

4. Turning local food economies into engines for more and better jobs

Increasing demand for diversified and processed food in developing countries is an opportunity to develop the downstream sector of the agri-food industry and create quality jobs for youth. This chapter provides the rationale for the focus on local food economies and reviews some local food systems and short food supply chain business models that try to reconcile economic, social and environmental objectives. “Food co-op” business models seem to have the highest potential in terms of scalability, replicability and employment creation for developing countries.

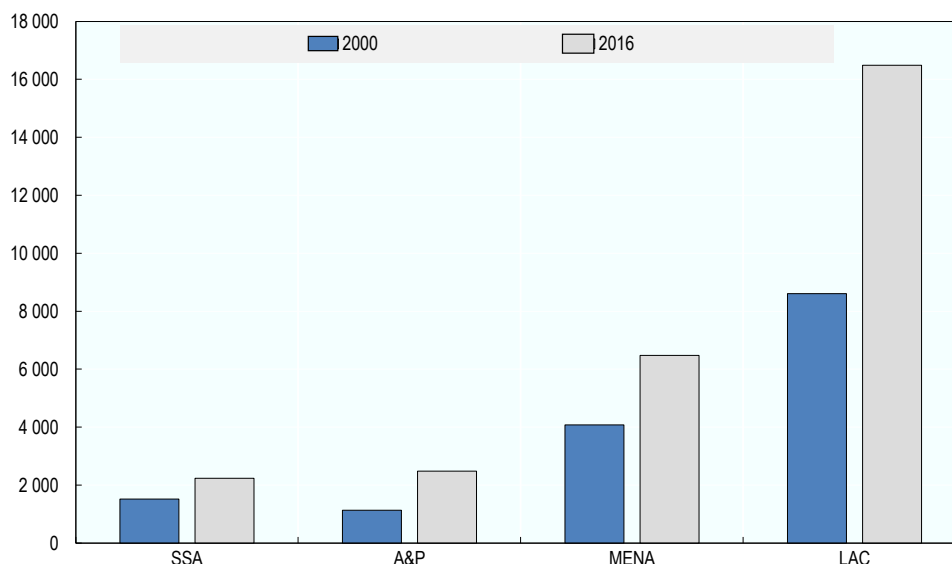
Rapid urbanisation and a growing middle class in developing countries will increase demand for diversified, processed and nutritious food. This is an opportunity to develop the agri-food processing sector and related services that will allow local businesses to tap into this growing market. The key question is which food system model(s) offer the highest potential to create decent jobs for youth, in particular rural youth. Which model can reconcile economic, social and environmental objectives? Giving priority to youth employment creation and Sustainable Development Goals (SDGs) is a strategic choice, which can be guided by evidence on food system models that work. This chapter lays out the challenges of current food system models, including participation in agri-food global value chains (GVCs) and presents rural development initiatives and business models that can cater to local and potentially regional food demands, address social and environmental concerns and create decent jobs for youth.

Livelihoods and environmental challenges of current food systems

In most developing countries, agriculture absorbs the majority of rural workers, but low pay and poor working conditions make it difficult to sustain rural livelihoods and attract new labour market entrants. In sub-Saharan Africa, jobs in agriculture in 2019 made up for 53% of total employment, a 10 percentage point decrease from the early 2000s, while in Southeast Asia the share has nearly halved from 50% in the early 2000s to 27% in 2019 (World Bank, 2019^[1]). The majority of agricultural jobs in developing countries are informal employment, with no written contract nor basic social protection. Agricultural workers are particularly more vulnerable to poor and dangerous work conditions with low and unstable incomes. Employment in agriculture is associated with the highest incidence of workers living with families below the poverty line (Altieri and Koohafkan, 2008^[2]). A growing number of evidence confirms that the current food system does not produce healthy nutrition while at the same time, predominant systems of agriculture and fisheries do not provide sustainable livelihoods for many farmers and fishermen (OECD, 2021^[3]; FABLE, 2019^[4]; HLPE, 2016^[5]).

Farming in Asia and Africa is characterised by small surfaces and low labour productivity. Out of the 570 million farms worldwide, more than 475 million farms are less than 2 hectares in size, and more than 500 million are family farms (Lowder, Skoet and Raney, 2016^[6]). In Africa, small-scale farming is the norm, averaging below 3 hectares and the majority being under 2 hectares (Jayne, Chamberlin and Headey, 2014^[7]). In Southeast Asia,¹ farm sizes have been declining, averaging around 3 hectares (IFAD, 2019^[8]). In Viet Nam, about 85% of farms are less than 1 hectare while in Thailand farm sizes range between 1 and 5 hectares (OECD/FAO, 2017^[9]). Though mechanisation is happening even in small farms, both sub-Saharan Africa and Southeast Asia lag behind in improving agricultural labour productivity (Figure 4.1). There are basically still too many agricultural workers for too little agricultural value added, resulting in lower incomes for farm households compared to other sectors (FAO, 2020^[10]). As the major source of employment for most of the rural population, an increase in agricultural productivity and wages would reduce poverty rates, expand non-farm employment opportunities, and spur structural transformation and further economic development (World Bank, 2018^[11]; Jayne et al., 2019^[12]; Wineman et al., 2020^[13]). As countries develop, employment within the food chain tends to shift from agriculture to other segments of the food chain, and jobs created outside of agriculture are often still connected to the food system (Reardon and Timmer, 2012^[14]; OECD, 2021^[3]). Decent job creation and SME growth in downstream segments of value chains as well as development and diversification into high-value crops will need to be key focus of policy makers (IFAD, 2019^[8]; FAO, 2015^[15]).

Figure 4.1. Agriculture labour productivity, by region, 2000 and 2016 (in constant 2004-05 USD)



Note: SSA: Sub-Saharan Africa; A&P: Asia and the Pacific; MENA: Middle East and North Africa; LAC: Latin America and Caribbean

Source: Calculated from Agricultural total factor productivity growth indices for individual countries, 1961-2016, IFPRI (2020), *Agricultural Total Factor Productivity (TFP), 2000-2016*.

For many Asian countries, change in consumption patterns created new business opportunities in the downstream segments of the global agri-food value chain, but not necessarily for small scale farmers. Since the 1960s, the region's overall agricultural production grew twice as fast as the global average, with a consequent increase in its share of world trade in agricultural produce (de Koninck and Rousseau, 2013^[16]). In Malaysia, Thailand and Viet Nam for example, agribusiness now accounts for more value added in the economy than agriculture and is a source of employment for many farm households (FAO, 2018^[17]). The process of structural transformation of the food economy in Southeast Asian countries has followed similar trajectories: countries start with heavy government intervention and then liberalise to develop large processing sector focused on transformation, with an important component of FDI (Reardon, 2015^[18]). For the majority of countries, policies largely consisted in various forms of support to agricultural intensification practices and territorial expansion, including maritime (de Koninck and Rousseau, 2013^[16]).

In Viet Nam, economic reforms undertaken under the *Doi Moi* (renovation) from 1986 started to change centrally-planned agricultural co-operatives towards more market-reliant independent farms. A combination of policies, including land-use rights to farmers, access to credit, and openness to trade placed Viet Nam as one of the world's top rice exporter. However, participation in the export business was limited to a handful of national and provincial state-owned enterprises (OECD, 2015^[19]). Private sector involvement in this export trade was encouraged only from late 2000s. The Agricultural Restructuring Plan (ARP) of 2013 started the massive investment towards a more "industrial" food system by creating more linkages between large-scale production and trade, shifting the focus away from smallholder family farms. This vertical integration of supply chain took the form of contract farming in the case of livestock, and large industrial private firms in the case of dairy, with government support for credit, training and other services (IIED and IFAD, 2016^[20]). In addition, the government pioneered programmes to distinguish products based on origin (as part of food safety certification schemes) and terroir (as part of geographic indication schemes) (Delphine, 2015^[21]). For the 2030 horizon, Viet Nam

wants to make processed and other value-added products 50% of agri-food exports, doubling its current share (World Bank, 2016^[22]).

Such rapid growth models have come with social and environmental challenges, however. The governments push for modern food distribution to promote food safety, tax revenue and competitiveness, tends to exclude small-scale producers, low-income producers and the dense network of informal traders and SMEs in between (de Koninck and Rousseau, 2013^[16]; IIED and IFAD, 2016^[20]). Indeed, regulations affecting the food processing segment has accelerated consolidation of the sector towards large-scale processors and resulting in the disappearance of many small firms (Reardon et al., 2014^[23]). In addition, 85% of the world palm oil production comes from Southeast Asia. The rapid expansion of agriculture land has led to deforestation which has been devastating on biodiversity (UNEP, 2011^[24]; Mendes-Oliveira et al., 2017^[25]), while working conditions on these large plantations are often characterised by serious decent work deficits, including poor safety and health, low wages and informality (ILO, 2015^[26]).

