Regional outlook: Sub Saharan Africa

The regional briefs in the *Outlook* highlight broad trends for the regions defined by the FAO in the implementation of its global workplan. Recognising regional diversity, the intention is not to compare results across regions. Instead, they illustrate some of the latest regional developments, highlighting responses to global challenges and emerging trends, and relating these to the main messages of the *Outlook*. The assessments generally compare the end point of the *Outlook's* projection (2033) to the base period of 2021-23.

Agrifood systems globally have navigated multiple disruptions in recent years, including the COVID-19 pandemic, the impact of Russia's war against Ukraine, weather related supply fluctuations in several regions, surging energy prices, a cost-of-living crisis and spiralling inflation. The sharp rise in food prices impacted the cost and affordability of healthy diets as well as food security in several regions. Differences in resource endowments, economic structure, development and income levels mean that the magnitude of these impacts are not uniform in all regions. These briefs do not present a quantitative assessment of the impacts of these disruptions, though they do account for the latest expectations with respect to macro-economic developments as the world emerges from them. The trends and issues presented are those expected to underpin the *Outlook* in the medium term. They assume that the adverse effects on food, feed and fuel production, consumption and trade will gradually moderate, recognising that several uncertainties remain.

This chapter contains seven sections, with text, tabular and graphic information for each region following a similar template. A background section provides the key regional characteristics and provides the setting from which the projection is described in the subsequent sections for production, consumption, and trade. Each regional brief contains an annex providing common charts and tables outlining the key aspects for the region concerned.

Background

Food security for a growing population still a major challenge

Sub-Saharan Africa is a vast and diverse region that comprises 19% of the world's agricultural land, yet provides only 7% of global agricultural output value. It is home to 1.1 billion people, 14% of the global population and possesses a distinct demographic profile. Amongst the regions covered in this chapter, its population is the youngest, its rate of population growth is the fastest and it is amongst the least urbanised, second only to South and Southeast Asia. By 2033, Sub-Saharan Africa's 1.5 billion inhabitants are expected to account for 17% of the world's population. Half of these could reside in urban areas by 2033, from 43% in the 2021-23 base period and only 32% 20 years ago. Concurrent to this trend, the rate of population growth is such that it is one of only two regions where the absolute size of the rural population is still increasing.

Notwithstanding differences in endowments, many economies in the region are highly dependent on resource-based commodities such as oil, mining and agriculture. On average, agriculture, forestry and fisheries accounted for 10% of economic output in the region between 2021 and 2023 but in several less developed nations this share is substantially higher, with the World Bank noting shares of 21% in Kenya, 22% in Malawi and as much as 36% in Mali. High dependence on agriculture in the economy amplifies impacts of volatility in the sector on livelihoods, but also implies that diversification of production beyond just food security crops could contribute substantially to income generation and economic development. Strong commodity prices were a major factor that supported the initial, albeit slow recovery following the COVID-19 pandemic induced recession but momentum has stalled as further disruptions such as Russia's war against Ukraine, the energy crisis and sharply increased cost of living affected economic performance and inflation globally. Amid tightening financial conditions and slower international demand, exchange rates in many countries depreciated, fuelling further inflation and in some instances also concern over foreign currency reserves. The region has limited means to support an accelerated recovery as fiscal challenges are already widespread. In 2023, income growth per capita was less than 0.5% at regional level and it is expected to remain below 1% in 2024. While more accommodating global conditions and subsiding inflation in the medium term would be expected to support growth, population growth is such that per capita incomes are only expected to rise by 0.9% p.a. over the *Outlook* period.

Income levels in Sub-Saharan Africa on average are already the lowest globally and projected income growth is insufficient to substantially narrow the gap. By 2033, average income levels are expected to reach USD 1 876 in constant 2010 terms – still only 14% of the world average. In least developed countries such as Ethiopia, this gap is even wider, with incomes remaining below USD 1 000 but in South Africa, they reach USD 8 687. As is expected at such low-income levels, households spend a bigger share of their income on food than any other region covered in this chapter. On average, across Sub-Saharan Africa, this share is 23% although it varies amongst countries, with the LDCs in the region spending on average 31%.[1] This substantial budgetary allocation to food heightens vulnerability to price spikes. It suggests that, amid a myriad of disruptions globally, average food inflation of 15% from 2021-23 contributed meaningfully to rising prevalence of undernourishment as well as moderate or severe food insecurity over the past three years. The FAO's State of Food Security and Nutrition (2023[5]) notes that by 2022, more than 300 million people faced severe food insecurity in the region – a third of the global total. As agricultural commodity prices come down, it is imperative to turn the deterioration in food security around. This will require a holistic approach by multiple stakeholders to improve affordability within the region.

Despite limited spending power and low-calorie intake per capita, the region's vast population means that it still accounts for a substantial share of global consumption, particularly of core staples. In the 2021-23 base period, it accounted for 35% of root and tuber consumption globally and 13% of cereals. Despite significant variation across countries, self-sufficiency rates for Sub-Saharan Africa overall are decreasing

for most major food commodities as domestic supply growth has failed to keep up with the rate of population expansion.

