Terminal Evaluation

UPGRADING THE SUDANESE SESAME SEED VALUE CHAIN

UNIDO ID: 160177

Evaluation Report

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Contents

Acronyms and Abbreviations	3
Executive summary	4
Evaluation purpose and methodology	4
Key Findings	4
Summary of Key Findings, Conclusions and Recommendations	5
Project ratings	11
1. Introduction	12
1.1. Evaluation objectives and scope	12
1.2. Overview of the Project Context	13
1.3. Overview of the Project	14
1.4. Theory of Change	16
1.5. Evaluation Methodology	20
1.6. Limitations of the Evaluation	21
2. Contribution to Development Results - Effectiveness and Impact	22
2.1. Achieved results and overall effectiveness	22
2.2. Progress towards impact	26
2.2.1. Behavioural change	26
2.2.1.1. Economically competitive - Advancing economic competitiveness	
2.2.1.2. Environmentally sound – Safeguarding environment	
2.2.1.3. Socially inclusive – Creating shared prosperity	29
2.3. Broader adoption	29
2.3.1. Mainstreaming	29
2.3.2. Replication	
2.3.3. Scaling-up	31
3. Project's quality and performance	32
3.1. Design	32
3.2. Relevance	34
3.3 Coherence	
3.4. Efficiency	37
3.5. Sustainability	
3.6. Gender mainstreaming	40
4. Performance of Partners	43
4.1. UNIDO	43
4.2. Food and Agricultural Organization (FAO)	45

4.3 National counterparts	45
4.4 Donor	46
5. Factors facilitating or limiting the achievement of results	46
5.1. Monitoring & Evaluation	46
5.2. Results-Based Management	47
5.3. Other factors	48
5.4. Overarching assessment and rating table	48
6. Conclusions, recommendations and lessons learned	51
6.1. Conclusions	51
6.2. Lessons learned	51
6.3. Good practices	54
6.4. Recommendations	54
Annexes	58
Annex A: Terms of Reference for International Evaluator	58
Annex B: Evaluation Matrix	63
Annex C: National Context in Sudan	65
Annex D: Logical Framework	68
Annex E: List of Documentation Reviewed	76
Annex F: List of Stakeholders Engaged	77
Annex G: Primary Data Collection Instruments	79

Acronyms and Abbreviations

ARC	Agricultural Research Corporation
CBS	Central Bureau of Statistics
СТА	Chief Technical Advisor
FA	Farmers Association
FAO	Food and Agricultural Organisation
FFS	Farmers Field Schools
FGD	Focus Group Discussion
GAP	Good Agricultural Practice
GDP	Gross Domestic Product
IEC	International Evaluation Consultant
IMF	International Monetary Fund
IPM	Integrated Pest Management
ISID	Inclusive and sustainable industrial development
KPI	Key Performance Indicator
LFA	Logical Framework Analysis
MFI	Micro Finance Institution
MoA	Ministry of Agriculture
МоН	Ministry of Health
MOV	Means of Verification
MOPER	Ministry of Production and Economic Resources
NPC	National Project Coordinator
NEC	National Evaluation Consultant
OVI	Objectively Verifiable Indicator
РА	Producers Association
PSC	Project Steering Committee
SDAC	Sudanese Accreditation Council
SDG	Sudanese pound
SPS	Sanitary and Phytosanitary
SSI	Semi-structured interviews
SSMO	Sudan Standards and Metrology Organisation
STDF	Standards and Trade Development Facility
TEG	Technical Expert Group
ТОС	Theory of Change
ToR	Terms of Reference
ТоТ	Training of Trainers
UN	United Nations
UNDAF	United Nations' Development Assistance Framework
UNIDO	United Nations Industrial Development Organisation
VC	Value chain

Executive summary Evaluation purpose and methodology

In accordance with the evaluation guidelines of the Standards and Trade Development Facility¹ (STDF) and UNIDO², the evaluation assessed project performance against the revised DAC criteria and critically reflected on the implementation history of the project to draw lessons and good practices for future projects implemented by UNIDO and the project team. The evaluation methodology was participatory and gathered data from project documents as well as interviews with a range of stakeholders to understand project performance and impact from a variety of viewpoints. The methodology allowed local stakeholders voice in the evaluation process and increased the validity of findings by triangulating information from different interest groups. The fieldwork included interviews with 29 stakeholders, 16 conducted online and 13 interviewed in person during the field missions to North Kordofan and Al Qadarif. The field missions included focus group discussions with 13 project beneficiaries. UNIDO shared the draft evaluation report with stakeholders and partners and collected feedback in response to which the evaluation findings and recommendations were revised.

Key Findings

The performance of the project has been satisfactory since the project delivered the planned outputs by the end of the extended project close-out period. The project has been less effective in achieving higher level results, due to a number of external challenges as well as the lack of adequate financial and human resources. The budget was a limiting factor in achieving envisaged results, given the overly ambitious project objectives. The following external factors affected project implementation: political instability and civil unrest, COVID-19 work and travel restrictions, high turnover among government personnel due to the political changes, the worsening macro-economic conditions in Sudan and continued inflation which decreased farmers' ability to implement the GAP and SPS measures recommended by the project, as well as the limited rainfall in 2021.

¹ Standards and Trade Development Facility (2018) Guidelines for the Evaluation of Projects Funded by the Standards and Trade Development Facility. STDF 214 (2018)

² UNIDO Independent Evaluation Division (2018) Evaluation Manual. Vienna, UNIDO.

