with curricula modified to meet prevailing conditions. Emphasis was placed on training empowered young people who could use technology to develop innovative solutions for the agri-food sector.

- **Governments focused on supporting local food systems:** Investment in restoring indigenous knowledge and agroecological practices to diversify agricultural production and enhance resilience to climate change were prioritised. Investments in renewable energy and decentralised grids, water provisioning, roads, ICT and other infrastructure to connect rural and urban areas were also made.
- **Local entrepreneurship targeted domestic markets:** Agrodealers reoriented their input supply to facilitate domestic production, creating new business and financing arrangements to meet the needs of their youth clientele. Young entrepreneurs developed innovative digital solutions to improve market information and connectivity.
- **Consumers shifted to local diets and products:** Increasingly fragmented trade and affordable local food resulted in a shift to local diets and products.
- **Intra-African trade and integration became a reality:** Building on the foundation set by the African Continental Free Trade Area, regions began to integrate their markets more closely, starting with thriving commodity exchange markets where local products could be sold. The AU and the Comprehensive Africa Agriculture Development Programme (CAADP) worked together to provide support and regional frameworks for agro-industries that grew in different countries. In 2040, the AU launched a new agenda, having achieved the priorities of 2030.

## *Implications*

This is a world that adapted to difficult international circumstances to ensure that young people thrive. With few decent jobs available in the non-agri-food sector, most young people find decent work in the agri-food system, as producers, entrepreneurs or workers in the agri-food value chain. They are enabled by a highly supportive environment, with access to youth-friendly loans, technology and are highly connected to each other. In this scenario, more women and previously marginalised groups are able to take advantage of existing opportunities, such as operating their own businesses. Governments are held to account, and young people are more heavily involved in the agri-food decision-making process, and are in a position to articulate their demands when needed. Governments regain legitimacy, and they are able to collect more taxes to fund local development.

Food systems are resilient, informed by indigenous knowledge that was transmitted from older

generations and combined with investments in infrastructure to improve productivity and market access. Producers and entrepreneurs in rural areas have access to electricity, water and are connected to urban and peri-urban areas. Climate change remains a challenge, but agriculture is resilient thanks to better access to inputs, infrastructure and more adapted production methods. Farmers, with access to regional markets see their incomes rise.

Consumers have access to affordable, nutritious and locally produced foods. This includes a diversity of indigenous grains, vegetables and fruits. Thanks to investments in domestic markets and well-integrated regional markets, local produce is widely available and more affordable and processed foods make a very small proportion of their diet. International companies selling ultra-processed foods see their market share stagnating, and cannot compete with domestically produced foods.



## BIG TECH DOMINATES: DIVED OPPORTUNITIES FOR YOUTH IN AGRI-FOOD SYSTEM DOMINATED BY HIGH TECH AND LARGER SCALE BUSINESS

Large tech companies, foreign investors and foreign governments seek to capture wealth from Africa's natural resources and large youth workforce. In an increasingly volatile global context, with climate extremes and geopolitical instability there is a scramble for resources. In a world of growing inequality those with wealth are seeking to protect themselves from an increasingly unstable environment with high tech solutions. A small proportion of Africa's youth who have education and skills are able to find good jobs in larger firms and

high-tech companies. But increasing automation in the food sector means there are limited numbers of such jobs. Governments globally and across the planet have failed to create the governance systems needed for an increasingly turbulent world. Weak regulations drive short-term opportunistic markets that exacerbate inequalities and resource degradation. A low tech agri-food system for poorer consumers function in parallel to the high-tech system focused on wealthier consumers and exports.

### *How did we get here?*

- **Agri-tech industries invested in automation:** farming became highly mechanised, and the agri-food value chain increasingly came to rely on automation and digitisation at all levels. Technological diffusion became extremely difficult and expensive due to monopoly control.
- **Geopolitical stability deteriorated:** International cooperation frayed, as countries increasingly competed for scarce natural and mineral resources. No meaningful agreements on climate change were reached.
- **Governments increasingly lost their legitimacy and ability to control:** large corporations, already powerful, amassed even more power as they merged and consolidated in order to have full control of their intellectual property and prevent competition from new entrants. They lobbied governments successfully to rewrite domestic laws and international trade treaties on labour, taxation and environmental protections in their favour.
- **Social protection programmes virtually disappeared:** cash strapped governments reduced expenditure on social protection programmes and basic infrastructure, leaving many people living in financial precarity.

