



Finance for food systems transformation in Kenya

-A background mapping desk study-

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For NFP

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Background document on food security and finance in Kenya.

1. Introduction to the Study

Short background.

This desk study focuses on finance for food systems transformation and serves as a background document to map relevant programs, financial sector actors and Dutch interventions in Kenya in the food systems and finance sector. The study aims to provide insights into the Kenyan food systems finance sector, primarily as a background for the Netherlands Food Partnership (NFP) and the Community of Practice on finance for food systems transformation. The purpose of the study was to get a global picture of the current state of affairs of food systems finance in Kenya. It is meant to be enriched by field explorations and continued resourcing of recent documents, while visiting key stakeholders in the sector and engaging a Kenyan consultant.

Approach and methodology

This study was commissioned by NFP to Fair & Sustainable consulting, as a desk study to draw available information from the internet and other sources, as well as through a limited number of interviews.¹

It was finalised mid-2023. Documents and data presented in the study are obtained up to this date. The study does not aim to paint a complete picture, since it is based on data available at that time which excludes more recent developments in the sector.

The study uses the below definition of food systems:

A food system is defined as a system that 'embraces all elements (environment, people, inputs, processes, infrastructure, institutions cetera) and activities that relate to the production, processing, distribution, preparation, and consumption of food and the outputs and outcomes of these activities, including socio-economic, health and environmental outcomes².

2. Introduction to Kenya's agri-food sector.

The Kenyan economy has steadily grown over the last decade. Kenya's agricultural sector, which is the backbone of the Kenyan economy, has improved significantly in terms of production, productivity, and an increased orientation towards the export market. More than 80 percent of the Kenyan population is directly dependent on agriculture as a source of food and income. Kenya has shown resilience during the COVID-19 pandemic, as compared to other east African community countries³.

¹ E.g. with the Netherlands Embassy in Kenya, and with the staff of WUR that support the food systems analysis in Kenya.

² Drawing from the UN Secretary General's Zero Hunger Challenge,

³ Mentioned in several documents e.g., FAO (2020), WB (2020) and FSD Kenya (2022)

The agri-food sector in Kenya contributes 34 percent of the total national GDP and 65 percent of all export related earnings. Food production is dominated by many small-scale farms, but the presence of commercially oriented medium- and large-scale farms is increasing. Small scale subsistence food production⁴ with low external inputs, is predominantly geared towards staple crops with limited production of cash crops. In this segment, production for the market is traded through informal networks, largely governed by informal brokers, with diverse distribution channels.

Commercial farms mostly focus their production on high value markets, including the export market. Although formal supply chains for fresh foods, such as fruits, vegetables, and animal sourced foods, are increasing, export-oriented production in horticulture and floriculture is practised by a limited number of large-scale commercial farms. Local urban markets increasingly source dry and fresh foods from rural areas in Kenya. Processing and manufacturing of agri-food products from local producers is considered an emerging market opportunity and stimulated by the government.

Food security

Agricultural production is stagnating due to several factors, such as slow implementation of irrigation programs, slow progress in value addition to agricultural produce, persisting inefficiencies in supply chains, causing losses of perishable food products, and finally, the effects of climate change on agriculture⁵. As a result, food insecurity is increasing. Data show an increase in malnutrition, as well as a sharp growth in overnutrition over the past 30 years, including lower consumption of fresh fruits and vegetables and low intake of high-quality proteins. On average, 30% of households regularly lack enough money for food⁶. Rural households and pastoral communities experience a higher micronutrient deficiency compared to the national average, with 59.4 percent of rural residents having gone without food in 2021. Households who reported often going without food increased from 7.7 percent in 2019 to 12.3 percent in 2021 while those who sometimes went without a meal increased from 25.6 percent in 2019 to 41.2 percent in 2021⁷.

Climate change

Agricultural production has been largely affected by the impact of climate change resulting in slowing down of growth in the sector in the last 5 years. Nearly all agricultural production in Kenya is rainfed, with only 2 percent of the total arable land being irrigated. Climate change results in increasing unpredictability of agricultural growth, and new pests and diseases leading to severe production losses in all crops under rain-fed agriculture. In addition, the effects of the Russia-Ukraine crisis on the agricultural sector and on the availability of food grains are also noticed.

2.2. Summary of government plans related to agriculture and food security.

In a bid to boost economic developments and to counteract the impacts of climate changes, worldwide wars etc., the Kenyan government has put in place several relevant strategies. The most important are listed below.

⁴ The sector is largely informal. Approximately 87 percent of Kenyan farmers cultivate less than 2 ha of land, while 67 percent cultivate less than 1 ha. Context. FAO (2020)

⁵ (See annex A, challenges in the Kenyan economy).

⁶ In Western Kenya it is even 45% Government of Kenya, (2018)

⁷ 2021 Fin -access household survey

Kenya's Vision 2030 strategy⁸ embraces agricultural development as a structural pathway to reduce poverty⁹, enhance food and nutrition security whilst establishing a robust national economy. Vision 2030 aims to transform Kenya into an industrialised middle-income country offering a high quality of life to all our citizens. The Vision 2030 identified six priority sectors: 1) Agriculture and Livestock; 2) Manufacturing; 3) Tourism; 4) Trade; and Business Processes, 5) Information Technology Enabled Services (ITES) and 6) Financial Services.

Within the **Government's Third medium Term Plan (MTP) 2018-2022**¹⁰ particular emphasis is given to promoting irrigation, investments in storage facilities and infrastructure, with the aim to grow the manufacturing share of GDP from 9.2 percent to 15 per cent and agro-processing to at least 50 per cent of total agricultural output. Strategies focus at enhancing food and nutrition security (FNS), construction of food storage facilities and implementation of high impact nutritional interventions. In addition, the industrial sector is projected to expand steadily from 5.8 per cent in 2018 to over 7.0 per cent in 2022. Special Economic Zones (SEZs) and industrial parks will be established, in which local and foreign private investors will be stimulated to invest jointly.

Kenya's **Agriculture Sector Transformation and Growth Strategy (2019-2029)**¹¹, focusses on both supporting smallholder productivity as well as to strengthen large scale commercial farming. Support to smallholders focusses on productivity increases, subsidised inputs for smallholder farmers¹², improved extension services, and post-harvest value addition. Support to large scale commercial farming includes development of 1.2 million acres of commercial irrigated production, and measures to promote exports of agricultural and livestock products in the regional and international markets to boost the sector's value addition. It is foreseen that public-private partnerships and investments will spearhead the development of Kenya's agri-food system. Gender equality, empowerment of women, youth, and persons living with disability and other vulnerable groups are envisaged to be a priority during the plan period. To this effect the government has put in place special funds, which are listed in box 3, on page 11.

The Kenya Youth Agribusiness Strategy 2017- 2021 aims to increase employment opportunities and support youth participation in agribusiness. According to the Kenya Youth Agribusiness Strategy (2017–2021), only 10 percent of youth are directly engaging in agricultural labour. Youth perceive agriculture to be unprofitable, labour-intensive, and an unattractive sector. The youth agribusiness strategy focuses on youth entrepreneurship, also in agriculture, and wants to use inclusive agri-finance instruments, stimulate agro processing and in-country value addition of agricultural products, while considering the principal export sectors. Specific funds that are put in place by the government also target youth. (see box 2, page 9)

Kenya has developed a climate smart agriculture strategy 2017-2026,¹³ since climate change affects vulnerable communities. Severe drought is estimated to affect 3-4 million people, who live with hunger, especially in arid and semi-arid lands (ASALs). In the strategy, negative effects of climate change are

⁸ See: <https://www.agck.or.ke/Downloads/ASTGS-Full-Version-1.pdf>

⁹ Key critical indicators for the 2030 strategy are: Increase small-scale farmer, pastoralist and fisherfolk incomes, increase agricultural output and value addition and Increase household food resilience:

¹⁰ As part of the Vision 2030 Strategy.

¹¹ Ministry of Agriculture, Livestock, Fisheries and Irrigation, (2018)

¹² Including support to a voucher system for farmer inputs

¹³ Ministry of Agriculture, livestock, fisheries and irrigation, (2017)

<https://www.adaptation-undp.org/resources/plans-and-policies-relevance-naps-least-developed-countries-lDCs/kenya-climate-smart>

addressed through promotion of a sustainable management of natural resources, development of sustainable infrastructure and by providing support for local resilience building through communities' involvement. The strategy aims to strengthen climate change governance and coordination, climate change monitoring, reporting and verification, and capacity building on the Green Economy Strategy. Concrete actions include establishment of climate funds; implementation of solar street lighting, introduction of energy efficient cook-stoves, and climate smart agriculture. However, several studies noted that international funding focuses mostly on mitigation strategies, while climate change adaptation currently is mostly financed through farmers own investments, such as family funds, and other forms of informal finance.

In a bid to address all objectives as formulated in the different strategies, the government has formulated flagship projects. Main improvements envisaged in these projects focus on a) Access to farm inputs, also by enhancing linkages between farmers and agro- SME's, b) farms mechanisation, c) food security also by enhancing food storage facilities, d) livestock improvement programs, e) creating agri-hub food processing units, f) enhancing youth and women involvement through MSME development programs, g) develop and implement climate smart agriculture program and, h) special programs addressing the ASAL region. A list of these flagship projects is provided in annex B. Key players to implement the strategy are the Government, private sector actors, development partners, finance institutions, civil society, and community institutions. The government has also established a Kenya national food systems transformation working group.

