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PROSPECTS



▶ Integrated enterprise and market systems assessment on the refugee and host community livelihoods in Sudan

Groundnut and sesame value chains in West Kordofan and East Darfur



Kingdom of the Netherlands

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Cover photo: East Darfur market scene in Ed Daein.
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▶ **Integrated enterprise
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► Foreword

Sudan has a long history of hosting refugees and asylum seekers, most fleeing from the conflicts in the neighbouring countries. Out of 1.1 million refugees in Sudan, majority are South Sudanese, and the rest from Chad, the Central African Republic, the Democratic Republic of Congo, Eritrea, Ethiopia, Somalia, Syria and Yemen. Most refugees in Sudan reside in the rural out-of-camp settlements congregated in the country's southern states of East Darfur and West Kordofan. These areas remain underdeveloped with limited infrastructure, services and work opportunities.

In 2019, the Partnership for improving prospects for host communities and forcibly displaced persons (PROSPECTS) was launched with support of the Ministry of Foreign Affairs of the Kingdom of the Netherlands in eight countries globally. Through a pillared approach, the Partnership aims at improving the access of host communities and forcibly displaced people to education, decent work and social protection.

In Sudan, the PROSPECTS Partnership focused its technical assistance on forcibly displaced and host communities from Al Nimir camp and the nearby settlements of Assalaya in East Darfur, and Al Meiram and along the Keilak/Kharasana corridor in West Kordofan. Here the ILO leads efforts, under the decent work pillar, to improve incomes and revenue streams for the targeted communities.

To support the remote field locations targeted by the Partnership, the ILO built its value chain approach using the Approach to Inclusive Market Systems (AIMS) methodology. It provided a strategy to strengthen local market systems and enable refugee and host communities to seize economic and employment opportunities.

This assessment has been conducted to help provide an analytical basis from which market-based refugee livelihoods programs can be developed. It will support development of the evidence-based interventions, necessary to address major constraints to value chain development including; traditional, labour intensive, and low yield output farming practices; absence of formal financing services; poorly coordinated and weak market actors; and a severe lack of access to market information.

The AIMS assessment was designed to provide a concrete analytical understanding of the market system as well as the dynamics surrounding entrepreneurship, Medium and Small-Scale Enterprises (MSSE), cooperatives, access to finance and financial literacy in the targeted states of East Darfur and West Kordofan.

With this Report, the ILO has been able to identify targeted push interventions that facilitate greater beneficiary engagement with the market through technical or entrepreneurial skills development, strengthening social networks, or through transfer of technologies and other assets. Push interventions are being implemented to develop targeted agricultural value chains with potential to expand and diversify the economic and employment opportunities.

Finally, assessment underscores the importance of enabling local actors to support the market system in a sustainable manner. Together these streams of the ILO's technical assistance provide a comprehensive and multi-dimensional approach to strengthening the rural livelihoods in PROSPECTS targeted locations.

I would like to congratulate UNICONS Consultancy Limited in Sudan for their excellent work in data collection and reporting, and PROSPECTS Partners, the UNHCR and UNICEF and the IFC for their collaboration with the ILO. Finally, I would like to thank the Embassy of the Netherlands for their generous support to this assessment and the production of this report undertaken in the context of this innovative PROSPECTS Partnership.



Alexio Musindo

Director

ILO Country Office for Ethiopia, Djibouti, Somalia, Sudan and South Sudan and
Special Representative to the African Union (AU) and the UN Economic Commission for Africa (ECA)

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► Abbreviations

AIMS	Approach to Inclusive Market Systems	MoFEP	Ministry of Finance and Economic Planning
CBoS	Central Bank of Sudan	MoPER	Ministry of Production and Economic Resources
CoR	Commission of Refugees	MSSE	Micro and small-scale enterprises
CTC	Central Trading Company	NAS	Native Administrative System
FDPs	Forcibly displaced persons	NGOs	Non-governmental organizations
FGDs	Focus group discussions	ROSCA	Rotating Savings and Credit Association
HAC	Humanitarian Aid Commission	SILC	Saving and Internal Lending Community
HC	Host community	SMAD	State Market Administration Department
HHs	Households	SSDB	Savings and Social Development Bank
IDPs	Internally displaced persons	SSI	Semi-structured interview
IFAD	International Fund for Agricultural Development	UNDP	United Nations Development Programme
IGAs	Income-generating activities	UNHCR	United Nation High Commissioner for Refugees
ILO	International Labour Organization	VC	Value chain
IPM	Integrated Pest Management	VCA	Value chain analysis
LEDC	Local Economic Development Committee	VSLA	Village Saving and Loan Association
KIIs	Key informant interviews		
MACP	Multi Annual Country Programme		
MFI	Microfinance institutions		
MFU	Microfinance Unit		

► Acknowledgements

This market assessment is the outcome of the ongoing Partnership for improving prospects for forcibly displaced persons and host communities (PROSPECTS), spearheaded by the Government of the Netherlands. The team would like to express their gratitude to the governors of the states of West Kordofan and East Darfur, government and non-government institutions, financial institutions, cooperatives and communities for their support, cooperation and provision of valuable information.

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Introduction

Sudan has a long history of hosting forcibly displaced persons (FDPs) from within its borders and from other countries in the region. Refugees and asylum seekers have made their way to Sudan from the Central African Republic (CAR), Chad, the Democratic Republic of Congo (DRC), Eritrea, Ethiopia, Somalia, South Sudan, Syria and Yemen in search of safety from violence and other perils in their countries of origin. These populations are often confronted with high levels of poverty, in part because many of them are hosted in some of Sudan's poorest regions, where host communities (HCs) already face a scarcity of resources and services. With the number of FDPs in Sudan gradually rising, particularly those in protracted settings, durable solutions are needed to build resilience, self-reliance and empowerment for FDPs and HCs alike.

To this end, in 2019 the Government of the Netherlands launched the Partnership for improving prospects for forcibly displaced persons and HCs (PROSPECTS). The initiative brings together five agencies — World Bank, International Finance Corporation (IFC), UNICEF, UNHCR and ILO — with the goal of transforming and strengthening the role of development interventions in contexts characterized by forced displacement. Within the partnership, the ILO leverages its expertise and experience in the world of work to improve socio-economic resilience and create decent jobs in targeted regions.

As part of this work, the ILO has carried out numerous activities across Sudan with particular emphasis on the states of East Darfur and West Kordofan. Protracted conflict has severely limited the availability and stability of livelihood opportunities in both states, while significant influxes of South Sudanese FDPs in the last decade have put this already fragile economic situation under greater stress. As a result, FDPs in the two states are severely hindered in their ability to access basic services to support themselves and their families, leaving them heavily reliant on humanitarian actors.

The following report details the findings of market assessments conducted on the groundnut and sesame value chains in East Darfur and West Kordofan. It also seeks to build on the findings of previous integrated enterprise and market system assessments conducted by the ILO to offer a comprehensive overview of the target groups, locations and value chains. Throughout the process, FDPs and HCs remain the central focus. This was achieved largely by applying the Approach to Inclusive Market Systems (AIMS), a methodology developed in collaboration with the UNHCR to apply the ILO's value chain development approach to contexts of forced displacement.



Spices and condiment seller in East Darfur Market. © Caroline Knook

The following chapters aim to provide a concrete analytical understanding of local market systems and the dynamics surrounding entrepreneurship, micro and small-scale enterprises (MSSE), cooperatives, access to finance and financial literacy in the targeted regions. Based on these findings, the report concludes with recommendations for further actions to support development of the value chains, with the goal of providing greater inclusion and improved livelihood opportunities to FDPs and HCs in a sustainable manner.

► What is the ILO's Approach to Inclusive Market Systems?

The ILO-UNHCR Approach to Inclusive Market Systems (AIMS) for refugees and HCs is based on the premise that initial humanitarian assistance at the onset of displacement be followed by a transition towards sustainable economic development. AIMS therefore works at the humanitarian-development nexus by strengthening local market systems and enabling refugee and HCs to seize the economic and employment opportunities therein.

AIMS utilizes a “push-pull approach” that seeks to work on demand and supply sides of the labour market. On the one hand, targeted push interventions aim at developing the skills and capacities of the target group to engage with the market, for instance through technical or entrepreneurial skills development, by strengthening social networks or through transfer of assets. On the other hand, the ILO's market systems development approach is used to identify and develop sectors and value chains with potential to expand and diversify the opportunities available to the target groups, as well as to better target any “push” interventions.

Finally, rather than intervening in local markets through direct delivery of goods and services, AIMS focuses on strategic facilitation that enables local actors to support the market system in a sustainable manner.

▶ 1

Context

▶ 1.1 Background

Within the framework of the PROSPECTS project, the ILO conducted a study of the groundnut and sesame value chains. The following report has been prepared based on the findings resultant of field work conducted using the AIMS methodology, which was developed by the ILO and UNHCR to help strengthen the livelihoods of refugees and HCs. In Sudan, the study targets these population groups in East Darfur and West Kordofan.

▶ 1.2 Purpose and objectives of the report

The assessment seeks to provide a concrete analytical understanding of the market system as well as the dynamics surrounding entrepreneurship, MSSE, cooperatives, access to finance and financial literacy in the targeted states of East Darfur and West Kordofan. After a sector selection process, the groundnut and sesame value chains were chosen for analysis and planning for future market-based interventions according to the AIMS methodology.

The main objective of the assessment is to identify constraints that hinder the functioning and growth of the value chains, particularly in terms of economic opportunities. With an emphasis on the target group of FDPs and HCs, the assessment also aims to identify the constraints that may prevent these vulnerable groups from accessing economic opportunities in the selected value chains. Once the main constraints are identified, deeper analysis uncovered the underlying causes of the market inefficiencies and the target groups' challenges in accessing the value chains. These findings then informed the development of a market vision which outlines how the market system needs to change to generate sustainable improvements for the target groups. Based on this vision, the document proposes a series of interventions. These include "push" interventions, which develop the skills and capacities of the target groups, as well as "pull" interventions, which focus on value addition within the value chains to create greater demand and decent work opportunities.

► 1.3 Analysis of Sudan's economy and agriculture sector

Sudan is the third-largest country on the African continent, hosting more than 4 million forcibly displaced persons¹ and currently undergoing a profound political and socio-economic transformation ushered in by the 2018–2019 Sudanese Revolution and the October 2021 coup d'état.

The country is also enduring a shrinking economy exacerbated by the COVID-19 pandemic. In 2020, real GDP contracted by 8.4 per cent after shrinking by 2.5 per cent in 2019.² Further challenges include a massive fiscal imbalance and high inflation, which reached 124.9 per cent in 2020 from 82.4 per cent in 2019, following a strong currency depreciation and monetization of the fiscal deficit. While the inflation rate continued to rise in 2021, the rate largely stabilized in the second half of the year. In 2022, however, inflation rates witnessed a sharp increase again, following the October 21 military coup in 2021. What is more, a recent assessment on the impact of COVID-19 on local labour markets found that agricultural activity was impacted by lack of access to inputs and workers. The lockdown in Khartoum and limited travel between states impacted the supply chains of agricultural inputs, such as seeds and tools. The severity of the impact was not the same across states. Agricultural activity in West Kordofan and East Darfur was less affected than in Khartoum because of the rainy season. The impact on agriculture caused by mitigation measures taken to combat the pandemic can be observed in the reduction of manpower, finance and logistics required for inputs and outputs. Most people were affected by cessation of activities, fewer working hours or lower return (ILO 2021).³ Despite these challenges, 2022 is expected to bring an improved economic outlook, with poverty dropping 0.5 per cent and private consumption and investment spurring growth on the demand side, with agriculture and mining pushing the supply side.

From the early 2000s, oil production served as the primary driver of Sudan's economic growth. However, the conflict and subsequent independence of South Sudan in 2011 heavily depleted Sudan's oil revenues. As a result, both industrial and service sectors experienced downturns. Only the agriculture sector continued to witness growth in this time. Today, the sector remains the main source of income and employment in the country, providing livelihoods to more than 80 per cent of Sudanese. Crop diversification to support exports and the production and export of livestock remain significant components of the agricultural economy, though higher levels of growth and productivity are significantly constrained by irrigation and transportation challenges. Agricultural development has proceeded without adequate conservation measures, and the country faces environmental challenges related to climate change, including soil erosion, desertification and drought, which makes it prone to recurrent food insecurity in rural settings and urban migration. Omar al Bashir's regime, which held power until 2019, failed to invest in Sudan's agriculture. For decades, only 1 per cent of the state budget was channelled to development of the agricultural sector. Consequently, Sudan became dependent on food aid, while agricultural productivity of many crop types has been in decline since the 1950s, at an annual rate of 1.3 per cent.⁴

Despite these challenges, Sudan's agriculture sector holds considerable potential. With a surface of 1.88 million sq km containing savanna, acacia forests, deserts and 200 million ha of arable land. This amounts to 10 per cent of the world's available arable land, a variety of rich soil types, and a tropical climate suitable for year-round agriculture.⁵ Moreover, the country benefits from ample water sources. Sudan holds 43 per cent of the Nile basin, sits on the world's largest fossil aquifer, Nubian Sandstone Aquifer, with 150,000 cu km of groundwater, and has a fertile rain-fed belt in the south.

1 UNHCR Sudan Fact Sheet, September 2021, <https://data2.unhcr.org/en/documents/details/88903>.

2 AfDB, <https://www.afdb.org/en/countries/east-africa/sudan/sudan-economic-outlook>.

3 ILO PROSPECTS, *Rapid assessment of the socio-economic impact of the COVID-19 pandemic with a focus on Khartoum, West Kordofan and East Darfur*, Sudan, 2021.

4 REDD+ Sudan, *In-depth Analysis of Drivers of Deforestation and Forest/Range Degradation*. 2018. Retrieved from <https://www.reddplussd.org/phocadownload/Drivers%20of%20Deforestation%20and%20Degradation%20of%20Forest%20and%20Range.pdf>.

5 Noble Capital Group, *The New Sudan: Investing in Stability, Growth and Wealth*. 2021. Retrieved from <https://invest.esudan.gov.sd/wp-content/uploads/2021/05/SUDAN-Investment-Prospectus-2021.pdf>

Recent successes in projects that introduce advanced crop science to Sudan suggest that it may be able to deliver on its promise of becoming the breadbasket of Africa and the Middle East. In 2020, Sudan recorded its largest wheat production level with a 1.115-million-ton harvest from 315,500 ha of farmland (3.5 t/ha) — a significant improvement from 2015, when farmers in Sudan working about 250,000 ha of land harvested just 472,000 tons of the grain (1.9 t/ha).⁶

Officials credit the African Development Bank's Technologies for African Agricultural Transformation programme, or TAAT, for delivering the latest technology of heat-tolerant wheat varieties for this breakthrough in wheat production.⁷ As the agricultural sector becomes the focus of public (both international and local) and private investment, it is poised to grow 7.5 per cent annually from US\$35 billion in 2021 to US\$72 billion in 2030.⁸ Moreover, growth of the agricultural sector can also help drive the recovery of other supporting sectors such as energy, ICT, processing, logistics and infrastructure sectors.

► 1.4 Targeted states and communities of the assessment

The targeted states of East Darfur and West Kordofan (Figure 1) host a significant population of forcibly displaced persons (including refugees and IDPs). Development programming in these regions is hindered by the temporary or transitory stay of these populations, as well as by the extent of their vulnerability. As a result, critical humanitarian interventions often have to be prioritized over more development-centered programming. Moreover, a lack of infrastructure and the marginalization and fractionalized nature of these communities, where social cohesion is a key factor, further exacerbates the challenges of development programming.

In East Darfur, the project targeted both forcibly displaced and host community members living in and around Al-Nimir refugee camp and the Assalaya settlement clusters that populate the locality.