### *Implications*

This is a world defined by stark inequalities and intense competition for access to resources, where young people struggle to find decent work. On one hand, highly educated young people are able to secure well-paying but precarious jobs in large firms and high-tech companies. On the other hand, young people with a basic education and those living in remote areas find themselves excluded from this technology driven economic system. Many continue to cultivate on increasingly fragmented

land, while others find low paying jobs on corporate owned farms as agriculture is highly mechanised. The rest become techno-peasants - disposed of productive land and therefore need to align themselves with digital technology if they are to eat. Internet "get rich quick" schemes and scams flourish as some people prey on others desperation.

Inequality defines access to food. Wealthy people have access to good quality, nutritious food. On

the other hand, more displaced people from rural areas, concentrated in informal settlements, increasingly rely on cheaper unhealthy and unsustainable food. Food prices are high, and are highly dependent on volatile international markets as well as frequent droughts and extreme weather events that hit agricultural systems both at home and abroad. As a result, poor people do not receive adequate levels of nutrition, with deficiencies and malnutrition prevalent.

In this world, wealthy people try to protect themselves from climate change and a general decline in living standards by investing in private

access to services such as water and other basic infrastructure, but insecurity is high. Meanwhile, farmers and poor people must bear the costs of climate related disasters and financial crises themselves. Globally, short-term profit seeking by large corporations means that international financial crises are frequent, making it extremely difficult for SMEs to survive. Having ceded control to corporations, government resources are spent on financial bailouts and infrastructure to support corporate extraction, but little else. As a result, inequalities, both within countries and between countries rise sharply.



## **AFRICA TURNS THE TABLES: YOUTH CAPTURE OPPORTUNITIES AS AFRICA LEADS THE WAY ON CHANGING THE GLOBAL FOOD SYSTEM GAME**

Geopolitical turbulence and extreme heat events during the 2020's led to the setting of a new global compact for the future. Youth have become increasingly vocal about the issues. The Ukraine crisis stimulated a rethink of Africa's food production potential. African governments, supported by international financial institutions and foundations developed a 15-year Africa changing the food systems game investment strategy. Building on early innovation by young African entrepreneurs a global profile was developed for healthy value-added food from Africa. A global social media campaign inspired the world about young Africans making a difference which evolved into a highly successful marketing strategy for African produce. A reformed CGIAR system enabled

a massive investment in appropriate and accessible technology and an enabling environment for the MSME sector enabling smaller operators to be competitive and complementary with larger scale enterprises. Economically, Africa turns the corner with its growing population creating demand for industrial products and services – this wider economic growth increases the demand for higher value food products creating significant opportunities in the sector. Employment opportunities outside the agri-food sector mean less under- and unemployment with increased wages in the agricultural sector. Labour reducing technologies make farming more attractive for young entrepreneurs.





## *How did we get here?*

- **Reforms and new policy frameworks for land-use and access:** a new policy framework kickstarted land reforms, with the goal of ensuring that fertile land is preserved for agriculture, prioritising local farmers and investors. Land records were digitised to facilitate leasing of land so that those who did not inherit land can easily lease for agricultural purposes.
- **Blueprint for continent-wide infrastructure is developed and implemented:** this guided investments in rail, road and sea infrastructure to facilitate intercontinental mobility and intercontinental trade.
- **Investment in agroindustry:** industrial clusters based on a comparative advantage for specialised zones of production were developed, through investments and incentives to domestic and international companies willing to produce goods for domestic markets and value-added exports.
- **Support for youth-led entrepreneurship:** strong policies and regulations were put in place to facilitate the growth of youth-led SMEs. These included incentives for large corporations to facilitate the transfer of skills and technology to youth-led enterprises and entrepreneurs with innovative ideas to solve local challenges.
- **Implementation of the One Africa, free movement agenda:** intercontinental travel restrictions were dropped, and the African Continental Free Trade Area was fully implemented, allowing Africans to trade and travel across the continent without visas or trade restrictions.
- **Decisive action on climate change:** with funding and support, African scientists led research and development on integrating climate-smart agriculture with indigenous agricultural production. These interventions were so successful that African scientists began providing technical advice to other countries on climate-smart agriculture. Farmers were provided with cheap and affordable agricultural technology that was distributed equitably, and access to clean water and renewable energy was greatly enhanced.