Sub-Saharan Africa is an agro-ecologically diverse, land abundant region that accounts for 16% of global crop land and 20% of pasture. Despite its high share of land use globally, production practices are often less intensive in nature with a high prevalence of rainfed systems. While the region as a whole is considered land abundant, significant differences exist among countries in terms of land availability and farm structures. In some regions, there is clear evidence that more medium scale farmers are emerging (Jayne et al., 2016[6]) whereas in others the agricultural sector is facing pressures from land shortages and declining plot sizes. Large parts of available arable land are situated in remote areas, poorly connected to markets and infrastructure, which amplifies already high costs of transportation and frequently leads to large price differentials between markets and extreme localised price volatility. Such volatility is exacerbated by the unpredictability of production which results from rainfed, low input production systems that are widespread amongst small-scale producers in the region. This also suggests that it is particularly vulnerable to the potential impact of climate change. Such volatility is evident in recent years, when the drought in Eastern Africa created extreme food security challenges, while the El Nino related drought in Southern Africa in 2024 has reduced food production in the region substantially, leading to sharp price increases at a time when global market prices are declining. Climate resilient production practices will be critical to improve resilience and sustain growth in the region.

The foremost challenges facing the region relate to reducing hunger and improving food security in a persistently low-income environment, amid increasingly unpredictable and extreme weather patterns associated with climate change. Despite pockets of progress and success in selected countries, productivity in most of the region remains stubbornly low. Some opportunities may arise to expand intra-regional trade, but trade-related costs need to be reduced to improve competitiveness. With imports into the region still expected to rise and against the backdrop of an increasingly fragmented global market and disruptions to logistical systems, the region's greatest opportunity to improve food security rests in sustainably closing the productivity gap, improving market access and improving the efficiency of regional trade.

Production

Productivity gains critical as land expansion slows

The value of agriculture and fish production is expected to increase by 27% over the coming decade, an average annual gain of 2.2%. This remains slower than population growth in the region, implying that the value of production per capita is set to decline further, in line with the trend observed since 2015 (Figure 1). Crop production contributes the bulk of agricultural value at 72%, the largest share amongst the various regions in this chapter, and growth is such that a further marginal increase is projected by 2033. This contrasts with growth of less than 1% p.a. in fisheries, implying a declining share in total value, while livestock production growth of 2.2% p.a. is sufficient to sustain its share at 17%.

Total agricultural land use is expected to expand only marginally and by 2033 is expected to be only 2% higher than in the base period. This constitutes only half of the expansion observed over the past decade, a substantial slowdown in a region that is considered land abundant. This abundance is however concentrated in a few countries (Chamberlin, Jayne and Headey, 2014[7]) and in many others expansion is constrained by land fragmentation, land degradation challenges, conflict, poor connection to markets and the presence of other competing uses such as mining and urban sprawl. Within the limited expansion, there is also some reallocation, as an 18 Mha expansion in crop area is partially offset by a 1.3 Mha reduction in land used as pasture. Little change is expected in the crop mix, with the combination of maize, other coarse grains, roots and tubers accounting for almost half of total crop land use by 2033. Within these commodities, Sub-Saharan Africa's share in global production is also set to rise and by 2033, it will

account for 38% of global roots and tuber production, as well as 8% and 16% of global maize and other coarse grain production respectively. Cotton is also widely produced, particularly in the region's LDC's, which contribute two-thirds of the region's cotton output. Benin and Burkina Faso are prominent producers.

By 2033, food crop production in Sub-Saharan Africa is expected to expand by almost 30% and the real value of crop production, expressed per unit of cropland used, is expected to rise by 2.3% p.a., accelerating from the past decade. This reflects a combination of productivity gains and further intensification. The projected expansion in area harvested exceeds that of land use by 20%, suggesting that double cropping could increase. This practice is prevalent in many of the tropical regions with bimodal rainfall as well as irrigated areas in Southern Africa. The expansion of rice cultivation, notably in Nigeria, is also expected to benefit from rising prevalence of multiple annual harvests. Despite ample resource potential, yield gaps remain substantial compared to what is achieved in other parts of the world. Growth over the *Outlook* is such that the gap to world average levels narrows for almost all crops but efforts to fully close it remains constrained by the limited use of inputs, slow adoption of seed technology in many countries and poor irrigation infrastructure. This also exacerbates vulnerability to extreme climatic events, with droughts and flooding causing frequent disrutpions to food production. Despite widespread implementation of fertiliser subsidy programs, fertiliser use is the lowest of all regions. Over the *Outlook* period, it is projected to increase by 19%, but application per hectare is still expected to be less than 20% of the global average (Figure 2). Efforts to reach more optimal application rates remains constrained by affordability, partly due to the high cost of imported fertiliser in the region, which are amplified by high logistical costs. Nevertheless, as production practices evolve, seed varieties improve and fertiliser application rates rise, notable yield growth is expected, at 1.6% p.a. for maize, 2% p.a. for other coarse grains, 1.5% p.a. for rice and 1.2% p.a. for cotton.