Summary of Key Findings, Conclusions and Recommendations

		CONCLUSIONS	RECOMMENDATIONS
Project Effectiveness	KEY FINDINGS The project trained 400 farmers and 50 post-harvest handlers in GAP and SPS measures and conducted Training of Trainer (ToT) training for 30 extension officers and lead farmers. The project also trained 11 trainers on the application of ISO 17020 and on conducting inspections ³ . The ToT training was undertaken online by the international consultants due to the COVID-related travel restrictions. The newly trained ToTs then undertook the training of farmers and post- harvest handlers in-person. The project also developed 8 practical guides on GAP for sesame farmers and 2 technical manuals for training facilitators, established 6 Farmers Field Schools, purchased equipment and chemicals for SSMO & built their capacity in expectation of accreditation for aflatoxin testing, reviewed plant health legislation, purchased demonstration sesame cleaning and oil extraction equipment for the two states and conducted an online Business-to-Business event connecting Sudanese producers to overseas buyers.	CONCLUSIONS Primarily, the project used expert input, both national and international, to define appropriate sesame production methods for Sudan to meet international food safety requirements, developed training material (manuals and courses) and trained sesame value chain actors to build capacity in meeting these requirements. The project focused largely on the creation of training manuals, the training of trainers (ToT) and the delivery of training to end users like small farmers, post-harvest handlers, laboratory staff and inspectors. Unfortunately, the effectiveness of the online ToT training, which was undertaken due to COVID related travel restrictions has been questioned. Since the demand for online training is likely to increase due to cost constraints, environmental concerns and health risks, it would make sense to improve the delivery of this online training.	RECOMMENDATIONS UNIDO and FAO should consider the packaging of the ToT training developed for the sesame VC as a more interactive and participatory online training course/s in order to improve its effectiveness and make it readily available to other communities within Sudan as well as other countries with which UNIDO works.
Project Effectiveness	The in-person training at the Farmers Field Schools was reported to be very good. However, the effectiveness of this training in changing production practices was undermined by the fact that many small farmers lacked the financial resources to implement the good agricultural practices taught at the training.	The coordination of work with local microfinance organisations would have allowed the project to connect participants in the training with sources of finance to implement the good practices being promoted. This would have greatly increased the effectiveness of the project.	It is recommended that future projects seeking to improve GAP and SPS compliance within value chains take cognisance of the need to coordinate work with providers of finance to enable the adoption of good practices being taught. The A2F models used by the "Fostering Inclusive Economic Growth in Sudan Kassala State, Proj. No.: 170074" and its successor project, would have important lessons in this regard.
	Stakeholders, including TEG members, voiced dissatisfaction about the machines purchased by the project. Interviews with project staff and stakeholders indicate differences in understanding about the decision-making process that resulted in the purchase of this equipment. The disparate views articulated about how the decision regarding equipment choice was made, indicates that better communication was required in order to improve buy-in and joint decision-making.	These disparate views might be due to the fact that the Technical Expert Group (TEG), which was supposed to meet once or twice a month, met only seven times over the 42- month project timeframe. Project personnel indicated that conducting online TEG meetings after the COVID lockdown had ended was impeded by UNIDO's strict COVID protocols which prevented the gathering of people at the UNIDO office in Khartoum since TEG members often lacked devices. Frequent changes in government and	It is crucial to proactively engage local stakeholders in decision-making, with a clear definition of roles and responsibilities, so as to improve the effectiveness and relevance of interventions and to improve chances of sustaining development gains achieved by the project. Likewise, it is essential that government departments in beneficiary countries honour their commitments to internationally funded projects, regardless of which party or individuals are in control of government or particular departments. Without this commitment, developing countries will see the exit of international

³ Figures communicated by project personnel.

		the leadership of MoA also made it difficult to achieve a quorum in TEG meetings. In addition, the PM indicated that the TEG meetings were also impeded by budgetary constraints and the fact that Sudanese participants expected 'incentive payments' like travel costs for participation. So, communication with the TEG was conducted via email and approval for the purchase of the chosen equipment was obtained from the TEG Chairperson via email.	donors as projects become less effective and less sustainable. Whether UNIDO will cover costs of local stakeholders to participate in meetings, needs to be clarified by the organization and a general practice established. Currently, some projects appear to cover costs while others don't. The evaluators recommend that the policy allows a small payment to cover essential costs like travel or data costs for online meetings, but only if these costs are not already being reimbursed by government.
	The sesame cleaning and oil extraction equipment had only recently arrived in Sudan at the time of the evaluation and was delivered to MOPER in each state. The FAO indicated that they would facilitate discussions between Producers Associations (PAs) and MOPER to agree on the transfer of the machines to the relevant PA. However, stakeholders reported that the machines' size made it most appropriate for demonstration purposes only and that it was best situated in a central location in the state, probably at MOPER.	The ownership, use and management of the equipment was an open question among project implementers & stakeholders at the time of the evaluation field mission, but appears to have been addressed thereafter, according to comments from the Project Manager in response to the evaluation report. These comments have been incorporated into the report at page 26. The FAO depends on training from equipment suppliers to build capacity to use and maintain equipment. This equipment was supplied by a Chinese company whose representatives were unable to get permission to travel to Sudan at the time of delivery.	The Chinese suppliers of the sesame cleaning and oil production equipment agreed to translate the equipment manuals into English, to provide videos on the use and maintenance of the machines and to conduct virtual training sessions. It is essential that the FAO project team facilitates the provision of this virtual training to the relevant local organisations and personnel before the closeout of the project.
	The provision of farmer training through local Farmers Field Schools appears to have been an example of good practice that worked very well on the project. These local schools provided training throughout the sesame production cycle, linked to the current production activity. The ARC also established demonstration fields alongside participant farmers' fields to visually demonstrate the improvement in quality and productivity with the use of GAP.	The Farmers Field Schools, coupled with the demonstration fields established by the ARC, have been a particularly useful, hands-on, immediate, practical and effective manner to provide training to farmers.	
Progress toward Impact: Advancing Economic Competitiveness	The project application submitted to STDF set out a holistic project designed to build the capacity of the Sudanese quality infrastructure, while also building the capacity of producers and post-harvest handlers to meet global quality standards and access higher value global markets. Focusing on only one of these aspects	However, this holistic view was hard to support with the limited project budget secured, since it stretched project resources over a larger number of work areas, sacrificed depth in each area and possibly compromised a more sustained change.	Greater focus, in terms of geographical area or a particular area of focus within the value chain, for example, on capacity building for laboratory testing, or a smaller number of targeted stakeholders along the value chain, might have improved project results, given the limited budget and human resources. The evaluation therefore recommends that future UNIDO

	would have been insufficient to increase sesame export revenues by 25% or to increase the revenue of stakeholders, particularly small farmers, in the sesame- seed value chain. So, the project rightly adopted a wider view and incorporated measures to increase compliance along the value chain, as well as demonstrate compliance through better testing and certification capacity.		projects properly reconsider project objectives, together with local stakeholders and the project funders, if the budget sourced falls short of that needed for all project activities. The Project Managers should record any changes to the project and should revise the logframe so that it continues to be a useful tool that directs implementation and project M&E.
Broader Adoption: Mainstreaming	The international experts contracted by UNIDO and ARC worked together to develop training programmes and illustrated manuals that were then used to jointly train extension workers from MOPER and lead farmers, so that these trainers could then use the training material to train sesame farmers and post-harvest handlers within the Farmers Field Schools	This implementation modality used international expertise and the knowledge of local research organisations to develop the capabilities of the local service delivery organisations tasked with supporting farmers. It therefore represents good practice in mainstreaming the good agricultural practices defined by the project. The illustrated training manuals have been reported to be very useful and accessible to farmers and should be more widely disseminated.	The illustrated guides and training manuals that have been developed by the programme are reportedly user- friendly and very useful for sesame producers and post-harvest handlers. It is therefore recommended that this training material be shared more widely within Sudan, with other organisations and other states that might find it useful. It is suggested that each partner organisation disseminate soft copies of the material to other projects within their respective organisations as well as and sister organisations with whom they cooperate.
Broader Adoption: Scaling Up	The stakeholder engagements indicate that Sudanese organisations have found value in the services delivered by the project, especially in the training courses and manuals developed by the project partners. Stakeholders indicated that the capacity building, especially for farmers, was good and that they would like to extend the training to others. However, these organisations also indicated that their budgets are currently severely constrained, so they are unlikely to be able to scale up the services offered by the project.	While the project proactively trained extension officers, ARC staff and lead farmers to act as trainers themselves, there is no agreement on how these trainers will roll out this training. The costs of the newly trained local trainers in conducting the training for farmers and post-harvest handlers was covered by the project budget, including travel and daily subsistence costs. It appears unlikely that these trainers will scale up training initiatives to farmers in the absence of dedicated project budgets to cover these costs.	UNIDO, along with its network of donor partners, will therefore be integral in sourcing the funding needed to scale up project activities within AI Qadarif and North Kordofan, as well as other sesame producing areas in Sudan. The evaluation recommends that the UNIDO project team, FAO and national partners develop a plan on how the training will be rolled out, with designated responsibilities for implementation, as well as a list of potential donors to be approached for funding.
Design	The project design took a holistic view by addressing the whole value chain, in addition to improving the quality testing and management system. This holistic view is correct if one has the resources to address all relevant aspects of the production and quality infrastructure. However, with a very small implementation project budget of USD904,989.00 and a highly inflationary context, the project did not have the necessary	Engagement with stakeholders indicates that the project was too ambitious in its scope and that it might have been more effective to undertake the work needed within the value chain through a step by step approach. This would have required a prioritisation of activities in order to determine what aspect to address in this project, within the available budget.	Greater focus might have improved project results given the limited budget and human resources available. The evaluation therefore recommends that future UNIDO projects properly reconsider project objectives, together with local stakeholders and the project funders, if the budget sourced falls short of that needed for all project activities. The Project Managers should record any changes to the project and should revise the logframe so that it continues to be a useful tool that