## *Implications*

In this scenario, the world acts decisively in cooperating to ensure equitable outcomes for all young people in the face of climate change. As a result, massive investments are made in ensuring that the African agri-food system provides dignified and fulfilling work. At the same time, investments in agro-industry spur the growth of vibrant industries that supply non-agriculture goods and services for the domestic and African market. Many young people are thus able to find work outside the agri-food system, while those that remain in agriculture use labour saving technology to enhance their productivity and incomes. Thanks to investments in education and social protection, poverty and food insecurity virtually disappear.

Food systems are resilient in the face of climate change, thanks to investments in African-led research and development, as well as the equitable distribution of technology and inputs to enhance adaptation. With greater global cooperation, food systems are able to weather shocks in different locations, as intra-African trade is greatly enhanced. Furthermore, Africa exports high value agricultural goods and has a domestic industrial base, and is thus much less vulnerable to global price shocks in commodity prices. Global cooperation also means that scientists work closely together, learning from each other and improving on sustainable and resilient agricultural practices. Globally, companies have also committed to providing healthy, affordable and sustainable food, so consumers have a wide variety of food to choose from.

## COLLAPSE AND CRISIS: YOUTH STRUGGLE IN A COLLAPSED AGRI-FOOD SYSTEM

A lack of investment in climate resilience and an unregulated food sector driven by short-term profits has led to a severely degraded resource base with agricultural production being constantly affected by extreme weather events and increased disease outbreaks. The food sector has marketed cheap high energy low nutrient value food. This combined with growing inequality has led to an escalating triple burden of undernutrition, obesity and nutrient deficiency. Food prices are high and fluctuate as climate extreme weather events wreak havoc on food production. Poorer groups are forced to consume cheap low-quality food and their life expectancy is decreasing. Lack of wider economic opportunities means that many youths are trying to make what living they can out of the agri-food system which is struggling to meet the demands of an African population which has doubled. In an informal and unregulated environment low wages and exploitation is common. Poor economic opportunities are leading to migration, increased corruption, violence and social instability. In response governments are resorting to draconian measures to maintain political stability.

### Implications

Based on current trends, this is a plausible scenario, in which the African agri-food system collapses due to declining yields and poor connectivity due to inadequate infrastructure. In this scenario, the majority of young people have precarious livelihoods, either in an unregulated informal sector or struggling to produce enough food in the face of more severe and frequent droughts, floods, heatwaves, and pest and disease outbreaks. With inadequate infrastructure and highly unequal access to technology, the agri-food system is not resilient, and production and supply is frequently disrupted by extreme weather events. Food prices are volatile, and skyrocket as disasters around the world become more frequent. These disruptions further entrench poverty and food insecurity, and hamper growth in non-agri-food sectors of the economy, so overall growth remains stagnant. As a result, good job creation in the non-agri-food

### How did we get here?

- **High profile meetings on climate change but no real action:** despite regular and renewed commitments to limit temperatures to 1.5 °C as agreed in the Paris Climate Agreements, very few investments were made in mitigation or adaptation. As a result, agricultural yields in African countries continued to decline due to more frequent weather extremes and ecosystem degradation.
- **Declining investments in the agri-food sector:** governments neglected young people working in the agri-food system, who continued to find precarious work in the informal sector with little support and were subject to dysregulation, harassment and extortion.
- **Limited investments in rural infrastructure:** few investments were made in remote rural areas, with increasing numbers of people without access to basic infrastructure such as water, electricity or education.
- **Increasing domination of the agri-food system by corporations:** large companies entered the domestic African agri-food system, while some local companies grew large by consolidation, gradually gaining control of the entire value chain.

sector is insignificant, with many people working in the low paying service sector. Access to healthy and nutritious food is determined by income, with poor people in urban and rural areas increasingly turning to cheap, ultra-processed foods to meet their subsistence needs.

Many people try to leave in search of better opportunities. However, global migration is severely restricted as wealthy countries increasingly turn to lifeboat politics, attempting to keep people out in futile attempts to maintain the living standards of their own populations in an increasingly unequal, divided and fragile world. In many cases this leads to large scale atrocities and the loss of human life, as they collaborate with authoritarian leaders in other countries and put in place increasingly draconian measures to keep borders closed and maintain a semblance of political stability.

# Section Seven

# 07

## Pathways for change

Young people generated a clear agenda of actions and investments needed to enhance dignified and fulfilling work opportunities in the African agri-food system.