Livestock production growth is expected to be led by dairy, where an expansion of 28% by 2033 equates to 8.3 Mt of additional milk production, compared to 3.3 Mt of additional meat. Bovine meat currently constitutes the greatest share of meat production but growth in the poultry sector is expected to be faster enabling it to account for 30% of additional meat produced by 2033, compared to 38% for bovine meat and 17% for ovine meat. With few exceptions, production systems are still largely extensive, particularly for bovine and ovine animals but also amongst the large constituent of poultry producers that rely on indigenous, dual-purpose breeds. Herd expansion is expected to contribute substantially to bovine and ovine production growth with expansion of 12% and 24% respectively by 2033. The region will have an increasing share of the global herd for both of these species with a substantial share reliant on grazing on a slightly reduced pasture area. Such animals are often kept in semi-arid regions where crop production is not viable which means that they are highly vulnerable to fluctuating climatic conditions, as evidenced by widespread losses due to the drought in the horn of Africa over the past three years. Conversely, in the poultry sector, adoption of broilers and specialised layers produced in feed intensive production systems are increasing in countries such as Zambia, Tanzania, Kenya, Nigeria and Malawi, having been widespread in South Africa for some time. The productivity gains achieved from such genetic improvement is a major contributor to the poultry production growth of 28% over the *Outlook*.

Fish production comprises just 11% of agricultural output in the region and is still predominantly based on capture fisheries, much of which occurs in its vast inland lakes. In the 2021-23 based period, capture fisheries constituted 91% of total fish production and despite growth of 2.2% p.a. in aquaculture output from a small base the share of capture fisheries in total production will only decline to 90% by 2033. Given the finite nature of fisheries resources, growth in capture fisheries is slower at 0.7% p.a. A substantial share of aquaculture also occurs in the region's freshwater lakes so sustainable management of this natural resource will be of paramount importance.

Direct greenhouse gas (GHG) emissions from agriculture are expected to rise by 10.3% over the coming decade largely as a result of herd expansion in ruminant production. Emissions from livestock are expected to rise by 1.1% p.a. compared to increases of merely 0.3% p.a. from the crop sector. By 2033, Sub-Saharan

Africa will account for 16% of global emissions from agriculture. This year's *Outlook* features a scenario that simulates the impact of halving food losses along supply chains and food waste at the retail and consumer levels by 2030 (SDG 12.3). The scenario projects that total agricultural emisisons in the region could be reduced by 4% relative to the baseline, while calorie intake improves. This implies that by 2030, agricultural GHG emissions could increase by 3.1% from the average level in the 2021-23 base period.

Consumption

Food demand driven by population growth, with limited dietary diversification

Sub-Saharan Africa harbours the highest concentration of poor and undernourished people in the world, and total calorie availability per capita is the lowest amongst the regions covered in this chapter. Pre-existing food security challenges were exacerbated in recent years by a multitude of disruptions that include the prolonged effects of the COVID-19 pandemic, Russia's war against Ukraine, surging inflation, spiralling energy prices, the cost-of-living crisis, slow economic recovery and conflicts in several countries. While many of the supply chain challenges associated with the COVID-19 pandemic and the war have abated, persistently high food inflation, often fueled by currency depreciation, combined with the slow economic recovery perpetuated affordability challenges and total calorie availability in the region declined consistently through the 2021 to 2023 base period. The first small increase is expected in 2024, but gains remain slow and by 2033, an increase of 75 kcal/person per day will only bring intake to 77% of the global average. Consequently, food security and undernourishment will likely remain challenges and even as income levels start to rise, a sustained recovery will require improvements in the availability, accessibility, affordability, and utilisation of food supplies in the future.

Food waste and losses are a major challenge in the region, with the FAO estimating that these equate to USD 4 billion annually in Sub-Saharan Africa. Estimates put combined losses and food waste almost 41% above the global average, suggesting that investments to reduce them hold potential to substantially improve calorie intake. In the *Outlook* scenario where food waste and losses can be halved by 2030, as envisioned in SDG targets, calorie intake in the region could be increased by 10.1% relative to the baseline and the number of undernourished people in the region could decline by 31%, while at the same time, reducing GHG emissions. In the least developed countries in the region, this gain in calorie intake is 19%. This implies that by 2030, calorie intake in Sub-Saharan Africa could increase by 13.3% relative to the average level in the 2021-23 base period, while the number of undernourished people in the region would decline by 53 million. In the least developed countries in the region, calorie intake could rise by 16.6%.

