

3. Booming demand: A new dawn for local food economies

Over the coming decade, dietary habits will continue to undergo changes resulting in a transformation of the food economy. Key underlying driving factors include a large segment of the populations in Asia and sub-Saharan Africa obtaining “global middle-class” status and a rapid urbanisation process in both regions. These trends will likely increase demand for processed and higher-quality food products. Based on a uniquely disaggregated dataset on sectoral employment, this chapter provides a forecast of the potential employment growth in the food economy at horizon 2030 for a set of 11 sub-Saharan African countries, as well as 2 countries in Southeast Asia.

The long-term prospects of the food economy are influenced by income growth and urbanisation. Income growth in low- and middle-income countries across sub-Saharan Africa and Southeast Asia is indeed likely to hasten the transition towards higher calorie intakes and consumption of processed food (OECD-FAO, 2020^[1]; Tschirley et al., 2015^[2]; Worku et al., 2017^[3]). Similarly, rapid urbanisation and population growth create new dietary habits and higher demand for agriculture inputs and food-related services such as restaurants and catering, which is expected to transform the downstream segments of the food economy in processing and create new employment for rural and urban youth (Hussein and Suttie, 2016^[4]; Berdegue and Proctor, 2014^[5]). However, urbanisation in developing countries also presents a series of challenges for the food economy, as urban areas sprawl with low density (especially small and medium-sized cities) and increasingly encroach on fertile land and reduce the scope for food production in peri-urban and surrounding rural areas (Cabannes and Marocchino, 2018^[6]).

An important question, therefore, is to what extent such trends could translate into more and better jobs in the food economy, especially for youth. The answer clearly depends on the extent to which local food systems will take up the challenge of higher and changing domestic demand for food, and, if so, which type of local agri-food systems will emerge.

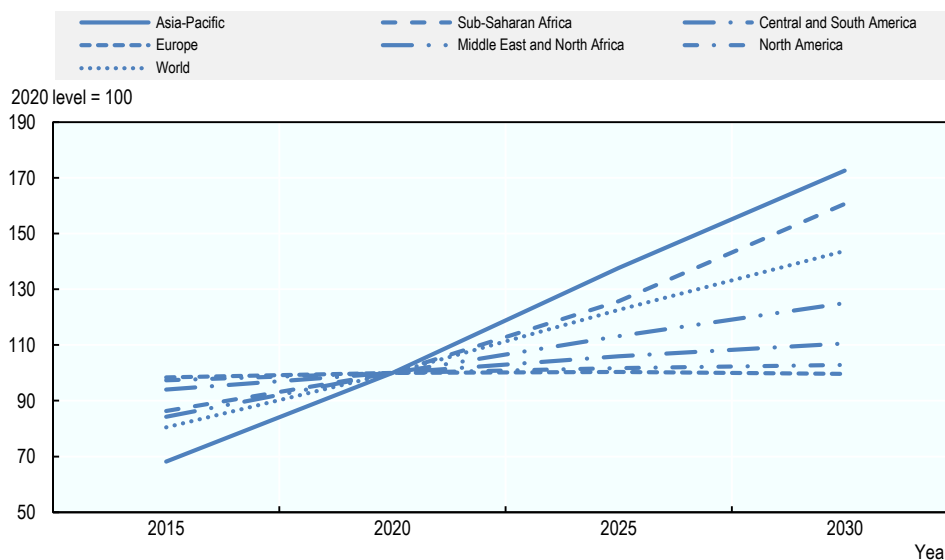
To start looking at this complex question, it is useful first to investigate what could be the employment growth potential in the food economy directly associated with income growth and urbanisation in the next decade, holding all else constant and assuming no change in policy directions and agri-food models. This chapter presents the results of a forecasting exercise, showing how urbanisation trends and the emergence of the middle-class in Asia and Africa could affect employment growth at horizon 2030.

The analysis is undertaken for the seven countries discussed in Chapter 1, as well as for six additional sub-Saharan African countries, and for the four sub-sectors of the food economy: food agriculture, food processing, food marketing and food-away-from-home. The 13 countries therefore are Côte d'Ivoire, Ghana, Mali, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Thailand, Uganda, Viet Nam and Zambia.