The present trajectory of growth in agricultural production is environmentally unsustainable, while the demand for food, feed, fibre and agricultural goods and services is continuously increasing. Population and income growth over the past two centuries led to large increases in food consumption and production, causing intensive and extensive use of land with negative environmental consequences such as deforestation, erosion and resource depletion (Kirch, 2005^[27]; Campbell et al., 2017^[28]; IPBES, 2019^[29]; IPCC, 2019^[30]); in (OECD, 2021^[3]). Soil changes can occur naturally but are under increasing threat from a wide range pressure caused by human activities and poor soil management practices (FAO and ITPS, 2015^[31]). Monoculture, intensive tillage, short to no fallow, and reduction or absence of crop rotation systems has resulted in the unsustainable degradation of soils, causing environmental harm, and decreasing the ability to respond to other environmental stresses (Kopittke et al., 2019^[32]). In sub-Saharan Africa, soil degradation due to poor soil management and low use of quality fertilisers are believed to be expanding at an alarming rate and is the root causes of declining agricultural productivity in the region. The marginal increase in cereal production is due mostly to area expansion rather than yield increases (FAO and ITPS, 2015^[31]).

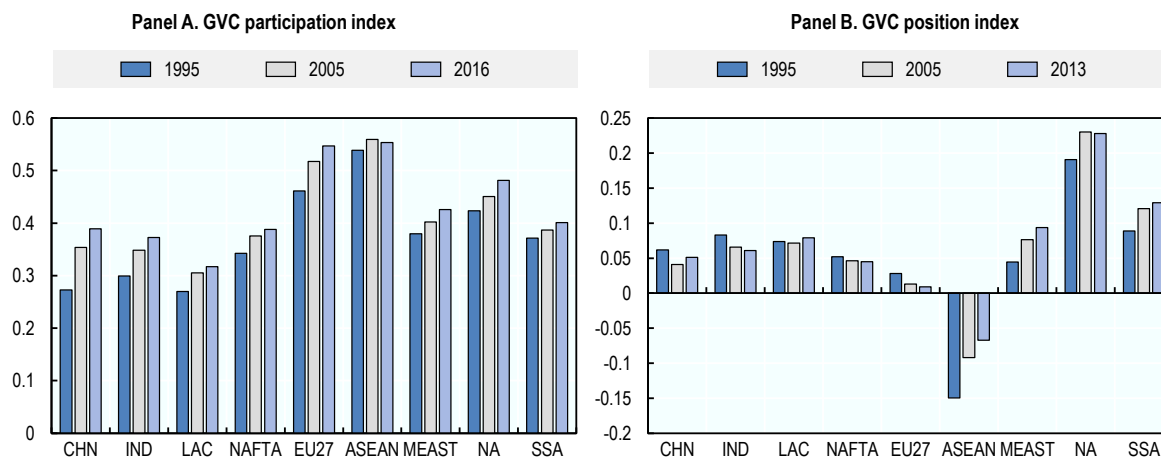
Crop production is negatively impacted by climate change-induced rain patterns and higher frequencies of temperature anomalies, to the extent that in some cases most of the technology-generated yield gains are offset (Hoffman, Kemanian and Forest, 2018^[33]). Climate change impacts the physical ability to exercise agricultural activities through the effect of rising temperature on human physiology (ILO, 2019^[34]). Western Africa and Southeast Asia are projected to be among the most affected regions, as their related losses in agricultural labour productivity due to heat stress are expected to reach approximately 8.9% and 9.1% respectively by 2030. At the same time, the effect of drought on agricultural labour markets is expected to increase unrest and armed violence by approximately 4% across a sample of 58 African and Asian countries (Berman, Bonnet and Borino, n.d.^[35]).

The challenge with upgrading from low value-added to high value-added participation in agri-food global value chains

Developing countries are increasingly integrated into agri-food global value chains. OECD research shows that agricultural trade is following other sectors and becoming organised within GVCs where agricultural raw material transformation and production of food for consumption occur ever more across different countries (OECD, 2020^[36]). While developing countries have been progressively integrating into agri-food GVCs, for many, particularly in Africa, participation has been limited to low value upstream activities. The GVC position index measures the level of involvement of a country (or industry) in vertically fragmented production. The index is determined by the extent to which the country (or industry) is upstream or downstream in the GVCs, depending on its specialisation. A country lies

upstream if it produces inputs and raw materials for others, provides manufactured intermediates or both. A country lies downstream if it uses a large share of intermediates from other countries to produce final goods for export. Figure 4.2 shows that despite a large participation in agriculture GVC (Panel A), the GVC position index records a higher positive value for the majority of African countries (Panel B), which indicates that most of them lie upstream, in low value-added activities (Balié et al., 2019^[37]).

Figure 4.2. Agri-food global value chain participation index, by region, 1995, 2005 and 2013



Note: The higher (or lower) the value of the GVC participation index, the larger (or smaller) is the participation of a country in global supply chains. The GVC position index is the difference between the forward and backward participation. Countries with high forward relative to backward participation record a positive value and therefore lie more upstream in the value chain.

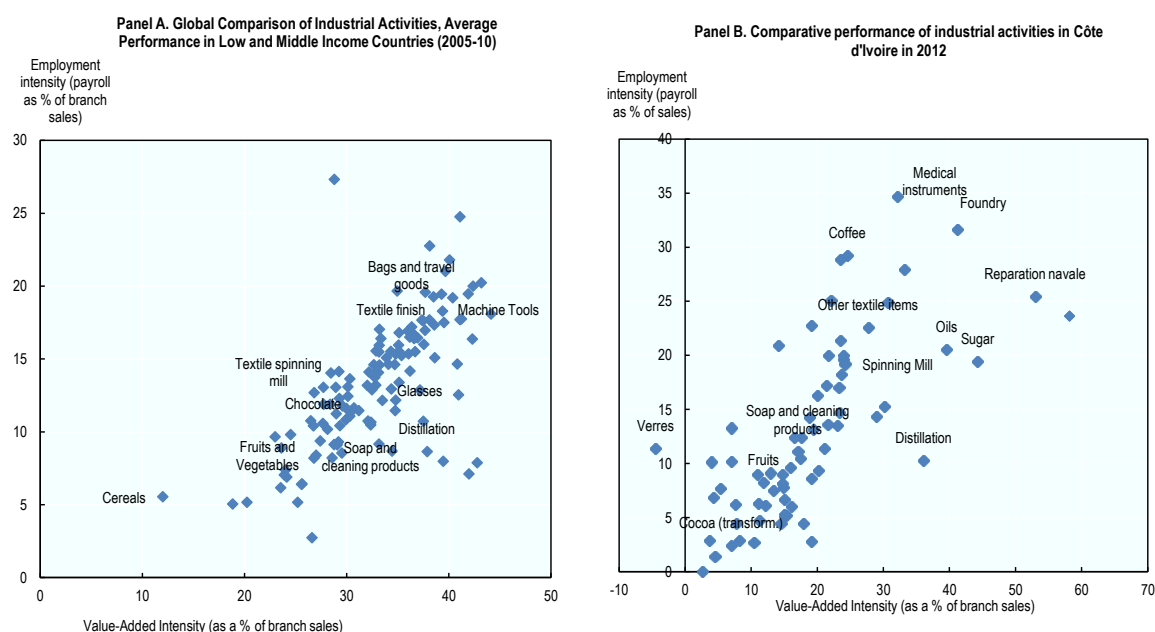
Source: Balié et al. (2019^[37]), "Does Trade Policy Impact Food and Agriculture Global Value Chain Participation of Sub-Saharan African Countries?", *American Journal of Agricultural Economics*.

At the aggregate level, trade liberalisation can be a powerful driver of economic growth and job creation (OECD, 2020^[36]), but the impact on the quality of jobs and income distribution depends largely on how a country is integrated in the global value chains and for most developing countries who participate in low-skilled, low-value part of the chain, "value capture" – the share of value added in exports that remains in domestic hands – can be relatively small (AUC/OECD, 2019^[38]; AfDb, OECD and UNDP, 2014^[39]; OECD/WTO/UNCTAD, 2013^[40]). Technological changes are making manufacturing more capital- and skill-intensive, lowering the capacity of manufacturing to absorb large amount of unskilled labour and informal workers. Global supply chains may help entry into manufacturing for low-cost countries through FDI, but they also reduce linkage with the rest of the economy and potential for the development of local upstream suppliers (Rodrik, 2014^[41]).

Upgrading participation in agri-food global value chains through higher value activities proves to be extremely difficult for new entrants, particularly from developing countries. On the one hand, processing or export activities for many cash crop, such as cocoa, cotton, coffee, and sugar, require reliable cold chain and quite heavy logistic services. Value chain of these crops are tightly controlled by lead producer firms (i.e. producer-driven chains), and at present higher-value activities are predominantly performed outside of Africa (AfDb, OECD and UNDP, 2014^[39]). On the other hand, entry cost in the form of initial investment needed to meet requirement for traceability and international certification, makes it difficult for many small firms to participate and thrive in export markets (AUC/OECD, 2019^[38]). Firm-level data (excluding the oil sector and services) show that the top 1% accounted for 57% of country exports on average in 2014, the top 5% exceeded 80% of country export revenues on average, and the top 25% accounted for virtually all country exports (UNCTAD, 2018^[42]).