	financial resources at its disposal. The budget constraints were recognised at project initiation and UNIDO sought additional funding from other donors ⁴ . Local stakeholders also flagged the need to focus the project more narrowly, but UNIDO indicated that they would seek further funding for the entire suite of project activities. However, additional funding was not forthcoming and it appears like the project design was not modified enough in response to the reduced budget available.		directs implementation and project M&E.
Relevance	The project's rural focus was relevant to the needs of the country since poverty rates are higher here (58%) compared to 47% in Sudan generally. In line with UNIDO's mandate, the project contributed to inclusive economic growth by focusing on small farmers who use traditional rainfed farming methods. Sesame is the most important cash crop and the largest agricultural export from Sudan, while Al Qadarif and Kordofan are two of the most important production areas for sesame within Sudan. The project promoted STDF's goal of increasing developing countries' capacity to meet SPS requirements and safely trade agricultural goods on the global market, as well as FAO's mandate to improve household incomes and food security for poor farming households.	The project rightly focused on improving the quality of a crop that is already well established, widely grown and familiar to farmers in Sudan. It also focused on that part of the production base, small farmers, that are most in need, increasing the potential for social returns from the project. Moreover, given the rural nature of the two states, their dependence on agriculture and their history in sesame production, the project was highly relevant to the needs and potential of the local areas. The project aligns well Sudan's development priorities: increasing trade, diversifying exports and decreasing poverty through inclusive economic growth.	
Efficiency	The project context posed a number of challenges that impeded project efficiency: two political revolutions and related uncertainty, runaway inflation rates, COVID-related restrictions and limited capacity and high staff turnover within local partner organisations. The many implementation challenges resulted in a request for a six-month extension of the project until 31 March 2022 in order to complete project activities.	The evaluation team deems project efficiency to have been satisfactory, since targets for project outputs were largely met within the extended project period.	

 $^{^4}$ STDF Project Inception Report for the period 1 April to 31 June 2019

Sustainability	The project made a start in the process of improving quality within the sesame value chain and increasing exports into high value markets, however success will depend on continued work by a host of national organisations. Although MOPER in North Kardofan indicated an intention to take forward the project work, this commitment appears to reflect the interest and capacity of this organisation, rather than being the result of a structured and leliberate dialogue between the project and local organisations regarding sustainability and the continuation of project work/benefits.	The evaluators understand that the project had to contend with serious challenges that impeded implementation, indicating a greater need for good sustainability planning to ensure that project benefits are carried forward into the future. Project personnel advised that sustainability formed part of the project implementation strategy, however, high turnover and non-functioning local organisations due to political instability made effective and efficient engagement difficult and impeded sustainability planning.	Effective sustainability planning is essential for all projects and programmes and is made even more essential by a difficult implementation context, such as the one prevailing in Sudan. This sustainability planning should be spearheaded by the UNIDO Project Manager, should focus on mechanisms and options for the continuation of project benefits and should be integrated into the whole project life cycle. The Project Manager should incorporate this issue into the dialogue with local implementing organisations right from the outset of the project. These sustainability strategies should be agreed as early as possible, be monitored during implementation and revised as necessary.
Gender Mainstreaming	Outcome 1: On average, 32% of the farmers trained by the project in both states were women. Outcome 2 Output 2.1: On average, 38% of the government workers trained across both activities in Output 2.1 were women. Output 2.2 & 2.3: 70% of the beneficiaries who participated in the SPS and the laboratory capacity development work were women. Output 2.4: 38% of the entrepreneurs who participated in the B2B event and coaching were women.	While the project has met the target for female participation, the target itself was rather low at 30%. Overall, there does not appear to have been an aggressive effort to target women farmers or enterprise owners to participate in the capacity building activities of the project, while the gender participation in those activities focused on government capacity building reflected the rates of gender transformation already achieved in said organisations.	UNIDO projects should set ambitious targets for women's participation, based on the reality within the sector. If women make up the majority of sesame farmers in Sudan, as indicated in the project documents, and capacity building projects don't reflect this reality on their beneficiary lists, then male sesame farmers are advantaged and might displace women's participation in the sector over time. UNIDO Project Managers and implementing partners should unpack the reasons that inhibit the participation of women within projects in a sector and address these issues appropriately. For example, if conservatism and patriarchal attitudes make it difficult for women farmers to mix with male farmers & trainers in the Farmers Field Schools, then specific training courses for female farmers with female extension officers as trainers should be considered.
Partnerships: UNIDO	Outcome 2 activities were delayed in both Al Qadarif and North Kordofan since the transfer of funds from UNIDO to MOPER was delayed because MOPER was unable to meet administrative requirements. The project relied on a National Project Coordinator (NPC) in Khartoum to follow up on project implementation activities with local organisations and service providers in Khartoum, North Kordofan and Al Qadarif. The NPC undertook only one mission to Al Qadarif and one to North Kordofan due to UNIDO travel protocols that limited travel during the COVID-19 pandemic	Implementation of Outcome 2 was complicated by the fact that UNIDO had a limited presence 'on the ground' in the two states to manage, coordinate and oversee implementation. In light of budget constraints and their skills in agricultural activities, UNIDO established a partnership with FAO and relied on them for this local assistance. More 'hands-on' management from UNIDO at state-level might have assisted in addressing the challenges to project implementation posed by the COVID-19 pandemic and the political unrest in Sudan as travel restrictions and security concerns affected	Given the possibility of capacity challenges within local organisations, UNIDO should undertake adequate follow up, monitoring and support of implementation activities at field level to ensure that activities 'outsourced' to these organisations are properly and timeously implemented and that they are able to meet the reporting and administrative requirements of UNIDO's systems. UNIDO Project Managers should assemble sufficient human resources in-country and close to the project implementation site in order to ensure effective, hands-on implementation. On this project, the COVID pandemic and political unrest intensified the need for such human