In West Kordofan, the targeted locations include the Keilak/Kharasana corridor, Al Meiram refugee camp, and closely linked HCs (villages and small settlements). Figure 1 shows the programme's targeted states.

► Study areas: key facts

East Darfur State borders South Darfur, North Darfur and West Kordofan in addition to sharing an international border with South Sudan. The population of the state is 2,172,108, of which 1,322,671 (61 per cent) live in rural areas, 349,540 (16 per cent) in urban settings, and 499,897 (23 per cent) are nomadic pastoralists.

West Kordofan State lies in the southwestern part of Sudan, 760 km from Khartoum. The state borders North Darfur, North Kordofan, East Darfur and South Kordofan, the contested area of Abyei, and shares an international border with South Sudan. The population of West Kordofan is estimated at 1.3 million, with most living in rural areas (60 per cent). About 70 per cent of the inhabitants are farmers, and around 25 per cent of the population is nomadic pastoralist.

6 AfDB, "Sudan's record wheat harvest is proof that Bank agricultural transformation program will boost breadbasket goal", 19 October 2020, retrieved from <https://www.afdb.org/en/news-and-events/sudans-record-wheat-harvest-proof-bank-agricultural-transformation-program-will-boost-breadbasket-goal-38388>.

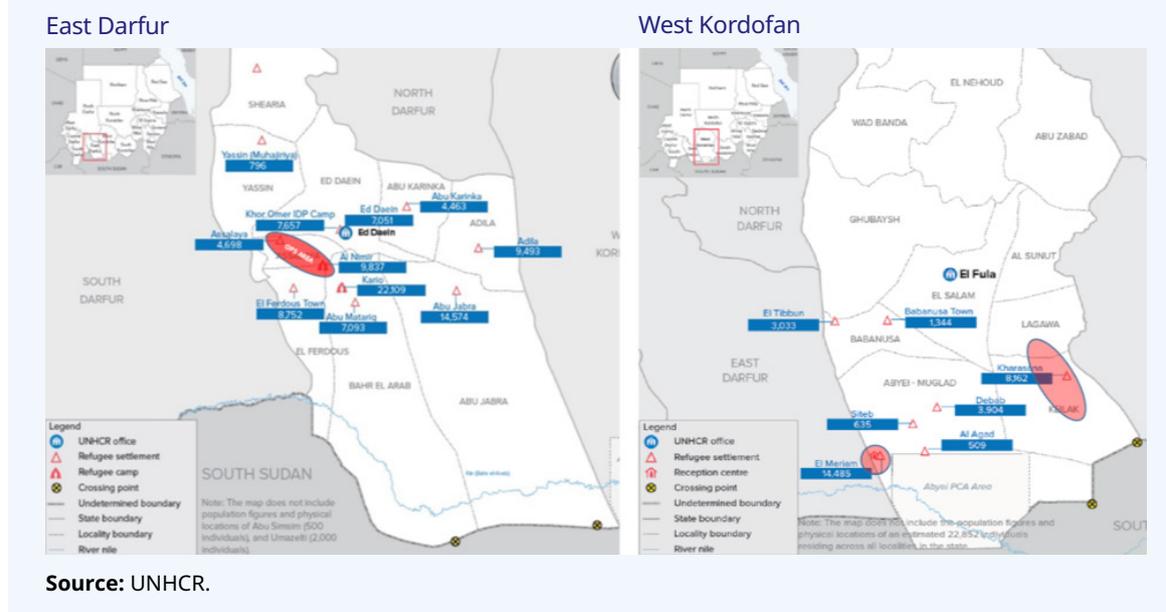
7 Ibid.

8 Nobel Capital Group, 2021

The two states have limited economic and livelihood opportunities, low social indicators and poor access to government services. Additionally, there is fierce competition for resources between farmers, nomadic pastoralists and FDP populations. This competition, compounded with other historical and economical grievances, contributes to frictions between the HC and FDPs in East Darfur and the HC and IDPs in West Kordofan.

The main livelihoods are agriculture, livestock, and trading, with agriculture being more dominant in terms of the number of households that are involved in the sector. About 84 per cent of the population are farmers with agricultural-dependent livelihoods, most of whom have low social protection indicators, insufficient access to government structures or service delivery points, and limited access to labour markets. Furthermore, possession of agricultural tools is very low.

► **Figure 1. Map of project target regions**



Profile of forcibly displaced persons and host community in East Darfur

In 2020, an estimated 76,890 refugees and 60,396 IDPs were registered as residing in East Darfur. Of these, approximately 68 per cent reside among HCs in self-settlements while the remaining 32 per cent are in two camps, Kario and Al-Nimir.⁹ The HCs are mainly of the Rezaigat ethnic group, who control and cultivate farmlands under the traditional land tenure system. The HCs and FDPs have their own Native Administrative System (NAS, detailed below).

FDPs in East Darfur largely avoid pursuing livelihoods with livestock because of the relatively high investment needed to begin and the risk of theft. This risk stems from the fact that the majority of FDPs don't have land and would therefore not be able to adequately observe their livestock. Some also work in the construction sector making bricks, or as workers at construction sites. A small number of educated FDPs were absorbed by UN agencies and the international NGOs in jobs contributing to camp management. Another minor group of FDPs within the camps received vocational training though were not engaging in any type of work owing to the lack of tools.

9 ILO PROSPECTS, *Socio-economic assessment: East Darfur and West Kordofan States, Sudan, 2021*.

Profile of forcibly displaced persons and host community in West Kordofan

West Kordofan hosts 86,535 IDPs, and 60,987 refugees from South Sudan. IDPs in West Kordofan have often fled inter-ethnic fighting between nomadic pastoralist tribes and IDPs communities within the state or in the neighbouring South Kordofan. All refugees reside in self-settlements that are often remote and dislocated from the state capital, El Fula.

According to PROSPECTS' Multi Annual Country Programme (MACP), the partnership targets the Keilak/Kharasana corridor and Al Meiram in West Kordofan. The refugee population in Al Meiram lives in two clusters and belongs mainly to the Dinka Malwal ethnic group. In Keilak/Kharasana, FDPs consist primarily of Nuer people, the second largest ethnic group in South Sudan after the Dinka. The Messeria tribe make up the majority of HCs and control and cultivate farmlands under the traditional *hakura* land tenure system. Both groups, HCs and refugees, have their own NAS.

Fisheries are flourishing as an economic activity in the seasonal lakes and reservoirs of West Kordofan. FDPs with background and strong experience in fisheries leverage their situation as major producers in the local fishing market hierarchy. In addition to these skills, many refugees also hold experience in food making and processing, cottage building, and livestock.

► The Native Administration System

The Native Administrative System (NAS) is the traditional government that plays an effective role in controlling and organizing community issues, especially those related to land use. It is acknowledged and empowered to manage and administrate tribal issues within a traditional cultural knowledge system.

Traditional authority, vested in the native administration, consists of diverse hierarchies of tribal chiefs and their assistants, elders and educated leaders in communities. This system, which is appreciated by community members, has been remarkably involved in natural resources (land, rangelands, water, forest, and so on), governance and management and other related issues (such as conflict resolution and management), in addition to rendering justice and judicial functions through the so-called native courts. The traditional collective actions are deeply rooted under the guidance of the NAS. This system is based on the social customs governing the use of common properties.

Although the system lost part of its identity, power and influential character during President Gaafar Nimeri's regime in the early 1970s, it is still influential in the Darfur and Kordofan states and continues to provide support to and be involved in community organizations.

Livelihood opportunities

The primary income-generating activities for refugees in the target states include farming, daily labour and petty trading. Both men and women are involved in agricultural work, brickmaking, carpentry, construction and plumbing, though small-scale farming and agricultural daily labour remain the most common types of income-generating activities in the project locations. Where micro and small-scale enterprises do exist, they typically focus on women selling clothes next to the road, selling tea and coffee, or operating other small trading-related kiosks.

In **Kharasana, West Kordofan**, there is a viable market in the camp using traditional stalls made of straw. Activities range from bread-selling, tea, tailoring, carpentry and handicrafts. Kharasana camp refugees work in farming sesame, groundnuts and sorghum, as well as selling charcoal, wood, tea and food,

and housecleaning. These jobs are mostly occupied by women and youth. The consultation suggests that groceries and food-selling are the among the strongest petty trading activities but require a start-up capital and commercial experience. FDPs claim they do not have access to financing instruments (capital or in-kind) at the moment.

The aspirations of the refugees extend from independent agriculture and trade to artisan jobs, with cottage-building and livestock as the preferred activities. In contrast to East Darfur, where refugees avoided livestock, the refugees in West Kordofan own livestock, which is kept around the camps.

Food-making and processing are already practised on a small scale among women, as well as household services such as housecleaning and laundry, though they pointed out that employers sometimes exploit them. They also engage in firewood collection, which they reported as the highest-earning livelihood activity, but it has a high risk of penalty from the forestry-regulating institution of the government arm in the locality because of its environmental impact.

While awareness of cooperatives is low, multiple cooperatives relevant to PROSPECTS programming exist near each of the target locations. This offers opportunities for collaboration and building on existing frameworks for programming.

Livelihood challenges

A weak economic environment, poorly enforced policy frameworks and limited economic development and financial services are some of the main challenges faced by FDPs and HC households in the two targeted areas. Financial services are limited owing to high default rates and a poor legal infrastructure governing the financial sector. Constraints related to the financial sector have negative consequences on sectors holding opportunities for employment and generating livelihoods. The main sector, agriculture, is largely held back by lack of financing opportunities and poor financial literacy, which negatively impact entrepreneurship and expansion of commercial activities. Addressing this limited access to financing opportunities would support the sector's diversification and expansion. Additional challenges include water scarcity, which hinders the production of diverse and nutritious crops, and inadequate opportunities for development of vocational skills.

In both states, FDPs and HC members suffer from weak labour market attachment and lack social protection coverage, with limited inclusion in safety net programmes. The informal sector employs approximately 84 per cent of economically active individuals.¹⁰ Refugees and IDPs active in the informal economy often face risk of exploitation and/or dangerous working conditions. This creates a context where projects should focus on an incremental or first-order formality interventions because of the significant gap between the informal sector and a formalized business environment.

The main challenges hindering labour market development are the absence of sufficient transportation networks, high inflation, poor access to finance, and the size of business units operating in the market. The deplorable quality of infrastructure networks and limited transportation networks around the regions not only exacerbate the exclusion of the target communities from the provision of government services, but also isolate communities and the businesses within these communities from regional and national markets. As a result, community members and businesses rely largely on networks of traders and brokers to bring products and inputs from outside the community and to access wider market networks. Such trading and brokering services drive up the price levels significantly at local markets and reduce the farmers' share of the profits as opposed to the middlemen in the value chain.

¹⁰ Ibid.

The rapidly increasing ownership of mobile phones in the two targeted areas offers potential opportunities for addressing some of these challenges. For instance, mobile phone services are already used informally to help share information on prices at neighbouring markets. The introduction of mobile payment services by many banks, particularly the Bank of Khartoum and Faisal Islamic bank (both with branches in the two targeted states), may offer additional opportunities for state- and federal-level market-oriented programming. Current obstacles to these opportunities include poor network coverage in the project locations and difficulties in acquiring SIM cards, particularly for refugees, owing to the legal requirement that phone numbers must be registered using a valid form of identification, which often does not include refugee cards.¹¹ Despite these challenges, it should be noted that mobile phone repair is becoming an increasingly important skill demanded in the target communities.

Greater development is further hampered by the low visibility of government in service provision, decision-making and security in the two targeted PROSPECTS states. While state governments are responsible for dictating state-wide policy decisions and providing basic services, such efforts usually do not reach remote areas. The lack of government presence in East Darfur refugee camps, for example with policing, create vulnerabilities for the populations living there. The targeted settlement areas in West Kordofan appear to be better off regarding the presence of government security institutions.

It is important to note that in the two target states there is no reliable or *official* information on the socio-economic circumstances of FDPs and HCs, including unemployment, GDP distribution, literacy, or lists of actors as certified financial institutions, cooperatives (neither online nor in the local government physical records). Therefore, the ILO conducted a socio-economic assessment surveying more than 1,100 households from forcibly displaced and host communities and conducting a number of key informant interviews and focus group discussions. The study provides an in-depth assessment of local labour market conditions, household vulnerabilities, and access to services in selected localities of East Darfur and West Kordofan¹² and helps to address some of the aforementioned gaps in key information.

11 Telecommunications in Sudan is guided by the 2018 Telecommunications and Postal Regulation Act and regulated by the National Telecommunications Corporation (NTC). Article 9 of the NTC's General Regulations (2012), based on the 2001 Communications Act, requires mobile companies to keep a complete record of their customers' data, and in 2017 mandatory SIM card registration was enforced.

12 ILO PROSPECTS, *Socio-economic assessment: East Darfur and West Kordofan States, Sudan, 2021*.

▶ 2

Situational analysis

▶ 2.1 Policy and regulatory environment¹³

Since the labour market in target states, and in Sudan as a whole, is characterized by a high degree of informality and the predominance of agriculture, potential avenues for formalization include not only the right to work (employment) but also business registration and development, cooperative registration, as well as land ownership and use, and access to finance for both HCs and refugees. A recent ILO study (forthcoming) examines and contrasts policy and practice of pathways to formal economic activity in Sudan, with a specific focus on refugees.¹⁴

Rules and regulations relating to the right to work and mobility

The central policy dictating refugees' access to employment and the labour market is the 2014 Asylum (Organization) Act, which was approved by the National Assembly and signed by the President of the Republic as a provision to Sudan's 2005 Interim Constitution. The act allows refugees to move freely within the country, grants them the right to work and to possess movable assets.

According to Article 18 (1) of the Act, refugees are allowed to work after first obtaining a work permit from an authorized labour office. However, these granted rights can be applied only by the intermediation of the Commission of Refugees (CoR), the agency charged with operationalizing the Act. In focus groups and interviews conducted by the project, the overwhelming majority of FDPs adduced problems with obtaining such permits (work, freedom of movement) from the CoR in their state. Because of the cumbersome and expensive process, FDPs are often unable to acquire the requested permit.

¹³ It should be noted that due to ongoing developments and regular changes within the Sudanese political and economic situation, the findings throughout this report may be subject change.

¹⁴ ILO PROSPECTS, *Review of National Policy and Practice, Sudan, 2022*, forthcoming.

► Required documents for refugees to obtain a work permit in the target areas

1. Copy of refugee card with validity of at least one year/2 years
2. Statement from CoR confirming the applicant's refugee registration
3. Letter issued by CoR and addressed to the Labour Office supporting the applicant's request to work in this jurisdiction
4. Certificate from the Ministry of Health declaring the applicant's good bill of health. With copy of letter from CoR
5. Letter from prospective employer stating that there is a job available, and that the applicant is acceptable in theory for the position. For a skilled job, refugees may be tested at a training centre to confirm they have the requisite competencies for the role
6. Completed work permit application form
7. Passport photo

In addition to providing the above documents, the refugee must pay a processing fee of approximately 2,100 Sudanese pounds (as of October 2021).

Although employers and refugees in both targeted states seldom seek to apply for work permits, there are harsh penalties for those who violate the process. According to a CoR official in East Darfur, "whoever hires a refugee without CoR's permission is punishable with two years' imprisonment or a fine according to the 2014 law". Despite the threat of penalty, refugees continue to seek both farm and non-farm work in both target states where agricultural labour draws the largest share of the South Sudanese working age population.

The implementation of the 2014 Act has been hindered by inadequate capacity and reach of the CoR, as well as an absence of standard operating procedures to follow on the ground. Many CoR officers are neither trained nor informed on the extent of the law and often lack the knowledge about processes or the templates for movement and work permits. As a result, most of the movement and work of the FDPs occurs without a permit and thus without the protection of the available legal framework. This situation makes them vulnerable to exploitation and unfair work agreements with members of the HC and can lead to problematic interactions with police.