Most developing countries participate in GVC in the primary production phase and the scope to increase value-added through processing/manufacturing or by acquiring new skills in research and development or marketing proves to be extremely difficult. There are two main reasons for that: First, the scope to increase value-added through processing/manufacturing depends a lot on sectors/technology. In other words, not all processing/manufacturing automatically leads to higher value added nor direct employment and there are large differences in the level of direct employment creation and value added in processing industries by sector (Figure 4.3). Sector-specific market characteristics and the type of technology that is being used can be more or less capital and skill-intensive. In Côte d'Ivoire, the scope to create direct jobs in export-oriented cocoa processing is more limited than processing of fruits or coffee. Second, the capital, skilled labour and infrastructure needed to upgrade agriculture and develop the agri-food processing sector is lacking. Looking at the successful examples of upgrading in GVCs (e.g. horticulture, organic or other certified products), securing price premiums on agricultural products therefore seems to be the most promising option and so far the one that has proven to work for developing countries.

Figure 4.3. Employment intensity of agri-food sectors in low income countries and in Côte d'Ivoire



Source: OECD (2016^[43]), *Multi-dimensional Country Review of Côte d'Ivoire*.

For the agri-food sector, tapping into the regional market may provide more opportunities for small and medium businesses and smallholders to participate. Plurilateral trade agreements such as the Regional Comprehensive Economic Partnership (November 2020), EU-MERCOSUR (June 2019) and the African Continental Free Trade Agreement (AfCFTA; January 2021) have been gaining momentum and driving further trade liberalisation. The AfCFTA aims at achieving a single continental market and applying zero-tariffs for 97% of all regionally traded products by 2030. This development has clear implications for the food economy, as processed food is the class of goods currently facing the highest tariffs and non-tariff barriers in the region (World Bank, 2020^[44]). By 2035, the full operationalisation of the AfCFTA is expected to increase regional trade in processed food by 91% and 49% in agricultural goods, relative to a hypothetical non-agreement baseline (World Bank, 2020^[44]).

Moving up agriculture in the global value chain will require structural changes but investments in agriculture and rural development are slow to come. Investments in fundamental capabilities such as skills, education, administrative capacity and governance are needed for domestic industries to emerge and structural transformation to be sustainable (Rodrik, 2014^[41]). In addition to meeting humanity's basic needs for food and fuel, agriculture employs more than one in three of the world's workers, and provides livelihoods for rural households totalling 2.5 billion people (FAO, 2013^[45]). Agriculture remains also an important contribution to the GDP in developing countries. In sub-Saharan Africa, the share of agriculture to the GDP was 14% in 2019 and 7.8% in developing Asia 7.8%, while in OECD countries it averaged around 1.4% (World Bank, 2019^[1]). Yet, development strategies often undermine agriculture and rural development and investment in agriculture and rural infrastructure and services continues to lag behind. One of the indicators used to assess the progress made in investing in agriculture is the agricultural orientation index (AOI), which calculates the ratio of the agriculture (including forestry, fishing and hunting sector) share of government expenditure over agriculture share of GDP. Despite its importance in employment generation and food security, AOI for sub-Saharan Africa shows a gradual decline in government expenditure for agriculture, from 0.25 in 2001 and 0.18 in 2010 and to 0.14 in 2013 (AU et al., 2017^[46]). AOI is less than 1 for most world's regions, indicating a lower public investment in the sector compared to its contribution to the economy, and is particularly low in sub-Saharan Africa compared to other regions (0.29 for Southeast Asia and 0.41 for developed regions) (AU et al., 2017^[46]). In 2003, African Union (AU) heads of state ratified the Comprehensive Africa Agriculture Development Programme (CAADP), Africa's policy framework for transforming the agriculture sector and achieving broad-based economic growth, poverty reduction, and food and nutrition security. CAADP sets two main targets: achieving a 6% annual agricultural growth rate at the national level and allocating 10% of national budgets to the agriculture sector. However, so far, the annual investment averaged 3% between 2008 and 2016 (AU et al., 2017^[46]).

Other evidence such as road density per square kilometre, access to energy, telephone connectivity, piped water or basic sanitation facilities point to under investment in basic infrastructure and services in rural areas, making it difficult for small farmers and rural communities to improve their productivity and retain or attract young people. Difficulty in securing land tenure rights, low skills development, low technology adoption, and low access to markets are some of the challenges holding back a broader transformation of rural areas in African countries (Kyomugisha, 2008^[47]; Anderson, Leach and Gardner, 2016^[48]; World Bank, 2018^[11]; Jayne et al., 2019^[12]). Improving prospects for farmers entails more profitable management of existing farms, with enhanced access to technology, markets, finance, information and infrastructure, and consolidation of land and land administration and documentation of tenure rights as well strengthening of rental markets (IFAD, 2016^[49]).

The domestic and regional food market opportunity

The domestic and regional food markets in Africa offer huge opportunities for investment and job creation (World Bank, 2013^[50]). In West Africa, food demand has increased five-fold since the 1960s, and the entire food economy (as defined in this report: production, processing, marketing and food-away-from-home segments) represented a total of USD 178 billion in 2010, equivalent to 36% of the regional GDP, with food import representing only 6.5% of this total domestic demand. Forty percent of the value added in the food economy was generated by non-agricultural activities (Allen and Heinrigs, 2016^[51]). Despite increasing food import trends in Africa, the domestic consumption is still largely supplied by domestic and regional markets and remains a source of great growth opportunities for local businesses. Local SMEs can enjoy relative advantage owing to their proximity to, and their knowledge of the home market and local consumers' preferences. In fact, Africa's domestic and regional markets, including agri-food related business opportunities are attracting international investors beyond the continent's endowment in natural resources. The potential of domestic and regional markets attracted

53.4% of new foreign direct investment projects to Africa in 2013-17. This share is similar to Asia's level (55.7%) and ten percentage points higher than Latin America and the Caribbean's (44.8%) (AUC/OECD, 2018^[52]). If the increased attention to African agriculture and agribusiness is matched with adequate electricity and irrigation as well as smart business and trade policies that link small-scale farmers with consumers in a fast urbanising Africa, the sector could contribute USD 1 trillion by 2030 to the region's economy, compared to USD 313 billion in 2010 (World Bank, 2013^[50]).

The changing dynamics of the food economy in Asia and the Pacific will require the development of sustainable agri-food systems that can cater for a large urban middle class. Asia and the Pacific had achieved tremendous economic growth and poverty reduction over the past several decades. In East Asia and the Pacific, the prevalence of extreme poverty² declined from 61% in 1990 to 2% in 2015, while in South Asia it declined from 47% in 1990 to 16% in 2013 (World Bank, 2019^[1]). The share of agriculture value added in the overall economy also declined from 14% in early 2000 to 7.8% in 2020 (World Bank, 2020^[53]). Urbanisation in the region is happening more rapidly than in any other part of the world, increasing from 30% in 1990 to 47% in 2016, with further increases projected between now and 2050 (FAO, 2020^[10]). By 2030, 76% of the population in Asia and the Pacific will belong to the "global middle class" (see Chapter 3). Per capita income growth comes with dietary changes whereby greater income increases the demand for nutritious and processed foods more rapidly than traditional staples (Muyanga et al., 2019^[54]; Reardon et al., 2019^[55]; Hernandez et al., 2018^[56]; Popkin, 2017^[57]). City life also leads to changes in consumption patterns and lifestyle, with urban dwellers asking for more convenient and processed foods. The share of expenditures on food prepared outside of the home has increased rapidly over the past 10 to 15 years in East and Southeast Asia, by about 15% in countries like China, Indonesia, the Philippines, Thailand and Viet Nam (FAO, 2018^[17]). The private sector estimates a cumulative investment requirement of USD 800 billion between now and 2030, of which 70% for improving the quality of food, including aspects such as food safety, nutrition and sustainability and the rest for increasing quantity to feed its population. Spending on food consumption for 2030 in the region is projected at over USD 8 trillion (PWC, 2019^[58]).

The COVID-19 crisis which started at the beginning of 2020 called for the need to reflect on the role of domestic and global food supply chains in order to ensure national food security. Export restriction measures taken by some food-exporting countries (e.g. Kazakhstan holding on to their flour and wheat, India and Viet Nam to their rice, and Cambodia to their fish and rice) raised concerns about the state of global food security (Dixon, Stern and Kumenov, 2020^[59]; OECD, 2021^[60]). The United Nations and the World Trade Organization warned that this could have devastating effects on food-importing countries. Export restrictions can alter the balance between food supply and demand, resulting in price spikes and increased price volatility. These measures are particularly damaging to low-income, food-deficit countries and to the efforts of humanitarian organisations to procure food for those in desperate need (FAO, WHO and WTO, 2020^[61]). Lockdowns and movement restrictions within countries and across borders have disrupted national and local food and agricultural output and input markets further exacerbating the fragility of systems (including agri-food systems) and livelihoods (FAO, 2021^[62]).