The emergence of a “global middle class” and rapid urbanisation

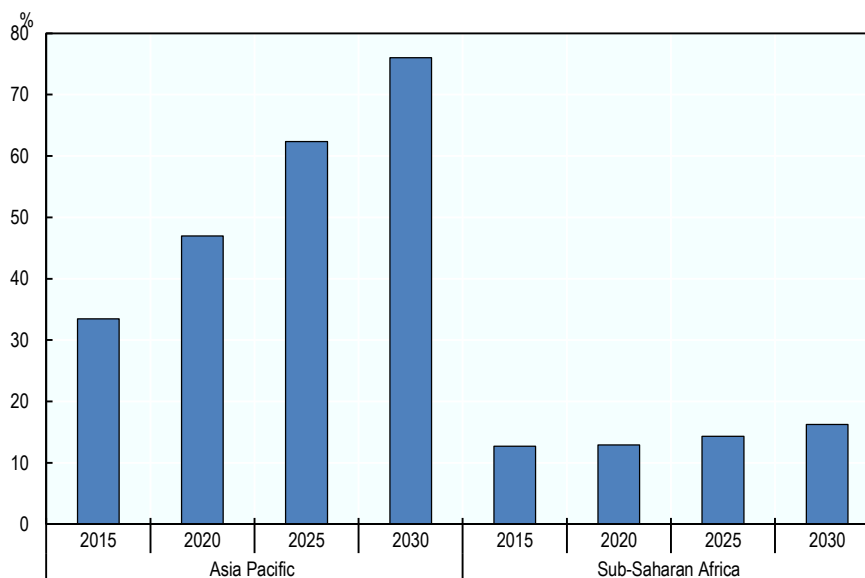
Income growth in low- and middle-income countries across sub-Saharan Africa and Southeast Asia is likely to increase demand for food products and services in both quantitative and qualitative terms. Key underlying trends consist in the accession of large segments of populations in Asia and sub-Saharan Africa to the “global middle-class” status, as well as, relatedly, a rapid urbanisation process. The number of people belonging to the global middle class is projected to increase by 44% between now and 2030. The “global middle class” is often defined as individuals living with USD 10-100 per capita per day, in purchasing power parity, expressed in 2005 dollars (Kharas, 2010^[7]; Kharas, 2017^[8]). According to a projection established prior to the global pandemic, the number of people belonging to this category is expected to grow from 3.8 billion in 2020 to 5.4 billion in 2030 (Kharas, 2017^[8]). Asia-Pacific and sub-Saharan Africa are the regions with the largest percentage increases of the number of people belonging to this category, with 61% and 73% increases, respectively (see Figure 3.1 and Figure 3.2).

Figure 3.1. Projected number of individuals belonging to the global middle class at horizon 2030, by region, relative to the 2020 level



Source: Authors' calculations based on Kharas (2017^[8]), *The unprecedented expansion of the global middle class: An update*, <https://www.brookings.edu/research/the-unprecedented-expansion-of-the-global-middle-class-2/>.

Figure 3.2. Projected share of the population belonging to the global middle class at horizon 2030, by region

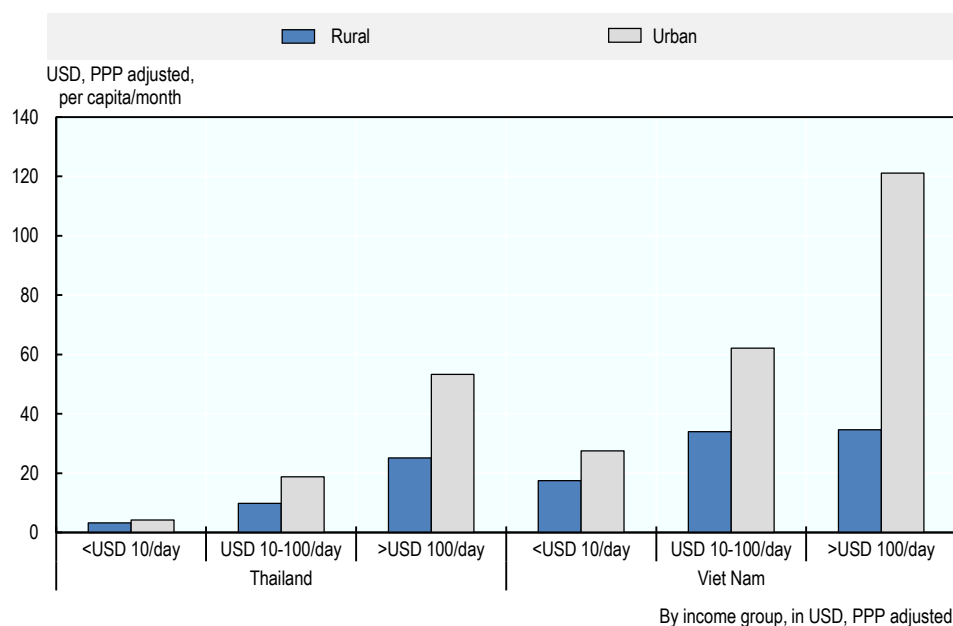


Source: Authors' calculations based on Kharas (2017^[8]), *The unprecedented expansion of the global middle class: An update*, <https://www.brookings.edu/research/the-unprecedented-expansion-of-the-global-middle-class-2/>.