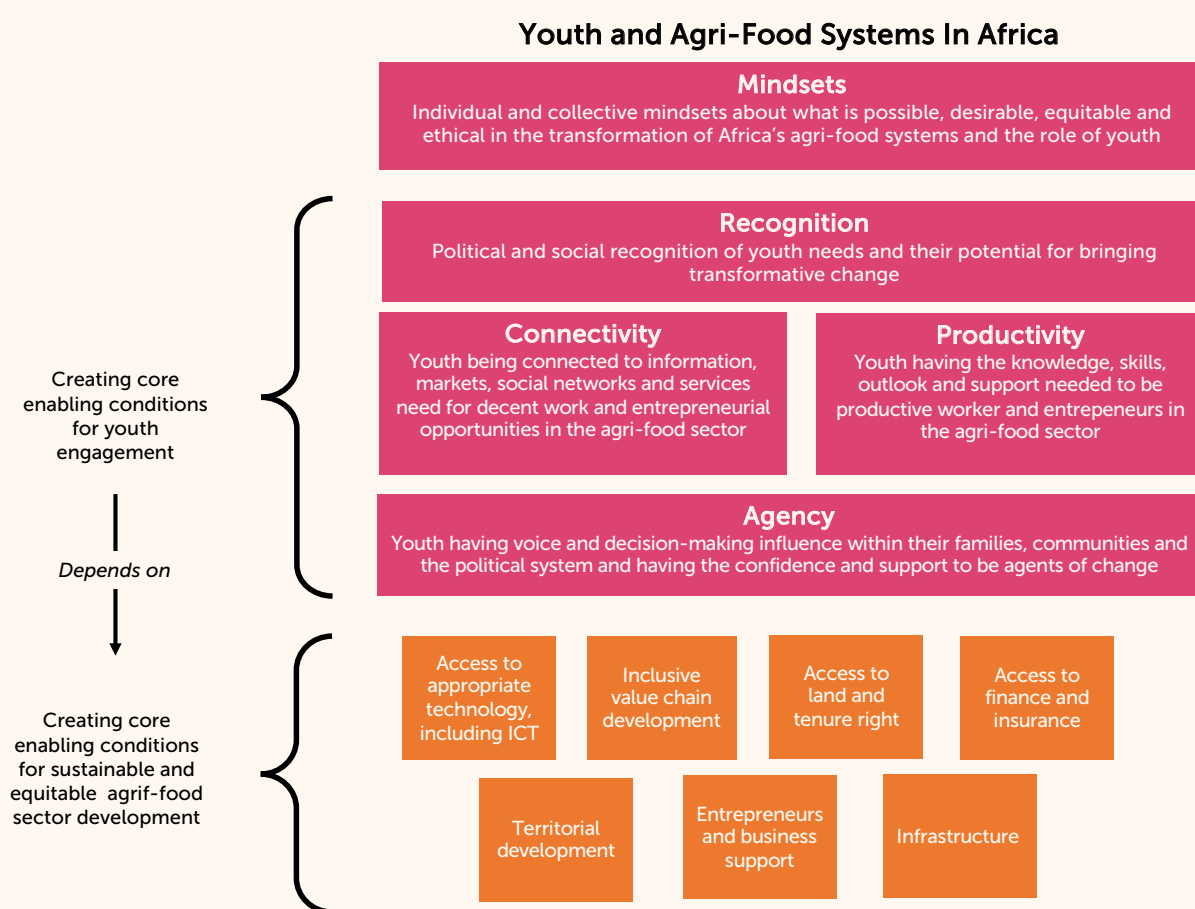
### Four key messages came out of the “Optimizing Opportunities for Youth Employment in Africa’s Agri-Food Systems” workshop :

- 01 Incorporate youth perspectives in decision-making at all levels:** The foresight workshop showcased the remarkable insights and understanding of agri-food system challenges and opportunities of youth representatives. Including young people in every level of the decision-making process, from local communities to policy-making at the AU, is crucial for three reasons: firstly, to incorporate their unique perspectives and knowledge; secondly, to establish alliances with young people to drive change; and thirdly, to strengthen the agency of young people in bringing about positive change.
- 02 Integrate long-term and adaptive thinking supported by foresight:** During the workshop, it became apparent to all participants that the future will be more uncertain and tumultuous. Therefore, it is essential to have long-term and adaptable thinking, supported by foresight. The workshop highlighted the importance of stakeholders collaborating to anticipate potential scenarios and collectively develop strategies to respond accordingly.
- 03 Focus on the politics and social mobilisation to make change possible:** Much of what needs to change to create a healthier agri-food system for people and planet and what needs to change to improve decent work for youth in the sector is well understood. The challenge is how to make the change happen. This requires more attention to the political economy of change, mindsets, and the alliances and social mobilisation needed to create the social understanding and political will to drive transformation.
- 04 Dual track approach that focuses both on enabling conditions for youth and on enabling conditions for sustainable development of the agri-food sector:** In order to promote both youth empowerment and sustainable development in the agri-food sector, a two-pronged approach is necessary. This involves creating favourable conditions for both young people and the sector as a whole. To provide dignified and fulfilling work prospects for young people in the agri-food sector, it is necessary to transform the sector as a whole and allow young people to play a leading role in this transformation. However, solely focusing on the needs of young people will not fully capitalise on the potential opportunities available, especially for marginalized and disadvantaged groups such as young women and youth organisations.