The crisis demonstrates the need to reflect on the need to strike the right balance between domestic, regional and global food supply chains in order to ensure national food security. It is especially important that international food trade not be constrained in a crisis or "weaponized by those countries that are exporters" (HLPE, 2016^[5]). Countries that depend on food imports were especially vulnerable to international supply chain disruptions caused by COVID-19 (HLPE, 2016^[5]). While some of these countries face real ecological limitations to producing more food at home, many have the opportunity to better balance their food sourcing portfolios (Clapp, 2017^[63]). Considering the specificities of each country with respect to their capacity to produce and/or import food, it is important to provide adequate policy space for governments to pursue policies that minimise risks associated with dependence on imported food and to build greater food system resilience (HLPE, 2016^[5]). As part of monitoring local food system status and prevailing practices during COVID-19 FAO conducted a global survey³ between

April and May 2020 to map local responses. The survey finds that 38% of the responding cities indicated facilitation of direct purchases from local producers as one of the key measures to mitigate the impact (FAO, 2020^[64]). One common lesson for developing countries' national agri-food sector from the COVID-19 is the pressing need to invest in efficient logistical system in transportation, storage, access to markets and handling (Nigeria, Sudan, Zimbabwe). Improving domestic storage capacity also increases countries' ability to ensure food availability through crises (Viatte et al., 2009^[65]). In high income countries, the food system has proven to be resilient despite unprecedented short-term stresses put by the COVID-19 on food supply chains around the world. Nevertheless, the COVID-19 crisis has signalled the urgency to deal with the "triple challenge" of simultaneously providing food security and nutrition to a growing global population faced by the food system, ensuring the livelihoods of millions of people working along the food chain from farm to fork, and ensuring the environmental sustainability of the sector (OECD, 2021^[60]).

The contribution of different local food system models in advanced economies

In many European and more advanced economies, consumers are increasingly asking for the origins of what they consume. The demand for local or regional agricultural products, both fresh and processed, are rising. The 2017 Eurobarometer survey shows that more and more Europeans are favouring regional and quality food products. More than three-quarters (77%) say respect for local tradition and "know-how" is an important factor in their decision to buy food products, 76% say having a specific label ensuring quality is important, and 75% say coming from a known geographic area is important in their decision to buy food products (Eurobarometer, 2017^[66]). In 2015, the European Parliamentary Research Service found that 15% of farmers sold half of their products through these short food supply chains (European Union, 2016^[67]).

The development of local food systems based on short food supply chain (SFSC) models is gaining ground in Europe. Food systems refer to "the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded" (FAO, 2018^[68]). SFSCs are broadly understood as including a minimal number of intermediaries (or none in the case of direct sales from the producer). As SFSCs gain increasing recognition as an area to be supported within EU rural development policy, an official definition was adopted under Article 2 of Regulation (EU) No 1305/2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), which entered into force with the reformed Common Agricultural Policy for 2014-2020 and is defined as follows: a short supply chain means "a supply chain involving a limited number of economic operators, committed to cooperation, local economic development, and close geographical and social relations between producers, processors and consumers" (European Union, 2013^[69]). In several recent resolutions, the European Parliament has expressed its support for short food supply chains and local markets as a way to ensure a fair price for producers and reconnect food products with their locality of origin (European Union, 2016^[67]). An important dimension of SFSCs models is the concept of "local food", which is normally perceived as one of the pillars (UNIDO, 2020^[70]).

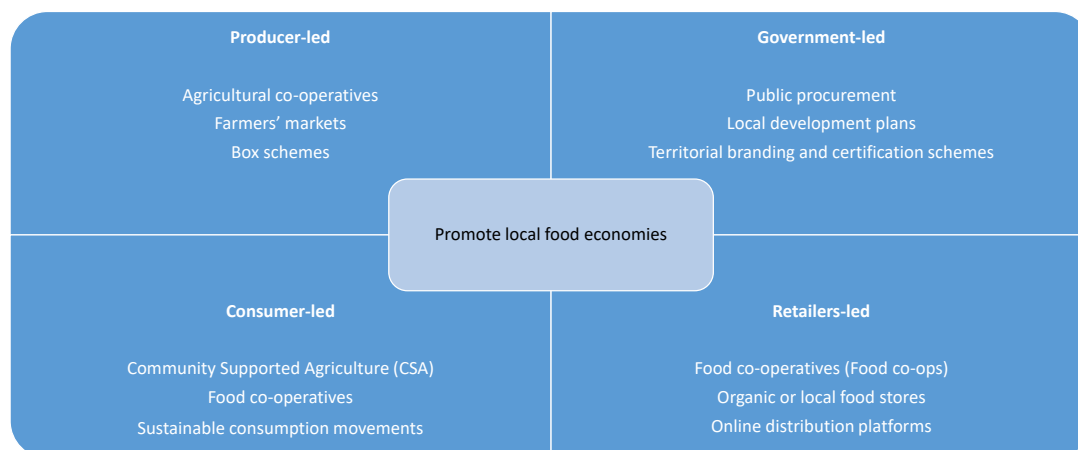
The European Union is responding to consumer demands for more local and sustainable food supply chain models through high-level commitments and new initiatives. The European Green Deal is a set of policy initiatives by the European Union to make Europe the first climate-neutral continent by 2050. It maps a new, sustainable and inclusive growth strategy to boost the economy, improve people's health and quality of life, care for nature, and leave no one behind. The Farm to Fork Strategy is one of the key components of the Green Deal, together with the EU Biodiversity Strategy for 2030. The Farm to Fork strategy recognises the intrinsic links between healthy people, healthy societies and a healthy planet and calls for a shift to a sustainable food system to bring environmental, health and social

benefits, as well as economic gains and to ensure that the recovery from the crisis is on a sustainable path. The strategy points to the importance of sustainable livelihoods for primary producers, who still lag behind in terms of income, as an essential factor for successful recovery and transition (EU, 2020^[71]). It aims at slashing pesticide use by 50% and increase organic farming by 25% by 2030. The Green Deal calls for 40% of the Common Agricultural Policy (CAP) budget to be dedicated to climate actions. The Farm to Fork strategy foresees the development of a legislative framework for a sustainable food system for 2023. The EU programmes like LEADER (*Liaison Entre Actions pour le Développement de l'Economie Rurale*), a key pillar of the European Agricultural Fund for Rural Development, started in the early 1990s, continue to support rural development projects using local development method whereby local actors are involved in the design and implementation of strategies, decision making and resource allocation for the development of local areas (European Union, 2016^[67]).

The budget for SFSC is gradually increasing within the Common Agricultural Policy budget. CAP accounts for one third of the EU's total budget and is the largest subsidies schemes the EU runs. CAP consists of two main pillars, the first one dedicated to direct hectare-based payments to farmers and the second one to rural development, under which SFSC and organic agriculture initiatives fall. The EU budget for 2020 was a total of EUR 168.68 billion in commitment appropriations, with the CAP accounting for 34.5% (EUR 58.12 billion). Direct payments to farmers accounted for 70% of the total CAP budget (EUR 40.6 billion) and rural development measures for 25% (EUR 14.6 billion) (EU, 2021^[72]). The CAP reform for 2021-27 foresees a decrease in the total CAP budget by 15% compared to 2014-20, i.e. an 11% cut for direct payments and a 28% cut for rural development. The proposed changes would nonetheless allocate 75% of the total CAP budget (EUR 324.2 billion) to direct payments and 21% to rural development (EU, 2021^[72]). In the next CAP budget (2023-27), EUR 340 million will be allocated for conversion of conventional agriculture to organic agriculture (Agence Bio, 2021^[73]).

Local food systems can take several forms: farmers' markets, vegetable box schemes, community-supported agriculture, food co-operatives (or supermarkets that source primarily locally), online retail platforms as well as public procurement schemes which source food locally. They can be regrouped into four broad categories according to the lead actor: producer-led, government-led, consumer-led and retailer-led (Figure 4.4). All of these have the territorial embeddedness and short food supply chain as a common denominator, meaning they aim to reinforce the capacity of agri-food systems to bring value to specific territorial resources and re-kindle social relations of proximity (Watts et al., 2005^[74]) in (Lamine, 2015^[75]). This section describes some of the common business models sprouting in many advanced economies that favour local production, processing and distribution. Not all models manage to reconcile economic, social and environmental objectives, however, as the middle class grows in developing countries, these are interesting to study as alternative business models that could be more inclusive of smallholder producers and local small and medium enterprises.

Figure 4.4. Local agri-food business models



Note: List non-exhaustive.

Source: Authors' elaboration.