Box 1: Key highlights of Kenya's pathway to sustainable food systems¹⁴

The vision for Kenya's pathway for sustainable food systems is to ***"build prosperity for youth fuelled by food systems that are inclusive, innovative, collaborative, and dynamic. Based on data-driven decisions, it is ensured that Kenya's food system nourishes the people with a diverse diet that builds climate resilient livelihoods in every region of the country, with the aim to create 100% food and nutrition security by 2030.***

Ambitions for the strategy include:

Ensure access to safe and nutritious food for all, including fruit, vegetables, dairy, meat and grain.

Shift to sustainable consumption patterns, promoted through education to households and at schools.

Boost nature-positive production, through ecosystem restoration, agroforestry, and sustainable use of natural resources.

Advance equitable livelihoods including facilitating a shift from subsistence farming towards commercialization of agriculture, ensuring access to markets through organised cooperatives and out grower groups.

Enhance value addition, and increase uptake of digital agricultural solutions, for improving production and for monitoring of natural resource use and water use.

Enhancing resilience to vulnerabilities, shocks and stresses in food systems through climate education and research on diversification of crops resistant to drought- and pests- and disease.

Summary issues related to the current situation of the agri-food sector are:

¹⁴ <https://summitdialogues.org/wp-content/uploads/2021/09/Kenya-FSS-Dialogue-Series-National-Position-Paper.pdf>

- ✓ Food production is still dominated by large numbers of small-scale farms but the prominence of commercially oriented medium- and large-scale farms is increasing.
- ✓ Small scale subsistence food production¹⁵ with low external inputs, is predominantly geared towards staple crops with limited cash crops production.
- ✓ Production of smallholders for the market is traded through informal networks, largely governed by informal brokers, with diverse, often informal distribution channels.
- ✓ Agricultural production is strongly affected by the impact of climate change. Nearly all agricultural production is rainfed. As a result, food insecurity is increasing.
- ✓ Kenya's Agriculture Sector Transformation and Growth Strategy (2019-2029)¹⁶, focusses on both supporting smallholder productivity as well as to strengthen large scale commercial farming. Support to smallholders focusses on productivity increases, subsidised inputs for smallholder farmers¹⁷, improved extension services, and post-harvest value addition.
- ✓ National strategies focus at enhancing Food and Nutrition Security (FNS), and high impact nutritional interventions, including nutrition education to households. The strategy has a strong focus on inclusion of women and youth.
- ✓ The government sees public- partnerships as key for successful implementation of the strategy, and strongly supports participation of the private sector.

3. Kenya's financial sector: Inclusion status, key supply side actors and agri-food finance initiatives.

This chapter highlights the status of the financial sector including the current financial inclusion status, the main actors supplying financial services and specific issues related to financial services for food systems.

3.1 Financial inclusion status

Every 3 to 4 years a financial inclusion study is undertaken to assess the progress in financial inclusion in the country (see picture 1 on page 12). Overall financial inclusion in Kenya is good as compared to east-African counterpart countries. The latest study was undertaken in 2021¹⁸ and noticed the following trends:

- Financial access increased to 83.7 percent in 2021, from 82.9 percent in 2019, mainly driven by use of technology. Technology has helped to close the urban rural gap and stimulated financial inclusion of women, thus enabling women to participate in formal economic activities.
- Young people, especially those with lower education show the highest exclusion rate (23,4%) and face most constraints to access appropriate finance. Young people especially are faced with credit denials due to 1) bad credit history, such as blacklisting in the credit bureau, 2) low savings, and 3) lack of regular income. People above 55 years are the second most excluded to any form of financial services, while people with no formal education also had a high exclusion rate of 23,4%

¹⁵ The sector is largely informal. Approximately 87 percent of Kenyan farmers cultivate less than 2 ha of land, while 67 percent cultivate less than 1 ha. Context. FAO (2020)

¹⁶ Ministry of Agriculture, Livestock, Fisheries and Irrigation, (2018)

¹⁷ Including support to a voucher system for farmer inputs

¹⁸ The Survey measures financial inclusion based on four main dimensions: Access, Usage, Quality and Impact/ Welfare.

- The use of informal sources of financial has declined¹⁹, implying increasing formality in the financial sector, thus better regulation, and client protection. The rural population shows the highest use of informal services, including the use of savings groups.
- The rural -urban gap in access to formal financial services continued to narrow, largely because of fast adoption of mobile money among the rural population. Use of mobile money was spurred by the government policy in 2020 to lower cash transactions, as a measure to slow down the spread of the coronavirus pandemic.
- Financial education and advice are mostly obtained through family and friends. The formal institutions played a very small role in financial education.
- Counties in the arid and semi-arid areas²⁰, strongly rely on mobile money, informal groups, and informal lenders, since formal bank access remains minimal in these areas.
- Challenges related to the quality of financial services include fraud, high transaction charges, lack of transparency in products and services and system failure due to poor connectivity. The highest reporting of poor services was for MFIs and SACCO's.
- While climate related shocks and events were on the increase, only 6.0 percent of farmers stated having the capacity to invest in adaptation of their production to prevent the impact of drought, floods, and pests, such as locusts.
- Financial health declined to 17.1% in 2021²¹ meaning that only 17.1 percent of respondents could adequately meet their day-to-day needs, cope with shocks and were able to invest in future goals like saving for old age. The decline in financial health is largely attributed to the Covid-19 pandemic.

Box 2: The definition of financial health or well-being

The definition of financial health or well-being²² is the financial condition of individuals or families who have sufficient resources to wade through and live life comfortably and worry-free. Measurement of financial well-being can be done with objective indicators such as income, expenses, debt, assets, and debt ratios.

For the OECD, the meaning of financial health is a person's ability to balance current and future financial needs. This includes one's ability to deal with unexpected conditions in financial activities

Women inclusion

Women play an important role in the Kenyan economy. Access to appropriate finance can enhance economic opportunities for women, helping them access and control more resources and participate in the economy. The household survey findings indicate reduced inequality in the access to financial services by gender, from 8.5 percent in 2016 to 4.2 percent in 2021, showing that women participate meaningfully in formal economic activities. In addition, there is a narrowing gap between male and female users, between rural and urban users, and among different age groups.

In Kenya, women, especially in rural areas, rely heavily on *informal groups*²³ which help them to build financial resources by saving in small amounts over long periods, both for consumption and investments.

¹⁹ From 4.7 percent in 2021 from 6.1 percent in 2019

²⁰ Such as Garissa, Wajir, Tana River and Marsabit

²¹ From 21,7% in 2019, Central bank report 2021

²² According to *The Organization for Economic Co-operation and Development or OECD (2016)*

²³ According to the latest FSD Kenya (2019) survey, 37 percent of women rely on informal savings and credit group (i.e. *chamas*)

Informal providers refer to providers that are not registered or regulated by any authority. It can include informal groups such as ASCAs, Rosca and Chamas, but also shopkeepers, money lenders and family and friends. In 2021 the usage of informal finance increased because of the Covid-19 pandemic. Recently digital innovations have been introduced for informal groups. Safaricom, for example, has tested a financing model by which *chamas* members can save small amounts for the purchase of a smartphone which provides them with access to internet and mobile wallet. Mobile financial services can provide Kenyan women with greater agency and control over their savings; while considering the role they play as managers of household finances. The government wants to stimulate women's economic empowerment and has put in place special funds to stimulate women's participation in the economy and enhance women's financial inclusion. see box 3 below. In short, these recent developments are conducive for financial inclusion of women.

Youth inclusion

Several studies observe that youth and young entrepreneurs face specific challenges to get finance for their businesses. A study²⁴ among 52 MSMEs illustrated a substantial financial gap of Kenyan youth, limiting their ability to pursue high value-adding entrepreneurial opportunities, also in the agribusiness sector. Youth based Kenyan SMEs faced prohibitively high interest rates, very high collateral requirements, lengthy application processes, repayment not linked to their cash flows and inappropriate durations of loans. The majority self-finance their business using retained earnings, which often implies lower opportunities for growth. Factors contributing to low access are lack of credit history, mismatch of professional skills training, low savings; lack of conventional collateral; lack of guarantors; and low and irregular income flows partly due to informality in the labour market. More than 80 percent of newly created jobs are in the informal sector. Youths in such informal jobs are limited to access formal financial services. These constraints especially affect young entrepreneurial women.

²⁴ See <https://www.fao.org/3/cb2297en/CB2297EN.pdf>

Box 3: Special funds for women and youth.

The government has put in place funds to invest in agriculture/ women and youth enterprises.

Women Enterprise Fund (WEF) for women, youth and PWDs²⁵. The fund focuses on financial services and training on entrepreneurial skills and capacity building, for women and youth. It targets 2.1 million beneficiaries by 2022 for a total of Ksh.25.7 billion.

The Uwezo Fund²⁶ was launched in 2013 by the GoK with a KES 6 billion (USD 55 million) capitalization. It is available to savings groups (*chamas*)¹⁹ for women and youth that are registered with the department of Social Services and have a bank account, which is a major barrier for informal, unbanked groups. The Uwezo Fund was recently scaled up by Ksh.2.5 billion to cover an additional 500,000 beneficiaries.

National Government Affirmative Action Fund (NGAAF)²⁷: this fund aims to enhance access to financial facilities for women and other vulnerable groups.