Middle-class status is strongly associated with increased spending on quality food products and services. In Thailand, middle-class households spend about three times more on restaurants than poorer households (earning less than ten dollars in purchasing power parity per capita per day). In

urban areas, the ratio is approximately four to one. In Viet Nam, middle-class households typically spend twice as much on restaurants as poorer households (Figure 3.3).

Figure 3.3. Spending on food-away-from-home in Thailand and Viet Nam, by income class and urban/rural status



Note: Income groups are based on total household income divided by the number of family members.

Sources: Authors' calculations based on Socio-Economic Survey (2017) for Thailand, Household Living Standards Survey (2014) for Viet Nam. Purchasing power parity (PPP) conversion factors for private consumption (local currency unit per international dollar) are obtained from the International Comparison Program, World Bank.

Restrictive measures adopted in several countries during the COVID-19 crisis are considerably deteriorating income dynamics. Sixty million additional people could be pushed into poverty in the short term (Lakner et al., 2021^[9]), and many economies are expected to exhibit a gross domestic product (GDP) around 5% lower in 2022 than before the crisis (OECD, 2020^[10]). While the long-term economic consequences of the crisis are difficult to foresee, one might however expect that at horizon 2030 many of its effects will have dissipated and countries will have converged towards their pre-pandemic trends.

Globally, 55% of the world's population lived in urban areas in 2018, and, by 2050, this share is projected to increase to 68%. In Africa, the majority of the population is still rural with 41% living in urban areas, while Asia became mostly urban for the first time in history in 2019, with more than 50% of its population living in cities (UN DESA, 2019^[11]). The urban population in Asia is expected to rise to more than 2.8 billion in 2030, making up 65% of the total population (UN DESA, 2019^[11]). In Southeast Asia, the urban population will grow by another 100 million people by 2030, rising from 280 million people today to 373 million, reaching an urbanisation rate of 57% (Florida and Fasche, 2017^[12]).

Urbanisation affects dietary habits. Higher urban wages tend to increase the opportunity costs of cooking for personal household consumption. This in turn increases demand for labour-intensive food services, such as restaurants (FAO, 2017^[13]). Such services also typically enjoy economic benefits from larger urban markets. These patterns are likely to drive demand for higher-quality food products and services, as well as higher caloric intake per capita over the next decade. Asia-Pacific and Africa are

the two regions exhibiting the largest projected rise in caloric intake per capita at horizon 2029 (OECD-FAO, 2020^[1]), with increases of 5.9% and 2.7%, respectively.

Employment forecast in the food economy

This section turns to an analysis of the expected changes in employment in the food economy at horizon 2030 related to urbanisation and the emergence of the middle class in Asia and Africa discussed above. While these projections do not differentiate employment by age group nor urban/rural status, they are indicative of opportunities for youth and particularly rural youth. They suggest an overall increase in the absolute number of jobs in the food economy in the countries of interest and a rebalancing of food economy employment from the agricultural sector to secondary and tertiary food economy activities.

Aggregate employment forecast in the food economy

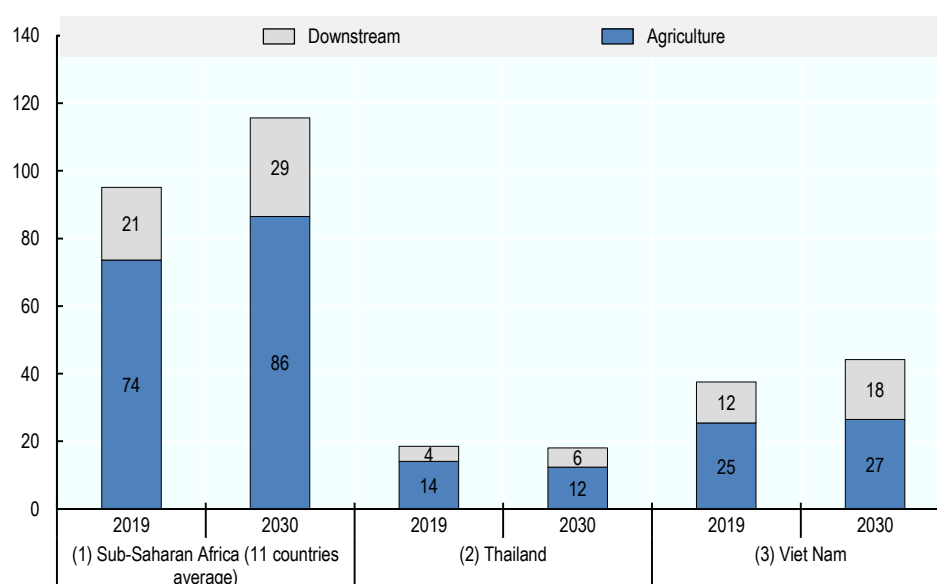
To forecast employment in the food economy, two novel, uniquely disaggregated sectoral employment datasets provided by the International Labour Organization (ILO) are used: Employment by sex and economic activity (ILO modelled estimates) and Employment by sex and economic activity (ISIC level 2). A methodology was specifically developed to harness information from both datasets, using GDP and urbanisation as main predictors and deriving country-specific elasticities (see Annex A). Employment estimates at horizon 2030 rely on the United Nations' *2018 Revision of World Urbanisation Prospects* (available at horizon 2030) and the International Monetary Fund's *World Economic Outlook* GDP forecasts (available at horizon 2025, extended to 2030; see Annex A for details). This approach based on rich longitudinal data represents a considerable improvement over previous food economy employment projections, which relied on a cross-section of observations and strong assumptions on future relationships between food demand and labour market outcomes (Tschirley et al., 2015^[2]).