Producer-led models

Agricultural co-operatives or farmers' organisations are important institutions for the livelihoods of small scale farmers and to ensure sustainable food economies. A co-operative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise (ILO recommendation 193, 2014^[76]). Co-operatives can be formed by a group of producers, customers, employees, users or residents. Members share equal voting rights regardless of the amount of capital they put into the enterprise. Co-operatives are businesses driven by values and not just profit, as such they put fairness, equality and social justice at the heart of the enterprise (ICA, 2014^[77]). Co-operatives offer support to their members in the form of training, information, access to market and credits and natural resources. They also help build soft skills such as making decisions, negotiating prices and contracts, and understanding land rights (FAO, 2012^[78]). More than nine out of ten farms in the world are family farms, representing the dominant form of farming in most countries (FAO, 2014^[79]). In developing countries, co-operatives play a particularly important role for small scale farmers and marginalised groups of people such as youth and women by providing sustainable employment and improving their livelihoods. According to Agriterria, an organisation that supports the development of co-operatives in developing countries, between 2016 and 2019, the share of women employed in co-operatives increased from 29% to 33% and the share of youth employed increased from 48% to 55% (Table 4.1).

Table 4.1. Evolution of female and youth employees within co-operatives in selected developing countries

N	Year	Permanent staff	Female staff	% Female	Youth staff	% Youth
185	2016	5 086	1 491	29%	2 440	48%
220	2017	7 259	2 317	32%	3 525	49%
277	2018	7 786	2 275	29%	3 776	48%
278	2019	6 978	2 295	33%	3 822	55%

Note: N refers to the number of farmers' organisations registered with Agriterria (50% from Africa, 30% from Asia and 20% from Latin America).

Source: Agriterria (2021), Interview with Agriterria.

Co-operatives also play an important role in facilitating job creation and rural development. The value of co-operatives beyond an economic role is widely acknowledged (Levin, 2003^[80]). Co-operatives exist in various forms ranging from small-scale to multi-million-dollar businesses across the globe. Globally, the International Co-operative Alliance (ICA) counts over 3 million co-operatives that provide quality employment to over 280 million people (ICA, 2020^[81]; ICA World Cooperative Report, 2020^[82]). Agriculture co-operatives can also be multi-purpose.

For example, the National Agricultural Co-operative Federation, known as *Nonghyup* (NH) in Korea, is the world's third largest agricultural co-operative (ICA, 2014^[77]). What started as a government-led initiative after the Korean war to overcome chronic food shortages, is now a multi-purpose service provider that promotes rural development through banking, insurance, agricultural marketing and extension services. As of April 2017, NH counted 2.25 million members from 1 131 primary agricultural co-operatives, representing more than 80% of Korean farmers (OECD, 2013^[83]). NH is largely credited for the modernisation of agriculture and rural communities. The agricultural marketing service which includes direct distribution outlets called Hanaro Mart is the co-operative's most successful line of business and benefits its members. The direct sales outlets help keep lower prices for consumers while ensuring fair prices to farmers (ICA, 2014^[77]). Profits from the primary agricultural co-operatives are accrued to the banking and insurance business, while profits from financial business in turn support input supply and marketing business of primary co-operatives (KREI, 2015^[84]). In view of its objective to provide mutual support among small-scale farmers, primary co-operatives have been exempted from certain provisions of the Monopoly Regulation and Fair Trade Act. For example, joint purchase and sale activities by co-operatives are subject to tax reduction or exemption in the following: value-added tax applied to agricultural inputs and equipment; sales tax; interest income and dividend income on deposits and contributions of members; and corporate income tax (OECD, 2018^[85]).

Agricultural co-operatives strengthen bargaining power, voice and representation of producers. In developing countries, agriculture co-operatives were promoted widely in the 1990s with mixed results. Co-operative organisations were for a large majority promoted by governments without genuine participation from members. As a result, the members were often alienated from what should have been their own organisations, with little or no influence on issues such as the marketing and pricing of their products (FAO, 1998^[86]). The heavy involvement of governments was considered harmful and many countries revised their policies concerning co-operatives on the principles of participation, and consultancy rather than intervention (FAO, 1998^[86]). Co-operatives, when operated by their members and self-financed, are proving to be effective and today their numbers keep growing both as producers' organisations but also financial service providers. Agricultural co-operatives strengthen bargaining power, voice and representation of producers. For example, the role of coffee co-operatives has been critical in negotiating fairtrade agreements with developed countries and raising the price of Ethiopian coffee (Dahlberg, 2011^[87]). In remote areas where farmers have limited access to markets, farmers organised as co-operatives can have stronger bargaining power against private traders.

Consumer-led models

Community Supported Agriculture (CSA) is a system that connects farmers directly with the consumers in a partnership that shares the risk of production. Consumers subscribe to a yearly harvest before planting season and receive a portion of whatever is available each week of the growing season. As such, consumers accept to share the risks associated with agricultural production as well as the benefits from over-abundance. CSA was coined in the United States (US) but is also known as *AMAP* (Association pour le maintien d'une agriculture paysanne) in France, *teikei* (meaning 'co-operation') in Japan, and *food guilds* in Switzerland. It is an alternative model of food production and distribution, which is often linked to organic farming and short circuit distribution. CSA started in 1985 with 2 farms and grew to 1 900 in 2008 (Local Harvest, 2008^[88]) and 6 200 in 2014 (Local Harvest, 2014^[89]). CSA

still represents less than 1% of farms in the United States. CSAs are usually initiated by consumers by creating an association and recruiting a core group of 'clients', who will then look for the producer(s).

An impact study of CSA on farmers revealed mixed outcomes (Brown and Miller, 2008^[90]). The 2001 national survey of CSA found that 96% of the CSA farms used organic methods, almost 75% of the farmers had a college degree, and CSA farmers were more likely to be female or younger (on average ten years younger) than US farmers. Sixty three percent of CSA farms had gross farm income greater than USD 20 000. Nevertheless, only about 46% of the surveyed farmers were satisfied with their ability to cover operating costs. Almost half (48%) were unsatisfied with their own compensation from the farm. A majority of respondents (57 %) were satisfied with their quality of life and said that their CSA operation improved this quality. A 2018 study, which evaluated the livelihoods of CSA farmers from the farmers' perspective in the Connecticut River Valley of Massachusetts, found similar results. CSA farmers earned far below the median national income and generally fail to earn a living wage. CSA farmers, however, valued the broader social, ecological, and economic benefits to farming as a source of well-being (Paul, 2019^[91]).

Most CSA farmers have to diversify their sources of income. Studies show inadequate farmer earnings and support from the members in the community (Lass et al., 2003^[92]; Tegtmeier and Duffy, 2005^[93]; Jarosz, 2008^[94]; Feagan and Henderson, 2009^[95]). CSA provides operational cash flow but is the lowest source of income (Flora and Bregendahl, 2012^[96]). A survey of CSAs in California showed that farmers use an average of 3.3 market outlets: CSA, farmers' markets, on-site sales, mail order/Internet, other direct-to-consumer sales, direct-to-retail sales, wholesale market sales, and services and other non-farm-good sales (Galt, 2016^[97]). In France, an evaluation of AMAPs also showed similar results in terms of profitability. While they provide a steady source of income and a saving on direct marketing costs, the annual contractual agreement between producers and consumers on quality, quantity and diversity represents a pressure on profitability. In fact, the profitability of an AMAP is highly dependent on the way the transaction (or risk) costs are divided between producers and members in the contract (Olivier and Coquart, 2010^[98]).

CSAs' profitability is not independent of the local market. Indeed, competition from conventional supermarkets as well as other Alternative Food Networks (AFN) negatively affects CSAs. With the increase in the number of local and organic outlets in both mainstream and alternative grocery retailers, consumers have more choices and price points will eventually fall as per the rule of competition if nothing is done to take into account social and environmental externalities in the price. A survey of 111 CSAs in California found that certain AFNs undermine some of CSA's fundamental values, such as fair farmer compensation and strong member-farmer relationships (Galt, 2016^[97]), reducing the profit of producers.

From an environmental perspective, CSAs have had clearly a positive impact on farmers and their lands. As the model calls for it, CSA farmers depend on multiple crops both to cater for their membership and as a risk-hedging strategy. According to the 2018 study, CSA farmers grew an average of 38 crops and 115 varieties (Paul, 2019^[91]). Farmers claimed that crop diversification is a way of assuring some profit along with environmental benefits. Farmers assured that biodiversity improved the quality of the soil, reduced pest infestations, allowing for a reduction of inputs, improved water retention and sustained healthy soil (Paul, 2019^[91]).

From a societal perspective, the link between producers and consumers lies at the heart of this model. CSAs have been strengthening social cohesion particularly in rural and remote areas but also in cities where consumers are increasingly asking to know more about the source of their products. One of the key social benefits perceived by consumers is the link between food and health. Fresh and seasonal food is considered to have dietary benefits as it is more nutritious than food preserved for a long time (FAAN, 2010^[99]), though, depending on the commodity, poorly conserved fresh food may have less nutritional value than canned food (Rickman et al., 2007^[100]). Organic farms, which are usually the CSA model, tend to be more labour intensive therefore generating more employment per hectare. In France,

the organic food industry has had progressive growth during the past decade. Between 2014 and 2019, organic farms have more than doubled in surface from 1.1 million hectares to 2.3 million hectares, creating more than 30 000 full time jobs, while employment in the conventional agriculture has continuously been in decline. The number of total direct jobs in the organic food sector, including production, processing, retail and services was estimated at 179 503 in 2019, a 14% increase year-on-year since 2016 (Agence Bio, 2021^[73]).