Youth Enterprise Development Fund (YEDF)²⁸: The Fund was established in 2006. It provides credit lines to financial intermediaries (commercial banks, MFIs and SACCOs) to on-lend to young entrepreneurs, to foster job creation and channel investment capital in the micro-, small- and medium-scale enterprise (MSME) sector. It aims to provide credit directly to youth MSME enterprises, combined with support to marketing and linkages for youth products and services in domestic, regional, and international markets, while providing business support services, mentorship and business incubation services. Youth Empowerment Centres (YEC) are set up countrywide to offer incentives to employers who hire fresh graduates and offer internship programmes for youth. In addition, a database on national youth socio-economic status including youth led MSMEs is being developed.

The *Stawisha Mashinani*,²⁹ is a new KES 4 billion investment fund (USD 37.2 million) explicitly targeting Kenyan MSMEs in the fields of agriculture, food processing, textiles, furniture and metal fabrication, medical facilities, pharmaceuticals, and building and construction. The fund provides equity investments, asset financing, working capital, project finance and business advisory services, targeting support to different stages of the enterprise life cycle.

Financing is particularly problematic for SMEs in the so-called “missing middle”. These are entrepreneurs that are too big for microfinance and informal investors, but too small or too risky for regular banks. Most of these companies need working capital financing, as well as longer-term investments in productive assets. In addition, these enterprises need strong technical and managerial support. Formal financial service providers remain reluctant to finance young entrepreneurs who cannot show a strong track record. For these aspiring entrepreneurs, the only sources of finance are informal sources (e.g., savings groups, village moneylenders) or mobile credit providers that are not prudentially regulated by the central bank.

²⁵ <https://wef.go.ke/>

²⁶ <https://www.uwezo.go.ke/>

²⁷ <https://www.ngaaf.go.ke/>

²⁸ <https://www.youthfund.go.ke/>

²⁹ <https://kie.co.ke/2020/03/10/stawisha-sme-mashinani-program-launch/>

Box 4: Challenges of consumers of financial products and services.

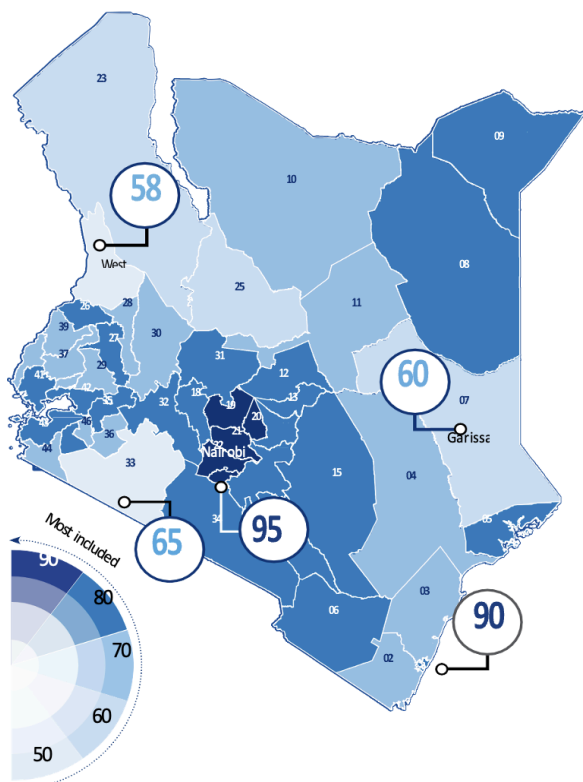
The financial inclusion study also identified various challenges in the use of financial services and products, as experienced by the users 48.4% of the respondents reported regular inability to access mobile money, and 78.5% reported inability to access bank services due to system down time or unavailability of internet and ATM services. In addition, 26.6 % of respondents reported that they have experienced fraud in the process of using mobile money, mobile bank accounts or digital apps in the last 12 months. 46.3% reported unexpected charges for SACCOs users. Financial services providers are not providing sufficient information on charges levied on products and services. The highest increases of unexpected charges were reported for SACCOs and MFIs. Experiences with poor services were highest among MFIs and SACCOs account holders at 33.7 and 26.8 % respectively..

Regional differences in financial inclusion.

There are big differences in financial inclusion in Kenya,

Picture 1: regional differences in the level of financial inclusion in Kenya.

Finances per county
County comparisons: formal inclusion



3.2. Financial sector in Kenya, key actors

Compared to other countries in East Africa, Kenya has a well-developed financial market. Many services are widely available, ranging from credit and loans, savings and payments from commercial banks and micro-finance institutes (MFIs), savings and credit cooperative societies (Sacco's), and mobile-based transfer services, like M-PESA. The number of Kenyans using these services has almost tripled over the past decade. Fintech has been a major driver of this development, having made it possible to link bank accounts to mobile money.

Kenya's financial sector includes 39 commercial banks in 2021, 11 microfinance institutions, 49 insurance companies and the Post Office Savings Bank with a large network of branches around the country. The sector also has 79 foreign exchange bureaus, three licensed credit reference bureaus, 14 money remittance providers and about 200 deposit-taking licensed savings and credit cooperative organisations with a membership of over three million Kenyans. In addition, it is home to almost 100 venture capital funds. Many commercial banks and microfinance institutions in Kenya boast of having agribusiness units however, the share of agriculture finance as a percentage of outstanding national credit remains below 5%.

Access to credit has moved from traditional players to relatively new players that employ different business models, from licensed SACCOs to non-deposit taking MFIs that loan against their own funds. The channels for providing credit have changed with the entry of digital credit. Digital loans account for fastest growth of loan volumes and is the 3rd largest source of credit by value, following bank loans and loans from SACCOs/MFIs

The financial sector in Kenya includes:

- Formal banking sector, including national and state-owned banks as well as private banks.
- Microfinance sector, including microfinance banks.
- Financial cooperatives
- Informal finance
- Venture capital funds
- Insurance companies

Each of these subsections are briefly described below.

3.2.1 Formal banking sector

Kenya is seen as the hub for commercial banks in Africa. The Central Bank of Kenya regulates all formal financial institutions with a special regulation for Islamic banks. The regulated banks include 28 local private banks, 2 local public banks and 17 foreign banks that are operational in Kenya. Bank profitability improved in 2021, while the gross non-performing loans (NPLs) have gradually declined to 13.1% in December 2021³⁰. During the pandemic, bank transactions on mobile phones increased from 56% of all transactions in 2019 to 85% in 2021. See annex C for a chart of the formal banking sector.

3.2.2. Microfinance sector

Microfinance institutions have been operating in Kenya for decades. The current microfinance sector is composed of 13 microfinance banks. They provide a variety of services including personal loans, business

³⁰ FSD Kenya annual report 2021.

loans, savings accounts, and term deposits. Microfinance institutions have traditionally attracted international impact investments, while steadily increasing over time. During the covid-19 pandemic, however, the sector stagnated. Loan default is one of the main threats to the sector. Data shows that microloans are mostly used to finance consumption and not so much for long term investments in enterprises or agriculture.

3.2.3. Savings and credit cooperatives

The SACCO movement in Kenya accounts for 5,000 registered SACCOs³¹, and is the largest in Africa with total savings amounting to 33% of the national savings. SACCOs are a vital component of Kenya’s economic and social landscape, and greatly assist to enhance access to finance for people who would otherwise remain unbanked. They provide favourable financial conditions, while also covering remote rural areas. Members include farmers, public servants such as teachers, informal and low wage earners within the *jua kali* – informal traders, artisans, and other micro-entrepreneurs.

The Kenya Union of Savings & Credit Cooperatives Ltd (KUSCCO) was established in 1973 as an umbrella body for Savings and Credit Cooperatives (SACCOs). KUSCCO provides education, training, research and consultancy, as well as advocacy for its members. It recently established a Central Finance Fund (CFF), which mobilises savings from SACCOs with surplus liquidity and on-lends to SACCOs with deficits, who in turn lend to their members, thus serving as a valuable funding source for rural smallholders.

The table below ³² shows the contribution of SACCO’s, commercial banks and micro-finance institutions to the financial sector while comparing the performance of SACCOs to commercial banks and micro-finance institutions for loans, deposits, and asset base, using financial indicators from the year 2020.

Table 1: Performance of Financial Institutions across select Indicators (SASRA Supervision Annual Report 2020)

Parameter	DT-SACCO Societies	Commercial Banks	Microfinance Institutions
Total Assets (KES. B)	627.68	5,405.75	74.88
Gross Loans and Advance (KES. B)	473.74	3,006.10	48.45
Customer Deposits (KES B)	430.11	4,011.32	49.36

3.2.4. Informal finance

Informal providers are specified as those not registered and/or regulated by any authority or legal entity. These include informal groups such as ASCAS³³, ROSCAs³⁴ and chamas, as well as finance from family, neighbours and friends, shopkeepers and employers. The increase in informal usage in 2021, highlights the important role of informal finance during the COVID-19 pandemic. Informal credit sources through social

³¹ KUSCCO. Retrieved 5 July, 2022, from <https://www.kuscco.com/index.php/our-partners>

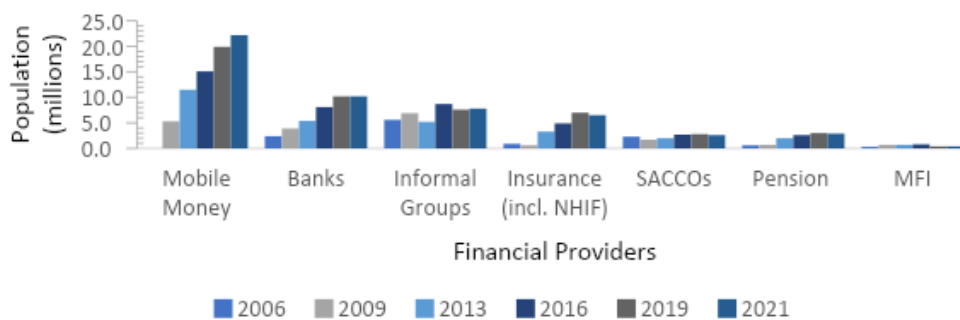
³² Waititu.B (2020, October 17). *Cooperative Societies in Kenya*. Retrieved from <https://kenyacradle.com/cooperatives-in-kenya/>

³³ Savings and credit associations, cumulating savings

³⁴ Savings and credit associations, rotating savings

networks and shopkeepers are a lifeline for liquidity management of rural households. Informal finance is the main competitor of low-value digital loans. SACCOs and MFIs serve smaller segments of the population while providing higher loan amounts, used for emergencies and consumption but also for production inputs and farm investments. Remittances also grew and totalled to USD 3,996 million in the 12 months to October 2022, 10.9% higher than a similar period in 2021.