Population growth is a major contributor to demand in the region, such that, despite a mere 3% gain in total calorie availability per capita by 2033, Sub-Saharan Africa will still be one of the largest sources of additional food demand. Consequently, the region's share of total food calorie consumption in the world is expected to rise from 12% in the 2021-23 base period to 14% by 2033. This share is higher in staples as the role of staples such as maize, roots and tubers in total calorie intake is more prominent in Sub-Saharan Africa than any other region. While population growth fuels large scale expansion in food consumption, compositional changes and associated dietary diversification in the region are expected to be limited under baseline assumptions. Growth in staple consumption is such that by 2033, it is still expected to account for almost 70% of calorie intake – similar to the base period (Figure 5). Within the staples group, the share of rice could increase modestly at the expense of other coarse grains such as sorghum and millet. While sugar consumption is expected to increase substantially in per capita terms by 2033, the gain in meat consumption is marginal at 0.4% p.a., while dairy, fish and vegetable oil show a modest decline. Per capita consumption of these commodities are already the lowest in the world and projected changes suggest that dietary diversity in the region will remain lacking compared to global norms. Diversification of agricultural production could aid in improving such dietary diversity.

Limited increases in meat consumption combined with reduced per capita intake of fish and dairy products constrains large scale growth in protein intake. Owing to some gains in plant-based protein, intake is expected to rise by less than 1g/capita/year by 2033 and so will remain the lowest in the world. Such limited gains in protein intake also inhibit improvements in vital nutrient and micronutrient intake.

The high prevalence of extensive production systems implies that Sub-Saharan Africa only accounts for 4% of global animal feed use. By 2033, total feed use in the region is expected to expand by 30% but from a small base and so its share in the global market remains stable. Drivers of feed demand include some expansion in animal inventories as well as the expectation of further intensification. Particularly in the poultry sector, the adoption of improved breeds and feed intensive production systems is accelerating, leading to increased demand for animal feed. In countries that already use feed intensively, genetic improvements and better feed conversion over time will reduce the amount of feed required per animal. These trends are somewhat offsetting at regional level and the net result is that feed use is expected to grow faster than meat production. Cereals, particularly maize, comprise the main raw material in feed rations but its share is lower than the global average, with a substantial contribution also made by roots and tubers. The inclusion of protein meal in total feed remains low at around 55% of the global average.

Trade

Import dependence grows with slow progress in regional trade agreements

To supply its rapidly expanding population, the region is expected to rely increasingly on imports to supplement regional production. With few exceptions, most basic food commodities in the region are produced for domestic consumption rather than export but domestic production of many products is insufficient to meet demand. Nevertheless, many countries also benefit from counter seasonality in the northern hemisphere and competitive labour costs, enabling net exports of high value fresh produce.

The region's trade deficit in major food items is anticipated to deepen over the coming decade and by 2033, its import bill, based on constant global reference prices, is expected to rise by 48%. In several countries, mounting debt, balance of payment challenges and foreign exchange constraints already hamper required food imports. The region is largely self sufficient in maize, roots and tubers, with the major contributors to its food import bill being vegetable oil and staples such as rice and wheat. Self sufficiency ratios are expected to deteriorate further for all three of these commodities, with wheat imports expected to rise by 36%, rice imports by 56% and vegetable oil imports by 27% over the coming decade. The historic reliance by many countries on both the Russian Federation (hereafter "Russia") and Ukraine for wheat imports has dwindled in the face of the ongoing war with increased sourcing from Europe, Canada, and the United States.

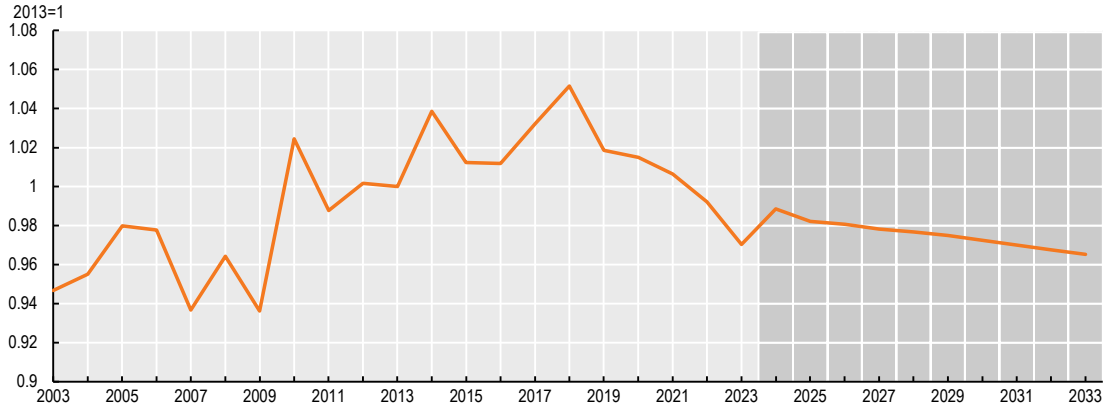
Amongst the greatest challenges adding to the cost of imported products is the high cost of transport and logistical inefficiencies. The region scores poorly in trade efficiency indicators such as the World Bank's logistics performance and container port performance indices. Pre-existing structural challenges were exacerbated by the disruptions in global logistics in recent years. Such disruptions have resurfaced amid conflict that affects passage in the Black Sea and Red Sea regions, bringing heightened concerns around its impact on the persistence of high food inflation in the region. At the same time, the effect of delays in port and/or en route, combined with increased shipping rates on the region's exports of high value, perishable products is severe.