Awareness raising around sustainable consumption and production have also helped bring value back to territorial specialties and the “made in local” culture, as well as change dietary habits. The movement “Slow Food”, started in Italy by active citizens, spread across countries and has now become a global trade mark symbolising ecological consumption. The Slow Food movement started in Italy in the 1980s with the intention to protect local food traditions and cultures, counteract the rise of fast life and combat people’s dwindling interest in the food they eat. The movement has since had a global impact with millions of people joining from over 160 countries. Slow Food believes food is tied to many other aspects of life, including culture, politics, agriculture and the environment. The movement contributes to the sustainable consumption and production debate and to the preservation of regional and local varieties, foods and lifestyles. Several studies (Debs, 2013^[101]; Hall, 2012^[102]; Dumitru et al., 2016^[103]) evaluated the impact of Slow Food on consumption patterns, the environment and society, and find that the movement has contributed in raising the profile of a number of issues, particularly the significance of local food and fair trade purchasing for restaurants and hotels as well as consumers in general. Changing food demand is more difficult than changing food supply, however change in diet is possible through a combination of tools for behavioural change and actions across whole food systems (Vermeulen et al., 2020^[104]).

The major benefit from the process of localising food systems is the re-balancing of power and knowledge relationships in food supply systems that have become distorted or abstract by the increasing distance and lack of social and physical connections between producers and consumers (Dumitru et al., 2016^[103]). Valorising local food systems provides an important impetus to reflect on where society is going and where new opportunities for consumption and production lie (Van Der Meulen, 2008^[105]). The Slow Food movement has also had a positive influence on a new wave of young people who have become ‘food producers’ as farmers themselves or food self-provisioning. These new young farmers innovate with agriculture techniques and use online sale-systems and create “food communities” (Dumitru et al., 2016^[103]). Farmers who have joined the movement particularly appreciate the knowledge the network provides in preserving the biodiversity of their cultivated and wild varieties and using local resources at the farm and reducing chemical inputs that may damage the quality of their products. Farmers in the Middle Eastern and Latin American farmers observed improvements in income and managerial skills as the most relevant impact, while African farmers underlined mainly the use of local resources (Debs, 2013^[101]).

Retailer-led models

Food co-operatives, better known as “food co-ops” are a rising trend in co-operative food systems. A food system can be understood as an interdependent group of activities that include the production, processing, distribution, wholesaling, retailing, consumption, and disposal of food. A co-operative food system connects these activities through a common value of working together for mutual benefits based on democratically chosen goals (Sumner, 2014^[106]). Though several forms of collaboration and business models exist within the co-operative food systems, food co-operatives hold a central place. Food co-ops are retail grocers that operate on very specific values and motivations. Because they are not owned by shareholders, the economic and social benefits of their activity stay in the communities where they are established. Profits generated are either reinvested in the enterprise or returned to the members (ICA, 2021^[107])(ICA website). They are typically owned by consumers who are members of the co-operatives. Food co-ops operate with members who volunteer a fixed number of hours per month

(usually three hours per month), thereby decreasing fixed costs of the business. Decisions are made by all members who have equal voting rights. In the US, between 2008 and 2018, 134 new co-ops opened with a 74% success rate, representing 160 000 new member-owners within the community-owned grocery stores nationwide, and 100 more were expected in 2019 (Steinman, 2020^[108]). Park Slope Food Coop, is perhaps the best known pioneer of this model, having started in Brooklyn, New York in 1973 and still thriving with 17 000 stores today. In Europe co-operative grocery stores are steadily sprouting (Kauffman, 2017^[109]; Potet, 2018^[110]; Briquet, 2020^[111]). Though they currently take up a small percentage of the market, their growth is sustained year-on-year. In France, *La Louve*, the first consumer-led co-operative started in France in 2016, counts today 5 000 active members and increased its revenues from EUR 3.9 million in 2017 to EUR 7.2 million in 2019 (Nippert, 2020^[112]). In Norway and Sweden, co-operative supermarkets already comprise 20-30% of the grocery retail market (Voinea, 2015^[113]).

Food co-ops stimulate local economic development. One common characteristic of food co-ops is their anchorage on the “local” and they cater for a highly localised consumer base. This is a conscious choice coherent with the values of democracy, environmental integrity and community resilience (Sumner, 2011^[114]). They usually adhere to the Rochdale principles such as voluntary membership, democratic governance, limited return on equity and concern for the community. A study on 350 food co-ops in the United States concludes that food co-ops are important business organisations that contribute to the intensification of local food networks and producer-consumer relations (Katchova and Woods, 2013^[115]). Food co-ops also help democratise the organic and local food markets by giving access to quality food to a wider range of consumers.

Food co-ops tend to pay higher wages to their employees. A study carried out by ICA in 2012 based on 165 co-operative food stores in the United States, combined with industry market research showed that the average food co-op creates 9.3 jobs for every million dollars in sales, compared to a conventional grocer, which creates only 5.8 jobs per million dollars in sales. Conventional grocers tend to rely more on automation and centralised management functions including human resources, accounting, and purchasing. The study found that co-op stores generally paid comparable or slightly higher wages to their employees compared to conventional grocers. Considering the average wages of all employees including bonuses and profit sharing, co-op employees earned an average of about USD 1.00 per hour more than their peers in the conventional sector (COOP, 2012^[116]).

Multi-stakeholder food co-operatives can provide the necessary infrastructure to bring local producers, processors and consumers to construct a co-operative food system. Co-operative networks such as Biocoop in France and Ontario Natural Food Co-op in Canada have diverse stakeholders who are co-op members (Sumner, 2014^[106]). A network can have producers, processors, shop owner and consumers as equal stakeholders. Such structures have been able to bring these different actors along the value chain at the negotiating table to discuss the “fair price” of food. These retailers are taking increasingly more share of the food distribution market (see Box 4.1).

Box 4.1. Inclusive food retail distribution model: Biocoop, France

In 2018, 7.5% of the agricultural area of the EU was grown organically (Agence Bio, 2019^[117]). In France, today, the organic food industry still represents only 6.5% of the food retail distribution but it is a fast growing sector. The French organic market was estimated at EUR 13 billion in 2020, and despite COVID-19, it was 10.4% increase from 2019. Between 2012 and 2020, organic food consumption by households increased close to five times. The sector also employs about 200 000 people (a 1.6 fold increase from 2016) both on and off-farm. More than half (128 000) of these jobs are on-farm, while the rest are jobs in the downstream sector of the distribution (26 000 in processing; 43 200 in distribution;

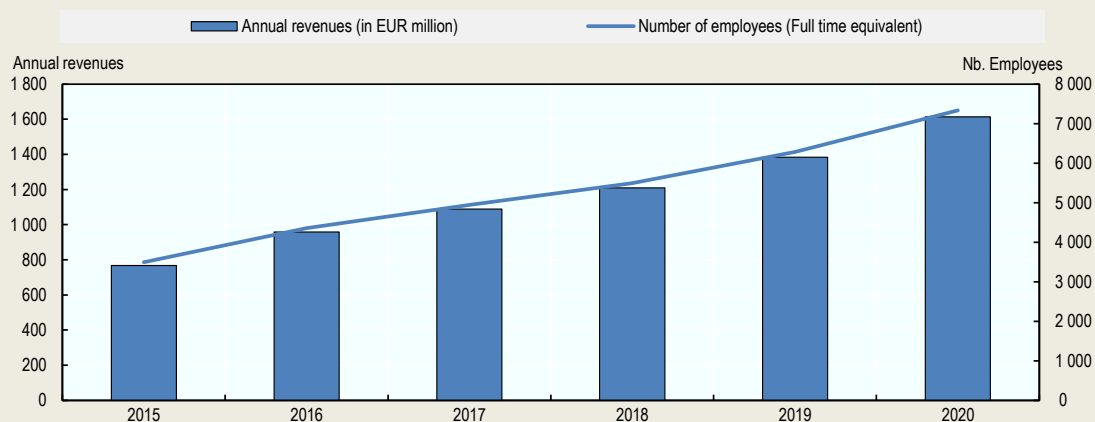
and 2 300 in services such as consulting, research and development and training). Organic food products sales have increased on average by 16% year-on-year since 2015 (Agence Bio, 2021^[73]).

Biocoop is the largest organic food retail distributor, but stands out from the conventional supermarkets in its governance structure. Biocoop started in the early 1980s as a consumer co-operative in two regions in France. In 1984, this consumer-led initiative turns into 40 stores and in 1986 Biocoop changes its status to association, becoming the first organic food distributor in France. In 2002, Biocoop had over 200 stores and its legal status changed to public co-operative enterprise (société anonyme co-operative).