The changing structure of employment in the food economy

For the 11 sub-Saharan African economies studied here, aggregate employment in food agriculture is projected to increase to 86 million jobs in 2030 from 74 million in 2019, a 17% increase. The number of jobs in the downstream segments of the food economy, defined as the sum of food processing, food marketing and food-away-from-home, is also set to increase from 21 million to 29 million in the same period (Figure 3.4). Out of total employment, the share of food economy jobs in 2030 should remain more or less stagnant at around 60%, with the share of jobs in the agriculture segment decreasing slightly from 46% to 44% on average over the 2019-30 period. The share of employment in downstream segments will increase slightly to make up 15% of total employment in 2030 (Figure 3.5).

For the same period regarding the two Southeast Asian economies, the total number of jobs in the food economy will remain stagnant in Thailand and increase slightly in Viet Nam (Figure 3.4). Out of total employment, the food economy is projected to account for over half of the jobs in Thailand and 65% in Viet Nam. The overall share of food economy jobs will decline in both countries, by 4 percentage points in Thailand and 2 percentage points in Viet Nam in 2030, mostly led by a decrease in the share of jobs in the agriculture segment. On the other hand, the share of jobs in downstream activities out of total employment should increase in both Thailand and Viet Nam, by 3 and 4 percentage points, respectively (Figure 3.5).

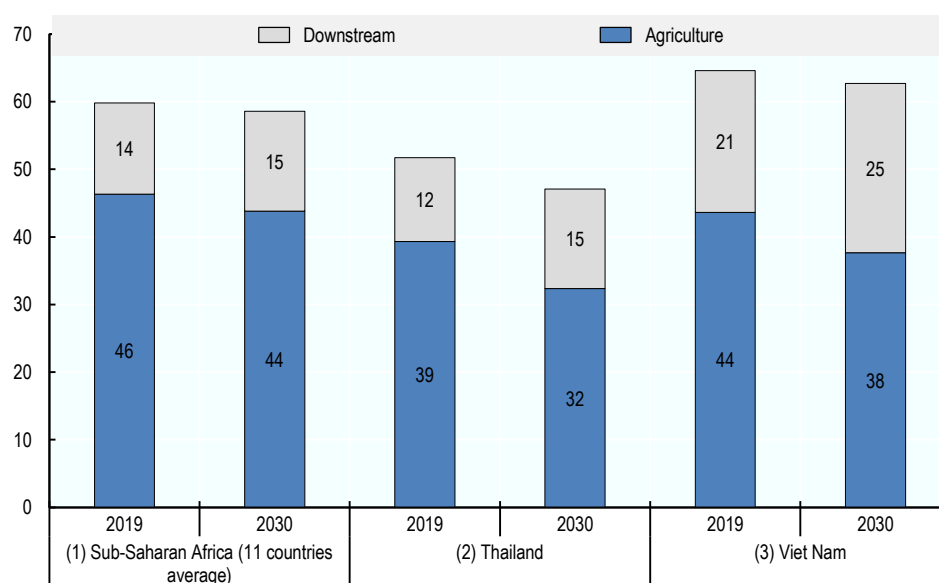
Figure 3.4. Employment in the food economy, number of jobs, 2019 and 2030



Note: The 11 sub-Saharan African countries include Côte d'Ivoire, Ghana, Mali, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Uganda and Zambia.

Source: Authors' own calculations.

Figure 3.5. Employment in the food economy, share of total employment, 2019 and 2030



Note: The 11 sub-Saharan African countries include Côte d'Ivoire, Ghana, Mali, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Uganda and Zambia.

Source: Authors' own calculations.