Additionally, the Regulation of Employment of Non-Sudanese Act (2000) states that it is not possible for non-Sudanese to engage in work unless they have obtained permission from the Ministry of Labour, specifying further that work permits shall not be issued to non-Sudanese unless there is no Sudanese worker that is able to perform the work.¹⁵ Under this law, work constitutes industrial, commercial, agricultural and any other profession or craft, including domestic service.

Access to land and property

The land ownership system in the targeted regions is known as a *hakura* (plural *hawakeer*) a traditional land ownership system adopted in the pre-colonial Sultanate period. The system allocates a defined area to a tribe, from which the tribe leader then allocates the land among the tribe members. No other land ownership system is in place except for small privately owned lands in the state capital cities and surrounding urban areas.

¹⁵ Regulation of Employment of Non-Sudanese Act (2000), Article 5, "It is not permitted for non-Sudanese nationals to seek employment unless they have obtained a work permit from the Ministry of Labour." Ibid. Article 5, "A work permit shall not be issued to non-Sudanese workers unless there is no Sudanese worker able to perform the work. However, in the absence of Sudanese workers, preference shall be given to nationals of African or Arab states."

There is a historical and long-standing practice between tribes that organizes the use of land for farming and grazing, to address the need for livestock to move between different grazing areas across different *hawakeer*. These traditional systems are overseen and organized by the tribe leaders concerned. Customs allow those who are not from the tribe to be provided land if one marries a woman from the HC, but he can only make use of this land as long as he remains the husband. Customs also allow those from outside the tribe to perform farming or grazing based on permission or rental agreement, but not outright ownership.

Based on information obtained by focus group discussions (FGDs) and interviews conducted in the target regions, the land of Al Meiram and Keilak in West Kordofan is within the *hakura* of Messeria tribe, while Al-Nimir and Kario farming land in East Darfur is within the Rizigat *hakura*.

Unlike HC members, refugee households do not own land and are more typically involved in the crop production process as agricultural labourers. This occurs most commonly as hired labour for HC members, under share-cropping agreements, or as farmers on land rented from HC members.

The 2014 Asylum Act permits refugees to acquire immovable property as per other aliens, providing they are registered and have obtained approval from the Council of Ministers (Article 13, 2g) sitting at the federal level in Khartoum. In theory, this could give refugees the ability to acquire land; however, there is currently no legal framework to guide how this could be done in practice, and the distance between a refugee claim and ministerial approval is great. Furthermore, based on existing law, it has not been possible to buy or own land outright (freehold tenure) for anyone in Sudan since 1970, and so the most a refugee could expect to secure formally would be registered leasehold land for a fixed term.¹⁶

Owning and registering businesses

On paper, the operating of a commercial enterprise is structured by the 1925 Sudan Company Act and related amendments and regulations. The act sets regulations, conditions and commitments of registering enterprises and defines authorities and actors. For the registration of an enterprise, the entrepreneur must submit an informal draft copy of the company memorandum and articles of association to the Companies Registrar for preliminary approval. Required documents and information include the company objectives, nominal capital, capital distribution, and the names of founding shareholders. However, in reality, most micro and small-scale enterprises operate under extremely informal conditions and rarely obtain a registration document.

Findings from the ILO Baseline Study Review of National Policy and Practice found that at the subnational level, the Commercial Registrar Offices do not engage in business or market stall licences. Instead, they focus mainly on business name registration. The East Darfur office suggested that any kind of business licence application would have to be undertaken in Khartoum. The West Kordofan office suggested that this was the responsibility of the CoR and UNHCR but conceded that Sudanese partners would be able to register a business in their name.

Additional research conducted by the ILO further clarifies the registration process, confirming that registered refugees, including South Sudanese, are not able to register a business without a Sudanese passport-holding partner.¹⁷ This study found that in some cases, the Ministry of Cabinet may directly provide refugees with business permits, but that this only happens on rare occasions, in cooperation with development partners who are planning a specific intervention in one of Sudan's priority business sectors, such as the agricultural sector.

¹⁶ Interview with housing, land, and property legal expert. Khartoum, 18 July 2021.

¹⁷ ILO PROSPECTS, *Socio-economic assessment: East Darfur and West Kordofan States, Sudan*, 2021, p. 48.

Setting up small commercial operations within camps, such as kiosks, clothes stalls, tea shops or food stalls, was common. These types of informal commercial activities had not sought access to business development services. CoR staff and camp leaders across states concurred that it was not necessary to register to seek permission to set up such stalls.

▶ 2.2 Support functions

Cooperatives

Although the early initiatives to start cooperatives in Sudan were seen in the 1920s under British colonial rule, and the first cooperative society was established in 1930,¹⁸ the first cooperative act was endorsed in 1948. The law bestowed a system for the establishment of cooperatives and defined their budget ceiling, responsibilities and other aspects, including membership eligibility. It also outlined accountability and monitoring by the cooperative registrar. This was followed by a 1973 law where greater accountability was included, such as financial regulations, auditing requirements, and defining membership as between 20 and 50 members. A subsequent 1982 law limited the members' share to no more than 10 per cent of the cooperative capital. The cooperative law of 1982 resulted in the formation of the National Cooperative Union and its branches at the state and locality levels. Their role is to support the country's cooperative systems and their activities, and to develop a conducive environment by providing information and reflecting the views of the cooperatives, while ensuring that any decisions taken are beneficial to them.

According to interviews conducted with staff from the Cooperative Department in the two states, the Cooperative Act of 1999 (Law No. 1 for 2000) replaced the previous Act with Article 3 of the law empowering the cooperative registrar at the state level. An amendment made in 2001 (Cooperative Regulation Act) was approved but did not replace the law of 1999; it only provided additional clarification with more detailed rules for their establishment, including a new regulatory order limiting a members' share in the capital to no more than 20 per cent. Political shifts in recent years have led to advocacy for adopting the cooperatives' approach as a mechanism to improve economic and commercial performance. Improved registration procedures are an important component in that process.

A prepared form (in Arabic) exists for registering a cooperative at the state level with a minimum requirement of 50 members (Article 15.1 of the Cooperative Act). However, the number can be less with the approval of the general registrar. These forms are available free of charge at the cooperatives departments for anyone interested in forming one.

Article 15.1 does not make mention of the nationality of members as a membership requirement. Consequently, refugees are able to become members of cooperatives, as the laws and regulations do not explicitly exempt them. Where cooperatives do exist in the targeted locations, refugees have been found to be members. However, they are not permitted to be decision-makers or hold executive positions. This is due in large part to their poor access to finance. Typically, the decision-makers are those who manage and engage with finances formally, for instance by opening bank accounts or borrowing. As even registered refugees can't get loans, they are de facto unable to be elected as board members.

Given their potential to improve livelihoods, cooperatives for farming are well suited for organizing the economic activity of refugees in the target locations. It should be noted that cooperatives are not restricted to farming but can include other agricultural value-adding activities such as groundnut or sesame processing, warehousing and storage, packaging and other trade-related initiatives found at the village or state market level.

18 Salah Mahdi, "Cooperatives' Weaknesses for Attracting Consumers in Sudan", ICA Research Conference paper, 2-4 September, Lyon, France.

According to regulations, both males and females have an equal right to be members of cooperatives and to benefit directly from the activities linked to the collectivization of economic activity and other services available.

► Applying for cooperative registration

According to the information obtained from the Cooperative Department in El Fula, the registration of a cooperative does not take more than few days to be finalized. The following documents are required.

- a. An application document, which shall provide information on:
 - the name and area of operation;
 - the objectives of the cooperative;
 - the value of each share and paid-up capital;
 - the names, age, place of residence, occupation, profession and signature of the founder members of the cooperative, and the signatures of the provisional committee members;
 - resolution of the meeting of the founder members.
- b. The by-laws of the society, which shall contain the following information:
 - the function of the cooperative, its system of work and areas of operation;
 - the manner of raising its capital, the value of one share, the maximum possession of one member, how to transfer or refund capital, and the minimum limit of paid-up capital;
 - the functions of annual general meetings, procedures for convening and voting;
 - determination of the financial year, books of accounts, method of preparation, auditing and ratification of the accounts;
 - procedure for the amendment of the by-laws;
 - formation of a reserve fund, distribution of net surplus;
 - adjustment of losses;
 - any other details claimed by the Cooperative Registrar.

The management system of the cooperative is composed of eight units: registration and registrar, auditing and control, field follow-up, awareness, cooperative media, training, research and development, and legal administration. Depending on the area of specialization or the geographical location, each group forms a union as an umbrella for its activity.

Three types of cooperatives exist in East Darfur and West Kordofan: agriculture; gum arabic; and consumers (multi-purpose). Overall, the most present and viable cooperatives deal in gum arabic. These often maintain a strong structure because they are built upon families and tribes who own the land where gum arabic is cultivated. Moreover, many have viable cooperative unions organized around the localities (geographically based) and have successfully established channels with local banks to facilitate access to large-scale funding.

According to the local administration of the cooperative, a huge effort is required to raise awareness and correct the conceptual framework so that it conforms to the country's new administrative organization. The government recently introduced the "Initiative of rebuilding and developing the cooperative movement in Sudan". In 2019–2020, the Ministry of Trade and Industry released a decree to suspend any further registration of new cooperatives. The ministry wants to review the status of the cooperatives registered

under the former government, as the new government is suspicious of the legitimacy of their internal structure, given the heavy politicization, corruption and influence the previous regime appeared to have in its structures.

Many FDPs in both states are not familiar with the cooperative concept in its modern sense. Instead, they cooperate with their traditional structure of clans and tribes. Discussions with refugees revealed that they are interested in organizing themselves formally to improve their living conditions. However, some legal issues need to be resolved first to enable the refugees to register with such associations. These issues can be addressed through discussion with the Commission of Refugees and the cooperative administrations at the state level.

According to a survey carried out in the target states, there are approximately 1,569 registered cooperatives in West Kordofan, accounting for about 92,000 members, with approximately 1,500 cooperatives in East Darfur. Interviews with the Cooperative Department staff in the two states revealed that these cooperatives are registered according to the Cooperative Law of 1999 and the Cooperative Regulations Act of 2001. The State Cooperative Departments in El Fula (West Kordofan) and Ed Daein (East Darfur) fall under the administration of the State Ministries of Finance. It is noteworthy that registered cooperatives are eligible to receive financing from banks based on recommendation letters from the State Ministry of Finance.

For a cooperative or producers' association to access credit from a bank or microfinance institution (MFI), it must meet the following criteria:

- a. be registered as a cooperative or producers' association with a certificate of valid registration;
- b. have three officers nominated to deal directly with the financing body;
- c. hold a plan outlining what the association wants to accomplish with the loans, for example, a feasibility study.

Interview responses received from Cooperative Department staff in the two states indicate that they are establishing offices where they keep registration records and reports for state-registered cooperatives. Cooperative Department interviewees further confirmed eligibility for both refugees and HCs as members of cooperatives. Consequently, they are entitled to the finance services provided to the cooperative. However, refugees are not yet able to make decisions related to these financial services because of their position as members, not at the board level. According to the surveys conducted in the two states, the Cooperatives Department is mandated to help not only to establish cooperatives but also directly in the efforts to improve the internal processes of cooperatives and in informing farmers about the benefits of forming cooperatives.

Based on FGDs held in the targeted communities, there is no registered cooperative in Al Meiram or Keilak. However, the discussion with the staff of the Ministry of Production and Economic Resources (MoPER) and key informants revealed a growing tendency among producers to be organized into cooperatives rather than in farmers' and livestock associations. This is largely due to the fact that cooperatives have a concrete system of registration, supporting documents for finance, monitoring, accountability and follow-up.

Financial services

According to FGDs and interviews held at the community level, no formal financing services exist in the targeted locations in East Darfur and West Kordofan, with the exception of the Agriculture Development Bank branch in Al Meiram town. According to interviews with bank representatives, most of the farmers prefer not to deal with the bank and instead favour traditional financing, which they are accustomed to despite the high repayment obligations. One area where the project can make an immediate impact is in the promotion of better financial education for target beneficiaries, improving community entry conditions for MFIs in the various PROSPECTS locations, and by assisting cooperatives to put in place the requirements to access these financial services.

Formal financial services

The financial system includes banks and non-bank financial institutions — mainly insurance companies and small-scale microfinance institutions — with limited size relative to the economy. Four state-owned establishments (with 14 per cent of total banking assets) operate as specialized banks, focusing on providing credit to targeted sectors such as agriculture or infrastructure development. The Central Bank of Sudan (CBoS) and state governments also hold small shares in other joint-venture commercial banks. Seven foreign banks (from United Arab Emirates, Saudi Arabia, Qatar, Egypt, Jordan and Lebanon) are registered as branches in Sudan. The CBoS is responsible for regulating the financial system, but information on non-bank financial institutions is limited. The CBoS operates a real-time gross settlement system with participation by commercial banks, with very limited turnover volume. Most farmers are either not informed about the procedures for borrowing money or unable to raise the collateral required to obtain a loan from formal banks. Moreover, findings suggest a complete absence of financial service providers in parts of the project areas.

Microfinance in Sudan

Microfinance in Sudan was reinvigorated in 2006 as a means of improving the livelihoods of poor households and as an important tool in poverty reduction. Leveraging this trend, the Government of Sudan incorporated it in parallel with other financing systems and worked to develop, promote and regulate the emerging microfinance system. Each state formed a State Council for Microfinance, and in 2008 the Central Bank of Sudan (CBoS) issued “The Organizational and Regulatory Framework for Microfinance Institutions” to facilitate the emergence of new and specialized microfinance providers. It specified that applications to operate as a microfinance institution (MFI) should be from one of the following entities: public organization, private or public company registered under the law, registered NGOs, registered credit associations, registered cooperatives or any other entity approved by the CBoS. Three types of MFIs were specified: federal, state and local. The CBoS directed banks to allocate 12 per cent of their portfolio to microfinance, of which 50 per cent should be for women, and about 70 per cent of the total amount of loans should be channelled to rural areas.

In general, microfinance providers can be divided into three types: commercial and development finance providers, government banks, and private microfinance institutions. The CBoS policy is that 12 per cent of loans from the banks must be in the form of microfinance products, however, this target is far from being reached. While banks must report monthly on their progress, there are still no punitive measures for not meeting this goal.

The CBoS, in cooperation with the Sudanese Insurance Union, introduced loan protection to cover the losses that a lending bank may incur upon the death, disability or sickness of low-income borrowers or as a result of a loss of assets, particularly relating to crop damage, loss of animals or house. A micro-insurance pool was established by the members’ insurance companies in 2011. The objectives of the micro-insurance pool can be summarized as follows:

- ▶ to promote the spread of innovative insurance policies in Sudan against loan linked risks in accordance with the terms of the CBoS;
- ▶ to reduce the cost of operations;
- ▶ to overcome the capacity problem of the market; and
- ▶ to promote the exchange of information with similar pools.

To offset default risks, a rate of 7 per cent (of total funds) is required to cover loan defaults in case of losses related to MFI loans. The crop insurance facility functions in the following manner. The insurance company needs to be contacted within 72 hours in case of loss so they can evaluate the claim. In theory, the insurance company will send its claims assessors to the site in order to verify the claim and process it. In practice, this is not happening, as logistically the insurance company does not have, in most instances, the means to conduct such site visits. In the case of non-compliance by the insurance company (after being

contacted by the farmer in the required time period), the insurance company, in theory, should proceed to pay out the claim despite not having verified it. According to information obtained, crop insurance is not widely used and is largely requested by large farmers and/or farming schemes. Although microfinance insurance makes commercial sense and is a requirement for financial institutions (given that they are the ones making the loans), one recommendation would be that the Government of Sudan introduce a 50 per cent subsidy to this insurance or risk pool to better incentivize financial service providers.