Fresh fruit and vegetables, along with high value products such as cotton, cocoa, tea and coffee are major contributors to export revenue. More than 85% of cotton production is destined for the export market and cotton exports are expected to rise by 7% over the coming decade. The real value of fruit and vegetable exports are expected to grow by 26% and 41% respectively by 2033. Consequently, the total value of agricultural exports from the region, expressed in 2014-16 USD, are expected to grow by 20% over the coming decade.

Regionalisation of agricultural value chains for prioritised commodities are part of the African Union strategy to drive agrifood system transformation, increased productivity and agro-processing growth by linking producers and agro-parks in surplus areas to markets and areas of need. The region has placed much hope for expanded intra-regional trade on the successful implementation of the AfCFTA. The agreement is in its third year of operation and holds much potential, with the World Economic Forum suggesting that successful implementation can boost intra-regional trade by more than 50% and UNCTAD noting that the projected USD 3 trillion borderless market could be instrumental in reversing current trends in poverty, inequality and growth on the continent.

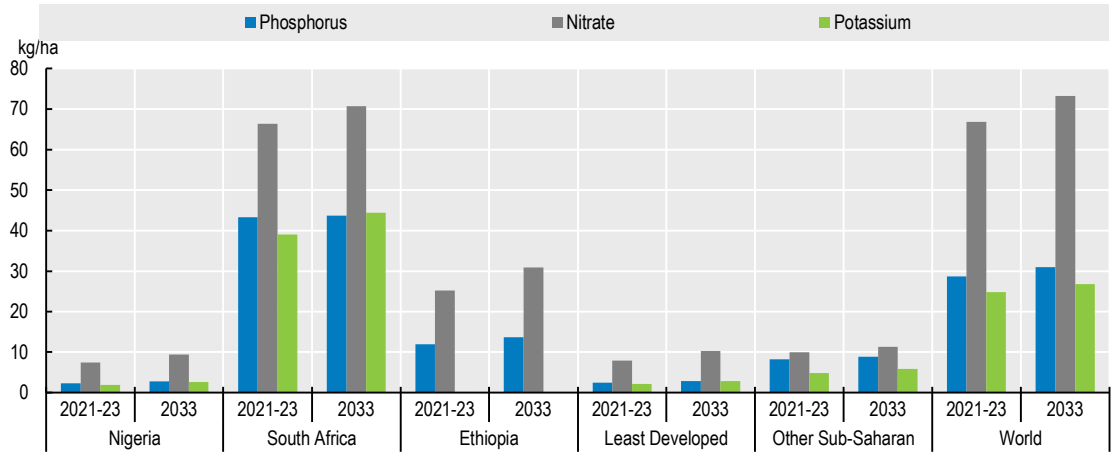
The agreement has the ambition of achieving a zero tariff rate on 90% of tariff lines, through a phased approach over a period of ten years for LDC's and five years for others. Despite progress made, some customs union members are yet to ratify the agreement, which prevents several regional trade unions from fully trading under preferential terms, unless concessions can be made to allow the agreement to be implemented on an individual basis. Furthermore, the success of the agreement will ultimately hinge on the extent to which it deals successfully with non-tariff measures, which are highly prohibitive to trade in the region, and high costs of trade and logistics. While it includes a mutual recognition of standards and licences, harmonisation of sanitary and phytosanitary (SPS) measures, rules of origin and a Pan African payment and settlement system that will undoubtedly aid particularly SME's, many non-tariff barriers are more difficult to remove.

Figure 1. Per capita net value of agriculture and fish production in Sub-Saharan Africa



Note: Estimates are based on historical time series from the FAOSTAT Value of Agricultural Production domain which are extended with the *Outlook* database. Remaining products are trend-extended. The Net Value of Production uses own estimates for internal seed and feed use. Values are measured in constant 2014-2016 USD.
Source: FAO (2024). FAOSTAT Value of Agricultural Production Database, http://www.fao.org/faostat/en/#data/QV; OECD/FAO (2024) "OECD-FAO Agricultural *Outlook*", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