Picture 2: the graph below shows the use of financial services over the years for 6 financial inclusion studies.³⁵



3.2.5 Venture capital funds.

There are almost 100 venture capital funds operational in Kenya. Most funds operate globally or across Africa. Some have their origin in Kenya and are specifically addressing the Kenyan SME market. The funds mostly aim at small and medium enterprises with equity investments. Ticket sizes range from 50K to 1 million Euro. Some funds provide special opportunities for startups and for young entrepreneurs. These funds also provide opportunities to the missing middle, that are not properly addressed by the formal banking sector. Many funds also offer technical assistance to the SME's, alongside the investment. There are few venture capital funds that aim at green investments. In annex. F you find a list of the most important venture capital funds targeting SMEs in Kenya.

2.2.6 Agricultural insurance.

There are several insurance companies that offer agricultural insurance in Kenya. Mostly, products include indemnity-based crop and livestock cover, directed at medium-and large-scale commercial cereal and dairy farmers. Seven local insurers – APA, Africa Merchant Assurance, CIC, Heritage, Jubilee, Kenya Orient and UAP – also offer multi-peril micro-insurance products, which cover smallholder maize farmers for crop yields below 80% of the expected harvest, especially when lower yields are caused by climate factors, diseases, insect damage and other natural causes.

Smallholder farmers' uptake of the various agricultural insurance products has been low as in many African countries. One problem is that payouts are often much smaller than actual losses incurred. There are also limitations on the types of seeds and crops farmers can insure, which limits farmers interest to take up crop

³⁵ Source: 2021 FinAccess Household Survey Report

insurance. Furthermore, the insurance premium costs could be high, with limited risk coverage for the farmer.

Recently innovative programs have come up that address insurance also for smallholders. UAP works with the Kilimo Salama (Safe Agriculture) programme in Kenya to offer weather index, area-yield index and satellite-based index insurance that cover a variety of crops. The Kenya Livestock insurance program (KLIP) uses satellite imagery to determine whether enough forage is available. Payouts are triggered when grazing is less than 20% of ideal conditions. In this program, the government purchases drought insurance from private insurance companies on behalf of pastoralist herders. Acre Africa has developed a tailored crop insurance program using digital platforms and satellite images. (Box 3)

Box 5: Sample Acre Africa crop insurance innovation

Acre Africa offers farmers tailored crop insurance to help them mitigate crop failure due to adverse weather patterns. The mix of smart design and digital innovation offers the farmers the ease of buying the scratch cards at local agri-dealers, use the system, and the capability to top up, as well as the options to pay for the premium in small amounts and over time. A combination of satellite and weather station data determine whether the farmer will receive a payout directly on his mobile account in case of drought or excess rain on their land. Through this system, more than 70,000 Kenyan farmers across 15 counties are now enjoying affordable weather index insurance. The pricing model ensures that most farmers, 89% of whom had never accessed insurance services before, can afford insurance. Use of technology reduces costs, improves attractiveness, profitability and reach by smallholder farmers. As a result, more farmers across the country are now taking up insurance.

3.3 Focus in on agriculture finance

Finance for agriculture is still constrained in Kenya. Currently, only 5 percent of financial loans are for agri-finance³⁶. The agriculture sector is financed mostly through mobile money, mobile savings, and sometimes through loans³⁷. Most farmers use financial services for purchase of agricultural inputs, investments in mechanisation or irrigation. Financing in post-harvest management and value addition for small scale farmers, has been low. Financial services for the micro, small and medium sized enterprises (MSMEs) in agriculture remain inadequate.

In Kenya, small farmers and agri- MSMEs supply 80% of the food consumed by Kenyans. The majority of these operate in the informal sector with limited access to formal finance. Many farmers access finance from informal sources, such as from shopkeeper credit, family, or friends, and from chamas. (please refer to box 4 below) These sources of finance are fast, reliable, and trustworthy. Despite the loans being for short periods and low amounts³⁸, they are usually obtained at high costs. Informal loans and mobile money transferred are mostly used to manage day-to-day expenditures, fees for education, and for emergencies.

Formal finance is not used widely among farmers. Farmers are unable to invest in equipment such as irrigation equipment, solar powered equipment, and water harvesting. These would all need longer loan periods and bigger loan amounts. Agribusiness is not the most attractive venture for financial services providers since it is perceived to be high risk. In general, banks and sacco offer larger loan sizes with better

³⁶ See FSD, (2022) financial inclusion report, WB report 2019.

³⁷ See FSD Kenya (2022): Agriculture and processing financing market analysis.

³⁸ the average amount of finance accessed from informal sources of finance is low (largely below KShs 10,000) per borrower.

repayment periods and lower interests compared to informal and digital sources. Nonetheless, they are reluctant to lend higher amounts for longer loan periods to the agricultural sector. In addition to production risks, trade risks and commodity price swings, weak post-harvest handling and weak processing arrangements constrain lending to agriculture. Risks are aggravated by rain dependent agriculture and changing weather patterns. In addition, the banking sector is also challenged by high operational costs for serving remotely based small farmers/enterprises. sufficient capital to lend during peak planting seasons is still a problem especially for smaller FSP's. Yet transforming Kenya's food systems desperately needs investments to contribute towards sustainable access to healthy food for all, and to tackle the impact of climate change.

Women operating in the agriculture sector face unique challenges to access finance. Constraints such as use of conventional collateral for loans affect women more than men. Increasingly lenders give unsecured loans, or use guarantors, group collateral and movable assets for smaller loans. All these all enhance access for women. The possibility to use movable assets for collateral has been stimulated by the government and provides a good opportunity to enhance access to finance for women. In box 6 below the most important sources of credit for agriculture are compiled.

Box 6: sources of credit for the agricultural sector

<i>Shopkeeper</i>	33.4%
<i>Family/friend/neighbour</i>	15.7%
<i>Mobile money loan provider, e.g.fuliza</i>	15.5%
<i>Group/chama</i>	11.4%
<i>Mobile bank (MShwari, KCB, MPesa)</i>	8.1%
<i>Sacco</i>	4.2%
<i>Hire purchase (e.g., A.R.T., Amedo)</i>	2.7%
<i>Personal loan from a bank/ business</i>	2.7%
<i>Cash loan from shopkeeper</i>	1.9%
<i>Buyer of your harvest</i>	1.5%
<i>MFIs</i>	0.7%
<i>Digital loans app (e.g., Tala)</i>	0.7%
<i>Government institution for education</i>	0.5%
<i>Moneylender/Shylock</i>	0.5%
<i>Overdraft</i>	0.1%
<i>Employer</i>	0.1%
<i>Credit Card</i>	0.0%
<i>Government or govt related</i>	0.0%

3.4. Fin-tech and Agg-tech solutions

Kenya is a frontrunner in digital economic services in Africa, including digital financial services. Kenya shows a significant growth in mobile money and digital payments. This has greatly contributed to growth in financial inclusion. Main uses of digital financial services include daily expenses, working capital and

payments for education. However, the majority of the digital credit offerings in Kenya remain ill-suited for the largest share of the population that survives on an irregular income, such as farmers and casual labourers³⁹. The use of mobile money is spreading rapidly, also among women and the rural population, including informal groups, mostly used by women.

Mobile borrowers in Kenya tend to be young⁴⁰ among whom occurrences of loan default are high. More than 2.7 million Kenyans – 6 percent of the overall population – defaulted on their digital loans in the period between 2016 and 2018, often with defaults on small outstanding balances⁴¹. In accordance with the sector’s regulations, defaulters on digital loans end up on a credit bureau’s blacklist. This comes irrespective of the loan amount unrepaid, thus negatively affecting their credit history. Blacklisting mostly happens to younger borrowers, who then lose their access to mobile loans which could help for investments for their businesses.

Competition in the digital lending market is growing, however, the regulatory framework strongly favours fintech companies and mobile money operators (MMO’s) over commercial banks. Fintech companies and MMO’s are only loosely regulated by the authorities, while the formal banking sector is governed by rigid consumer protection measures imposed by the Central Bank of Kenya. This creates unfair competition in the market.

According to several studies, there is an urgent need to reform the digital credit market, create a level playing field and enhance consumer protection. Reforms should ensure that young Kenyan entrepreneurs can access credit in a mobile money market that is safe and transparent. The market should not penalise them excessively because of their relatively lower levels of business and financial education, nor their limited overall experience with financial services compared with that of older entrepreneurs.