Even if formal financial services were available (which they are not in the target regions), owing to the inherent risk and uncertainty attached to small-scale farming and the lack of collateral, small-scale farmers would often be unable to access the formal financial and insurance services. Access to credit is far below the requirements of small plot farmers and individual market traders; the operations and limited banking culture among the rural people contribute to making banks less likely to provide finance for rural people and informal enterprises.

Although there is a CBoS microfinance unit and multiple active commercial banks (for instance, Agriculture Development Bank, Bank of Khartoum, Saving and Social Development Bank) in each of the two state capitals, Ed Daein and El Fula, most farmers are using the traditional loan system because farmers are unable to fulfil the required commercial bank collateral conditions.

► **Banks and microfinance companies operating in West Kordofan and East Darfur**

- **Savings and Social Development Bank (SSDB):** a government bank with rich experience and long-term involvement in financing individuals and groups even before microfinance was endorsed as formal financing mechanism in Sudan. In 2020, the SSDB financed cooperatives for the amount of 120 million Sudanese pounds.
- **Agriculture Development Bank of Sudan:** specialized in financing farmers, mainly under the *Salam* financing system.^a It has branches in Al Meiram in West Kordofan and Ed Daein in East Darfur. This bank participated in a number of microfinance activities (ABSUMI) with IFAD in North Kordofan and Central States of Sudan.
- **Elniel Bank:** a commercial bank that provides microfinance for small businesses as well as farming in the form of *Salam* with a price determined by the Bank of Sudan and Agriculture Development Bank.
- **Bank of Khartoum:** active in offering microfinance in Ed Daein in East Darfur. Irada, the bank's microfinance company, was formed with the objective of providing microfinance for cooperatives and other requesting bodies, conditional on a registered cooperative opening an account with the bank. Under this setup, Irada provides financing through the bank, using a contract modality between itself and the bank. However, the cooperative must sign a separate contract with the bank. Irada also uses another approach for the provision of finance, namely the direct financing of farmers under a shared production process. Accordingly, Irada provides input while the farmer provides land and covers the cost of farming operations. At the end of the season, the profit is divided equally between the farmer and Irada.
- At the state level, West Kordofan and East Darfur microfinance companies provide finance for small producers using the *Salam* system and in accordance with the policies of the Central Bank of Sudan.

^a *Salam* is an Islamic financing model whereby a seller commits to supply a set amount of goods to a buyer at a future date in exchange for an advanced price paid fully on the spot. The contract of *Salam* creates a moral obligation on the seller to deliver the goods.

With respect to access to financing in target locations, interviews with the coordinator for the registration of the farmers and herders' associations indicated that farmers prefer to be members of cooperatives rather than farmers' associations, the reason being that banks prefer to finance cooperatives, given that monitoring, follow-up and the accountability of cooperatives are better organized than those of farmers' associations.

The study findings confirmed that the development of cooperatives for both HCs and refugees is a practical means for facilitating financing. Efforts aimed at improving financial literacy will also help to support the organization of agricultural production, increase financial resources and lead to better employment opportunities for the target populations. In addition, the establishment of partnerships with other informal groups such as Village Lending and Savings Associations (VSLAs) or women's groups also presents better opportunities to access financial services.

Interviews with the Chamber of Commerce in El Fula (West Kordofan) also confirmed that working with organized groups like cooperatives or producers' associations is more efficient as it helps to consolidate agricultural output and better prepare products for timely supply and transport to markets.

Informal financing

Informal credit markets (from traders, brokers and HC farm or land holders) play a significant role in the market system by providing credit to farmers who sell their crops to them for a predetermined price. Farmers receive loans in the form of *shale*; a traditional finance system through which big merchants provide loans in exchange for the purchase of a specific crop under cultivation at a fixed price for a specific unit of production. Collectors (middlemen and/or wholesalers) buy produce directly from farmers and deliver it to other urban wholesale or retail markets, such as in Ed Daein (East Darfur) or El Fula (West Kordofan).

The collectors and traders are often the main source of finance for the farmer, with the relationship largely depending on trust when guarantees or collateral requirements from borrowers are not possible. The amount borrowed comes in the form of cash and must be repaid after harvest in an amount equivalent to the cost of the produce at the time of receiving the loan. This leads to challenges, for instance when the price of the crop at the time of repayment is higher than that at the time when the loan was received. In such cases, the farmer has to pay more money (sometimes double) in order to repay the same amount of crop (for example, two sacks of groundnut and/or sesame) as in-kind repayment. Moreover, if there is high inflation, the farmer will experience further losses in potential income. Under these conditions, such agreements tend to lead to grievances and can cause greater inter-group conflict.

The study finds that in the four targeted communities in the two states, the *shale* system, although highly problematic, is the main financial service available to small plot farmers at the community level. Organizing refugees and HCs into groups such as cooperatives would help them to benefit from formal financing by creating the conditions that are necessary to start the formal financing process, by being members in a registered organized group.

FDPs and financial services

Overall, field data indicate that FDPs have very limited financial perspectives. Opening a bank account requires a valid national identity document or alien registration document. During the study, several banks revealed that they do open bank accounts for FDPs who use refugee identification cards. However, FDPs invariably reported that they are unable to open and operate a bank account. It was noted that a few refugees had a bank account from the pre-secession era that they have since kept active.

Based on the above-mentioned conditions of the state of the financial service industry in the country and the region and FDPs' vulnerabilities and inability to meet the financial institutions' requirements, access to formal credit and financial services are severely limited for refugees. Instead, they mostly rely on informal sources, relatives, friends, clients or suppliers for such services.

The UNHCR in Khartoum stated that in March 2019 the Central Bank had circulated a decree to all banks allowing refugees with a valid refugee card to open accounts, including the Blue Nile Mashreq Bank, with which the UNHCR has a direct relationship.¹⁹ However, authorities and banks do not seem aware of this, either in Khartoum or at the subnational level, and all refugees interviewed believe that they need a national number in order to open an account. UNHCR representatives in Khartoum have found that banks such as the Bank of Sudan require proof of residency to open an account, with refugee camp or informal accommodation not accepted. One potential way to address this would be for the ILO and UNHCR to raise awareness of the Central Bank decree and further lobby for UNHCR refugee registration documents to be included in the list of acceptable documents

Mapping solutions

Financial institutions in East Darfur and West Kordofan have a low capacity for assessing technical viability; they have a limited amount of capital to disperse and their decisions for allocating funds are heavily influenced by tribal and political connections. Small-scale farmers do not count on the support of these institutions, forcing them to look for informal coping mechanisms that end up being more expensive and riskier.

One first step towards improving this situation is strengthening the financial institutions' capacity to offer services to small-scale farmers. This can come in the form of developing products for specific sectors, establishing a dialogue with cooperatives in the said sectors, and developing an internal capacity to assess agricultural and livestock projects.

The United Nations Development Programme (UNDP) is working with microfinance institutions in both states by serving as a technical advisor in assessing the risk and proposing adjustments to business plans presented to these institutions. Such a mechanism could be scaled. Furthermore, a market for a service that assesses the technical viability of projects for financial institutions and entrepreneurs might be worth exploration.

Another approach being used by bigger market actors is contract farming models as a form of collateral to leverage capital from financial institutions to small-scale farmers. Value-chain development interventions and strengthening the cooperatives in the sectors might be useful options to adopt to develop and pilot financial services to FDPs and small-scale farmers.

A second approach, currently being implemented by the UNDP, is partnering with national NGOs to distribute funds to VSLAs and Saving and Internal Lending Communities (SILCs) to finance projects between members of the HC and FDPs. The idea is to strengthen the VSLAs and SILCs so they could offer appropriate financial services (mainly loans) to the community. This is yet to be implemented with FDPs.

Capacity-building and skills promotion actors

According to the study's survey results, capacity-building and skills promoting actors include private institutions that provide training in business development in El Fula and Ed Daein. In addition, the Vocational Training Center in El Obeid (capital of North Kordofan State), is one of the largest agricultural training facilities in the country. The survey also showed that private workshop owners accept the idea of apprenticeship, especially for those who can be involved as blacksmiths for farming tool and animal traction technology production.

¹⁹ ILO PROSPECTS, *Review of National Policy and Practice, Sudan, 2022*, forthcoming.

▶ 3

Value chain analysis

▶ 3.1 Groundnut value chain

Since 2015, Sudan has been ranked as one of the world's top exporters of groundnuts (a variety of peanut). Despite this high export potential, groundnuts are mostly consumed domestically. Most of the crop is used in the oil production industry and as a by-product in animal feed. The rest is sold to other processors who manufacture confectionery and peanut butter.

Groundnut production in Sudan has increased by approximately 320 per cent since the beginning of the 21st century.²⁰ In the 2020–2021 period, national production was estimated at 2.4 million tonnes. This was a 15 per cent reduction from 2019 but still 18 per cent higher than the average of the preceding five years (2015/16–2019/20).²¹ The drop in production from the 2020/21 period is attributed to waterlogging and labour shortages. Some of the largest international destinations for Sudan's groundnuts include mainland China, Indonesia and the Philippines.

The groundnut value chain in Sudan faces two major challenges that need to be addressed for it to develop: 1) the occurrence of mycotoxin (of the aflatoxin variety); and 2) the lack of capacity to adapt groundnut supplies to the varieties best suited to specific end-uses. Imperfect shelling and the presence of mycotoxins are common occurrences in shipments of groundnuts. Improving the quality and storage methods could increase exports to buyer networks.

20 Sudan National Chamber of Exporters, Presentation http://www.iopepc.org/misc/2019_20/Gaily.pdf.

21 FAO, Special Report, April 2021, <https://reliefweb.int/sites/reliefweb.int/files/resources/cb4159en.pdf>.

Groundnuts in East Darfur and West Kordofan

Groundnuts are produced throughout East Darfur and West Kordofan and are transported to the local markets in the state capitals, namely in East Darfur, West Kordofan and Khartoum. They are then taken to the major markets in Nyala and El Nihud. Since the 1990s, the area and total production in the traditional rain-fed sector has increased, while productivity per unit area showed a decreasing trend, particularly in West Kordofan, which is largely due to unsustainable agricultural practices and ensuing soil degradation.

An example of a successful partnership can be found in East Darfur between large-scale farmers and a private sector company, **DARFOOD**. Such a partnership is driven by DARFOOD's interest in groundnuts with low aflatoxin concentration, given that their production centre has capacity for 30,000 tons but is currently operating at just 9,000 tons.

DARFOOD works with cooperatives in East Darfur through a contract farming model, providing capital (either by investing directly or through microfinance institutions) and technical assistance. They have also shown interest in expanding such a model to West Kordofan and including FDPs.

An additional actor involved locally in the value chain is the **Central Trading Company (CTC)**, one of Sudan's largest agri-businesses actors, which supplies agricultural inputs and machinery primarily to big farming operations. They have recently begun exporting groundnuts, sesame and gum arabic and have expressed interest in developing a sub-dealer network in the target area.

The CTC has also created a network of technology transfer centres, the closest being in El Obeid. However, they aim to develop this tech-transfer programme further and involve farmers' cooperatives once they have established a greater presence in East Darfur and West Kordofan. The said programme consists of training mechanics and technicians to maintain and operate machines through a "farmer to farmer" methodology, where they bring farmers from one area to another in a form of peer learning.

A large number of groundnut farmers support their farming activities through the use of funds, while a small group use their network of relatives and friends for financial and material support. For smallholder farmers to use improved seeds and other agricultural inputs to enhance productivity, they would need to access finance to cover the pre-harvest expenses.

FDPs in both states are actively involved in groundnut cultivation and minor transformation, as it has been integrated as a cash crop complementary to sorghum. FDPs are engaged as owners, crop-sharing partners, farming family members or hired labour. Their contributions are considerable in labour-intensive activities such as weeding, land clearing and harvesting. In general, women also play an important role in the work carried out on small farms.

► **Table 1. Rainfed production of groundnuts in 2019/2020 (FAO 2021)²²**

State	Area planted (ha)	Area harvested (ha)	Yield	Total groundnut production (tonnes)
East Darfur	964,000	862,000	1071	923,000
West Kordofan	979,000	881,000	829	730,000

Production process

Although the value chain analysis has been handled separately for the two states, there are several similarities, especially those related to the production process. Farmers often take a traditional approach to production, not using machines, applying limited use of animal traction technologies, and relying almost exclusively on the use of hand tools for soil preparation. Most farmers use hand tools (spades and shovels) made by blacksmiths in the local village markets, where the quality is often a matter of concern.

²² FAO, Special Report, April 2021, <https://reliefweb.int/sites/reliefweb.int/files/resources/cb4159en.pdf>, p. 27.

They use these tools to clear vegetation for land cultivation, prepare the ground for planting seeds, for weeding and crop tending as well as harvesting. The same tools and farming approach are used for both groundnut and sesame.

Groundnuts are usually grown in areas with light soils (with more sand content). Farming is generally organized as a family task, involving the men, women, young boys and girls in the production process.

In West Kordofan, according to the FGDs in both Al Meiram and Keilak, farmers store groundnuts in poor conditions, which usually affect the quality of the crop. Hence, they emphasized the need for minimizing post-harvest losses through the use of hermetic bags and by **establishing community-based storage systems**.

Moreover, as indicated above, the groundnut value chain in the target regions faces particular challenges linked to the presence of aflatoxins in the production and post-production processes. The major factors influencing aflatoxin infection in groundnuts before harvest are insect damage to the developing seed or pod, drought and high soil temperatures. After harvest, environmental conditions such as high humidity and high temperatures promote fungal infection and aflatoxin accumulation. Agronomic practices such as crop rotation, use of resistant varieties, insect control, timely planting and harvesting, weed control, adequate fertilization and late season irrigation can reduce pre-harvest aflatoxin production. Post-harvest aflatoxin contamination can be minimized by rapid and proper drying following harvesting, proper transportation, and packaging, sorting and post-harvest insect control.²³

Cost of production and revenue

According to information obtained during FGDs and from the agricultural extension department, farming of groundnuts is a rewarding business, from selling the crop and raw crop residues or by processing seeds into oil.

► **Table 2. Cost of production for farmer**

Production input	SDG cost/ <i>mukhamas</i>	SDG cost/ha	USD cost/ha*
Land rent	5,000	6,800	\$15
Seeds (10–12 <i>malwa</i> **)	12,000	16,320	\$37
Seed treatment	5,000	6,800	\$15
Planting	10,000	13,600	\$31
Weeding	12,000	16,320	\$37
Harvesting	12,000	16,320	\$37
Cleaning	15,000	20,400	\$46
Empty sacks	3,000	4,080	\$9
Transportation (if applicable)***			
Total: 1 <i>mukhamas</i> (0.73 ha)	74,000	-	\$228 (per ha)
Total: 5 <i>mukhamas</i> (3.7 ha)	370,000	370,000	\$844

* SDG/USD Rate (UN operational rates of exchange for Sudan, 30 June 2021)

** 1 *Malwa* is approximately 3.5 kg

*** Transportation cost depends on distance and prices of fuel at the time of transport, and for this reason it represents a variable that adds an amount equivalent to its value to the total cost.