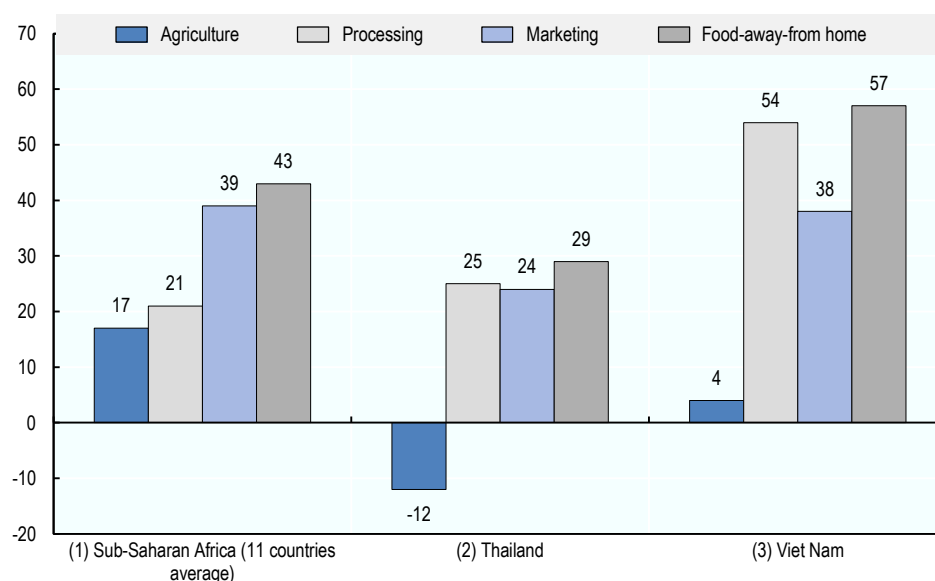
Within the downstream segments of the sub-Saharan African countries, processing will account for 4.9 million jobs in 2030, a 21% increase from 2019, and marketing 21 million jobs, a 39% increase.

Finally, food away-from-home will experience the highest employment increase at 43%, with 4.6 million jobs (Figure 3.6).

In the two Southeast Asian countries, jobs will grow in all the downstream segments of the food economy. The highest increases will be in the processing and food-away-from-home activities in Viet Nam, at 54% and 57%, respectively.

The overall dynamism of the downstream sectors should not overshadow the fact that they start from a relatively small base, compared to agriculture, in most countries of interest.

Figure 3.6. Employment by food economy sector, projected change 2019-30, percentage change over initial level

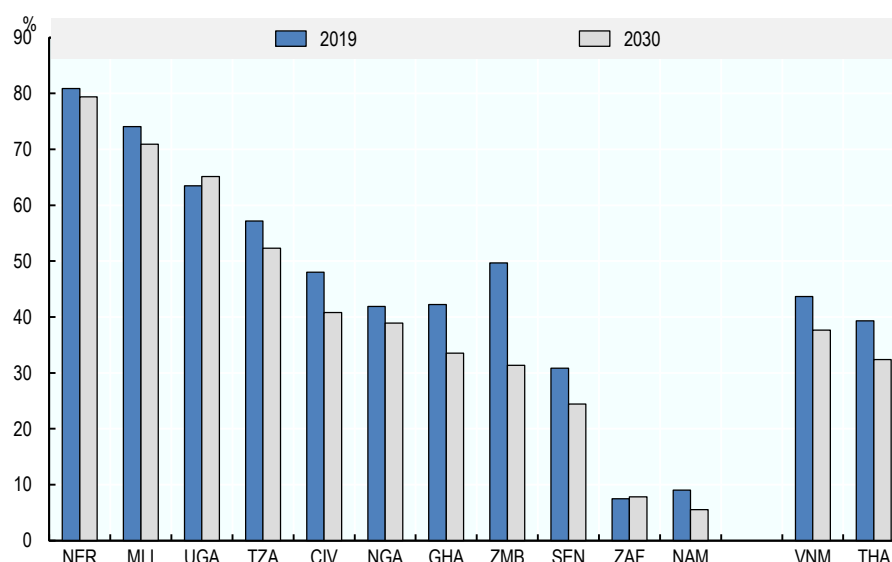


Note: The regional figure is a weighted average. The 11 sub-Saharan African countries include Côte d'Ivoire, Ghana, Mali, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Uganda and Zambia.

Source: Authors' own calculations.

In the sub-Saharan African economies, employment in agriculture, while increasing in absolute terms, should decline nearly universally as a share of total employment, representing, for example, a decline of nearly 20 percentage points in Zambia, following a trend initiated in the 2000s. Despite these dynamics, agricultural employment will remain an essential component of sub-Saharan African labour markets across the next decade, as 8 of the 11 sample countries are projected to maintain more than 40% of their total employment in the sector (Figure 3.7).

Figure 3.7. Employment in agriculture, share of total employment, 2019 and 2030, by country



Note: The 11 sub-Saharan African countries include Côte d'Ivoire, Ghana, Mali, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Uganda and Zambia.