Agg-tech- fin-tech solutions

A wave of innovations in linking fin-tech to agri-tech solutions through digital platforms. This development is supported by improved technology and infrastructure, better regulation, and better end-user support. Innovative digital products targeting farmers and agribusinesses are surfacing, such as weather stations, satellite-based and hybrid weather insurances; area-yield indices insurance; and dairy livestock and multiple peril crop insurances. Going digital may offer opportunities for farmers to connect with quality input suppliers, diversify their markets and access relevant information. All these will help to improve financial resilience. See list of relevant applications in Annex D.

Nevertheless, several barriers are observed in the use of digital services:

- ✓ *Digital literacy and access to basic technologies* among farmers (especially women) are limited in certain parts of the country.
- ✓ *Digital skills and expertise for agriculture* are in short supply across the ecosystem.
- ✓ *Monetisation and payment limits sustainability of digital services.* Farmers are unwilling/unable to pay for digital advisory services. They rely on agrovets to provide free, timely, and tailored advice. Last mile service delivery is still required for farmers to gain familiarity and trust digital solutions, so that eventually they are willing to pay for such services.

³⁹ FSD Kenya, 2017).

⁴⁰ 62 percent of digital borrowers are aged 18–35

⁴¹ About half of these defaulted loans had an outstanding balance of less than USD 10 (MicroSave Consulting, 2019).

The enabling environment challenges for digital services include:

- ✓ *Data accuracy and usability:* Data accuracy varies significantly among users, in addition, most data are stored in physical documents that are not readily accessible digitally.
- ✓ *Data management systems:* quality of systems vary significantly in standards and complexity across the ecosystem. A lot of agricultural data is collected and processed manually, and few institutions have the capacity to integrate and store data in the cloud.
- ✓ *Limited access for financial service providers:* Financial service providers sometimes run systems that are not ready to access and manage complex data.
- ✓ *Policy and regulations* to support solutions are still nascent – there are no common standards for data sharing and privacy, and for open data use in Kenya.

Box 7: Case on regulation of digital data.

In a bid to streamline the digital markets and create data connections, the government has started the collection of biometric data and the introduction of digital IDs. However, the process was challenged in court on the grounds that (a) the collection of biometric data raised concerns relating to privacy rights and the potential abuse of personal data in the absence of a data protection law (that has since been passed), (b) the absence of extensive public participation on the exercise, and (c) concerns over the inability to digitally register individuals that currently lack IDs. This poses a risk of further marginalising these persons.

3.5. Climate finance

Climate Finance⁴² has high priority in the Kenyan national strategy. The national treasury developed a draft national policy on climate finance⁴³. This policy establishes the institutional framework for mobilisation and management of climate finance. Objectives of the policy include:

- Enhance the capacity to mobilise climate change finance to support sustainable development.
- Enhance the implementation of public finance management in relation to climate financing.
- Establish mechanisms to mobilise internal and external climate finance.
- Track, monitor, evaluate and report on sources, applications and impacts of climate finance.
- Encourage private sector participation in climate relevant financing opportunities.

Amongst others, it is suggested to establish a national climate finance platform and a climate change fund that can support the mobilisation, coordination and tracking of climate finance in Kenya, including finance from both domestic and international resources. Furthermore, the policy wants to establish a clear and flexible legal and regulatory framework for climate finance, as well as developing an institutional set up that can address climate finance mobilisation, enhance climate resilience, reduce greenhouse emissions, and generate carbon credits. The aim is also to establish a national monitoring, reporting and verification framework to provide a clear overview of domestic and international climate financial flows, trends, sources and purposes, and track utilisation and impact of the finance. Significant financial resources from the public and private sectors are expected to be channelled towards climate activities⁴⁴ under this policy.

⁴² See <https://www.iied.org/sites/default/files/pdfs/2023-02/21251iied.pdf>

⁴³ <https://faolex.fao.org/docs/pdf/ken190011.pdf>

⁴⁴ <https://faolex.fao.org/docs/pdf/ken190011.pdf>

Currently, limitations for the implementation of a comprehensive climate finance policy are mostly related to the limited capacities of government staff at national and regional levels. Staff has limited awareness of existing funds; limited technical capabilities to evaluate and screen projects or programmes; limited capacity to develop innovative finance packaging and a bankable project pipeline; and limited monitoring and reporting capabilities.

Recent actions to address climate change in Kenya include tree planting programmes, protection and conservation of five water towers⁴⁵, as well as programs that stimulate energy efficiency and drought management. Links with the carbon market were established through the development of mitigation projects in renewable energy and restoration of degraded lands. Kenya has the largest portfolio of Clean Development Mechanism (CDM) activities in East Africa and has issued over 45 MtCO₂e of carbon credits by 2020, mostly for cooking stoves, renewable energy, and water purification. Several studies point to the need to investigate how these credits can be used as a source for farmers' finance needs.

While there are solid commitments for climate finance foreseen, for the immediate future there is a serious shortage in the short-term and medium-term funding for climate finance. Bridging the short-term gap could mean a temporary increase in grants, using programmes that focus on facilitating an acceleration of private climate and nature investment. Donors have shown interest in supporting climate and nature sectors but have not done so largely because of concerns over measuring climate impact. The private sector is slowly entering the climate finance market in Kenya and must face market influence by the public funds before being able to develop viable business models.

Innovations in climate finance include green bonds, green investment banks, carbon mechanisms, blended finance instruments, green focused public private partnerships, and green investment banks. Kenya currently accessed climate funding mostly from international sources⁴⁶. Multilateral donors like GCF, GEF and World Bank are currently the biggest climate financiers. Internationally, funds for climate financing are extensive and can be accessed in Kenya. Major bilateral financial partners supporting climate change activities in Kenya include the United Kingdom's Department for International Development (DFID), French Development Agency (AFD), Danish International Development Agency (Danida), German international development agency (GIZ), Japan International Cooperation Agency (JICA), Swedish International Development Cooperation Agency (SIDA), and the German government-owned development bank (KfW). Kenya is also a UN-REDD Programme partner country and a participant of the Forest Carbon Partnership Facility. Bilateral development partners also support REDD+ initiatives.

According to several development actors, Kenya is well positioned to become a hub for green investment since it has a generally supportive political environment for green growth, technology and innovation-driven business development. It also has considerable natural resources which contribute substantially to both livelihoods and productivity. Lessons learned could be captured and shared in the East African Community, including lessons on standardised monitoring, reporting, and verification (MRV) systems.

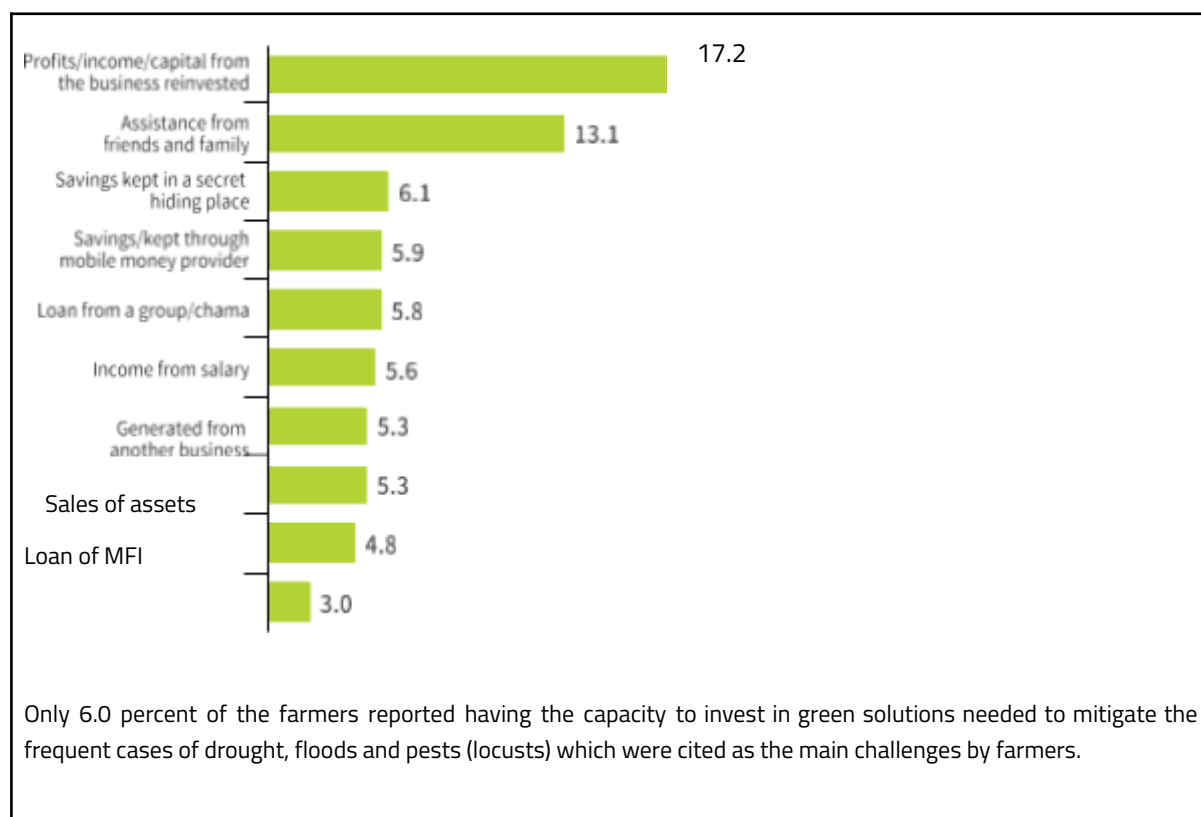
Better coordination across agencies and stakeholders is essential for investment to be directed towards low carbon climate resilient development. Open and transparent dialogue between national and county

⁴⁵ (Mau forest complex, Aberdares, Mt. Kenya, Cherangani Hills and Mt. Elgon)

⁴⁶ including Global Environment Facility (GEF), Green Climate Fund (GCF), and the Adaptation Fund (AF). Green growth

governments, business, long-term investors, and microfinance, banking and development institutions will stimulate knowledge development for climate finance.