23 Kwabena et al., 2019.

► **Table 3. Production revenue for farmer (raw unprocessed)**

Production size	Yield/production (kg)	Early raw sale at kg price (SDG/USD)*	Late raw sale at kg price (SDG/USD)**
1 <i>mukhamas</i>	900–1,530	50,040–85,000/ \$113–\$193	119,970–203,949/ \$272–\$462
1 ha	661–1,125	36,750–62,550/ \$83–\$142	88,111–149,963/ \$200–\$340
3.7 ha	2,446–4,160	135,975–231,435/ \$308–\$525	326,010–554,863 \$739–\$1,258

* Early raw sale price 5,000 SDG/90 kg sack (July 2021)

** Late raw sale price 12,000 SDG/90 kg sack (July 2021)

► **Table 4. Production revenue/profit for farmer (oil press)**

Production size	Yield/production (kg)	Total oil press Revenue (USD)	Farming production costs (USD)	Potential profit range (USD)
1 <i>mukhamas</i>	900–1,530	\$453–\$770	\$168	\$228–\$545
1 ha	661–1,125	\$333–\$566	\$228	\$64–\$297
3.7 ha	2,446–4,160	\$1,232–\$2,094	\$844	\$236–\$1,098

Note: One *mukhamas* (0.74 ha) produces eight sacks of groundnut residue/by-product for animal feed. One sack weighs 90 kg. Production/*mukhamas* is 10–17 sacks. When groundnuts are sold raw, farmers get about SDG5,000 per sack early in the harvesting season, rising to SDG 12,000 when sold late in the season.

If the groundnut is pressed, then one sack produces one jerrican of oil. The cost in this case will be as follows:

Item/activity	Cost/SDG
Price of groundnut 1 sack	12,000
Cost of pressing 1 sack	2,000
Empty jerrican	500
Total	14,500

The price of one jerrican of oil is 20,000 Sudanese pounds. This means that about SDG 9,000 per sack can be obtained as a profit when groundnuts are pressed to yield oil. On other hand, one *mukhamas* planted with groundnuts provides about eight sacks of dry groundnut residue (*safir*), which is preferred dry feed for livestock for its richness in protein.

A small number of oil press machines were observed at the camp or settlement levels in the two states. Two were seen in Assalaya town, though most oil presses are found in El Muglad in West Kordofan and Ed Daein in East Darfur, with a few others reported to be in operation in larger towns nearby. According to the farmers, this situation represents a missed opportunity and could be better **addressed through cooperative ownership of an oil press**. It should be noted that the commercial operation of an oil press is viewed as being difficult for an individual farmer and would require technical and entrepreneurial training, as well as support with the acquisition of running costs during the start up.

Market paths

As for access to the market, most farmers sell their crops to intermediaries and brokers for lower prices almost immediately after harvesting. Once the crop has reached the market, it usually follows one of three paths.

1. Traditional value-adding: turning groundnuts into edibles, shelled, deshelled, or crushed. This is usually for oil and cake to supply local consumption.
2. Advanced value-adding: roasting, extruding, to make nutritional meals for humans or animals
3. Export: kernel, oil and cake. The main export destinations are China, India, and Indonesia.

It is worth mentioning that most of the farming and value-adding activities involved in groundnut production are performed by women.

Groundnut value chain in West Kordofan

Producers

The primary producers are farmers who come from both host and refugee communities. In West Kordofan (Al Meiram and Keilak), small plot farmers usually cultivate (individually or under a sharecropping agreement) groundnuts, sesame and other crops like sorghum and vegetables. Refugees who are engaged in a joint production process with the hosting communities work under conditions where landowners provide land (≈ 5 *mukhamas* or 3.7 ha), seeds, tools, and the necessary food materials including flour, sugar, tea, and so on. After harvesting and covering all production costs, the landowner (HC member) and the refugee (farmer in a sharecropping setting) share the profit equally. There is a practice that the landowners secure about one *mukhamas* (0.73 ha) for their partner (refugee men or women) to grow vegetables that are usually consumed during the season. The average land holding size is 5–30 *mukhamas* (3.7–22 ha). In reality, however, this arrangement is said to be highly skewed to the benefit of the HC landholders, with a number of reported incidences whereby profits and agricultural yields are taken entirely by HC members.

Input providers

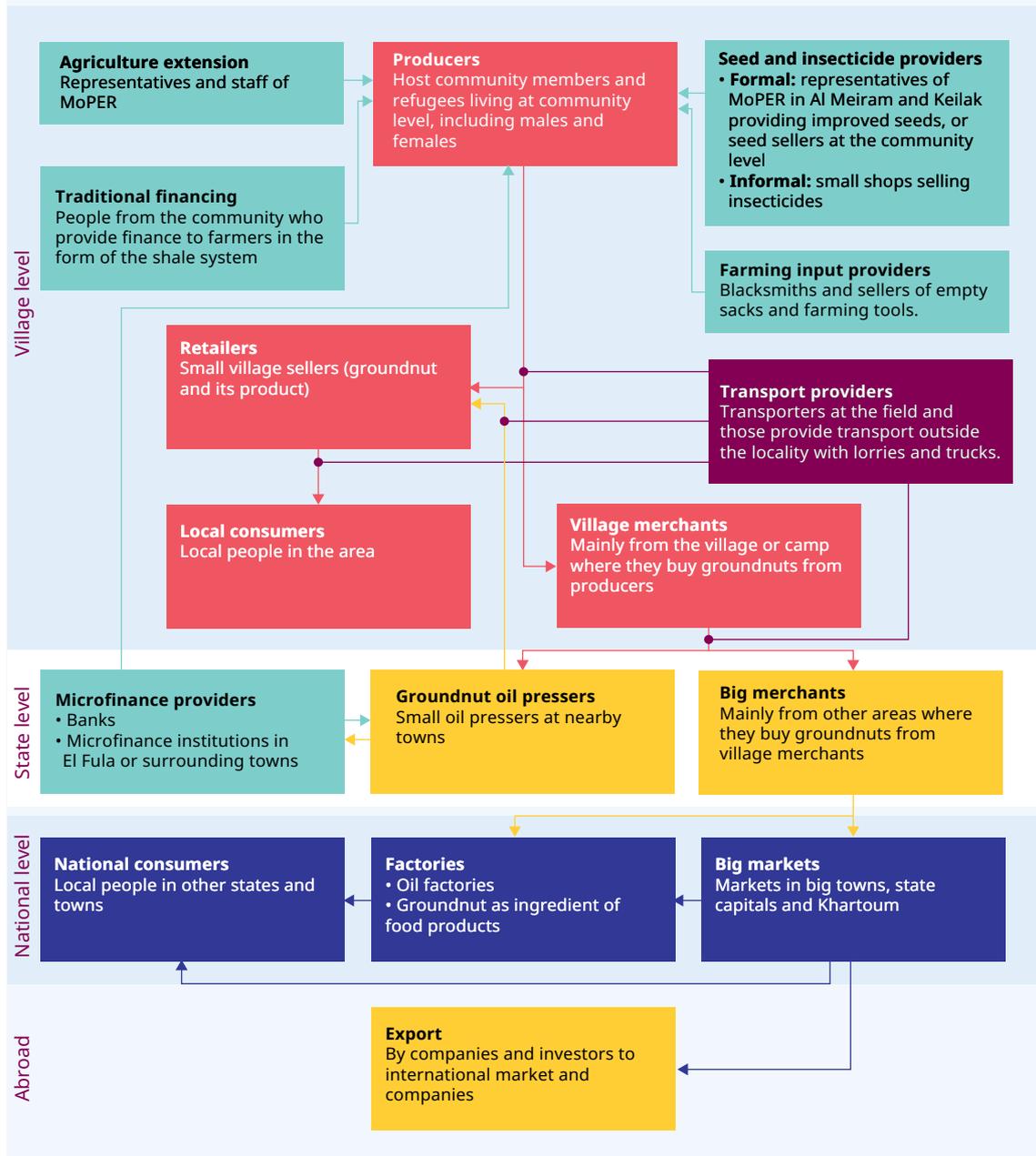
Inputs are materials and services required for agricultural production or farming practices and are used in all phases of the agricultural production process. They include farming tools, animal traction, seeds, fertilizers, herbicides or pesticides, and equipment for various post-harvest operations (harvesting, storage, transportation, and so on). The primary inputs used in West Kordofan and East Darfur include the following.

- ▶ **Farming tools:** these are the hand tools that are most often made by blacksmiths in the village markets or bought by farmers from surrounding towns like El Muglad or El Fula.
- ▶ **Seeds and fertilizers:** seeds are the main inputs that farmers require. Information obtained from the MoPER revealed that improved seeds of groundnuts are usually provided by the MoPER through the **Arabic Company for Seed Production** in El Obeid. However, this covers only 10 per cent and is usually not enough to satisfy the needs of farmers, hence the need for more groundnut seeds to be made available within an arrangement that involves more providers. It was also found that farmers rarely use fertilizers, but when necessary they purchase them from the nearby towns.

Crop protection services

Interviews with the MoPER reported that the Crop Protection Department provides services against national crop pests and diseases within a national programme of crop protection. This aims at reducing the spread of pests such as ants, *Dura antad* (*Agonoscelis pubescens*), birds (*zarzur*) and other invasive bird species like *Quelea quelea aethiopica*, using chemicals typically provided by the Central Ministry of Agriculture. According to information obtained in the interview process, few people sell agro-chemicals to farmers, and then mostly herbicides. However, these are highly restricted, given the associated health hazards. The agricultural authority supports the idea of controlling the use of chemical application, but to do so they need to raise awareness on the issue and gain support from the ministry to facilitate adherence to the regulations.

► **Figure 2. The groundnut value chain in West Kordofan**



Retailers and merchants

Retailers come mainly from the same community as the farmers and are generally small traders who buy groundnuts from camp farmers to sell in local markets. Local traders tend to sell groundnuts as a raw product to village households or as an input for food items such as groundnut oil or butter for use in sweet cakes. Most small traders are either small shop owners or women selling products in heaps (bulk) or in *malwa* (3.5 kg).

Like retailers, village merchants are often from the community itself or from nearby towns. They trade at the village level and are engaged in this activity as an informal business. They buy groundnuts from farmers, either directly or in the camp market, and sell them to merchants from other towns who in turn transport the products to other nearby markets. These larger-scale merchants sell the products in markets destined for Khartoum or for use by processors or exporters.

Transport

Donkeys, donkey-drawn carts and motorized carts (motorbike equipped with a box) are the main means used by farmers to transport groundnuts from the field to the collection and market sites.

Groundnut value chain in East Darfur

The value chains in the two states are almost identical, with the exception that the Ed Daein market in East Darfur is the main market centre in the state. In West Kordofan, the markets in Al Meiram and Keilak are the centre of commerce for the surrounding settlement areas.

Producers

According to the survey results, groundnuts in East Darfur are produced by both HCs and refugees. Nearly 90 per cent of the refugees in Al-Nimir camp are predominantly from the Dinka tribe and are involved in the production of groundnuts using the same types of seed and traditional production process as in West Kordofan. A small number of households in the area are comprised of members of the Firteet tribes, who are mostly involved in agricultural activities as hired labour, but not as partners with HCs like the Dinka in and around the Al-Nimir camp.

Input providers

Inputs required for groundnut production are similar to those found in agricultural production in West Kordofan. Hand tools are also produced at the community or bought from Ed Daein.

Crop protection services

The provision of crop protection services is managed by the Federal Crop Protection Department and focuses on reducing agricultural losses linked to pest and diseases. The department is the official channel for addressing crop protection issues in the state. Informal means of crop protection include chemicals sold in shops in Ed Daein, though this is usually done without a licence from the crop protection authorities and has the potential to put agricultural workers, households and consumers at risk due to improper handling, storage and application of chemicals.

Agricultural extension services

These are provided by the MoPER and mainly involve field visits and meetings with farmers to discuss farming practices, fertilizer and chemical applications, as well as strategies to reduce post-harvest losses. Unlike in West Kordofan, agricultural extension services in East Darfur are provided by extension officers stationed in Ed Daein. There are no agricultural extension officers based in or around Al-Nimir camp.

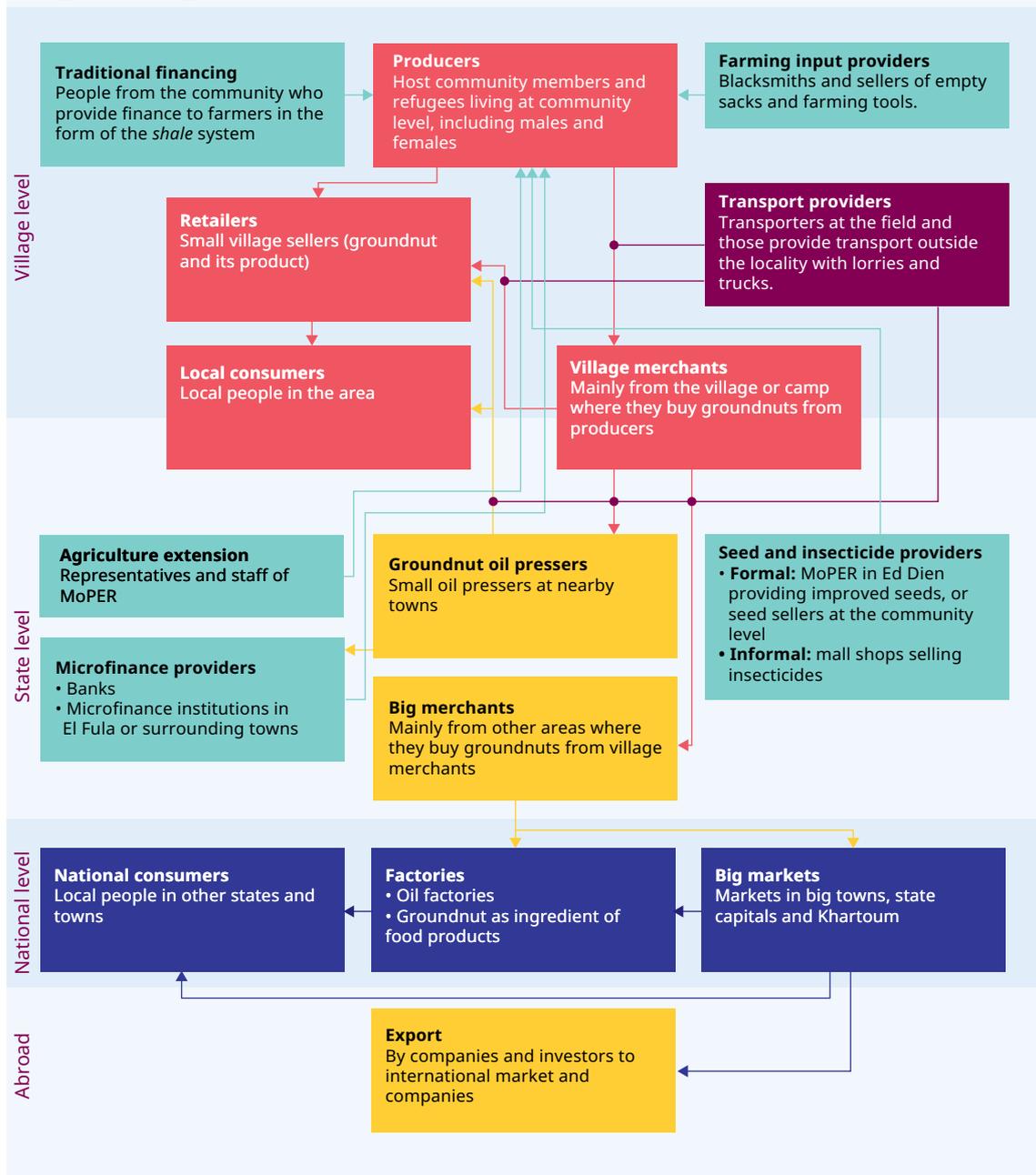
Retailers and merchants

Retailers and merchants operate similarly in West Kordofan and East Darfur. The groundnuts are sold by merchants at the village or community level, or to larger merchants who sell to factories or exporters in Khartoum.