	to 'essential travel only'. International travel restrictions also prevented the international experts and the Vienna-based project personnel from visiting the project area.	international and inter-state travel rather than travel within local areas.	resources since the movement of international project people and Khartoum-based staff was prohibited at different times. However, the evaluation team is aware that securing additional human resources on this project was limited by budget constraints. This recommendation therefore serves as a lesson for future projects.
Monitoring & Evaluation	The evaluation team sent a number of questions of clarity regarding targets achieved to the project team since the six- monthly monitoring reports reflected only on achievements for each six-month time period and it was unclear whether figures were sometimes repeated. The length of time taken to respond to these queries and the incomplete nature of the responses suggest that the monitoring system established was not effective in monitoring and tracking project performance. A presentation by FAO to the evaluation team reflected some production data from 2019- 2021 for some farmers trained by the project. UNIDO's TOR to MOPER also asked that they track the production data of the farmers to be trained, but capacity limitations within MOPER meant that this was not done.	There appears to have been a mindfulness about tracking the outcomes of the training and FAO might have established a monitoring system that tracked outcomes data. However, this information was not forthcoming and the length of time taken to respond to queries from the evaluation team and the incomplete nature of these responses suggest that the monitoring system established was not effective in monitoring and tracking project performance.	UNIDO IED should consider producing simple Excel-based monitoring tools that can be easily adapted for use by each project. This tool should be offered as an illustration of the kind of tool required to monitor and track project outputs and outcomes. This example can then be adapted to the needs of projects by each project team, who can increase the complexity of their own tool according to their project needs and the team's capabilities.

Project ratings

	Evaluation criteria	<u>Mandatory</u> <u>rating</u>
A	Impact: Likely positive & negative, primary and secondary long-term effects produced by the development intervention, directly or indirectly, intended or unintended, including redirecting trajectories of transformational process and the extent to which conditions for trajectory change are being put in place.	4
В	Project design	4
1	Overall design: Assessment of the design in general	5
2	Project Logframe: Assessment of Logical Framework	4
С	Project Performance	4
1	Relevance: Extent to which the project suited the priorities and policies of the target group, recipient and donor.	6
2	Effectiveness: Extent to which objectives were achieved.	4
3	Efficiency: A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.	5
4	Sustainability of benefits: The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.	4
D	Cross-cutting performance criteria	4
1	Gender mainstreaming: The extent to which the intervention has contributed to better gender equality and gender related dimensions were considered in an intervention.	4
2	 M&E: Refers to all the indicators, tools and processes used to measure if a development intervention has been implemented according to the plan (monitoring) and is having the desired result (evaluation). M&E design M&E implementation 	4
	Environment and socio-economic aspects	4
3	Results-based management (RBM): Assessment of issues related to results-based work planning, results-based M&E and reporting based on results.	4
E	Performance of partners: Assessment of the contribution of partners to project design, implementation, monitoring & reporting, supervision and backstopping and evaluation. The performance of each partner will be assessed individually, based on its expected role and responsibilities in the project life cycle.	
1	UNIDO	4
2	FAO	5
3	National counterparts	4
F	Overall assessment: Overarching assessment of the project, drawing upon the analysis made under the Project Performance and Progress to Impact Criteria above, but not an average of ratings.	5

1. Introduction

1.1. Evaluation objectives and scope

The objectives of this terminal evaluation are twofold:

- (i) To undertake an independent assessment of the performance of the project against the objectives and outcomes set out in the logframe in order to establish whether the project was relevant, coherent, effective, efficient, sustainable and whether progress towards impact is observable; and
- (ii) To assist UNIDO and other project partners to improve the design and performance of future development programmes by reflecting on the learnings and recommendations that arise from the findings of the evaluation.

The key evaluation questions that guided this evaluation are as follows:

- (i) To what extent have the expected results been achieved or are likely to be achieved? How well has the project performed? What are the project's key results?
- (ii) Has the project done the right things? Has the project done things right, with good value for money? To what extent is the project suitable to the needs of the beneficiaries and the policies and priorities of Sudan and the donor. To what extent has the project incorporated gender issues? To what extent has the project management utilized good M&E systems/practices and Results Based Management??
- (iii) To what extent has the project helped put in place the conditions to address the key drivers, overcome barriers and contribute to the long-term objectives?
- (iv) To what extent will the achieved results be sustained after the completion of the project? To what extent have local stakeholders taken ownership and responsibility for the continuation of project activities.
- (v) What lessons can be drawn from the successful and unsuccessful practices in designing, implementing and managing the project?

These questions provided a framework for the evaluation, which focused on gathering the necessary data to answer these questions critically. The Terms of Reference for the

International Evaluator, which shaped this evaluation is included as Annex A, while the Evaluation Matrix is attached as Annex B to this report.

1.2. Overview of the Project Context

Sudan has been facing macro-economic challenges since the secession of South Sudan in 2011, with the consequent loss of three-quarters of its oil output, the halving of its fiscal revenues and the decrease of its export earnings by two thirds. Economic conditions have deteriorated further since 2017, following a sharp devaluation of the local currency as the demand for imports increased with the removal of international sanctions on the country. This led to high inflation rates as the prices of imported goods surged, sparking widespread protests. These protests culminated in the ousting of the president, Omar Al-Bashir, and the establishing of a transitional government, jointly managed by the military forces and the civilian government, to govern until the general elections scheduled for late 2022.

According to the Central Bureau of Statistics (CBS), the country's gross domestic product (GDP) amounted to approximately SDG 4 066 billion in 2020. The International Monetary Fund (IMF) estimates that GDP decreased for the third consecutive year and at a steeper rate (8.5 percent) in 2020, reflecting reduced investment and large deficits due to reduced economic activities related to the COVID-19 pandemic. The export of crude oil decreased by more than 60 percent compared to 2019 as international demand slumped.

On a positive note, the volume of agricultural exports increased by 15 percent in the January-September 2020 period compared to the same period in 2019. The IMF estimates that the agricultural sector contributed about 20 percent of the GDP in 2020, while contributions of the industrial and service sectors were 23 and 57 percent, respectively. Within the agricultural sector, livestock sector made the biggest contribution to GDP (approximately 65 percent), followed by staple and cash crops (around 33 percent), while the contribution of forestry and fishing was marginal. Total revenue from the export of sesame and groundnut, which generated the highest export earnings, are estimated at USD 855 million between January and September 2020, about 32 percent higher than in the same period in 2019. The increase in exports of these crops is due to strong international demand, especially from China, and the above-average production in 2019. The country was the most important supplier of sesame and the second largest supplier of groundnuts to China in 2020.