Young people’s perspectives on future pathways for change reinforced messages from recent global reports, in particular the IFAD 2019 “Rural Development Report - creating opportunities for rural youth”. For ease of interpretation, the pathways of change have been organised using the schema below, which illustrates the relationship between core enabling conditions for youth engagement, which depends on creating core

enabling conditions for sustainable and equitable agri-food sector development. These changes are enabled by mindset change, where shifts in individual and collective mindsets about what is possible, desirable, equitable and ethical in the transformation of Africa’s agri-food system and the role of youth occur (HLPE, 2021; IFAD, 2019; Woodhill et al, 2022).

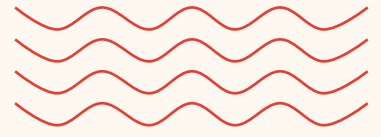
**Figure 26:** Creating enabling conditions for youth in the African agri-food system



Source: Adapted from IFAD 2019, HLPE 2021

As the figure illustrates, core enabling conditions necessary for youth engagement are the political and social recognition of youth and their potential to generate transformative change; enhanced connectivity, through information, markets, social networks and services needed for dignified and fulfilling work; improved productivity, through investment in knowledge, skills and support for dignified and fulfilling work and entrepreneurship;

and youth voice and agency within their communities, families and political systems. These core conditions are supported by broader enabling conditions to ensure access to appropriate technology, inclusive value chain development, access to land and tenure rights, finance and insurance, entrepreneurship and business support and adequate infrastructure. These are outlined in more detail in the following subsections.



## CREATING CORE ENABLING CONDITIONS FOR YOUTH ENGAGEMENT

In order to promote youth engagement and transformative change in Africa's agri-food systems, there are five critical factors that need to be addressed: mindsets, recognition, connectivity, productivity, and agency. During the foresight analysis, youth participants discussed what changes they felt were necessary in each of these areas and how to achieve them. It is important to note that these core areas are interconnected and should be viewed as complementary in order to achieve the desired transformation of the system. Below is a summary of their thoughts on each core area.

### MINDSET CHANGE

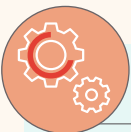
Young people stressed that transforming the agri-food system to support youth opportunities would require change in individual and collective cultures, values and mindsets about what is possible, desirable, equitable and ethical in order to support systems change. In particular, they identified the following critical changes necessary:

**Recognition of the importance of the agri-food system for national and regional development:** It is crucial that all Africans recognise the significant role that the agri-food system plays in the development of the continent. While people generally understand that agri-food systems are essential for well-being, development, food security and peace, there is still a tendency to devalue its importance, since economic development is perceived as industrialisation and urbanisation. Therefore, it is crucial that governments and decision-makers recognise the importance of investing in the agri-food system,

local economies, and young people to ensure sustainable and inclusive development in Africa.

**Intergenerational learning and shared understanding are essential for the success of agri-food systems:** Shifting mindsets requires the integration of knowledge systems that had previously been devalued, and this needs to occur in order to find new ways of thinking about sustainability, land and water access and use rights, as well as equity.

**Change in mindsets on investing in agri-food systems:** Agri-food system finance and investment actors should shift their mindsets towards farmers, rural communities, youth, women, and marginalised people, often perceived as high risk. This will facilitate the creation of financial services and products that incorporate the needs of agri-food system actors.