Transport

As in West Kordofan, in East Darfur groundnuts are usually transported from the field to the houses, camps or directly to the local market. Donkeys, donkey-drawn carts and motorized carts are again the main transportation means used by farmers.

► **Figure 3. The groundnut value chain in East Darfur**



▶ 3.2 Sesame value chain

Sesame (*Sesamum indicum*) is one of the main exported agricultural commodities in Sudan. The country exports significant quantities of its 1,209,000 metric tonne production, making it the world's top overall sesame exporter. Production dropped by 6 per cent in 2020, though this level was still nearly 50 per cent higher than the five-year average.²⁴ The drop was attributed to flooding and the sesame gall midge (*Asphondilia sesame Felt*), which forced farmers to switch to shorter cycle crops. Sudan's primary export destinations are the Middle East and Asia.

There are many varieties of sesame, though it is generally classified as white or brown sesame. Brown sesame has a higher oil content and is preferred by oil extractors and processors, while white sesame is preferred for export and confectionery manufacturers. Sesame grows particularly well in well-drained neutral PH soils and is considered as a drought-resistant crop, making it ideal for the conditions found in Sudan.

Although more than 50 per cent of the sesame production is mechanized, there are high losses in the supply chain owing to poor harvesting, storage and extension services.²⁵ The losses are at their highest during the harvesting period, mainly because of the dispersal of the seeds when they become ripe. This is due to a delay in harvesting, either from the lack of adequate labour or of harvesting machines. Damage to seeds during harvest affects their viability, storage, and ultimately, the quality of the oil.

Apart from its high oil content, sesame contains a variety of nutrients and is believed to have various medicinal benefits. Its oil is used in foods, cosmetics and medicines. The seed is also used in making confectionery and baked products and is added as a condiment or ingredient in many types of food. The seedcake by-product from seed crushing in oil extraction processes is usually mixed with other ingredients and used as animal and poultry feed. However, sesame is a low-yielding crop; the average world productivity is 440 kg/ha. In Sudan, productivity has been fluctuating and in recent years shows a decrease in production.

Sesame in East Darfur and West Kordofan

Sesame is widely cultivated in West Kordofan (with very low productivity). Cultivation is lower in East Darfur, though it has seen noticeable increases in production in recent years. The market is controlled by a few buyers concentrated in El Obeid, Gadaref and Om Rwaba auction markets.

▶ **Table 5. Traditional rainfed production of sesame in 2019/2020 (FAO 2021)²⁶**

State	Area planted (ha)	Area harvested (ha)	Yield (kg/ha)	Total groundnut production (tonnes)
East Darfur	101,000	82,000	219	18,000
West Kordofan	475,000	427,000	243	104,000

The stakeholders in the sesame value chain in West Kordofan include seed and commercial farmers, seed traders, small-scale processors, wholesalers, input suppliers, financiers, government agencies, NGOs, development partners and consumers. Among the key challenges identified in the value chain are the

24 FAO, Special Report, April 2021, <https://reliefweb.int/sites/reliefweb.int/files/resources/cb4159en.pdf>.

25 Care International, *Holistic Livelihoods Assessment for South Sudanese Refugees in Darfur and Kordofan States – Sudan*, 2019.

26 FAO, Special Report, April 2021, <https://reliefweb.int/sites/reliefweb.int/files/resources/cb4159en.pdf>, p. 27.

lack of available extension services and the lack of good agricultural practices.²⁷ The sector has a major problem of improper use and application of pesticides, poor post-harvest practices and weak government enforcement of phytosanitary measures.²⁸

Sesame is labour intensive and therefore has the potential to provide ample work opportunities for FDPs in the farming and cultivating process. Harvesting constitutes about 50 per cent of the cost of production and is produced by both smallholders and large-scale farmers. It provides an additional source of income for small-scale farmers to support their subsistence livelihood and can help to mitigate the impact of climate variability. In general, sesame has a high potential for value addition and processing. Instead of selling it as raw material to the wholesaler, small-scale farmers could process it to produce oil and animal feed.

At present, any involvement of FDPs in sesame cultivation is minor, due to a variety of factors that limit their capacity to see it is a viable option. Sesame requires a substantial amount of capital to begin cultivation, and as observed in this report, FDPs are largely excluded from financing and other financial services. Another hindering factor is that the areas of cultivation and processing of sesame are distant from the places where the FDPs of West Kordofan live. In addition, bureaucratic problems are associated with movement, and women could face protection risks with a long commute to the harvesting site.

Production process

Sesame is grown in areas where soil has relatively more clay. Interviews with members of the MoPER at the locality level in the two states showed that the sesame seeds used are the Promo and Kenana types (both white sesame). Seeds are usually provided with support from the Federal Ministry of Agricultural and Natural Resources. Interviews revealed that the amounts of seeds distributed constitute only 10 to 20 per cent of those required by small plot farmers and are obtained largely by big agricultural farming schemes. Moreover, the FGDs conducted for this study confirmed that most of the farmers in the two states use seeds from previous seasons. According to the agricultural extension personnel, this could contribute to low productivity, as such seeds may not be healthy because of poor storage conditions. According to responses from the MoPER, no seed propagation is practised at the locality or state levels, and as a result, improved seeds are bought from seed-selling companies operating in the region.

Among the main insects affecting sesame are the webworm or leaf rotter (*Antigastra catalaunalis*) and the sesame seed bug (*Elasmolomus sordidus*). Information collected from FGDs with HCs and refugees in the target areas indicated that most of the farmers prefer to grow groundnuts rather than sesame whenever possible, for the following reasons:

- ▶ sesame is more subject to disease than groundnuts;
- ▶ farming practices are more difficult for sesame as cultivation is more labour-intensive and weeding is a major activity;
- ▶ sesame is subject to post-harvesting pests;
- ▶ sesame may be affected by early heavy rains, resulting in decreased productivity.

Cost of production and revenues

Sesame is a cash crop grown by farmers in heavier soil locations in the targeted areas. The average production of sesame per *mukhamas* (0.74 ha) is four to five sacks (2 *guntars*) or approximately 90 kg. Farmers use Promo, Kenana and Tulshi types of white sesame. The production cost per *mukhamas* is detailed below.

²⁷ GRO Intelligence, 2017.

²⁸ Care International, 2019.

► **Table 6. Cost of production for farmer**

Production input	SDG cost/ <i>mukhamas</i>	SDG cost/ha	USD cost/ha*
Land rent	2,000	2,720	\$6
Seeds	2,000	2,720	\$6
Preparation of land	7,000	9,520	\$22
First weeding	5,000	6,800	\$15
Second weeding	5,000	6,800	\$15
Harvesting	8,000	10,880	\$25
Threshing and cleaning	1,500	2,040	\$5
Empty sacks	500	680	\$2
Transportation** (production)	1,000	1,360	\$3
Total: 1 <i>mukhamas</i> (0.73 ha)	32,000	-	\$99 (per ha)
Total: 5 <i>mukhamas</i> (3.7 ha)	160,000	160,000	\$365

* SDG/USD Rate (UN Operational Rates of Exchange for Sudan, 30 June 2021)

** Transportation cost varies according to distance and prices of fuel at the time of transport, and for this it represents a variable that is added to the selling price.

According to the information obtained from meetings and FGDs in the two states, there are no oil pressers for sesame in the targeted areas, where farmers sell sesame as raw material. Oil pressers in operation exist in big towns such as El Obeid, Ed Daein and Khartoum.

Market paths

Like groundnuts, sesame also typically takes one of three routes once it is in the market.

- Traditional value-adding: pressing and milling to produce local sweets and oil for human use and cake for animal use
- Advanced value-adding: processing into *tahnia* (halva), tahini, oil and cake for animal use.
- Export: raw sesame seeds, oil, tahini, and *tahnia* are the main exports of the sesame value chain. The main export destinations are Turkey, Italy, Greece and China.

Processing companies are primarily involved with the production of *tahnia*, tahini, oil and cake for animal use. These products are then sold domestically, while the raw crop is exported to China, Turkey, Italy and Greece. Companies specializing in export contract private agents to do the cleaning and sorting operations.

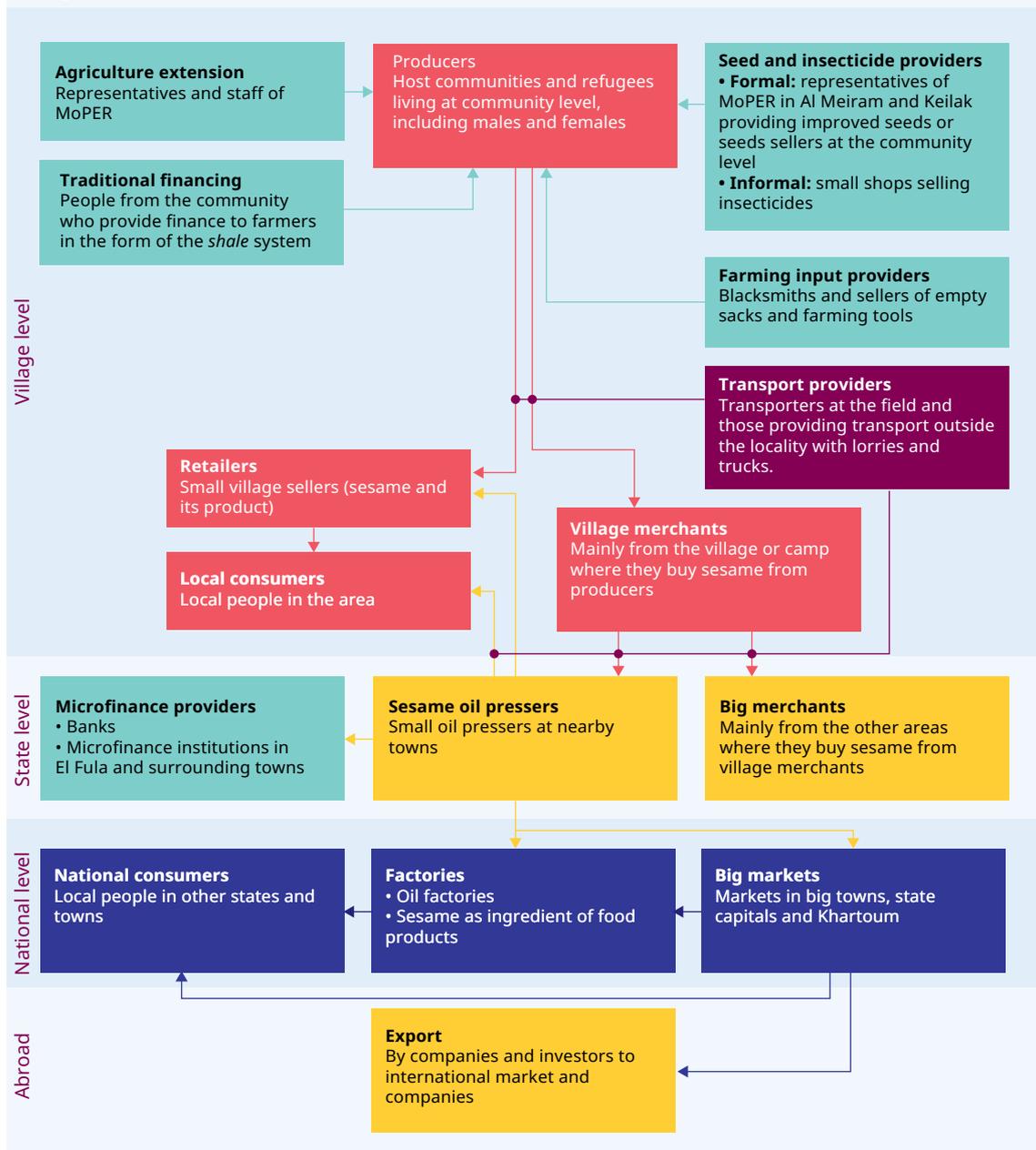
Sesame value chain in West Kordofan

In West Kordofan, sesame is cultivated in the two surveyed areas (Al Meiram and Keilak) and produced by the same farmers who grow groundnuts. According to the survey, fewer farmers grow sesame in Al Meiram than in Keilak, where the soil has a higher clay content and is thus more suitable for sesame. Most of the farmers in the two localities use white sesame seeds (Promo, Kenana and Tulshi).

Producers

Producers are mainly farmers from HCs or refugees. Refugees who grow sesame in the Al Meiram and Keilak camps are primarily engaged in a share-cropping production arrangement with the HCs.

► **Figure 4. The sesame value chain in West Kordofan**



Input providers

According to the survey results, farmers generally use improved seeds provided by the MoPER. However, the amount provided is not sufficient, and the farmers use local types that are kept over from the previous seasons, either from their own stock or purchased from other farmers.

Crop protection services

The crop protection services, provided by State Crop Protection Authorities, are not a sesame-specific service but are carried out in parallel with outreach services directed at other crops. Other extension services include herbicides, storage improvement and post-harvest pest control measures and are also provided by agro-chemical sellers. Termite insecticides are used for groundnuts, while for sesame, insecticides are used mainly for sucking insects.

Agricultural extension services

These are usually provided by the MoPER to Al Meiram and Keilak as part of the collective effort. According to the information obtained, they are provided directly to farmers' groups through field visits. However, activities such as farmers' schools and demonstration farms are severely lacking and under-resourced in the state.

Retailers and merchants

Retailers come mainly from the same community. They represent small traders who buy sesame from farmers and sell it to the village household members. Most of these retailers are either small shop owners or women selling sesame as raw product to local households in bulk or in *malwa* (3.5 kg).

Village merchants are typically small traders operating at the village level and come from the community itself or from surrounding towns. These merchants collect sesame from farmers and sell it to larger merchants who come to local markets and transport it back to larger markets or end users. Large wholesale merchants buy sesame collected by village merchants and sell it to other merchants or transport it to factories and exporters in Khartoum.

Transport

Sesame is usually transported from the field to the houses, camps or directly to the local market. Donkeys, donkey-drawn carts and motorized carts are the main means of transport used by farmers to get sesame from the field to the collection sites, storage facilities, and/or local markets.

Sesame value chain in East Darfur

Both HCs and refugees are engaged in the growing of sesame (using mainly Promo, Kenana and Tulshi seed types) and cultivate this crop using the same farming practices found in West Kordofan.

Producers

According to the interviews with communities and the results of FGDs, farmers generally grow sesame using a sharecropping production process. This is the most common form of production practised in and around Al-Nimir camp. Sharecropping involves an average land size of 3 to 5 *mukhamas* (2.2 to 3.7 ha).