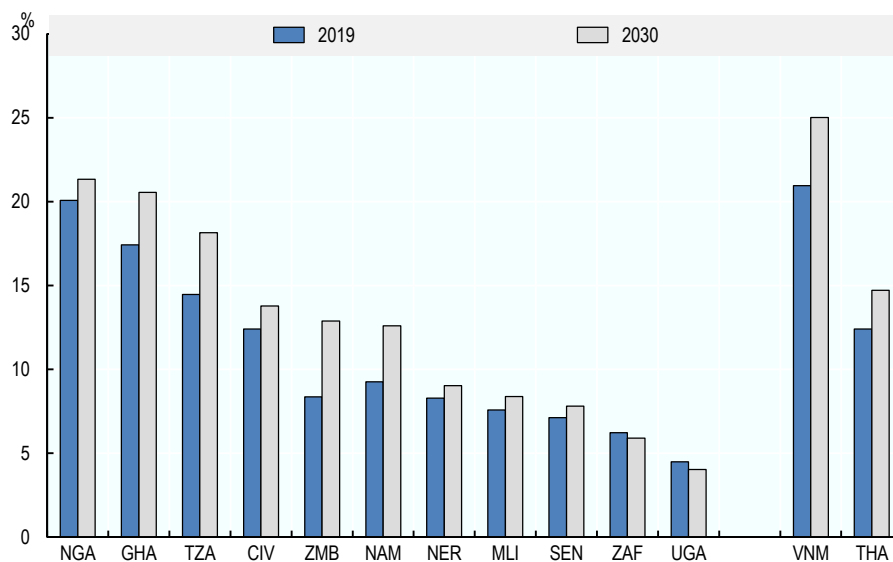
Source: Authors' own calculations.

Evolution of the downstream sectors of the food economy

At horizon 2030, the share of employment in the downstream part of the food economy in sub-Saharan Africa will range from 21% of total employment in Nigeria to 4% in Uganda. Employment in downstream sectors should rise most, as a share of total employment, in Zambia (+5 percentage points) and Tanzania (+4 pp). It will decline as a share of total employment only in South Africa and Uganda (>-1 pp). While in the case of Uganda this relative decline is related to quickly increasing overall employment in the rest of the economy, in the case of South Africa an absolute decline in food processing is projected. The trend is in line with the "premature deindustrialisation" of the country since the late 2000s (Imbs, 2013^[14]), which is attributed to the rise in extractive activities aimed at exports to emerging Asia, originally triggered by a surge in mineral commodity prices. The trend is rather specific to the country, as middle- and high-income economies tend, in certain circumstances, de-industrialise generally to move into services, while in the case of South Africa the move is towards the primary sector (Imbs, 2013^[14]).

Downstream segment employment should increase sharply in Viet Nam (+4 percentage points) and Thailand (+2 percentage points), therefore expanding the trend of a fast modernisation of the food economy which has prevailed over the last two decades in Southeast Asia (Briones, 2019^[15]). This dynamic has greatly benefited from the region's investment in transportation infrastructure facilitating rural-urban linkages (Reardon and Timmer, 2014^[16]).

Figure 3.8. Employment in downstream sectors of the food economy, share of total employment, 2019 and 2030



Note: The 11 sub-Saharan African countries include Côte d'Ivoire, Ghana, Mali, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Uganda and Zambia.

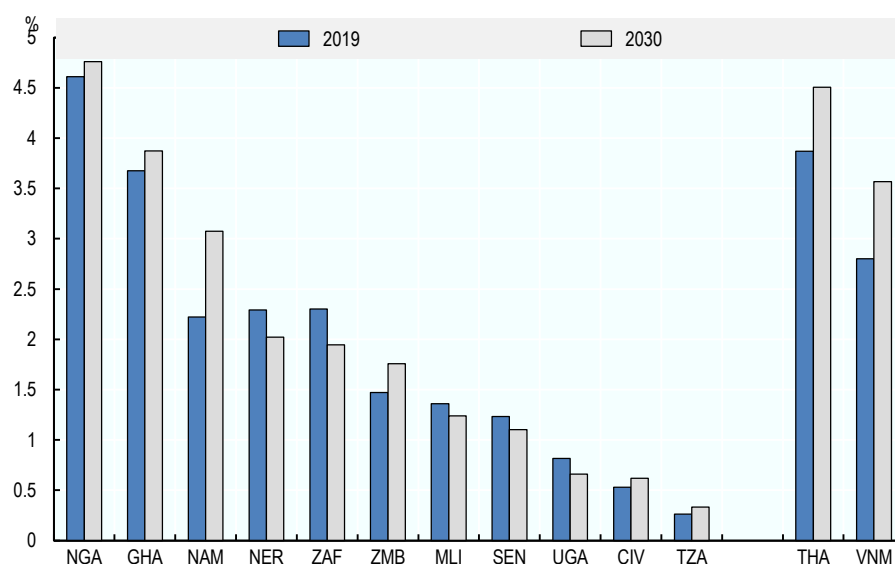
Source: Authors' own calculations.