### *Actions to support mindset change*

Although mindset change occurs slowly and through repeated interactions with new perspectives, a **"social takeover"** to bring mass awareness on the importance of the agri-food system could support this. This would include strong communication and awareness raising to bring about a paradigm shift on the importance and centrality of the agri-food system. Some specific suggestions include:

- **Agri-food systems champions:** Role models, such as celebrities and other well-respected people could be recruited to create awareness on the role of the agri-food system as a key sector for youth entrepreneurs and young people in general.
- **Media campaigns and programming:** Radio and television programming showcasing opportunities for young people and entrepreneurs could raise awareness and visibility.
- **Workshops and other fora:** Targeted at a diverse audience, including parents, children, school teachers, politicians and policy makers to discuss pertinent issues on the agri-food system.

## RECOGNITION

Young people stressed the fact that political and social recognition of youth-specific needs and their capabilities is necessary for bringing transformative change. Recognition in the following:

**Political recognition:** Political leaders must recognise the realities, ambitions, and challenges that African youth face in the agri-food system and actively encourage their participation in international trade.

### Recognition by agri-food system

**stakeholders:** Major stakeholders with power and influence must involve youth in their decision-making processes through inclusive co-creation.

**Inclusive engagement:** It is crucial to include marginalised youth in policy development, decision-making, and government participation while taking their unique realities and needs into consideration.



### *Actions to support youth recognition*

**The following suggestions were made on enhancing youth recognition:**

- **Direct involvement in parliament:** a designated quota of youth representatives would ensure that young people are represented and their needs recognised.
- **Safe spaces for dialogue:** biannual meetings with political leaders, such as presidents and ministers would allow for regular engagement and discussion with elected representatives.
- **Multistakeholder engagement:** this would facilitate discussions on the future of agriculture and food security in Africa. An ad-hoc youth commission for agriculture could also be created.
- **Mainstreaming youth recognition in government programmes and budgets:** young people called for a 30% youth quota for all government-related programmes, special budget allocations for youth, women, and marginalised groups, and the inclusion of dedicated programmes for young people in all policies.

## CONNECTIVITY

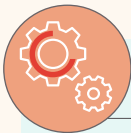
Young people emphasised the need for enhanced connectivity with other agrifood system actors, such as investors, logistics providers, extension services, value chain actors and mentors, as well as with other young people involved in the agri-food system:

**Social networks connecting young people in the agri-food system:** A robust African agri-food system youth network is important to promote advocacy, influence, and engagement among young people.

**Youth alliances:** Youth alliances that provide a platform for young people to voice their challenges and support their inclusion in decision-making.

### Access to services and information:

Enhancing access to information, social networks and services in order to facilitate connection with other stakeholders in the system is necessary for decent work and entrepreneurial opportunities in the agri-food system.



## *Actions to enhance youth connectivity*

**The following actions were suggested to enhance youth connectivity:**

- **Knowledge hub for engagement and peer-to-peer interaction:** The primary objective of this platform would be to provide a secure space for dialogue and discussion, inspire and motivate each other, exchange ideas, facilitate collective support, encourage collaboration, promote ecosystem development, monitor progress, explore market development opportunities, disseminate stories, exchange information and knowledge, and promote learning. This platform would enable regular communication through various channels such as emails, webinars, the African Youth Foresight Network's LinkedIn page, quarterly/bi-monthly calls, and a WhatsApp group. Thematic groups and regional chapters could be included to help contextualise recommendations and push the agenda in respective regions and countries. The goal is to shift from mere discussion to action.
- **Exchange visits:** visits between different countries could be encouraged to facilitate learning.
- **Agri-tinder:** an agri-business matchmaking space on the platform could also be created.

Youth champions were identified to take some of the suggestions forward.

## **PRODUCTIVITY**

Enhancing productivity entails investing in young people so that they have the knowledge, skills, and access to productive assets and finance in order to find decent work or capitalise on entrepreneurship opportunities in the agri-food system. Young people also highlighted the importance of both formal and informal approaches in improving education, skills, capacity and knowledge development. In this context, participants highlighted the importance of the following:

**Investing in basic education:** increasing investments in core and basic education is critical, especially in rural areas.

**Private sector engagement:** this could include the use of technology and local knowledge hubs linked to innovation and logistics hubs in order to facilitate skills transfer to young people. Public private partnerships could facilitate this.