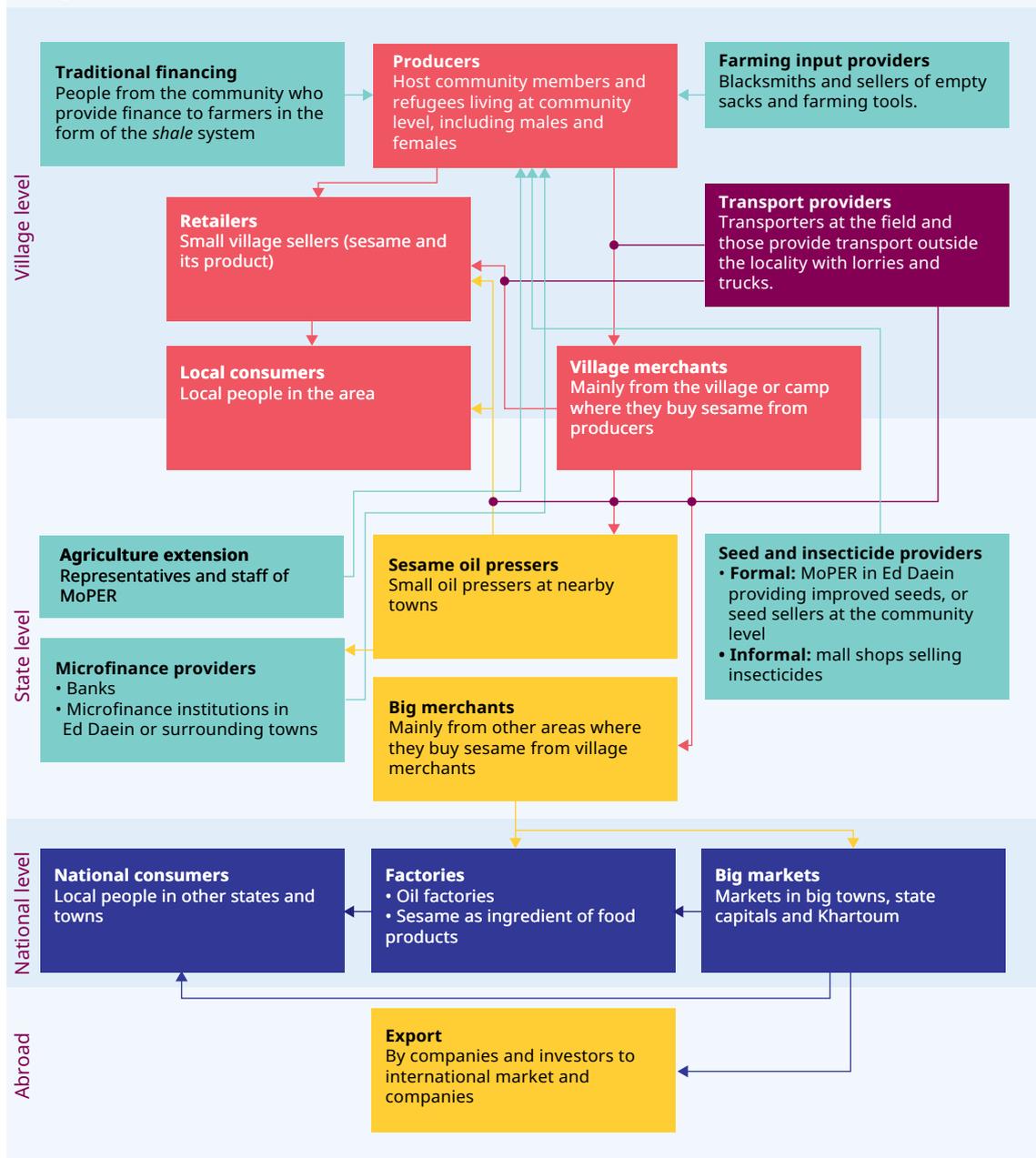
Input providers

Guidance on the type of seeds to be used is based upon recommendations provided by agricultural research and mainly by the State Ministry of Agriculture (under the supervision of the Federal Ministry of Agriculture and Natural Resources). The seeds provided amount to less than 20 per cent of actual requirements. The lack of seeds forces farmers to use the Baladi type that have been stored from the previous season. These tend to have a greater risk of disease and result in lower productivity rates per *mukhamas* (0.74 ha) planted.

Agricultural extension and crop protection services

Agricultural extension and crop protection services are part of the same package provided by MoPER, undertaken in alignment to the specification of sesame crops, or as part of more generalized extension services linked with other crops.

► **Figure 5. The sesame value chain in East Darfur**



Retailers and merchants

These are small sellers at the community level; they buy sesame from farmers and sell it to the village customers. Most of them are either small shop owners or women selling their products in the open areas of the village market. Sesame is sold as raw product in bulk or in *malwa* (3.5 kg) for household consumption, or processed in the form of locally made sweets or food materials.

Al-Nimir's village markets collect the product from farmers and transport it to the larger markets in Ed Daein. These merchants come from the community itself or from surrounding towns and act as collectors of raw sesame for sale to larger merchants, who transport the sesame from the local markets to other nearby towns and/or end users.

These larger-scale merchants purchase sesame collected by village merchants and sell it to other merchants or transport it to Khartoum for factories or exporters.

Transport

Transport at the field level is mainly done by carts and motorized carts, while larger-capacity vehicles are used to transport the raw product from the camp area to Ed Daein markets. Big trucks and lorries are generally used to transport crops to other towns.

▶ 3.3 Additional findings

Fees and customs

Interviews with locality staff stationed at the community level confirmed that farmers do not pay any fees when they bring their products to the camp market. However, fees must be paid at the collection office of the locality by village merchants when they transport the product out of the production area. Crops are usually transported to bigger markets in the state, or to Khartoum as a raw material for factories or other industries for groundnut butter, sesame or groundnut pressers, or as additive materials for sweets or other products. Groundnut crop residues are also transported for use in dry feed for livestock.

Women's involvement

According to the survey, women are involved in farming as hired labour, and informants reported that some women rent plots of farmland to grow crops. Although women are involved in farming, skewed gender relations in the targeted areas significantly restrict access to finance and financial products for women. Despite extensive evidence confirming that women are lower credit risks, require fewer loan provisions, and reflect a lower portfolio risk for the MFI, community finance remains a male-dominated and male-accessed road to local capital stocks. This situation will need to be addressed through changing behaviour and facilitating women's access to finance, possibly through the formulation of women's groups. Some of the women are heads of households, representing groups that need to be supported by the project by enhancing their capacity to access and use financial services to improve their livelihoods. This will entail exposing women to loans windows, as they are not always in the position of requesting loans.

According to key informants, the culture of HCs in the two states associate women with indoor household activities such as childminding and other family affairs. Nevertheless, women are also active at the community level as members of farming activities or petty trading in local markets. However, their role in decision-making at the community level is rather restricted and, according to information obtained from the field, there are no women associations or groups in the two targeted communities in each of the targeted states.



Fruits and vegetable vendor in Al-Meiram, West Kordofan. © Caroline Knook

▶ 3.4 Key market actors

Interviews with companies active in the target regions found that the three leading private sector actors in the groundnut and sesame value chains are **Slophenia, CTC, and Green Zone**. For sesame, **Dal Group** is an additional leading company. Together, these companies export 38 per cent and 19.7 per cent of Sudan's total groundnut and sesame exports, respectively.

For groundnuts, the total demand of the ten companies interviewed was 224,480 tons/year in 2021. From this total, 214,800 tons/year are for export purposes, representing 47 per cent of the total amount exported by more than 101 companies in 2020. As for local processing, **DARFOOD** company (a subsidiary of SAY Group) requires 12,000 tons/year for its factory, while **Dal Group** purchases 30,000 tons/year of peanut cake from aggregators.

For sesame, the total demand of the interviewed companies was 142,000 tons/year as of 2020, representing 20.6 per cent of the total amount exported by more than 192 companies in 2020.

▶ 4

Opportunities and interventions for inclusive and sustainable value chain development

▶ 4.1 Marketing dynamics

The markets in all the targeted camps are administered by the State Market Administration Department (SMAD), representing the state authorities. There is no structured system for exchanging market information. Producers and merchants obtain information about prices based on their own contacts from surrounding markets. Mobile phone services (though poor) help buyers and sellers to get information about prices in nearby markets.

Intermediate markets are those in big towns near refugees and host camps such as El Muglad and El Fula in West Kordofan or Ed Daein in East Darfur. Groundnuts and sesame, collected from different production sites, are usually brought to these intermediate markets and reloaded onto bigger trucks to Khartoum, where the produce is either sold to oil factories or other food processing factories, where they are used as ingredients in food products. Groundnuts are also processed to produce groundnut butter (*dakwa*), labelled and sold in big supermarkets.

According to the survey results, including the FGDs conducted at camp level, the marketing spectrum for the producer is limited. In most cases their role ends upon bringing their produce to the village market. Further activity is often limited because farmers:

- ▶ do not have access to other market information;
- ▶ are forced to sell directly after harvest to repay the *shale* loan;
- ▶ do not benefit from any added value engagement; and/or
- ▶ do not have appropriate storage means.

► 4.2 Core market constraints and their root causes

The primary constraints and bottlenecks within the two value chains can be summarized in the following table.

► **Table 7. Constraints in the value chains**

	Problem	Root causes
Constraint 1	Traditional family farming practices are inefficient with low productivity levels and low crop quality, stemming from lack of skill and inputs, including those which improve soil nutrients, aeration, and water or soil retention.	Limited capacity of MoPER to provide extension services ²⁹ ; lack of storage facilities which affects post-harvest quality and seed quality; farmers not benefiting from added value engagement; deterioration of land quality, lack of investment in soil fertility.
Constraint 2	Inadequate marketing capacity, transport, and information exchange. Most farmers sell directly after harvest to intermediaries and brokers for low prices.	No structured system for exchanging market information (producers and merchants get information about prices from individual contacts in surrounding markets).
Constraint 3	Refugees have limited access to financing.	Absence of formal financing at the community level; the unfair nature of the informal financing system, <i>shale</i> , which forces many to sell produce directly after harvesting to repay the <i>shale</i> loans; bank policies, e.g., need for collateral and documents of official land ownership.
Constraint 4	Export companies not purchasing more groundnuts and sesame.	Lack of demand linked to challenges at the production level, including aflatoxin fungus, poor crop management, inadequate storage for farmers, and costly or unreliable transportation, which all affect quality and reliability demanded by the companies.

Additional bottlenecks particularly relevant to the target regions include the following.

- a. Security hazards. The companies interviewed consider the targeted areas insecure and still affected by armed and tribal conflicts. Therefore, in order to protect their assets and capital, they opted to operate in more secure areas. Some companies such as Maryoma state that they have no plans to operate in the project locations unless the security situation improves.
- b. The area is too remote. The PROSPECTS project area is quite remote and has no significant economic activities to attract businesses. The poor conditions of the roads, which are often made difficult to use by flooding during the rainy season, added to the unattractiveness of the area for the private sector.
- c. No experience with working with FDPs. None of the companies interviewed have experience working with the FDPs. The non-settled status of the FDPs makes the private sector hesitant to do business with them.

²⁹ Agricultural extension services mainly provided by the Department of Extension and Technology Transfer, whose mandate is “to provide agricultural extension services and to promote adoption of improved seeds and other recommended farming practices”. The department is inhibited by resource constraints, e.g., inadequate functional and administrative capacity, insufficient office space and equipment, and ineffective programming.

▶ 4.3 Proposed interventions

The AIMS methodology uses a push-pull approach as a framework to develop holistic and market-based livelihoods strategies. This entails two sets of separate but interlinked interventions. Pull interventions aim to develop the market by increasing the quantity and quality of job opportunities available. Push interventions focus on strengthening capacities and skills of the target groups to enable them to seize these opportunities.

Push interventions

Train or facilitate training for farmers to improve agriculture practices and crop management

Low quality and production levels severely hinder growth across both value chains. The private sector companies have indicated interest in the crops at specific qualities and quantities, and with farmers who are trusted to honour contractual agreements. Skills development and initiatives that facilitate input provision are therefore instrumental strategies, especially if they include involvement of these private sector actors.

Shifting to **better yielding and more disease-resistant seed varieties** can significantly improve productivity in smallholder farming. Farmers are currently hindered in obtaining better seeds by lack of funds, lack of access and lack of knowledge of their benefits. Availability of better seed varieties in East Darfur and West Kordofan could be improved by linking farmers with certified seed producers who could provide training, information services and access to seeds in exchange for agreed-upon quantities and qualities of crops.

Additional inputs such as fertilizers and tools can also increase productivity, compared with the traditional methods currently applied. It is important for these to include measures that conserve soil characteristics, including inputs that improve nutrients, aeration, and water or soil retention. For instance, it was observed that the soils in the target region are well suited for groundnut production, but applications of potassium and phosphorus are strongly recommended.

Trust building between farmers and the private sector is vital for the ILO to create a win-win partnership. The ILO can play the role of mediator and guarantee provider and financier of the first and/or second round of production. As the relationship between the partners evolves, the ILO can start phasing out its role until the partnership is entirely sustainable on its own. The ILO can also support the private sector with a supply aggregation through the cooperative approach, as well as with capacity-building for agricultural extension services, such as those offered by companies, NGOs, public institutions or informal farmers' associations.

Establishing pilot plots that can be managed by the lead farmer or the agricultural extension service agents can help to showcase the benefits of adapting the use of agricultural inputs and improved agricultural practices for farmers who otherwise lack knowledge or trust of improved methods. Farmers are more willing to apply what they have seen to work in practice. Pilot plots or information services can also be used to inform farmers of further good practices, such as proper storage techniques, or cleaning and packaging.

Beyond working with private sector actors, the project can also collaborate with the MoPER, especially in areas such as the acquisition of seeds. This may be particularly useful in more remote areas where private companies are less present. All of the above-mentioned services and strategies will explicitly target FDPs alongside the HC landowners, as applicable.

Support and development of cooperatives

Organizing farmers into cooperatives is a long-standing tradition in Sudan that also serves an effective strategy for addressing the aforementioned constraints.

For instance, farmers can **enhance their access to agricultural inputs and services** by forming cooperatives, which trade fertilizers and plant protection materials, collectively own agricultural equipment, develop savings groups and providing extension services for their members. Harvesting has become a bottleneck, as the lack of effective inputs renders groundnut harvesting slow and labour intensive. This could be addressed by collective ownership of harvesting equipment by farmer cooperatives. While the size of most small plot farms diminishes the effectiveness of groundnut harvesting machinery, the expansion of animal traction with groundnut lifting attachments could save on labour. Community storage facilities can also be established and maintained, as this was identified as a serious constraint inhibiting better quality of seeds and crops, and individual farmers are often limited by lack of knowledge of best practices and capacity.

Farmers limited in their capacity to **benefit from value addition activities** in both value chains will also gain from the establishment of cooperatives. These can serve as an entry point into such activities. These bodies can create a greater demand through collective action and promote knowledge and skills of business development and enterprise for the benefit of HCs and refugees. They can also lead to greater access to a wider marketing spectrum, such as intermediate and terminal national markets.

Facilitating the establishment or support of cooperatives will also help **create and manage the relationships with other market actors**, such as those providing training and inputs. These may include the agricultural extension services of the MoPER, or private sector actors identified and listed in the section below, "Private Sector Actors for Potential Partnerships". For example, they can increase revenues and manage price risks by collectively negotiating contracts with buyers and skipping middlemen in the value chain. These relationships and partnerships need to be formalized and protected by creating contractual relations between the private sector and the farmers' cooperatives. Collaboration can include finance contracts, supply contracts, service contracts, and eventually contract farming arrangements. These contracts will also play an essential role in setting the expectation of all parties involved.

More specifically on **facilitating access to finance**, which is a particularly inhibiting constraint for FDPs, formal contracts can help to access finance from agricultural banks, which are able to better estimate farmer's projected revenues when negotiated with cooperatives. The study found that microfinance institutions are more likely to finance groups such as cooperatives than individuals. Moreover, these can be later developed into savings and credit cooperative societies that help their members to access finance, further improving ability to invest in agricultural productivity. The same applies to the establishment of other informal groups like VSLAs or other women's groups.

Project support for cooperatives could take on various forms. For instance, training cooperative staff in areas such as leadership and teamwork skills, cooperative management or bookkeeping and financial management skills. It could also facilitate visits or exchanges between cooperatives to share successes and best practices. Conducting a survey that assesses the current situation of cooperatives in the regions, as well as lessons learned from existing groups, could help to develop more tailored interventions.

Additionally, the project could also facilitate **support to government cooperatives departments** (which fall under the administration of State Ministries of Finance). Such support could be manifest through enhancing the skills of staff to use updated means of communications with communities, or updating their skills as trainers of trainers (ToTs) to raise the capacity of cooperatives committees and to promote knowledge about cooperatives. Further assessments may also need to be conducted to identify additional support structures for cooperatives.