Food processing

As shown in Figure 3.9, food processing employment in sub-Saharan Africa is expected to be highest in Nigeria and lowest in Tanzania (<1%) at horizon 2030. The increase, in terms of share, will be highest in Namibia (+1 percentage point). Five African countries will likely reduce their share of employment in processing over 2019-30, with South Africa experiencing the largest drop (0.4 percentage points), which can be attributed to the deindustrialisation dynamics at play in the country described above.

Thailand and Viet Nam exhibit among the highest shares of total employment in food processing (5% and 4%, respectively) and the fastest expanding ones (+0.6 and +0.8 percentage points, respectively).

Figure 3.9. Employment in food processing, shares of total employment, 2019 and 2030



Note: The 11 sub-Saharan African countries include Côte d'Ivoire, Ghana, Mali, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Uganda and Zambia.

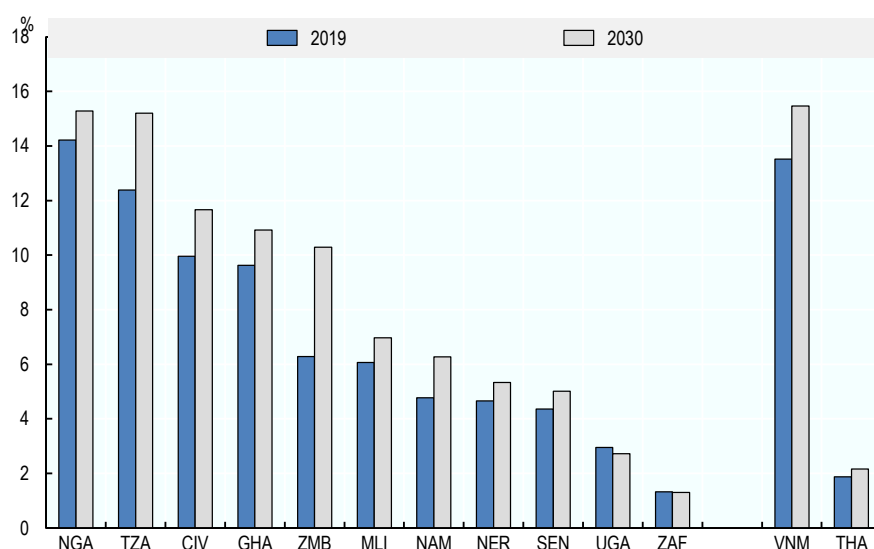
Source: Authors' own calculations.

Food marketing

In sub-Saharan Africa, the rise in food marketing employment, consisting of wholesale agricultural machinery, food and beverage retail, and food transport, is projected to be highest in Nigeria (15%) and lowest in South Africa (1%). The sector displays among the highest expected gains in the overall food economy, with namely Zambia and Tanzania exhibiting gains corresponding to more than 4 and 3 percentage points of total employment, respectively. The sector will be virtually stable in South Africa and Uganda.

The sector exhibits heterogeneous patterns among the Southeast Asian sample, as it is projected to represent 15% of employment in Viet Nam but only 2% in Thailand at horizon 2030.

Figure 3.10. Employment in food marketing, shares of total employment, 2019 and 2030



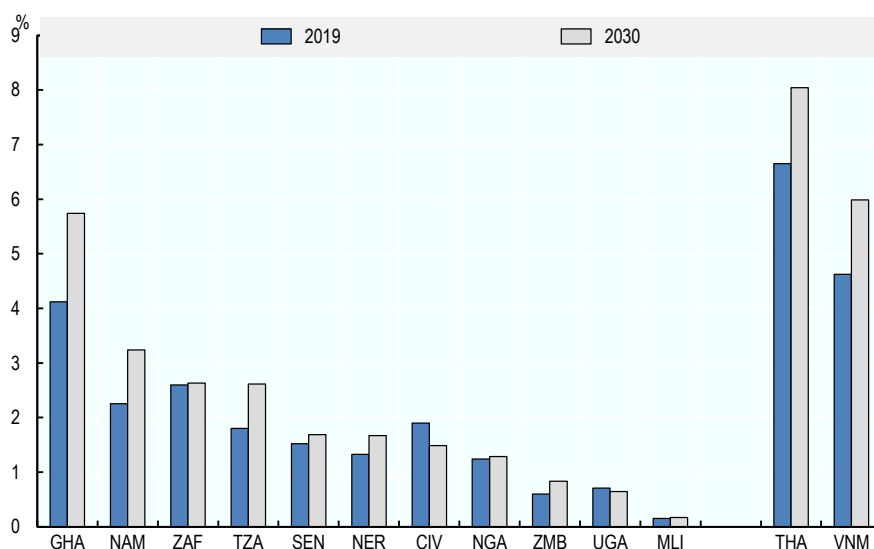
Note: The 11 sub-Saharan African countries include Côte d'Ivoire, Ghana, Mali, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Uganda and Zambia.