Unfortunately, the average annual inflation rate, estimated at 50 percent in 2019, continued to escalate, increasing at an even steeper rate in 2020, reaching 250% in November 2020 and rising to 422% in October 2021. According to the CBS, prices in the food and beverage as well as the transport sectors increased most sharply, reflecting higher costs of imported inputs, including fuel. These inflationary pressures have continued to erode the purchasing power of

both urban consumers and farmers, significantly constraining their access to food and agricultural inputs.

Sudan suffered another military coup in October 2021. Even though power was restored to the transitional government in November 2021, widespread political unrest has continued as the public protest the ongoing involvement of the military in the governing of the country. These political developments have once again pummelled the country's economic performance, with exports plummeting more than 85% in January 2022 according to the Central Bank, and the currency sliding on the black market. Please refer to Annex C for a more detailed reflection on the context in Sudan during the project implementation period.

1.3. Overview of the Project

This project was funded by the Standards and Trade Development Facility (STDF) and jointly implemented by the United Nations Industrial Development Organisation (UNIDO) and the Food and Agricultural Organisation (FAO). The project sought to increase the revenue of stakeholders, particularly small farmers, along the sesame-seed value chain by enhancing the competitiveness of their product on the global market. To do this, the project focused on improving the quality of sesame production in Sudan by promoting good agricultural practices (GAP), food safety and sanitary and phytosanitary (SPS) measures along the value chain in order to enhance access to higher value international markets. Sudan has the largest land area devoted to the production of sesame in the world, with 2.53 million hectares under sesame in 2014. However, it's low productivity levels in the sector means that it is only the fourth largest producer in terms of volume, with around 410,000 tons produced in 2014. In comparison, the largest global producer, Myanmar, produced 890,000 tons of sesame from only 1.14 million hectares in the same year. Sudan's sizeable sesame output is mostly sold into lower value markets in China and the Arab countries⁵.

To increase export revenues and access higher value markets in Japan and the European Union, Sudan must adhere to the relevant food safety and SPS measures and must be able to demonstrate compliance through traceability and accreditation systems. The project therefore focused on two outcome areas: (1) increasing the capacity of small-scale sesame farmers to understand and use good agricultural practices, and (2) increasing compliance with SPS measures and international food safety standards throughout the value chain. As part of outcome 2, the project also strove to improve Sudan's laboratory testing, inspection and certification capacity.

⁵ STDF Project Grant Application Form (July 2017). Upgrading the Sudanese Sesame Seeds Value, Republic of the Sudan

The project was jointly implemented by two agencies from the United Nations family, the Food and Agricultural Organisation (FAO), which focused on developing farmers' capacity to use GAP (Outcome 1) and the United Nations Industrial Development Organisation (UNIDO), which focused on implementing Outcome 2 with post-harvest stakeholders and regulatory authorities. The project was implemented in two states, North Kordofan and Al Qadarif. In order to deliver services to farmers and post-harvest handlers within these states, the FAO & UNIDO adopted a Training of Trainers (ToT) approach, developing training programmes together with the Agricultural Research Centre (ARC) and then training the extension officers from the state Ministries of Production and Economic Resources (MOPER), together with selected lead farmers, to deliver the training to farmers and post-harvest handlers at Farmers Field Schools within the three localities chosen in each state. The ARC adopted a practical, participatory technology development approach and demonstrated the impact on production of using the new methods being advocated in the training. In the paraphrased words of a respondent from ARC:

"We established a farmer's field of two feddans to demonstrate the training activities to the farmers. We examined traditional seeds and improved seeds to know the differences between the two types, provided training for farmers on how to protect your product from insects and how to use allowed pesticides. In the other field we asked some farmers to cultivate using their normal practices. This was practical training to allow the farmers to differentiate between the two types of the cultivation methodologies" (Interview 2).

As part of Outcome 1, the FAO also purchased two machines for each state: a sesame oil extraction machine and a sesame cleaning machine in order to demonstrate how to add value to production activities in each area.

The training on quality and hygiene measures for fifty post-harvest handlers within the two states was based on a series of eight pictorial guides developed by UNIDO (lead) and FAO to illustrate good practices within the sesame value chain in an easily accessible format. In collaboration with the state governments in the two states, the project trained 400 farmers and 50 post-harvest handlers. In addition, UNIDO conducted a number of workshops with Khartoum-based organisations to build national capacity on SPS measures, including the training of 11 trainers from the Ministry of Agriculture (MoA), Ministry of Health (MoH) and the Sudanese Standards and Metrology Organisation (SSMO) on ISO 17020, which will allow these trainers to train the inspectors tasked with inspecting the operations of entities within the sesame value chain

UNIDO also assisted SSMO to purchase new equipment and chemicals to undertake aflatoxin testing. Project personnel indicated that this equipment was delivered in May 2021, when UNIDO was informed by SSMO that a new HPLC system had been purchased to replace their old one, but financial clearance was pending with the vendor. SSMO was therefore not able

to utilise the new equipment until February 2022, which did not allow enough time to secure accreditation for SSMO to test for this parameter. However, UNIDO has assisted the organisation to prepare a validation plan to secure this accreditation in the future. UNIDO has also undertaken training sessions for nine officials from MoA, MoH, SSMO and the Sudanese Accreditation Council (SDAC) on ISO 17025, the standard for organisations that undertake testing, sampling or calibration. In addition, UNIDO developed a concept document for an Export Control System and a paper-based traceability system as well as organising a virtual Business to Business (B2B) event putting 24 Sudanese sesame companies in contact with 27 buyers from Japan, South Korea, China, Europe and Middle East. Upon request from the plant health authority, UNIDO also conducted a review of the plant health legislation in Sudan.

1.4. Theory of Change

This project was designed using the logical framework analysis (LFA) approach, which also forms the basis of the monitoring and evaluation for the project and the results-based management of the project according to UNIDO's procedures. The logframe matrix, extracted from the Project Inception Report, is included in Annex D.

A reflection on this matrix shows that it is an unusually long matrix of seven pages, rather than the maximum of two pages that is usually recommended⁶, making it a rather unwieldy logframe to use. Further reflection shows that the length is due to the fact that the lower 'Activities' level of the logframe is set out in great detail. This is not a problem in itself and might reflect a detailed understanding of the work to be undertaken in addressing the fairly standard and technical activities involved in SPS and food testing systems. However, further reflection shows that the higher 'Outcomes' and 'Objectives' levels of the matrix, is not adequately considered. This is especially evident in the objectively verifiable indicators (OVIs) and the means of verification (MOVs) linked to the upper levels of the logframe. Please refer to Table 1 below which reflects an excerpt from the logframe.