The governance structure of Biocoop is unique and incorporates a diverse group of stakeholders. Four types of Biocoop members co-exist: store owners (419), salaried associates (433), associations of consumers (3) and producer groups (20). Each of the 875 members has one vote. Store owners are independent entrepreneurs and do not pay royalties to Biocoop like in a franchise model. The producer groups bring together 3 200 farms in four value chains (fruits and vegetables, meat, milk and cereals) and participate in all decision making and in the development of Biocoop's strategic plans.

Despite diverging interests, members work together towards the common objective of developing organic agriculture by 1) increasing the supply of organic local food products; 2) practising fair pricing to facilitate organic food consumption; 3) sharing profits through the co-operative model; and 4) reducing negative impacts of their activities on the environment.

Figure 4.5. Evolution of Biocoop revenues and employment



Source: Interview with Pierrick De Ronne, President of Biocoop, 2021.

In 2020, Biocoop had an annual revenue of EUR 1 600 million. The number of employees has increased in proportion to its growth. In 2020, Biocoop had 678 stores, which generated a total of 7 332 full-time equivalent jobs. The headquarters employs 1 162 persons.

Eighty percent of the products sold in Biocoop stores are from France with 15% of the products from within 150 km distance. Twenty percent of all products have the fairtrade label. Each store is obligated to respect the Biocoop Charter and store compliance requirements.

Biocoop's long term vision is to change the current food system structure into one that works for farmers, food processors and distributors, and consumers and to ensure that all people along the agri-food value chain are able to have decent livelihoods. The Biocoop business model promotes the come back of organic farming as the mainstream of agriculture, while respecting the social contract and the

environment and revitalising local economies and small enterprises through inclusive procurement policies.

Source: Biocoop (2019^[118]); *Rapport d'Activité et Déclaration de Performance Extra-Financière 2019*; Interview with Pierrick De Ronne, President of Biocoop, in 2021.

E-distribution platforms have seen a huge boost in recent years and use of their services peaked particularly during the COVID-19 crisis. Food distribution is increasingly impacted by e-commerce (Rickman et al., 2007^[100]). Food and grocery products are among the top ten items purchased online, with clothing, footwear and sporting goods have experienced fast growth in recent years (OECD, 2017^[119]). E-distribution platforms can contribute to local economic development particularly if the business model supports local producers and local entrepreneurs. Moreover, the COVID-19 pandemic has increased the demand for local products. In France, e-distribution platforms like La Ruche Qui Dit Oui or smaller regional initiative like Loco Motivés, have seen the number of members increase by 150% (L'info durable, 2020^[120]). La Ruche Qui Dit Oui launched the first short food supply platform in France in 2011. The products travel on average 49 km, and 30% of them are organic. The producer gets 80% of the sale tag, the “hive” manager 8.35% and the platform 11.65% and this seems to work for everyone, including consumers. The ten year-old platform counts over 200 000 regular users and works with over 5 000 local producers who supply 850 distribution points called ‘hives’. Other smaller regional initiatives promoting short food supply chain models have been more successful using online shopping options than the traditional box schemes (see CSA above and Box 4.2. on Loco Motivés).

Unequal connectivity and knowledge of Internet use risk alienating vulnerable groups on both supply and demand sides. The average usage of information and communications technology among individuals in OECD countries is high but unequally distributed across countries and social groups. Internet usage for online purchases and banking is very low among the elderly and less educated (OECD, 2017^[119]). In developing countries, where the digital gap between rural and urban areas and between social classes is even larger, rapid exposure to e-commerce risks creating unsustainable dependence and further alienation of vulnerable groups. The experience of China's Taobao Villages shows the opportunity and vulnerability of e-commerce in rural areas. E-commerce in China has developed at extraordinary speed in recent years. E-commerce activities in rural areas have been intensively promoted by Alibaba (a Chinese multinational company specialised in e-commerce) through Taobao Villages. Essentially, Taobao are rural villages, often close to urban agglomerations, where Alibaba decided to invest hard and soft infrastructure to facilitate the commercialisation of local products via the internet. The number of Taobao Villages rose exponentially from 20 in 2013 to 1331 in 2016. The initial success of some Taobao Villages in helping local agricultural producers, handicraft enterprises and family businesses deserves attention. New job opportunities have also been created in the service sector related to e-commerce such as graphic design, photography, delivery, storage and information technology (IT) technicians. However, several studies raise concerns on the economic sustainability of Taobao Villages, pointing to the homogenisation of products, cut-throat competition amongst producers and lack of innovation (Zeng et al., 2015^[121]; Li and Zhang, 2015^[122]). There is also rising concern that the increasing dependence of rural e-tailers on Alibaba's infrastructure will put them in a disadvantaged position vis-à-vis the multinational IT conglomerate in the long-run, as well as undermine the culture of local communities (Li, 2017^[123]).

Box 4.2. Linking local producers with consumers through the digital platform: Loco-Motivés in France

Created in 2012 to provide direct links between producers and consumers in the region of Aveyron, Loco-Motivés created a website with eight producers and a dozen clients. Only one year later, the association delivered on average 50 baskets of orders per week. In 2020, Loco-Motivés connected directly about 40 producers with more than 2 500 consumers, while continuing its short food supply chain model. Each week, the association delivers on average 250 to 280 baskets of orders, consisting of fresh produce (fruits, vegetables and meat) and processed meat, cheese, jam, wine, syrup, oil, honey, etc. Their sales shot up five times during COVID-19 confinements.

Loco-Motivés is a membership-based association with 200 members and an administrative council which consists of 28 associate producers and four volunteer consumers. The objective of the association is to promote direct sales of local agricultural products. Participating producers are small-scale producers and 80% of the products offered are organic or certified “Nature and Progress”. The association currently employs three full-time employees who handle logistics, the deliveries and the management of the Internet platform. The clients are not obliged to buy each week as is the case in a CSA/AMAP, and can select the products they want to order.

Loco-Motivés received a start-up support grant of EUR 16 000 from the Fondation de France and EUR 6 000 from the Community of Communes (communauté de communes) to buy the delivery trucks. A Community of Communes is a public institution that regroups several French communes to promote inter-communal co-operation. Other than these seed funds, Loco-Motivés is financially self-sustainable. It receives membership fees but mostly functions through the commission from sales. The association takes a commission of 15% to 30% on the sale price, with the commission fee varying depending on whether the producer is a member of the association. The price is determined by the producer.

Since its start in 2012, Loco-Motivés’s revenues from local products have skyrocketed from EUR 13 000 the first year to EUR 460 000 in 2019. This new sales outlet has allowed some of the producers to diversify their production and earn additional revenues. Member producers, depending on the type of production, can make between 5% and 50% of their total revenues from Loco-Motivés platform. The customers, instead of driving up to 30 minutes to the nearest market, can get their orders delivered at a place closer to their homes.

The regular exchange among producers has been a rich source of knowledge in terms of production methods and has motivated farmers to adopt more sustainable and ecological farming practices. Some producers are in the process of converting their farms into organic agriculture. The cohesion among producers is at the core of Loco-Motivés’ success. However, with a growth rate of 25% per year, the logistics are complex, with storage space becoming inadequate for the volume handled and the need for additional full time staff becoming more pressing. The challenge for Loco-Motivés will be to keep its core values of cohesion while growing bigger.

Source: Interview with Stéphanie Degoute, founder of Loco-Motivés, in 2021.

Government-led models

Public procurement can be a strategic tool to support sustainable local economic development. Public procurement refers to a range of contractual arrangements and purchasing tools used by governments to plan, source and manage the acquisition of goods, services and works. It represents an average of 12% of GDP in OECD countries and 20-30% in developing economies (OECD, 2020^[124]). About 63%

of public procurement occurs at the sub-national level, with almost 134 000 authorities at local and regional level across the OECD (OECD, 2019^[125]). Public procurement is increasingly used to promote responsible business conduct and address global supply chain risks to people and the planet. “Green” and “sustainable” public procurement refer to the introduction of environmental and social considerations in making public procurement decisions. Specifically, green public procurement is the purchase of “products and services which are less environmentally damaging when taking into account their whole life cycle” (OECD, 2015^[126]), while sustainable public procurement also looks at employment opportunities, working conditions and social inclusion (EC, 2011^[127]).

Ensuring social and environmental considerations into public procurement drives local and regional food economies. The European Union Directive 2014/24/EU on public procurement makes provisions to consider other criteria than ‘price’, such as quality, social, environmental and innovative aspects as well as delivery conditions and process (EU, 2014^[128]). National laws may add other binding rules for public procurement. Various initiatives can be found in the EU countries to support local and regional food economies. The study “Sustainable public procurement of food” reviews the food procurement system for public schools in ten countries (Soldi, 2018^[129]). The following are some of the more striking examples. The procurement process in Rome, Italy, for the provision of food and catering services to public school canteens is valued at over EUR 374 million for the period 2017-20. Since 2001, Rome has gradually turned to organic food for its school food procurement system, allocating 49 points out of 100 to qualitative criteria other than price. In Slovenia, the region of Podravje has set the target of increasing the consumption of locally grown food in public school canteens to 20% by 2020 and to 70% by 2030. In Lens, France, the quality-price ratio in the procurement requirements of food for school canteens was 70:30, with the minimum requirement for organic food set at 20%. Other innovative approaches by municipalities exist, which go beyond school canteens to support small scale farmers (see Box 4.3 on Brazil).