Source: Authors' own calculations.

Food-away-from-home

Food-away-from-home is set to represent a large share of total employment by 2030, in particular in Ghana (6%) and Namibia (3%) among sub-Saharan African economies. The sector should gain more than 0.5 percentage points in terms of employment share in Ghana, Namibia and Tanzania. It will experience relative declines in Côte d'Ivoire and Uganda. The Southeast Asian sample countries will enjoy the highest increase in shares, reaching 8% in Thailand and 6% in Viet Nam by 2030.

Figure 3.11. Employment in food-away-from-home, shares of total employment, 2019 and 2030

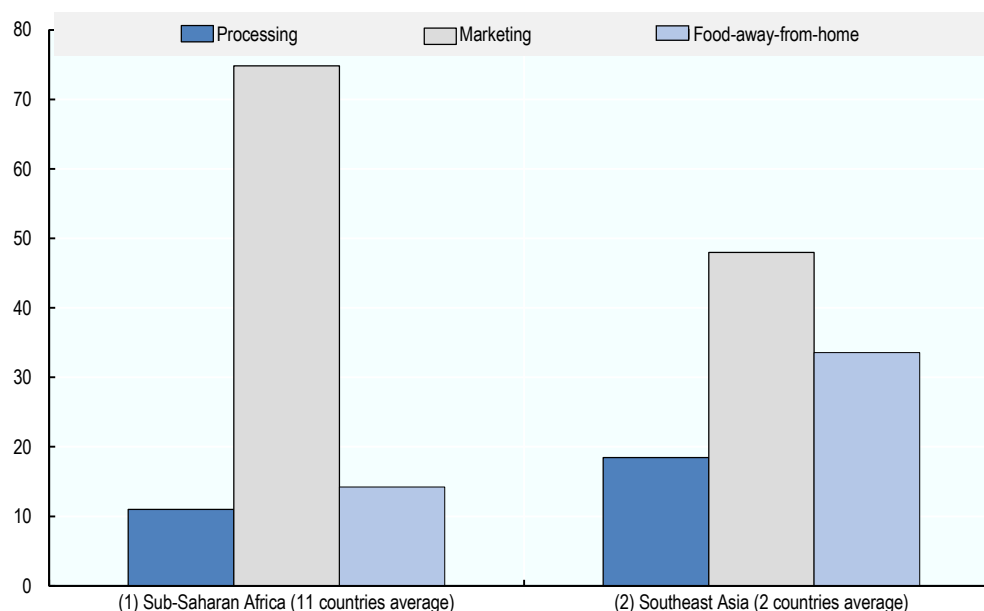


Note: The 11 sub-Saharan African countries include Côte d'Ivoire, Ghana, Mali, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Uganda and Zambia.

Source: Authors' own calculations.

Within the downstream segments, food marketing represents the largest share of total agri-food downstream employment creation in sub-Saharan Africa. The picture is somewhat more balanced in the Southeast Asian countries.

Figure 3.12. Contribution of each downstream sector to overall downstream employment creation, 2019-30



Note: Regional figures are weighted average. The 11 sub-Saharan African countries include Côte d'Ivoire, Ghana, Mali, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Uganda and Zambia.

Source: Authors' own calculations.

Conclusion

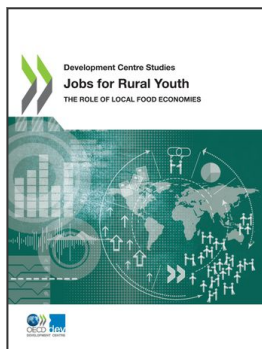
This chapter sought to contribute to our understanding of the employment potential in the food economy by forecasting the changes in employment directly associated with rapid urbanisation and the rise of the middle class, holding all else constant. The projections show that such trends would increase the overall level of employment in the food economy, in absolute terms in the case of agriculture and, in the case of downstream segments, in both absolute and relative terms. Looking at the changes within the different segments of the food economy further shows a rebalancing of food economy employment from the agricultural sector to secondary and tertiary food economy activities.

Yet, these results only present a low estimate of the employment growth potential in the food economy, as they assume no change in food models and relate only to rapid urbanisation and the rise of the middle class. The next chapter will discuss how different types of local food systems could further influence the quantity and quality of employment in the food economy beyond urbanisation and rising incomes, while responding to the social, economic and environmental challenges.

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