Table 1: Excerpt from Project Logframe	able 1	1: Excerpt	from	Project	Logframe
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	Description	Measurable indicators/targets	Sources and means of verification	Assumptions
Goal	To increase revenue of stakeholders, in particular small farmers, along the sesame-seed value chain by enhancing the competitiveness of their product	Increase of gross income (including labour costs) of 20% at the level of the small-farmer household	National incomes survey Central Bureau of Statistics	Increase in quality is accompanied by an increase in productivity, supported by the extension services and implemented by farmers

⁶ The Monitoring and Evaluation Toolkit; <u>www.thetoolkit.me</u>

Immediate objective	on the global market. Increase export revenues through compliance with food safety and SPS measures along the sesame- seed sector value chain in Sudan.	 a) Export revenues increase by 25% by accessing premium markets b) 50% decrease in rejections in export markets 	Export statistics National Bank of Sudan EU RASFF Ministry of Health, Labour and Welfare (Japan)	Climate change does not impact negatively on productivity of the sesame sector International demand not undermined by economic shocks in main markets
Expected results	1. Farmers in two target states apply GAP successfully. 2. Testing, certification and inspection procedures related to sesame VC strengthened, with additional capacity for internationally recognised testing of all quality and safety parameters required by export markets.	At least 200 farmers in target states improve their awareness and understanding on the importance of implementing GAP and practices to comply with SPS measures to increase their yields and revenue. Testing, certification and inspection gaps identified Increase in No. of test parameters offered	Reports from extension services MOAF, SSMO and MoH laboratory reports Testing, certification and inspection gap assessment report Laboratory test services offered on laboratory website or brochures	MOAF provides the necessary resources for extension services to provide guidance in the field Testing, certification and inspection improvement plan agreed by beneficiary and implemented

Source: STDF Project Inception Report for Upgrading the Sudanese Sesame seeds value chain Project (SAP ID: 160177)

According to the logframe, the overall objective/goal of the project is, "To increase revenue of stakeholders, in particular small farmers, along the sesame-seed value chain by enhancing the competitiveness of their product on the global market". Success in this goal is to be measured by an increase in gross income, and the target set is "Increase of gross income (including labour costs) of 20% at the level of the small-farmer household". While this is a reasonable way to measure the success of the 200 participating farmers and 50 post-harvest handlers, the source of this data is indicated as the "National incomes survey (by) Central Bureau of Statistics". So, rather than measure the increase in income for the participating small farmer households through a household survey, the project expected to see an overall increase of 20% in the household income of all small farmer households in Sudan.

The situation is similar at the level of the specific/immediate objective of the project, which is defined as "An increase in export revenues through compliance with food safety and SPS

measures along the sesame-seed sector value chain in Sudan". The associated KPI and target is indicated as "Export revenues increase by 25% by accessing premium markets" and "50% decrease in rejections in export markets", with the Means of Verification listed as "Export statistics - National Bank of Sudan, EU RASFF, Ministry of Health, Labour and Welfare (Japan)". Once again, the listed source of information implies that a 25% increase in overall export revenue is expected at national level from the sesame sector as a result of this project. It is patently unrealistic to expect this kind of impact from a project of this small magnitude. Nonetheless, even if such an increase in export revenue and small farmer income was noted in these national surveys and statistics, one would not be able to realistically claim that this small project had made a significant contribution to these outcomes. For this reason, it would have been most appropriate if the KPI was verified through a means of verification more directly linked to the project, in terms of surveys of participating households and enterprises.

Figure 1, on the next page, reflects the reconstructed theory of change (TOC), based on the overall project logframe and includes information from the activity and output levels of the logframe. Essentially, the TOC underlying the project design indicates that if farmers are assisted to organise and are given effective training in GAP and SPS measures and are supported by capacitated extension officers during the production cycle, they will be able to improve the quality of the sesame grown. Similarly, good training offered to post-harvest handlers is expected to lead to better SPS measures implemented throughout the value chain, while capacity building (in terms of training, equipment and certified processes) within the laboratories and regulatory organisations is expected to offer credible proof of compliance to international buyers who would then be willing to buy the improved, high quality sesame from Sudan at higher prices.

This theory of change is based on a number of assumptions, only some of which are reflected in the logframe. One of the most important assumptions that was not articulated is the assumption that the training would convince farmers and post-harvest handlers to invest money in the adopting of GAP & abiding by good SPS measures. Unfortunately, many of the farmers in the focus group discussions indicated that they could not afford to buy the improved seeds and meet other GAP measures, while the Quality Control and Export Development Unit from MoA indicated that warehouse owners/managers were resistant to change and would have to be persuaded to change practices in order to meet SPS measures. Moreover, the TOC assumes that the relevant government departments would have the necessary budgets and stability within their staffing structures to commit to ongoing support of the sesame VC beneficiaries. If these assumptions are not met, the delivery of the project outputs will not translate into the outcomes sought by the project.

Figure 1: Reconstructed Theory of Change



Assumptions

Farmers & other VC actors are willing to adopt good practice & SPS measures; Small farmers have resources available to implement GAP. Farmers have resources and infrastructure to invest in improving productivity; Government provides the necessary resources for extension services to support farmers in the field; Testing, certification and inspection improvement plans agreed to and implemented by government organisations; Political and security situation in Sudan remains stable.

1.5. Evaluation Methodology

In accordance with the evaluation guidelines of the Standards and Trade Development Facility⁷ (STDF) and UNIDO⁸, the evaluation assessed project performance against the revised DAC criteria and critically reflected on the implementation history of the project to draw lessons and good practices for future projects implemented by UNIDO and the project team. The methodology for the evaluation was participatory and qualitative in nature, attempting to develop an in-depth understanding of the manner in which the project was implemented and the manner in which different project stakeholders experienced the project. It attempted to gather perspectives and insights from a range of different partners and beneficiaries in order to understand project performance and impact from a variety of viewpoints. The participatory and inclusive methodology was chosen to ensure that local viewpoints are captured and to allow local stakeholders voice and agency in the process of the evaluation, thereby increasing local ownership and the evaluation's legitimacy. The methodology also increases the validity of evaluation findings by giving voice to a multiplicity of views and by triangulating information from different interest groups. However, in response to various drafts of the evaluation report, the project staff have indicated that they believe that the evaluation process relied too heavily on the views and voice of stakeholders, as evidenced in the use of direct quotations from interviews to support the findings of the evaluation. The project staff indicated that they believe that there has been a general lack of objectivity by the evaluator and a lack of verification of the findings.

The evaluators began the process with an analysis of project documents from the project's information management system in order to develop an understanding of programme design, activities and outputs. Please see a list of documents reviewed in Annex E. This analysis allowed the evaluator to identify the issues to be explored during the evaluation process. The findings from the document analysis process were then verified and triangulated with data collected through semi-structured interviews and focus group discussions held in field and virtually. A stakeholder mapping process was undertaken and guided the sampling of respondents engaged by the evaluators. The fieldwork included interviews with 29 stakeholders, 16 of whom were interviewed online through the Zoom platform. The remaining 13 stakeholders were interviewed in person during the field missions to North Kordofan and Al Qadarif. The field missions also included focus group discussions with 39 beneficiary farmers & MSMEs. Focus group discussions with 13 project beneficiaries were also conducted during the field missions. The list of stakeholders engaged is included as Annex F.