Box 8: Top ten sources of green finance⁴⁷



4. International players in food systems finance.

This section lists the most relevant international players in the field of food systems finance in Kenya. The list is not exhaustive as there are a vast number of relevant programs and international donors active in the field.

The World bank supports the Vision 2030 strategy through its country partnership agreement with Kenya. According to Word Bank, finance is both a driver of food system inefficiencies and an essential ingredient for food systems transformation. Financiers of food systems need to take a longer-term view and better manage health, environmental and social risks, redirecting finance into more sustainable assets and activities. This will shift finance away from capital-intensive, environmentally damaging, high-input assets in linear value chains towards knowledge-based, regenerative, and circular business models that are driven by value rather than volume and are more resilient, diversified and in balance with nature. Transition will require mobilising private finance and optimising public finance for resilience food systems and climate

⁴⁷ 2021 HH survey

resilience finance. In its Food Finance Architecture document WB⁴⁸ promotes high-performing and inclusive food systems which are critical to achieving the Sustainable Development Goals (SDGs), see box 4 below.

Box 9: critical factors for public and private investments in food systems.

The Food Finance Architecture contains five core “imperatives” to optimise public spending and mobilise private capital for a global food system transformation:

1. Reshape public support and incentives using subsidies and market mechanisms to redirect capital.
out of unhealthy, destructive subsidies towards support of public goods thus spoiling the market for private sector entry.
2. Integrate health, environmental and social risks into financial decision-making, create resilient jobs and reverse devastating climate change and nature loss.
3. Introduce and scale appropriate financial products and business models, mainstreaming innovative financial instruments while improving access to finance and services for primary producers through new supply chain partnerships.
4. Secure equitable food systems by investing in rural infrastructure and implementing fair prices and living wages to ensure access to affordable and healthy diets.
5. Strengthen food governance and stability to build physical and financial resilience to shocks

The WB runs a few programs related to building resilience in Kenya, including programs with an access to finance component.

The Financial sector Deepening fund (FSD)⁴⁹ is an independent trust that supports development of a financial system that can service a green and inclusive digital economy, while focussing on improving financial health and inclusion of women and micro-and small enterprises. FSD is a key critical player in the financial sector in Kenya. It organises sector wide discussions and has published several documents relevant for food systems and finance. It works closely with the public sector, the financial services industry, and other partners to develop financial solutions that better address challenges in access to finance for low-income households, women and youth, micro and small enterprises, and other underserved groups. Current funders are the Kenyan government, UK aid, the Swedish International Development Cooperation Agency (SIDA), and the Bill & Melinda Gates Foundation

Other relevant actors and projects

The EU-funded AgriBiz Programme focuses on youth and women to realise their potential as agribusiness entrepreneurs. The programme offers mentorship, capacity building and business advisory services, as well as grants and credit to youth and women entrepreneurs in agribusiness.

The Enable Youth Kenya Project funded by the African Development Fund (ADF) is a 5-year program to provide skills and capacity development, mentorship, and access to markets and finance to young

⁴⁸ See <https://www.worldbank.org/en/topic/agriculture/publication/food-finance-architecture-financing-a-healthy-equitable-and-sustainable-food-system/>

⁴⁹ <https://www.fsdkenya.org/>

agri-entrepreneurs aged 18–35, in an effort to boost employment and business opportunities for this age category.

Other relevant international actors that operate on food systems transformation in Kenya are FAO, WFP, IFAD, GIZ etc.

5.The Dutch involvement in food systems and finance

5.1. Netherlands embassy

The Netherlands Embassy has a strategic focus on poverty reduction in line with the SDGs. Economic growth should be equally distributed and should include marginalised groups in Kenya such as women and youth, people in arid and semi-arid areas, and refugees.

The current program of the embassy focusses on agriculture, horticulture, aquaculture, and dairy. The embassy wants to promote climate resilient approaches, renewable energy solutions, improved access to water and technology and improve food security and health. In addition, the embassy provides support to the logistics and transport sector in Kenya.

The Embassy wants to work in close collaboration with local public and private sectors as well as with the Dutch private sector that invests in Kenya. Kenya has a supportive business environment which makes it an attractive country for Dutch companies and impact investors. Several are active in Kenya, in food systems and in the financial sector. Dutch companies can benefit from support provided by the Dutch government, including linking to programs and investments, and linking to the Kenyan market by making use of the existing network of the Dutch government in Kenya⁵⁰.

Currently the Dutch embassy is developing a program for the ASAL region in Northern Kenya. Recent drought in that area had devastating effects on small scale farmers that rely on rainfed agriculture and on pastoralist communities. A new multi-annual plan is being developed by the embassy for 2023-2026, with a focus on the ASAL region.

5.2. Dutch knowledge institutes: Wageningen university and food systems analysis

Wageningen University and Research (WUR) is very active in Kenya, for example in food systems analysis for action research and project formulation. The food systems analysis is used as a framework to understand and shape strategic interventions and policies related to agriculture and food & nutrition security.

⁵⁰ Useful websites with further information include:

- [Doing business | netherlandsworldwide.nl](#)
- [Home | DGGF](#)
- [Funding | RVO.nl](#)
- [Facility for Sustainable Entrepreneurship and Food Security - FDOV | RVO.nl](#)
- [DHI subsidy scheme | RVO.nl](#)
- [Atradius Nederland | Kredietverzekering en incasso](#)

Several different frameworks for food system analysis have been developed by WUR over the years. In these frameworks access to finance is usually included as part of the support service to food systems. In annex E, a framework for food systems analysis is presented where financial services is explicitly mentioned. A sample of a recent study supported by WUR is provided in box 10 below.

Box 10: sample of food systems analysis in Kenya, including access to finance.

In Kenya, post-harvest losses of over 40 percent are common in the case of perishable and nutrition dense agricultural products such as fruits. A food systems approach was used to study the relevance of post-harvest loss management in the Mango/ avocado and poultry sectors.

The study observed that food losses affect both small-scale and commercial producers, as well as middlemen, suppliers, distributors, traders, exporters, wholesalers, consumers, and national governments and concerns both vegetables and fresh animal products.

In the case of the mango, avocado and poultry sector, the study observed recurrent losses, but also identified economic opportunities to invest in mitigation and reduction of post-harvest losses. Opportunities include investments in temperature-controlled storage, aggregation facilities, packaging solutions and processing technologies. For the poultry value chains these include industrial slaughtering facilities. The study identified six business opportunities that are worked out in detail, and financial services is seen as a key element to promote and scale the business opportunities. It is also observed that Dutch solutions⁵¹ in storage, aggregation, packaging and processing can be very valuable in Kenya.

For improvements in post-harvest loss management an integrated approach is suggested including training and organisation of farmers, traders, and vendors as key actors, improving access to market information, and market linkages with formalised contractual arrangements. Enhanced enabling policy environments and improving access to agri-finance products are also crucial. Financial services for small farmers can support very small, low-cost, appropriate technology solutions such as on-farm charcoal evaporative coolers and medium-scale cold storage containers at local aggregations.

For larger producers and commercial chain actors, financial services can support large scale cold stores at urban markets (with refrigerated transport). With appropriate financing opportunities, Kenyan companies can invest in high-end Dutch technology whereby Dutch companies can offer long-term support, service, and after-care. Digital solutions developed by companies can play an instrumental role to develop effective linkages in the market, and better access to financial services.

5.3. Dutch private sector and impact investors and civil society in Kenya

5.3.1 Dutch based impact investors in Kenya

The Kenyan agriculture market is dynamic with many agribusiness opportunities. Most entrepreneurs, however, still face challenges such as limited access to business advice, markets, and capital. These constraints are even higher for those who are young, female, or live outside of the metropolitan regions.

⁵¹ Dutch private sector companies that could potentially be of interest include Cool Green Solutions, Celtic Cooling, Geerlofs, Kloosterboer, Adheerst and Coolfinity; and • Relevant initiatives include the One Acre Fund, Kigali Cooling Efficiency Program, UKAID (DFID), Global Cold Chain Alliance (GCCA), Atradius, and Cold Chain Assessment Initiative

One of the key challenges mentioned many times by companies is access to finance. Many impact investors, including Dutch based investors try to address this issue.

Almost all Dutch impact investors that focus on inclusive finance in LMIC⁵² are active in Kenya. Many invest in local or regional investment funds or financial services providers (FSP's) that finance small holder farmers and SMEs in food and agriculture. They mostly use debt financing or equity investments instruments, while guarantees or blended finance constructions are less employed. In general, the final client selection is left to the local investors or FSP's who are then responsible for detailed client risk assessment, client education and capacity building for clients. Dutch investors can link to other Dutch actors in food value chains or to Dutch tech- companies that support digital platforms for food chains in the sectors that are stimulated by the Netherlands embassy. Impact investors also support the Agriculture Exchange program of the Kenya cooperative bank. The Rabobank supports a digital platform for the Kenya Cooperative Bank to link data captured by food chain actors to agri-finance providers, using data for credit scoring. A detailed list of Dutch impact investors active in Kenya can be found in Annex G--

5.3.2 Dutch civil society relevant for food systems and finance

Many Dutch civil societies as well as international organisations that are registered in the Netherlands, are operational in Kenya. Many of these work on poverty alleviation, food systems and food security and increasingly also focus on building climate resilience. Several organisations link to financial services in their programs. They link to financial service providers either through their own investment fund or through programs on the ground by linking project activities to formal or semi-informal financial services in Kenya. Such a combined approach appears to be very successful for the vulnerable communities and groups in rural Kenya. Examples of such programs are World vision, Care international, Aflatoun, One Acre fund and Mercy corps.