## *Actions to enhance productivity*

### **The following actions were suggested to enhance productivity:**

- **Education and curriculum reform:** reforms would be necessary to include civic education, integrate agri-food system specific issues and indigenous knowledge from elementary schooling. This would encourage innovation and promote education that is suited to local culture and continental history.
- **Skills gap and needs assessment:** a skills gap and needs assessment for the agri-food system should be conducted for Africa for a period of 20 years. This will inform skills and knowledge development plan(s) and a practical and action-oriented approach should be supported for continual development.
- **Practical and action-oriented learning approaches:** this could include apprenticeships and internships to enable young people to develop practical skills. Mentorship and coaching programmes could be used to help young people develop soft skills and enhance their personal development. School visits by young agripreneurs and farmers, as well as trips to agri-business fairs, expos and programs could help more young people learn about opportunities in the agri-food system. Training programmes on specific topics such as trade could also be targeted at young people to ensure that they are aware of opportunities and how to take advantage of them.

## **AGENCY**

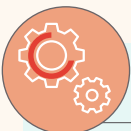
It is important for young people to have a say in their families, communities, and government in order to create positive change. Young people emphasised on the need for a shift in power dynamics so that they have a stronger voice in shaping policies and agendas at the national, regional, and continental levels. This would be achieved through:

**Organised and connected young people in the agri-food system:** agency is enhanced

through organisation and connection with other young people in order to have a stronger voice.

**Inclusive engagement and participation:** this includes engagement in policy development and decision-making, including direct involvement in parliament and regular engagement with elected officials.

**Intergenerational cooperation:** finding ways to ensure intergenerational cooperation is key to moving away from the “tyranny of the elders”.

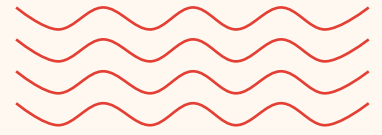


## *Actions to enhance agency*

### **The following actions were suggested in order to enhance the agency of young people:**

- **Development of a long-term youth vision for Africa’s agri-food system:** a co-designed and collective vision articulating young people in Africa’s agri-food system ambitions, starting with a goal for 2024.
- **Support to build networks and alliances:** including an engagement platform and knowledge hub to enhance peer-to-peer engagement.





## CREATING CORE ENABLING CONDITIONS FOR SUSTAINABLE AND EQUITABLE AGRI-FOOD SYSTEMS

The youth participants identified additional factors needed to create sustainable and fair development opportunities, specifically for young people in Africa. Investing in these core enabling conditions will benefit all agri-food system actors as they address challenges related to access to infrastructure, land rights, access to finance and technology, territorial development, as well as business and entrepreneurship support. These are summarised below:


**Access to finance and insurance:** To better serve marginalised groups in African agriculture, financing and investment actors should offer diverse options with suitable terms and conditions. An integrated approach to investing is necessary, including reclassifying agriculture and developing new collateral approaches. Financing and investment options should be created specifically for youth, women, marginalised and disabled individuals. Low taxation and incentives should be provided for youth-led ventures. Bureaucracy should be reduced and digitalisation embraced to improve access. Innovative finance options should be pilot tested with dedicated insurance products created to build resilience.

**Access and use of technology:** Technology should be used to modernise agriculture, enhance resilience to climate change, and increase efficiency. Sharing market and technology information should be facilitated to bridge the gap between local producers and the market. Access to agri-tech and artificial intelligence (AI) for young people should be facilitated to expand market access and enhance youth participation. Data at research institutes should be centralised, and open access. Farmers and other agri-food system actors, including youth, should be engaged in data collection and verification in order to improve the accuracy and relevance of data. Data collection and management standards should be established for collection and use of AI. Partnerships with tech and cell phone companies should be used to enhance credit provision, mobile payment solutions, and

tech infrastructure. Existing village structures should be used for digital access and connect initiatives for experimentation.

**Inclusive market chains and value chain development:** Africa is pushing for free trade between regions and the continent, including free movement of goods and people. Developing inclusive value chains for young people, SMEs, and remote areas will expand trade through the African Continental Free Trade Area. Youth, SMEs, and rural areas need support to participate and integrate into value chains for economic resilience and improved market access. Better planning and coordination among agri-food system actors can achieve value chain integration, with support for farmers to overcome barriers. Technology can support markets and value addition development. Local economies, markets, and products need protection, including indigenous food-related markets and value chains. Innovation and product development should be supported through incentives and investment for youth and locally owned businesses. Production and packaging hubs should be established to increase the quality of products and learning opportunities. Consumer education should be done through marketing and public health campaigns to encourage healthy food choices and promote local value chains. A circular economy approach should be taken to minimise food waste, and a regulatory and certification system should promote environmental responsibility and sustainability while creating/promoting access to existing/new markets.