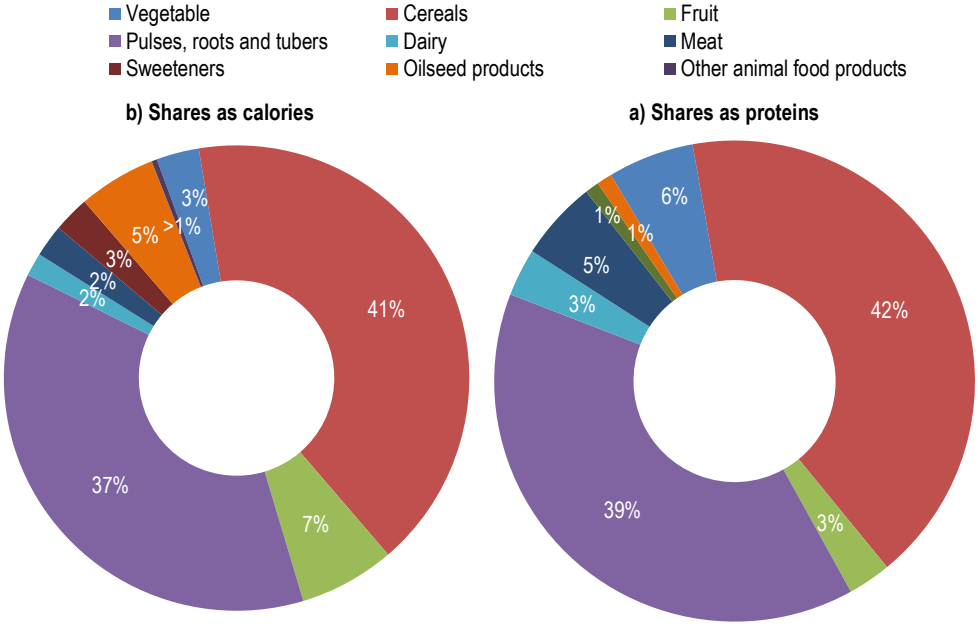
Figure 2. Fertiliser application per hectare of land used for crop production is low in Sub-Saharan Africa



Source: OECD/FAO (2024), "OECD-FAO Agricultural *Outlook*", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

StatLink 2 https://stat.link/6ycte7

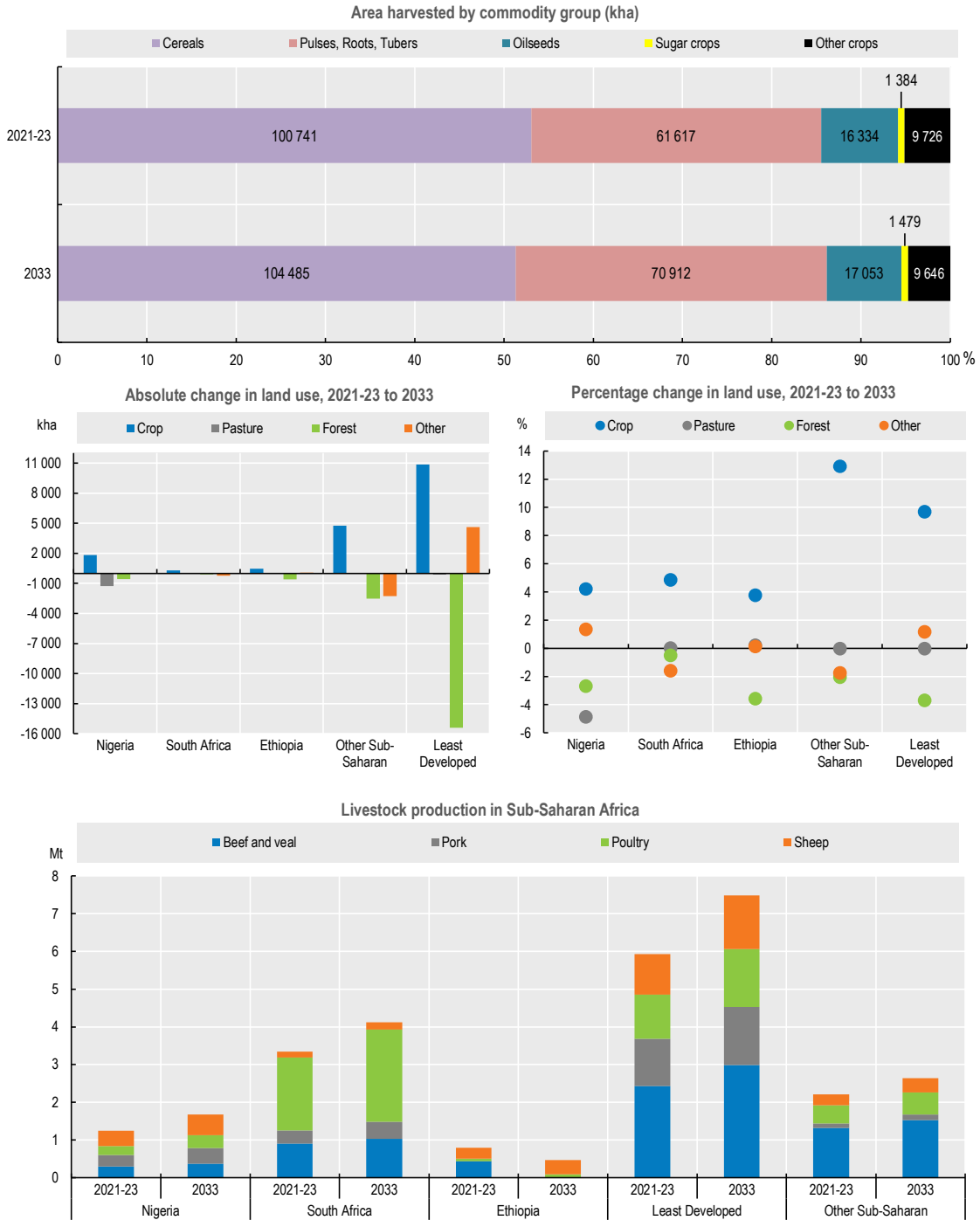
Figure 3. Distribution of food waste and losses in Sub-Saharan Africa in terms of calories and proteins, 2021-2023