Box 4.3. Sourcing local to support food aid programmes in Brazil

Since 2003, Brazil has implemented a food procurement programme called Programa de Aquisição de Alimentos (PAA). PAA purchases food from small-scale and vulnerable farmers for food aid programmes. PAA gives priority to the most vulnerable producers, farmers’ organisations run by women and indigenous populations. The programme works with various government ministries, as well as provincial and municipal governments, civil society organisations, co-operatives and workers’ unions.

The programme is managed by a committee composed of the Ministry of Agriculture, Livestock and Food Supply; the Agrarian Development Agency; the Ministry of Social Development and Fight against Hunger; the Ministry of Economy; and the Ministry of Planning, Budget and Management.

The procurement process is done through two schemes:

1. The Direct Purchase scheme contributes to building the food reserves of the federal government. These stocks are used to meet the government’s own needs, such as for the distribution of food baskets to victims or vulnerable social groups like landless families and indigenous people.
2. The Purchase for Simultaneous Delivery scheme is for any project that does not require storage and the purchased products can be delivered immediately to the targeted beneficiaries. The contracted small scale farmer therefore delivers the products directly to food insecure populations, nurseries, public hospitals, schools, etc.

Given the success of PAA, in 2009, the government also introduced national school feeding legislation. Brazil’s National School Feeding Programme (PNAE) aims to purchase at least 30% of the food for school meals from local small-scale farmers. Key success factors of PNAE are its inclusive policy, which

facilitates farmers' participation, and the strong co-ordination between ministries of education, agrarian development, social development, agriculture and health. The eligibility to be a contractor for either of these programmes (PAA or PANAÉ) requires obtaining the Declaration of Aptitude to the National Program for Strengthening Family Agriculture (Declaração de Aptidão or DAP). The DAP is a certificate which attests that the producer is a family farm or an association of family farms, according to criteria set by the Family Units of Agrarian Production (UFPA).

Source: Swensson (2015^[130]), "Institutional Procurement of Food from Smallholder Farmers: The Case of Brazil".

Territorial branding and certification schemes have attracted increasing attention from policy makers, trade negotiators and agricultural producers. Roquefort, Darjeeling, Cognac, Champagne are some well-known names associated throughout the world with products of a certain nature and quality, known for their geographical origin and for having characteristics linked to these territories. Geographical Indication (GI) or Protected Designation of Origin (PDO) is a form of intellectual property given to a product that has a specific geographical origin and possesses qualities or a reputation that are due to that origin. GI protection is granted through the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement. In order to function as a GI, a sign must identify a product as originating in a given place. In addition, the qualities, characteristics or reputation of the product should be essentially due to the place of origin. Since the qualities depend on the geographical place of production, there is a clear link between the product and its original place of production. A GI enables those who have the right to use the indication to prevent its use by a third party whose product does not conform to the applicable standards. This form of intellectual property (IP) now appeals to more and more nations as a tool to upgrade in GVCs, including African and Asian countries, but essentially for export markets. A key challenge will be the capacity of developing countries to invent and manage new institutions that could enforce the rules, controls and sanctions of GI, with a clear distribution of roles between private, collective and public stakeholders (Sautier, Biénabe and Cerdan, 2011^[131]). GI recognition is also dependent of existing trade agreements making it a complex and difficult process for producer organisations in developing countries to obtain.

Other less costly territorial branding methods exist that could cater to domestic markets. Producers can differentiate themselves by marketing the "local" or "organic" nature of their products. "Genussregionen" (Austria), "Distinctly Cumbrian" (England), "Living Tisza" (Hungary) are examples of non-statutory territorial branding that can make quality branding more accessible to small farmers with limited resources (FAAN, 2010^[99]). Products standards such as regional labels, organic labels or controlled designation of origin allow the recognition of a particular product coming from a specific geographic area, and could potentially support value addition and the development of local value chains in developing countries.

Territorial branding contribute to rural development. Regional producers become entitled to use a territorial brand (GI or other forms) and the added value generated accrues among all such producers. Because officially recognised brands usually generate a premium price, they contribute to local employment creation, which ultimately may help to prevent rural exodus. In addition, branded products also have important spin-off effects, for example in tourism, creating additional jobs. Territorial brands may bring value to a region not only in terms of jobs and higher income, but also by promoting the region as a whole, contributing to the creation of a "regional brand" (WIPO, 2017^[132]). Kampot pepper, produced in the Kampot province in Cambodia, won GI status in 2010. Since gaining GI status, prices for Kampot pepper increased from USD 5 per kilogramme before GI status in 2010 to about USD 18 per kilogramme in 2014, helping livelihoods of small farmers (OECD, 2018^[133]).

Conclusion

The different models presented above represent a small sample of many local food economy and business models found in advanced economies in Europe and the United States. Not all succeed in addressing producers' livelihoods, environment, social cohesion and job creation objectives equally, but they all have more or less positive effects on one or several of these aspects. Agricultural co-operatives, food co-operatives, public procurement models and territorial branding and certification schemes have a strong consideration to improve producers' livelihoods. CSAs tend to value more environmental impact and social cohesion and often remains small-scale due to the very nature of the business model which is based on a direct annual contract between the producers and consumers. E-distribution platforms have allowed to create more direct linkages while overcoming the physical distance and contractual obligations, but at the risk of some suppliers in remote areas becoming dependent on the platform.

Creation of new quality wage jobs is not well-evidenced in many of these model. Based on existing data, food co-operatives (both consumer- and producer-led) seem to be the most promising in terms of scalability and job creation. Environmental footprint seems to also be an important consideration in this model, as these 'food co-ops' operate with charters requiring a certain quantity of local, organic, and low-carbon products, though no independent evaluation can attest to this yet. Territorial branding and certification schemes require strong involvement of local governments and "champions", and as such, need careful co-ordination between the different actors in the value chain. Certification schemes like GIs have the highest potential for direct and indirect job creation through new local business development for domestic and export markets as well as tourism.

Development strategies need to strike a balance between developing effective local food systems that will allow local business opportunities to tap into the growing domestic demand and pursuing export-oriented growth based on commodities. Upgrading in GVCs through premium products (GI certified or organic) has seen some successes in developing countries, but in the majority of cases, participation in GVCs in low-value agricultural commodities has little spillover-effects on domestic value added and jobs. The changing domestic consumption patterns and rising incomes in many developing countries have turned attention to the inclusive development potential of local value chains to tap into domestic and regional markets. In advanced economies, there is an increasing consumption trend for organic, local and low-carbon footprint foods, and though still representing a minority share, the year-on-year demand increase has seen various local business and territorial development initiatives sprout. The chapter reviewed the most common ones with replicability potential in developing countries.

Many of the local food system initiatives (CSA, co-operatives, farmers' markets, and more recently e-platforms) presented in this chapter also exist in developing countries and often constitute a large part of how food is purchased and consumed in rural areas, albeit informally organised. Formalising, scaling-up, creating decent incomes and jobs through existing models have faced obstacles. In more advanced countries, scaling-up and creating quality wage jobs while keeping short supply chains and local values at the core of the business model have been possible through a combination of government-supported regulations and rising producers and consumers' consciousness and desire for sustainable local alternatives. Success factors of "food co-op" distribution models and e-platforms, for example, lie primarily in having built strong cohesion between producers and consumers through shared values. Other factors such as rural infrastructure, advanced logistical and transport services, and digital connectivity are necessary to create an enabling environment.

Building a sustainable local food system means more investment in local production and transformation, diversification of agriculture products and upgrading skills of young people in rural areas in downstream segments of agri-food value chain. All this needs to be accompanied by an overarching development strategy that prioritises agriculture, local food systems, rural development and youth employment. This is a political choice that needs to be made by individual countries.

Notes

¹ Indonesia, Viet Nam, Thailand, The Philippines, Myanmar and Lao PDR.

² Defined as people living on less than USD 1.90 [2011 purchasing power parity] per day

³ The survey obtained 860 responses from a wide range of city sizes across countries at different income levels (16% low-income countries, 41% lower middle-income countries, 32% upper middle-income countries and 11% high-income countries) and geographical locations (Latin America and the Caribbean, Africa, Asia and the Pacific, Europe and Central Asia, and the Near East and North Africa).

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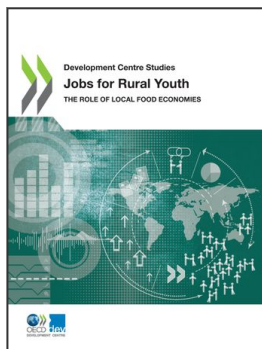
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