**Entrepreneurship and business support:** Efforts to increase access to business development services and market information in Africa, particularly for youth can include the establishment of an **"Agri-tinder"** to support matchmaking and market development for young entrepreneurs. Focus should be put on supporting youth presence at market shows and providing dedicated start-up funding and incubators. Processing centres can be developed as learning centres, and collectives



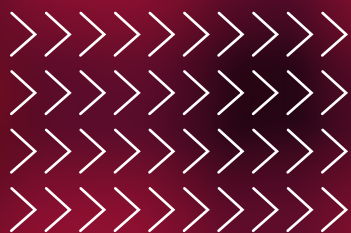
and cooperatives should be created to increase economies of scale and facilitate exchange. Youth businesses could be clustered by value chains and types of innovation, and supported by innovation hubs. Youth specific programmes can be developed to support the development of viable business ideas for youth.

**Land access and rights:** A long-term and integrated approach to resource use and planning is necessary. This should include planning for land, water, energy, and biodiversity. In order to ensure productive land, legislation should be used to protect prime land for agriculture and prevent real estate development and urbanisation from encroaching on fertile land. Land legislation should be clear, time-bound, and effectively implemented. A clear governance framework with defined roles, responsibilities, and accountabilities should be established. To ensure efficiency of land administration and governance, governments should allocate adequate budget, more human resources and increase capacity

and technical skills. Accountability mechanisms that involve youth and communities should be established to increase transparency. All land should be included in a digital land registry, and campaigns should be conducted to ensure that all adults have valid identification cards, to ensure that land ownership and tenure is respected and to facilitate transfer of land from elders to youth. Include all land in the digital land registry regardless of the type of land tenure. Land and water access and use rights should be protected, especially for women, young people and marginalised groups in both urban and rural areas.

**Infrastructure:** Investment in supporting infrastructure is crucial for the development of markets and value chains, ensuring efficiency, effectiveness, and reducing wastage. Key areas that require attention include transportation, ICT, technology, energy, water, logistics (including packaging, storing, processing, and cold storage plants), as well as modern machinery.





## Final remarks

Food systems in Africa are undergoing a transition to keep up with urban food demand. This growth creates new jobs in the agri-food value chain that will benefit young people. While young people in urban areas will find more opportunities in the mid-stream, many young people in rural areas will continue to rely on agriculture for their livelihood. In considering young people in the food system, it is important to recognise that those in SSA face limited opportunities, just like older generations do. Furthermore, young people's employment opportunities will depend on the overall economic opportunities in the economy, which depends on the extent of economic transformation and income. Lastly, the quality of work young people can expect within the agri-food system is uncertain and depends on how agri-food system actors respond to trends such as climate change, global trade, and new technology in the context of a growing population.

Through concerted and deliberate action, it is possible to transform Africa's agri-food system to create a resilient, sustainable system that provides decent work and healthy and nutritious food for Africa's future generations. To illustrate possible future outcomes, four scenarios were developed, framed around:

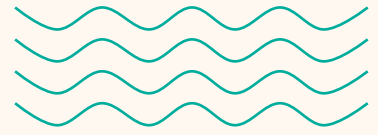
- 1.** Positive local responses by African governments to a difficult wider global environment of climate disruption and global geopolitics with positive youth engagement;
- 2.** In a competitive world where poor governance, high-tech corporate and foreign interests are winning over more equitable and sustainable African development;
- 3.** High levels of cooperation and good governance globally and across Africa enable a progressive response to global issues, with Africa using its resources to take a lead in agri-food systems innovation; and
- 4.** Failing governance at all levels makes it impossible to effectively tackle emerging pressures on the agri-food system, creating a severe downward spiral.

Rather than predicting the future of youth employment in the African agri-food system, these scenarios provide a simple framework for possible trajectories to stimulate ambitious and creative thinking about future opportunities, challenges and uncertainties, as well as ambitions, visions and goals for the future.

Based on these scenarios, young people generated a clear agenda of actions and investments needed to enhance dignified and fulfilling work opportunities in the African agri-food system. These are oriented around four key messages: incorporate youth perspectives in decision-making at all levels; integrate long-term and adaptive thinking supported by foresight; focus on politics and social mobilisation to make change possible; and investments that focus both on enabling conditions for youth and on enabling conditions for sustainable development of the agri-food sector to catalyse necessary for transformative systems change to ensure decent work for young people in the African agri-food system.

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