Note: Other animal food products include egg and fish.
Source: OECD/FAO (2024), "OECD-FAO Agricultural *Outlook*", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

StatLink 2 https://stat.link/5q2oup

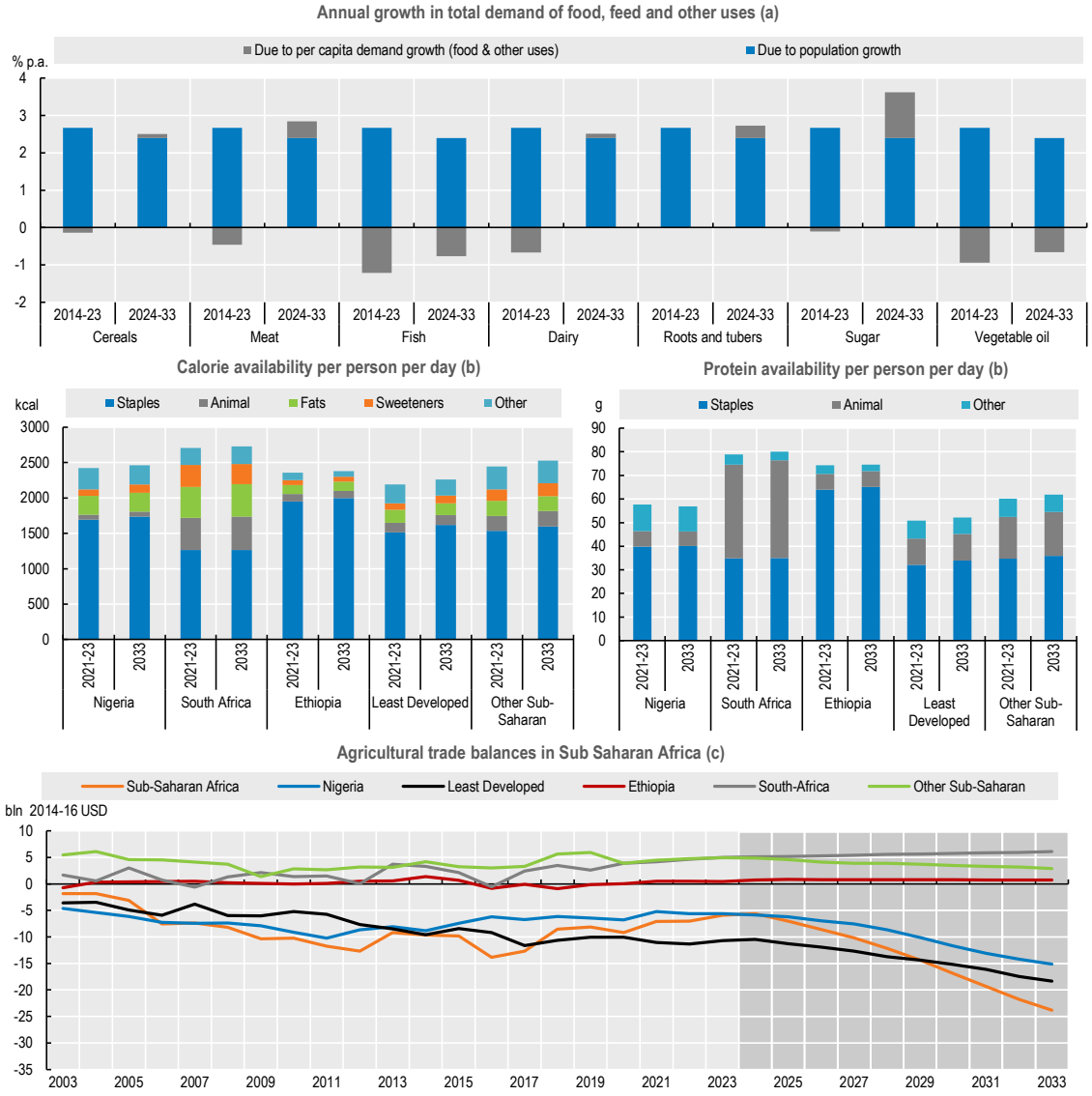
Figure 4. Land use change and livestock production in Sub-Saharan Africa



Source: OECD/FAO (2024), "OECD-FAO Agricultural *Outlook*", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