NGOs with Dutch roots also frequently aim to link with financial service providers. For example, organisations such as SNV, Woord en Daad and Agriterria aim to link their value chain development projects to financial service providers. Organisations such as A4A, Dorcas and Heifer aim to link to financial service providers that finance the bottom of the pyramid also in food production and food chains. A list of the most relevant Dutch based organisations in the field of food systems and finance is provided in Annex H.

5.3.3 Dutch private sector in Kenya.

Over 100 Dutch companies have business in Kenya, amongst others in Kenya's flower industry or the food industry. Dutch companies are actively involved in development activities. Sometimes in collaboration with the Netherlands government, unlocking the potential of Dutch expertise and technologies for the Kenyan actors to boost inclusive growth. Moreover, Dutch tech companies are looking for business in Kenya. Recently the Netherlands Business Hub Kenya (NLBH) started to offer Dutch companies support in entering the Kenyan market. The hub promotes bilateral trade between the Netherlands and Kenya and facilitates linkages to a vast business and social network of local contacts, thus supporting Dutch companies that are willing to start, develop and expand their business in Kenya. NLBH is an independent, privately owned, not-for-profit organisation based on membership. It works closely with the Netherlands Embassy in Kenya.

⁵² Low and middle Income Countries

It offers networking events, (online) seminars, matchmaking, and business advice on taxation and legal issues. Some of the current members include consultancy companies, flower exporting companies, companies offering legal advice and other companies which specialise in supporting Kenyan entrepreneurs or offer digital technology support.

6. Conclusions and recommendations

This chapter provides a summary of the main conclusions and critical challenges in the sector as well as recommendations for action in the food finance sector, including possible entry points for NFPs Kenya CoP Food systems finance.

Conclusions:

Kenya has a very rich and diversified financial sector that can serve a wide variety of clients and actors in rural and urban areas. These financial services are also relevant for food systems transformation.

The conducive policy and legal environment and the general supportive business climate stimulates digital and technology innovations. As an effect, Kenya has become an innovation hub for digital solutions in agriculture and in finance in Africa. Recent developments include digital platforms that link fintech with agri-tech solutions. Mobile systems have greatly stimulated access to and growth of financial inclusion in Kenya, also for women and youth.

Kenya has a supportive business and investment environment that encouraged many international organisations to be based in Kenya. Also, many Dutch based impact investors, Dutch based civil society organisations and Dutch companies have a base in Kenya and several are supporting food systems development.

Most investors are concentrated in urban areas with most of them in Nairobi. MFIs and Saccos are serving rural stakeholders.

There are National pathways collaborations within the food systems transformation theme, bringing together actors in the food system, but food systems finance is not a major focus and financial service providers are not included in the group.

The strong focus on enhancing climate resilience is an emerging concern for food systems transformation. Several development actors suggest that Kenya could spearhead innovations in this area because of its vast financial sector and the strong focus on digital innovation⁵³. Financial services could contribute to food systems transformation, while including climate and health concerns.

Challenges:

- ✓ The overall financial sector is very rich and well developed in Kenya. However, agriculture is still one of the least financed sectors. Long-term finance for investments in good storage facilities, mechanisation, irrigation systems and other investments relevant for building climate resilience are especially difficult to obtain for small scale farmers and agri-based SME's.
- ✓ Issues like high interest rates (currently around 20%), rapid depreciation of local currency, new and high taxation regimes, and growing climate related risks, are key challenges affecting access to finance for agriculture.

⁵³ Mentioned by WB and others.

- ✓ Well-functioning data platforms that link agricultural data with credit scoring tools are still facing challenges. Data standardisation and the enabling environment for data sharing and data privacy is not yet fully in place in Kenya.
- ✓ The young generation, and especially young entrepreneurs face problems accessing finance. Their demand is only partly addressed by the mobile lending systems, which provide very short-term finance, while requiring strict repayment disciplines which are not always easy to maintain for starting entrepreneurs. Several development actors point out the urgent need to reform the digital credit market. This will create a level playing field and enhance client protection. It will also ensure that young Kenyan entrepreneurs can access credit in a mobile money market that is safe, transparent and that does not penalise them excessively because of their relatively lower levels of business and financial education
- ✓ With regards to food systems analysis and programs, there is limited effort to include the financial sector. The financial sector seems to remain a grey area, while according to the world bank: *"finance is both a driver of food system inefficiencies and an essential ingredient for food systems transformation."* It is very challenging to translate this in the Kenyan context when financial sector actors are not included in the National Pathway coordination on food systems transformation.
- ✓ Related to collaboration among Dutch actors: it is unclear how impact investors collaborate with civil society organisations that also provide subsidies and grants for business investments. The balance between subsidies and debt investment in food systems transformation is still a challenge for long term sustainability in finance for food systems transformation.

Recommendations and possible entry points for NFP.

Relating to the objective of the Cop finance to collaborate with Kenyan actors to gather existing and create new knowledge around food system finance, further investigation would be needed to find out which platforms exist, and where the NFP Cop could link to. There is an opportunity to engage the national pathways platform to convene with financial services actors. Other platforms to collaborate with are FOLU, AFRACA.

In food systems transformation, generally broad stakeholder collaboration is encouraged, however involvement of the private sector including the financial sector is still lacking. How to engage the financial sector in such stakeholder collaborations without jeopardising their financial sustainability objectives and business models is a critical question to address. It could be a learning point for the COP- finance.

NFP could stimulate joint learning on access to finance for youth, and especially for young entrepreneurs. Joint learning could include exchange between the Dutch and Kenyan financial actors on how to improve access for youth (collateral free lending, easier access to digital loans etc.)

NFP could explore how to work on long term finance for investments in climate resilient solutions. This should include improved storage facilities, mechanisation, irrigation systems and landscape restoration and stimulated joint learning between the Dutch and Kenyan financial sector actors, in the framework of food systems transformation. There exists several Dutch led investors and development partners that would be ideal for the COP FSF to connect to.

NFP could explore opportunities of Dutch solutions for the Kenya food systems transformation challenges and link this to opportunities in finance, and especially to the Dutch impact investors sector.

Since there is massive finance available for Climate Finance worldwide, it could be good to explore the nexus between climate finance and food systems finance. How Climate finance models and food systems finance could cross pollinate each other in terms of financing models could be an interesting entry point for NFP.

Peer to Peer Learning across sectors and regions (Indonesia) could be stimulated by NFP.

Annex A: Challenges in the Kenyan economy.

Kenya has improved the private sector investment climate, however there are some persistent challenges in economy⁵⁴

- Sluggish growth and economic dualism, including income inequality, with a small, but rich formal economy and a larger, poorer informal economy.
- Macroeconomic reliance on an erratic agriculture sector.
- Dependence on imports.
- Vulnerability to climate change.
- Low quality social services (health, education, and housing).
- Marginalisation of women and girls.
- Digital inequality and market concentration
- Growing informality in the labour force.
- Growing population dominated by young people.
- Dependency on imports also for basic goods.

⁵⁴ See: FSD Kenya inclusive finance for sustainable development in Kenya

Annex B: List of Flagship programs on food systems and finance of the Kenyan government.

FLAGSHIP 1: *Fertiliser Subsidy Programme.* This program focuses on increasing agricultural productivity by improving access, affordability, and suitability of fertilisers. It subsidises 200,000 MT of assorted fertiliser annually. Target is to service 1 million farmers in 40 zones, served by > 1000 farmer supportive SMEs that will work directly with the farmers providing farming inputs such as fertiliser, aggregating crops and products from livestock and fisheries, or facilitating marketing services. They are expected to help farmers make the transition from focusing on staple crops to producing higher-value commodities, A major constraint to SMEs is access to affordable finance. To address this, the Government of Kenya wants to attract international agriculture financing such as equity, debt, asset-based and blended finance for this program.

FLAGSHIP 2: *Input supply support.* The program focuses on farmers with increased ability to invest in the right inputs at the right time. The program builds on the following main elements: 1. To re-allocate government procurement of fertiliser and maize seed to an e-voucher system that can serve farmers nationwide and allow them to purchase a range of inputs, 2. To place provision of inputs in the hands of the private sector, including registered Agro dealers 3. To establish a system that reliably disburses funds when the farmer uses the e-voucher, input suppliers are immediately paid 4. To roll out nationwide farmer registration to screen for eligibility, with verification by extension agents at every registered farm during the first three years and develop a national farmer profile database 5. To stimulate agricultural mechanisation and strengthen adoption of agricultural mechanisation by supporting counties to provide affordable agricultural mechanisation services to small scale farmers.

FLAGSHIP 3: *Agro processing accelerator.* This program is establishing six large-scale agro- and food-processing hubs across the country through the Agro-Processing Accelerator – a one-stop shop for agro-processors. It will combine support to agro-processing and reduction of post-harvest losses, improve access to modern agro-processing technologies to enhance value addition, and stimulate better access to markets for agricultural products. This will be achieved through modernization and conversion of the 10 existing Agricultural Technology Development Centres (ATDCs) into centres of excellence. In addition, the programme will support establishment of 1000 targeted production level SMEs to boost commercialised food systems for livestock, fish, poultry, and piggery with the establishment of East Africa's premier food hub Industrial and Small and Medium Enterprises (SMEs) Parks Programme. The national and county governments in conjunction with the private sector will collaborate in identification of land, infrastructure development and management of SMEs and industrial parks.