Address lack of knowledge and access to finance

The absence of formal financing at the community level is regarded as a major constraint limiting the abilities of HCs and refugees to improve their livelihoods. The current ubiquitous form of financing available to refugees is the informal financing system *shale*, which is considered by farmers to be an unfair financing relation between lenders and borrowers, as it puts farmers at a disadvantage vis-à-vis prices before and after harvesting.

As outlined above, the formation of farmers' cooperatives presents a key opportunity for improving access to finance and addressing some of the major obstacles such as refugee risk profiles or collateral requirements. Building on this could be interventions that **attract microfinance institutions and link them with cooperatives** as a means of creating a smart financing environment, as group collaterals are more accepted by microfinance institutions. Such practices have already been tested in different parts of the country, including West Kordofan State. This will require a mobilization stage that orients the microfinance providers and promotes involvement of HC and refugee members in businesses within the value chains. Such mobilization will make it worthwhile for the finance provider to deliver services closer to the communities. Such an intervention could also include efforts supporting MFIs in developing adequate financial mechanisms that serve as a feasible alternative to the *shale* system for both parties. This support could come in the form of developing products for specific sectors, establishing a dialogue with cooperatives in the said sectors, and developing internal capacity to assess agricultural and livestock projects. Technical support for such an intervention could come from collaboration with the ILO's Social Finance.

Further entry points for enhancing access to (micro) finance include:

- ▶ promoting and facilitating the development of community-managed microfinance vehicles, such as savings and credit cooperative societies, VSLAs and Rotating Savings and Credit Associations (ROSCAs) that can be linked to formal financial service providers;
- ▶ partnering with interested financial service providers that can be facilitated to set up operations in the area with the view of ensuring that they finance refugees and HCs. This could entail partnerships with actors such as the Central Bank of Sudan, which has a microfinance unit, or commercial banks that were found to be active in the state capitals.

Development banks also indicated interest to working in camps, though with the stipulation of involvement of HC (Sudanese) farmers in addition to any FDPs.

Raising financial awareness and literacy among FDPs and HCs can also help to bridge the gap in the use of formal financial services. This can be achieved in part by incentivizing banks and MFIs to establish a presence in camps by raising awareness of the potential for business opportunities. This will be complemented by other project activities, as providing technical assistance and connecting FDPs with prosperous markets can be of great help to the financial institutions in the area, who often lack the capacity to assess the risk profile of small-scale farming projects.

Interventions can also equip financial service providers and other actors such as the Chamber of Commerce with financial education skills to train their members and target the population in financial literacy. The ILO's financial education package can be used to train any entities interested in disseminating such products and services.

Another possibility to improve access to finance is by providing a **revolving fund**, to be managed by one or two MFIs for financing farmers in the target areas. The project can answer all the conditions needed to ensure good governance of the fund. This can be in the form of a contract between the project and an MFI after due diligence is done on the selected MFI.

Pull interventions

Support for extension services

The study found that for many extension service providers, staff do indeed have the skills and incentive to carry out their mandate but are often limited by a lack of facilities and capacities to reach the target groups. Support to these services to address existing gaps could take a variety of forms, including assistance that:

- ▶ facilitates community mobilization and coordination;
- ▶ enhances staff movement to reach the communities;
- ▶ raises awareness on rural and participatory development approaches;
- ▶ contributes to the development of new communication devices and applications.

Supporting extension service providers could have a long-standing impact, indirectly boosting HC and FDP productivity beyond the project's duration. For example, such interventions could include a hiring consultants or experts to work with extension services and BDS providers, while also identifying actors in the Ministry of Agriculture with the incentive to contribute to capacity-building. Carrying out this activity in unison with the others would mean that once the project is over, there would be a relationship between extension service agencies and cooperatives, with higher capacity levels in the extension officers to continue to offer quality services.

Enhance access to market information

Market information is currently hard for smallholder farmers to obtain. Information such as commodity pricing that can help to inform more fair negotiations, market demand or best practices can help actors throughout the value chains. Most farmers rely on contacts within their personal networks to obtain whatever market information they can. While the increasing use of mobile phones improves the situation slightly, there remains a gap for any reliable and institutional source.

The study found no structured system for the exchange of market information in the target regions. The project will, therefore, need to focus on supporting the actors or institutions that have the capacity or the incentive to serve, at least partially, as information hubs for farmers and merchants in the value chains. As discussed earlier, cooperatives offer one potential source of a centralized body that can accumulate and share market information with its members. Linkages between different cooperatives, as well as with their partners, such as private sector actors, could further strengthen this. Support should focus on working with key buyers, wholesalers, farmers and farmers' groups. Taking advantage of the growing mobile phone usage could be another entry point, for example supporting programmes or initiatives that disseminate information through local media outlets and channels.

Support value chain linkages

Many of the business models in the two value chains rely on informal or non-existent relationships between different market actors. Producers, wholesalers and buyers benefit from more formal trade agreements and are therefore more likely to honour them. Facilitating linkages between such actors to create more reliable, trust-based arrangements and linkages with upstream and downstream partners can therefore create greater demand within the market systems.

As alluded to above in the proposed interventions on cooperative development and support, the focus for these interventions can focus, at least initially, on piloting, testing and refining more structured contracting models between producers, wholesalers, MFIs and/or other actors within the value chain, such as those involved in cleaning and sorting, or other value-added activities. This support to early partners will help to demonstrate the benefits of such contract-based agreements. Eventually, this can lead to a system of interdependent linkages between actors, thereby reducing the risk for each market player involved

and ensuring the possibility of creating a sustainable solution. It is essential to be done in tandem with the interventions that focus on improving the quality of crops, as companies interviewed expressed that there is a demand for such crops in the target regions as long as the quality adheres to sufficiently high standards.

These pilot mechanisms to formalize links between cooperatives, traders and processors will help to improve those relationships well beyond the timeline of the project. The pilots could consist of trust-building workshops, exchange activities, deal-making in which the project assumes a degree of the risk to appease both sides, and identifying other partners willing to broker these relationships and investing in them (for instance, actors further up the market). To operationalize this, a fund could be established to pilot various activities, once more information becomes available from the work with cooperatives and traders and processors.

Private sector actors for potential partnerships

For **West Kordofan**, the study identified a number of small and medium sized factories within reach that are involved in activities using groundnuts and sesame as primary inputs for their products. These products include oil, groundnut butter and sweets such as *tahniah*. Fewer factories were identified in **East Darfur**.

► **Table 8. Regional companies and factories in the groundnut and sesame value chains**

Company name	Primary activity	Location
Graibo factory	Oil production	El Nuhud (West Kordofan)
Elginaid factory	Oil production	El Nuhud (West Kordofan)
Eldafag factory	Oil production	El Nuhud (West Kordofan)
Gazafi company	Groundnut husking	El Nuhud (West Kordofan)
Kamal company	Groundnut husking	El Nuhud (West Kordofan)
Omer Siddigm	Groundnut husking	El Nuhud (West Kordofan)
Gamuaa factory	Oil and <i>tahniah</i> production	El Obeid (North Kordofan)
Awlad Elrahd factory	Oil and <i>tahniah</i> production	El Obeid (North Kordofan)
Wadi Alkaib	Oil pressing	El Daein (East Darfur)
Ganoub Darfur	Oil pressing	El Daein (East Darfur)

Each factory in El Nuhud possess its own groundnut husking machines as a preparatory stage for oil production. There are also approximately 20 small machine-based groundnut and oil pressers in El Fula (West Kordofan) and surrounding small towns. Similarly, a number of small-scale groundnut and sesame oil pressers working with small machines were identified in the El Daein area (East Darfur).

Larger companies that are active in the two value chains at a national level include **Dal Group**, **Slophenia**, **Green Zone** and **Central Trading Company (CTC)**. **The Arabic Company for Seed Production** in El Obeid is a key player in seed provision. **DARFOOD** is another example that already has experience in East Darfur working with cooperatives in a contract farming model.

These factories and companies present a marketing opportunity for both the groundnut and sesame producers. If the farmers are organized in a suitable setting, such as in cooperatives, and are able to ensure provision of the crops in adequate quality and quantity, the above-mentioned private sector actors could make suitable project partners. The project can therefore focus on linking producers with these actors in the same State or with its neighbours.



▶ 5

Conclusion

AIMS is a framework used to identify sectors with potential economic opportunities for FDPs and HCs while at the same time paving the way for demand-side labour market interventions. This report outlined the characteristics and background of FDPs and their HCs in East Darfur and West Kordofan and provided an overview of the legal context and supporting functions available to both populations. In doing so, the AIMS approach ultimately enabled the design of targeted interventions that respond to local market realities and challenges in identified key value chains, groundnut and sesame.

Across both states, a number of core market constraints were identified and determined to severely limit the overall functioning of both value chains and the inclusion of FDPs within them. These findings show that:

- ▶ the current and widespread production process in both value chains is labour intensive and centred around traditional practices associated with low productivity and low-quality outputs;
- ▶ a near complete absence of formal financing services at the community level prevents (small-scale) farmers from accessing the resources to improve and expand their operations and commercial activity;
- ▶ linkages between market actors are often weak in the two target states, with a severe lack of access to market information.

To create market-wide sustainable changes, each constraint must be addressed so that local market actors drive the change with the support of the ILO and its partners. Key among the report's findings was the large potential of establishing and supporting cooperatives and collective production models. By taking the push-pull approach of the AIMS methodology, interventions can support the development of cooperatives and facilitate linkages with other actors to create mutually beneficial market relationships that create gradual improvements across the value chains. This includes developing the capacity of agriculture extension services and creating linkages with cooperatives. This will not only assist extension services to offer quality services to a broader network but will also improve the quality and quantity of the outputs of cooperatives (and their members). Formalizing and facilitating relationships between cooperatives and traders and processors will also help to increase the availability and flow of market information.



Market scene in Ed Daein, East Darfur. © Caroline Knook

The report also recommends facilitating availability and access to financial services in the target regions, with the support of cooperatives once again found to be central to such interventions. Additional activities can address the demand side of financial constraints by supporting the access and awareness of financial literacy and education programmes.

This push-pull approach thus offers an opportunity to tackle the constraints of both supply and demand sides, developing the market systems to expand and diversify the market opportunities available, and enhancing the target groups' ability to engage with the market and seize these new and improved opportunities.

Existing cooperatives in the programme target areas:³⁰

West Kordofan

Al Meiram

Altsamouh was founded three months prior to data collection and includes 28 female members. The objective of the cooperative is to facilitate skills training and market access for women. The cooperative is looking for support from an international organization, is attempting to organize a small handcrafts fair, and some of the members produce juice and jams. The cooperative uses joining fees. It is officially registered, and members establish their own prices.

Kharasana/Keilak

The Community Management Committee (Kharasana) was founded in 2018 with the support of the UNDP and includes 18 members. It provides agricultural input (fuel, seeds, access to land and agricultural services such as ploughing) to vulnerable farmers. It is not completely clear what the organizational structure looks like, but presumably the cooperative markets and sells the products, and farmers are paid a profit share after production costs are covered.

Drota Cooperative (Keilak) was founded in 2008 with the support of the Agricultural Bank and includes 51 members. It provides them with land to cultivate and all agricultural input at the start of the season. The cooperative is in charge of the marketing and sales of produce, and at the end of the season, the costs of agricultural inputs are subtracted from each member's profit share. The cooperative is registered and establishes prices based on input, and production costs plus a profit margin.

Keilak Albphiera Cooperative Association was founded in 2008, supported by the Agricultural Bank, and includes 56 members. It has land and agricultural machines (tractors) available against a user fee, set lower than the market value.

East Darfur

Assalaya

Al Baraka Association includes 28 female members and is a registered cooperative. It works in agriculture and trade and was founded to allow members access to formal financing services. The cooperative buys improved seeds and distributes them among members. Prices are established based on production costs, below market prices, with a small profit margin.

(Name unknown) was registered in 2012 and fully established in 2017 with the support of the Agricultural Bank, and includes 50 members, all male. It focuses on harvesting and storing peanuts in its own storage facilities; it also has livestock to support the harvest. Members pay a user fee, and the cooperative tries to include those in need. It establishes prices compatible to the market.

Al-Nimir

The Women's Cooperative was established in 2018 and includes 25 female members. They engage in baking, sewing and making juices. The cooperative provides all needed materials for free (and is probably still supported by an international agency) and ensures that the members learn all the crafts it offers. It is not registered and establishes prices just below market prices.

The Traders Association was founded with the support of the Ministry of Agriculture and includes 54 male and female members. The cooperative imports goods, distributes them to shops, and checks in with the shops to ensure that the low pricing of imported goods is maintained. It does not have storage facilities, which would be costly. Because the cooperative sells all products, running expenses are subtracted from the profit and the remaining money is shared out among the cooperative members based on their level of contribution. The cooperative is registered, has a bank account, and establishes prices based on the costs of input, transportation, production, and a small profit margin.

³⁰ Findings from *Socio-economic assessment: East Darfur and West Kordofan States, Sudan*, ILO, 2021, conducted by Consilient.

▶ References

AfDB (African Development Bank). 2020. Retrieved from “Sudan’s record wheat harvest is proof that Bank agricultural transformation program will boost breadbasket goal” (19 October 2020). Available at: <https://www.afdb.org/en/news-and-events/sudans-record-wheat-harvest-proof-bank-agricultural-transformation-program-will-boost-breadbasket-goal-38388>.

---. “Sudan Economic Outlook”. Available at: <https://www.afdb.org/en/countries/east-africa/sudan/sudan-economic-outlook>.

Care International. 2019. “Holistic Livelihoods Assessment for South Sudanese Refugees in Darfur and Kordofan States – Sudan”.

FAO. 2021. “Special Report – 2020/21 FAO Crop and Food Supply Assessment Mission (CFSAM) to the Republic of the Sudan”. Rome. Available at: <https://doi.org/10.4060/cb4159en>. GRO Intelligence, Sudan’s Resilient Sesame Seeds, June 2017, Available at: <https://gro-intelligence.com/insights/sudan-sesame-seeds>.

ILO PROSPECTS. 2021. “Socio-Economic Assessment: East Darfur and West Kordofan States, Sudan, 2021”. Available at: https://ilo.org/global/programmes-and-projects/prospects/countries/sudan/WCMS_819056/lang-en/index.htm.

Kwabena, A. B., O. Kwadwo, S.K. Offei, D. Dzidzienyo, J.Y. Asibuo, and R.A. Amoah. 2019. “Aflatoxin contamination of groundnut (*Arachis hypogaea* L.): Predisposing factors and management interventions”. *Food Control*, Vol. 98, pp 61–67, ISSN 0956-7135. Available at: <https://doi.org/10.1016/j.foodcont.2018.11.020>.

Mahdi, Salah “Cooperatives’ Weaknesses for Attracting Consumers in Sudan”, ICA Research Conference Paper, 2–4 September, Lyon, France.

Noble Capital Group. 2021. “The New Sudan: Investing in Stability, Growth and Wealth”. Retrieved from <https://invest.esudan.gov.sd/wp-content/uploads/2021/05/SUDAN-Investment-Prospectus-2021.pdf>.

REDD+ Sudan. 2018. “In-depth Analysis of Drivers of Deforestation and Forest/Range Degradation”. Retrieved from <https://www.reddplussd.org/phocadownload/Drivers%20of%20Deforestation%20and%20Degradation%20of%20Forest%20and%20Range.pdf>.

Sudan National Chamber of Exporters. 2019. Presentation. Available at: http://www.iopepc.org/misc/2019_20/Gaily.pdf.

“Sudan’s Resilient Sesame Seeds”, *GRO Intelligence*, June 2017. Available at: <https://gro-intelligence.com/insights/sudan-sesame-seeds>.

UNHCR. 2021. Sudan Fact Sheet – September 2021. Available at: <https://data2.unhcr.org/en/documents/details/88903>.



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