StatLink 2 https://stat.link/uhdse7

Figure 5. Demand for key commodities, food availability and agricultural trade balance in Sub-Saharan Africa



Notes: Estimates are based on historical time series from the FAOSTAT Food Balance Sheets and trade indices databases and include products not covered by the *Outlook*. a) Population growth is calculated by assuming per capita demand constant at the level of the year preceding the decade. b) Fats: butter and oils; Animal: egg, fish, meat and dairy except for butter; Staples: cereals, oilseeds, pulses and roots and tubers. c) Include processed products, fisheries (not covered in the FAOSTAT trade index) based on outlook data.
Source: FAO (2024). FAOSTAT Value of Agricultural Production Database, http://www.fao.org/faostat/en/#data/QV; OECD/FAO (2024) "OECD-FAO Agricultural *Outlook*", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

StatLink 2 https://stat.link/cimfwr

Table 1. Regional indicators: Sub-Saharan Africa

	Average			%	Growth[2]	
	2011-13	2021-23 (base)	2033	Base to 2033	2014-23	2024-33
Macro assumptions						
Population ('000)	881 501	1 150 610	1 497 070	30.11	2.67	2.40
Per capita GDP[1] (kUSD)	1.72	1.71	1.88	9.97	-0.53	0.88
Production (USD bln 2014-16)						
Net value of agricultural and fisheries[3]	158	205	261	26.94	2.13	2.15
Net value of crop production[3]	110	147	190	29.87	2.18	2.33
Net value of livestock production[3]	30	36	45	26.58	2.11	2.21
Net value of fish production[3]	18	23	25	8.97	1.90	0.80
Quantity produced (kt)						
Cereals	122 116	159 850	208 606	30.50	2.65	1.94
Pulses	18 363	21 385	29 349	37.24	2.26	3.01
Roots and tubers	64 601	85 803	117 094	36.47	2.62	2.69
Oilseeds[4]	9 915	14 756	17 027	15.39	4.06	1.21
Meat	10 972	13 520	16 871	24.79	2.00	2.26
Dairy[5]	3 400	3 965	5 064	27.72	2.28	2.39
Fish	6 556	8 349	9 195	10.13	2.12	0.80
Sugar	7 219	7 648	9 115	19.17	1.97	1.18
Vegetable oil	6 006	8 239	9 157	11.14	3.33	0.89
Biofuel production (mln L)						
Biodiesel	0	0	0	-25.34	0.00	4.07
Ethanol	574	1 038	1 304	25.63	5.32	2.34
Land use (kha)						
Total agricultural land use	837 440	867 314	884 224	1.95	0.31	0.15
Total land use for crop production[6]	178 869	210 979	229 218	8.65	1.56	0.61
Total pasture land use[7]	658 571	656 335	655 006	-0.20	-0.07	-0.01
GHG emissions (Mt CO2-eq)						
Total	788	932	1 028	10.25	1.94	0.89
Crop	232	231	239	3.46	0.77	0.27
Animal	554	699	786	12.49	2.34	1.09
Demand and food security						
Daily per capita caloric food consumption[8] (kcal)	2 319	2 321	2 396	3.23	-0.02	0.40
Daily per capita protein food consumption[8] (g)	58.7	57.5	58.5	1.72	-0.25	0.32
Per capita food consumption (kg/year)						
Staples[9]	176.4	178.7	188.0	5.21	-0.11	0.36
Meat	8.9	8.6	8.7	1.58	-0.47	0.37
Dairy[5]	3.9	3.5	3.4	-1.39	-0.77	0.13
Fish	9.5	8.6	8.1	-5.32	-0.81	-0.77
Sugar	9.9	10.0	11.3	12.67	0.07	1.15
Vegetable oil	7.9	7.4	7.2	-2.41	-0.95	-0.19
Trade (bln USD 2014-16)						
Net trade[3]	-11	-7	-24	254.89	..	..
Value of exports[3]	35	50	61	20.17	2.96	1.55
Value of imports[3]	46	57	84	47.69	1.38	4.27
Self-sufficiency ratio (calorie basis)[10]	85.6	85.8	83.6	-2.61	0.36	-0.39

Notes: 1 Constant 2010 USD. 2. Least square growth rates (see glossary). 3. Follows FAOSTAT methodology, based on commodities in the Aglink-Cosimo model. 4. Oilseeds represent soybeans and other oilseeds. 5.Milk solid equivalent units. 6. Area accounts for multiple harvests of arable crops. 7. Land for grazing. 8. Food availability, not intake. 9. Cereals, oilseeds, pulses, roots and tubers. 10. Production / (Production + Imports - Exports)*100.

Sources: FAO (2024). FAOSTAT Food Balance Sheets and trade indices databases, http://www.fao.org/faostat/en/#data; OECD/FAO (2024), "OECD-FAO Agricultural *Outlook*", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.

Notes

[1] Source OECD-FAO interpolated for 2018-20 from the database of the Global Trade Analysis Project (GTAP) 2011, using food expenditure and GDP data used in this *Outlook*.