The semi-structured interviews were loosely structured around pre-identified areas so as to understand the experience of project stakeholders. This data collection method allowed the

⁷ Standards and Trade Development Facility (2018) Guidelines for the Evaluation of Projects Funded by the Standards and Trade Development Facility. STDF 214 (2018)

⁸ UNIDO Independent Evaluation Division (2018) Evaluation Manual. Vienna, UNIDO.

evaluators to probe answers and develop a deeper understanding of the project than would have been possible through structured questionnaires. Interesting issues and avenues of information could be followed up by the evaluators as they arose from stakeholder input. The focus group discussions with beneficiaries were structured in a similar manner around broad areas of enquiry. The schedule of questions that guided the focus group discussions and the semi-structured interviews are attached in Annex G.

1.6. Limitations of the Evaluation

The international evaluation consultant (IEC) could not participate in the field missions in Sudan due to the restrictions arising from the COVID-19 pandemic. The field missions to Al Qadarif and North Kordofan were therefore undertaken by the national evaluation consultant (NEC) alone, while the virtual interviews with national stakeholders based in Khartoum and with international project 'staff' were led by the international evaluator. Although the NEC conducted daily debriefings on the day's engagements with the IEC and later wrote up his interview notes as responses to questions for each engagement, data losses were discernible from the quality of the responses submitted. This issue will have to be more closely managed in future evaluations constrained by COVID-19.

The evaluation planning phase anticipated this type of data loss and therefore attempted to enable the virtual participation of the international consultant in engagements with stakeholders whenever allowed by the availability of reliable internet access. The interviews with stakeholders based in Khartoum were therefore undertaken online by the two evaluators, while the field mission undertaken by the national evaluator focused on site visits and interviews with stakeholders based in Al Qadarif and North Kordofan. It is a shortcoming of the evaluation that the national evaluator consequently did not undertake a site visit to the Sudan Standards and Metrology Organisation (SSMO) laboratory in Khartoum.

It should be noted that the project staff have indicated that they believe that the evaluation process relied too heavily on the views and voice of stakeholders, as evidenced in the use of direct quotations from interviews to support the findings of the evaluation. The project staff therefore indicated that they believe that there has been a general lack of objectivity by the evaluator and a lack of verification of the findings.

Contribution to Development Results - Effectiveness and Impact Achieved results and overall effectiveness

- 1. Information from the six-monthly project reports and the project team indicates that the project delivered all planned outputs by the end of the project close-out period. Primarily, the project used expert input, both national and international, to define appropriate sesame production methods to be used in Sudan to meet international food safety requirements, developed training material (manuals and courses) and undertook the training of sesame value chain actors to build capacity in meeting these requirements. The project trained 400 farmers and 50 post-harvest sesame handlers in good agricultural practices and SPS measures, as well as conducting Training of Trainers (ToT) training for 30 extension officers and lead farmers who can continue to train other farmers in these measures. The project also trained 11 trainers on the application of ISO 17020 and on conducting inspections⁹. The project also developed 8 practical guides on GAP for sesame farmers and 2 technical manuals for facilitators, established 6 Farmers Field Schools, purchased equipment and chemicals for SSMO & built their capacity in expectation of accreditation for aflatoxin testing, reviewed plant health legislation, purchased demonstration sesame cleaning and oil extraction equipment for the two states and conducted an online Business-to-Business event connecting Sudanese producers to overseas buyers.
- 2. The project secured international experts to work with Sudan's Agricultural Research Corporation to devise appropriate agricultural methods and develop training material to build capacity on these methods. These experts then trained local stakeholders (agricultural extension officers, lead farmers and government personnel) to act as trainers in rolling out the training to sesame value chain actors. The evaluation commends the project team for choosing the Training of Trainers methodology (ToT) and building the capacity of service delivery organisations within Sudan so that they are able to continue the process of training and capacity building within the local value chain beyond the life of the project.
- 3. Given the international travel restrictions due to COVID-19, the ToT training was undertaken online by the international experts, together with in-person input from the experts in ARC. The extension officers and lead farmers then undertook the training of farmers and post-harvest handlers in-person at the Farmers Field Schools within the six local areas targeted by the project within North Kordofan and Al Qadarif. The project therefore focused largely on capacity building: the creation of training

⁹ Figures e-mailed by UNIDO Project Associate in a file named, "NTP_National Training Programme" on 1st June 2022, in response to questions of clarification from the evaluation team.

manuals mentioned, the training of trainers (ToT) and the delivery of training to end users like the small farmers, post-harvest handlers, laboratory staff and inspectors. Unfortunately, the effectiveness of the online training has been called into question by some stakeholders. In the words of one of these stakeholders:

"We received training in ISO 17025 and ISO 17020 in addition to the ToT training. The training courses were online and that affected our communication with the facilitators and was not effective. The duration was only three days per training which is not sufficient to complete all the sessions effectively. The online training was not as effective as direct (in-person) presentation from the facilitators" (Interview 7).

It should be noted that the MoA reported that they had written to UNIDO in 2019 in order to indicate that the training then being offered by UNIDO was insufficient. UNIDO responded positively to this feedback and increased the length of the training. Unfortunately, the subsequent pandemic mean that the training moved online, negatively affecting the training experience. The NPC reported that the international experts have attempted to incorporate more interaction into the online training sessions, using brainstorming techniques, practical work, homework between sessions and follow-up workshops in an attempt to get online trainees to engage more actively with the learning experience. However, it appears that there exists a need for more rigorous evaluation of the online training experience and input from experts in online training in order to improve the effectiveness of this training modality. This is likely to become more important in the future as the demand for cost-effective training solutions increases and the impact of air travel on climate change drives digital uptake in this sphere, along with health-related restrictions on international travel.

4. While the in-person training at the Farmers Field Schools was reported to be very good, the effectiveness of this training in changing production practices was undermined by the fact that many small farmers' lacked the financial resources to implement the good agricultural practices taught at the training. In the words of one stakeholder,

"I was satisfied to find farmers in far areas speaking the new language of GAP, about what they were supposed to do during harvest, how they should use pesticides ... But they need financial support, for example for machines for the pesticides. I met a number of farmers who have knowledge now but need money to implement" (Interview 13).

This issue is discussed more fully in section 2.2.1. Given their lack of financial resources, many beneficiaries called for the provision of agricultural inputs, improved seeds and equipment in order to enable them to adopt good practices. Since the

project budget was limited, this was clearly not possible as part of the project. However, the coordination of work with local microfinance organisations would have allowed the project to connect participants in the training with sources of finance to implement the good practices being promoted. This would have greatly increased the effectiveness of the project.