FLAGSHIP 4: *support to large scale farm production.* The program wants to unlock 50 new large-scale private farms (with 150,000 acres under sustainable irrigation from existing projects, such as to rehabilitate dams, with government-provided infrastructure (e.g., power, roads) and protected land ownership.

FLAGSHIP 5: *Youth and Women Empowerment in Modern Agriculture Programme.* The programme aims at creating sustainable and gainful self-employment for the youth and women through their participatory engagement in agriculture. The Government will offer incentives for integration of youth and women into agribusiness value chains.

FLAGSHIP 6: *Agricultural Insurance Programme*: This program focuses on support to farmers to access agriculture insurance to manage risks and losses amongst smallholder farmers, increase crop productivity and livestock production through improved access to credit and higher yielding technology, and support transition from subsistence to commercially oriented farming.

FLAGSHIP 7: *Food resilience and development in ASAL region*. The program aims to boost food resilience of 1.3 million farming, pastoralist, and fishing households in ASAL regions. This is to be done through community co-created design, and active coordination of development partners, using government, and private sector resources, while engaging private sector and development partners. In a participatory manner, a prioritised list of interventions will be established for increasing drought-resistant crop production, improved animal health and feeds availability, increased water availability and management, and enhancing the uptake of index-based insurance. In the ASAL areas, the program will implement the Drought Resilience Sustainable Livelihood Programme (DRSLP) and Regional Pastoral Livelihood Resilience Programme (RPLP). The DRSLP supports small-scale irrigation schemes; livestock market development, pasture and water development and animal health, while the RPLP seeks to enhance livelihood resilience of pastoral and agro-pastoral communities in cross-border drought prone areas.

Other relevant programs established by the government include:

A Strategic Food Reserve program with a focus on specific farmers, securing investment through public, private partnerships in post-harvest handling and market distribution as well as elimination of multiple levies across counties since these restrict movement of food reserves to food insecure areas.

A program to stimulate Climate Smart Agriculture (CSA), to address the effects of climate change on agricultural systems. The program involves development of strategies for adaptation and mitigation including early warning, early preparedness and response, improved Climate Smart Agriculture (CSA) technologies and practices; and identify and promote suitable crop insurance products as a means of climate risk transfer.

A program to stimulate livestock production with the aim to promote food and nutrition security, while also enhancing income generation by stimulating milk, beef, egg and honey production. This will be achieved by developing four (4) livestock breeding research farms; establishment of a National Rabbit Centre and establishment of nine (9) sheep and goat breeding farms.

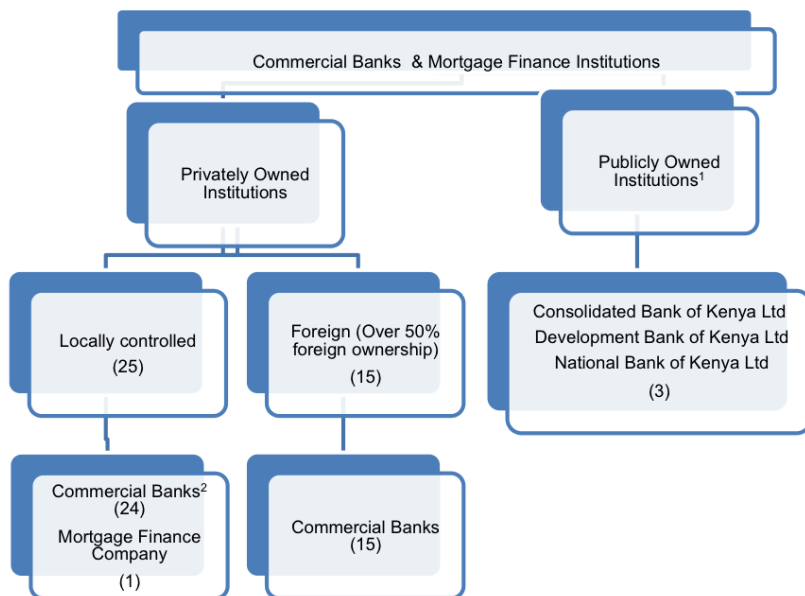
The Agro-food Processing Programme involves value addition in agricultural, fisheries and livestock. Targeted products include tea, coffee, nuts, legumes, cereals, fruits, vegetables, roots and tubers, animal feeds, dairy and meat. The programme will also entail training agro-processing entrepreneurs and expanding to seven (7) international markets.

Micro, Small and Medium Enterprises (MSMEs) Development Programme: The MSMEs Development Programmes will include inculcation of entrepreneurial culture and skills development; development of Micro and Small Enterprises Centres of Excellence ; provision of worksites; incubation, innovation and technology transfer; provision of financing; productivity and promotion of quality improvement of MSMEs products; intellectual property right registration; and branding and market access to MSMEs products. The local government will implement a robust SMEs development and support programme which would formalise the large number of informal enterprises and support their growth from micro and small to

medium enterprises, and eventually into large firms. This would contribute to the creation of at least 1 million jobs and contribute to tax revenues.

Manufacture of Industrial and Agro-processing Machinery, Equipment, Parts and Tools Programme: The local government will exploit the available potential to manufacture/assemble machineries and equipment used in agricultural product value addition, some of which are imported, to make use of competitive advantage available in skilled labour, market, raw materials and strategic location in the EAC and COMESA regions

Annex C: Chart of formal banking sector in Kenya (FSD, 2020)



Annex D: Relevant digital platforms, fintech -agri- tech solutions.

Tulaa

Tulaa is a digital end-to-end platform, active since 2015 in Kenya and Ghana, that uses mobile technology and a last-mile agent network to connect smallholders, input providers, large-scale commodity buyers and financial institutions, improving the flow of information among these actors and making it cheaper and easier for lenders to identify the most promising investments in the value chain.

DigiFarm

Safaricom's DigiFarm is an integrated mobile platform, launched in 2016, that provides a bundled offer of services to smallholder farmers, including input credit and supply, agri-insurance, a digital market platform, and access to agricultural and livestock data.

Pula

Pula is an insurance firm, created in 2015, that provides smallholder farmers with a bundled offer of microinsurance, inputs (in partnership with local suppliers) and farmer advisory services, all through a mobile app. As of 2019, it served more than 1.7 million smallholders in ten African countries and India.

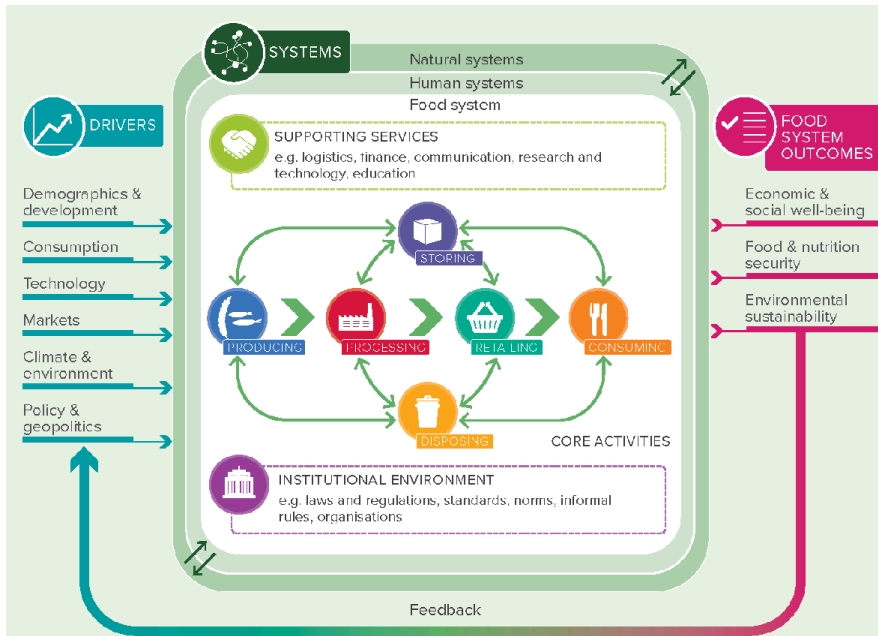
MobiGrow

KCB, Kenya's largest commercial bank, launched MobiGrow in 2016, in the context of a USD 30 million partnership with the Mastercard Foundation focused on promoting financial inclusion for smallholder farmers. It is a prominent example of a digital super platform that provides more than 400 000 smallholders with a bundle of financial services (credit, savings and insurance), capacity building and market linkage facilitations.

Twiga Foods

Twiga Foods is an agritech startup, created in 2014, that runs a mobile-based business-to-business (B2B) food supply platform which sources produce directly from a network of 17 000 farmers and delivers it to more than 8 000 urban retailers in Nairobi (e.g. small- and medium-sized vendors, outlets and kiosks). Through a mobile-based, cashless platform, Twiga Foods sources fresh fruits and vegetables from its farmers, offering them higher prices than the market average for their products, and guaranteed sales. Vendors, for their part, can benefit from a steady supply of products, while final consumers are able to buy fresh fruits at a lower price, thanks to the more efficient supply chain (Tsan *et al.*, 201)

Annex E: framework food systems analysis.



Sample food systems analysis framework, with finance explicitly mentioned as supporting services. Source: WUR, 2023 "Food system models and methodologies within Wageningen University & Research: Opportunities for deepening our food systems work" <https://edepot.wur.nl/516691>

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