5. Interviews indicate dissatisfaction among stakeholders, including TEG members, regarding the type of equipment purchased for beneficiary organisations through project funds. The FAO reported that the choice of machines was based on the technical advice of UNIDO and the Technical Expert Group (TEG), while UNIDO indicated that the TEG made the choice based on advice from the international experts and that the TEG Chairperson signed off on the machine to be purchased. This issue regarding choice of equipment indicates a need for greater coordination and joint decision-making among project partners in order to promote buy-in. The differences in understanding might be due to the fact that the TEG did not meet often enough. It was supposed to meet once or twice a month depending on the intensity of project work, but met only seven times over the 42-month project timeframe, on 4 August 2019, 25 August 2019, 16 October 2019, 28 November 2019, 9 January 2020, 10 February 2020 and 17 December 2020. The establishment of the TEG was delayed, with the first meeting taking place in August 2019, ten months after the project started. Thereafter, the TEG met six times within seven months before the onset of the COVID-19 pandemic. After the lockdown ended, the TEG met only once, in December 2020. The project manager indicated that the TEG meetings were not carried out as envisaged due to UNIDO's strict COVID protocols which allowed only for essential meetings, as well as budgetary constraints since Sudanese participants expected 'incentive payments' like travel costs for participation. It was also difficult to achieve a quorum for TEG meetings since government instability meant that the government personnel changed often. Communication with the TEG was therefore conducted via email.

At the time of the evaluation, the second issue of concern regarding the equipment purchased, related to its 'ownership' and management into the future. The FAO reported that the equipment had only recently arrived in Sudan and been handed over to MOPER in each of the two states, in accordance with FAO procedures. However, in response to the Draft Evaluation Report, the Project Manager reported that in Al Qadarif, MOPER handed over the equipment to farmers groups, having arranged that the equipment will be installed at the Women's Training Centre in Kasab town in the West Galabat locality. The Project Manager indicated that the location was selected because the building is relatively new and secure, close to a paved road, and has permanent electricity supply. In addition, the location is accessible to around 20 active producers associations and women's cooperatives, that can benefit from the equipment. Moreover, the Ministry committed to providing a professional mechanical engineer for the installation of the machine, appointing permanent security guards, and providing a permanent operator for the machines. The Project Manager reported that fee collection, operation and maintenance will be fully managed by the farmers group. In North Kordofan, due to lack of electricity in rural areas, the farmers asked that the equipment be installed at MOPER's premises in El Obied. A joint committee between farmers and the Ministry has been established to oversee the operation and maintenance of the equipment. Farmers targeted by the project will be provided priority use of the equipment before other farmers are serviced.

Discussions with the FAO indicated that they do not consider it necessary to themselves build the capacity of the PAs that take ownership of the machinery to manage, use and maintain the equipment. Instead, the FAO depends on the training provided by the equipment suppliers. This equipment was supplied by a Chinese company whose representatives were unable to get permission to travel to Sudan at the time of equipment delivery. However, the company agreed to translate the equipment manuals into English and to provide videos on the use and maintenance of the machines. The FAO indicated that they were also able to arrange virtual training sessions with these suppliers. It is essential that this issue be finalised before the end of the project closeout period and that the virtual training is carried out by the suppliers.

6. An aspect of the project delivery arrangements that appears to have been very effective, is the delivery of training through the Farmers Field Schools. These schools were established within the local areas in which the project worked, and training was provided throughout the sesame production cycle, directly linked to the production activity then being undertaken. This training was conducted by the MOPER extension officers and lead farmers trained by the project but was supported by the ARC. The ARC also established demonstration fields alongside participant farmers' fields in order to physically demonstrate the improvement in quality and productivity with the use of GAP. As explained by one stakeholder,

"We established the farmers school field by provision of two feddans to demonstrate the training activities for the farmers. We examined the traditional seeds and improved seeds to know the differences between the two types. We trained the farmers on how to prevent your product from the insects and the using of allowed pesticides. In the other field, we asked some farmers to cultivate by using their normal practices to make practical training and to allow the farmers to differentiate between the two types of cultivation methodologies ... Farmers schools helped the farmers in preventing the sesame diseases and allowed them to upgrade their knowledge in improving the cultivation of sesame. The farmers schools allowed the farmers to meet the timing of cultivation" (Interview 2).

The discussions in the focus group with beneficiaries indicated that the lead farmers and beneficiaries also rate the Farmers Field Schools highly:

"It (the Farmers Field Schools) was good and contributed to change the farmers and post harvesters' behaviour and change the bad agricultural practices for us who attended the training, helping us to change the way of cultivating sesame. Also, the school farming was very useful. We provided the sessions to more than planned. Our product has been increased more than before in our villages and most of the farmers in our villages were affected positively in their productions" (Focus Group Discussion 3).

The Farmers Field Schools, coupled with the demonstration fields established by the ARC, therefore appears to have been a particularly useful, hands-on, immediate, practical and effective manner to provide training to farmers.

2.2. Progress towards impact

The project appears to have been too small, in terms of budget committed and resources mobilised, to have a big impact, especially in light of the manner in which resources were spread across the value chain, over different geographical areas and a number of organisations. To paraphrase one of the international experts on the project, "A EUR 3 million project is needed over three years in order to make the kind of impact envisaged in this project. Right now, the project impact is limited to the booklets created and the B2B event held virtually with buyers from Japan and Korea, if these relationships are taken forward" (Interview 18).

However, stakeholder interviews indicated that the training of trainers that was undertaken, the creation of the training booklets and the awareness of GAP and SPS requirements created by the project all set a good foundation upon which future quality improvements within the sesame value chain can be built.

2.2.1. Behavioural change

In order for the project to be effective and reach its objectives, it must create changes in the behaviour of actors throughout the sesame value chain, educating producers and post-harvest handlers about SPS requirements and inducing them to adopt the good practices necessary in order to meet SPS and international food safety requirements.

However, stakeholder engagements indicate that the training offered by the project often did not result in the adoption of the good practices advocated. To paraphrase comments from the discussions in the focus groups with farmers in the two states (Focus Group Discussions 3 & 1):

"Changing the bad behaviour by gaining good agricultural practices to upgrade the sesame value chain needs provision of equipment and improved seeds that are suitable to our environment, ... the training courses are not the **only** activity needed to lead to upgrading the sesame value chain".

"Poor financial capacity for farmers do not allow them to adopt the advanced agricultural methods. The project should support and work with other value chain (actors) to improve farmers' capability in getting finance and equipment for cleaning the sesame".

"For us we are familiar now to use the new improved seeds, but it is very expensive, and it is not affordable. Adopting new technologies - it is very expensive. Knowing is not enough; to use these technologies, it should be affordable for farmers. Supporting the farmers to obtain these packages is very important. The project should contribute by providing equipment for the three villages".

"The project should expand its provision of activities ... to maximize the effectiveness of the activities. The relationship between MOPER, ARC and the farmers should be linked together to set agricultural plans with suitable budget to support the farmers, especially with improved seeds because in all the time we only use our traditional seeds due to unavailability of improved seeds".

According to focus group discussions with post-harvest handlers:

"The training was theoretical and was helpful to understand how we can change the quality of the sesame, but the project should consider the practical side. We are looking for developed machines. The quality of North Kordofan sesame is very poor. The project should consider providing improved seeds. The ARC should provide the improved seeds at suitable prices and MOPER should support the production of the improved seeds" (Focus Group Discussion 2).

These discussions with beneficiaries indicate that their ability to change their behaviour in accordance with their newly acquired knowledge of GAP & SPS measures is limited by their lack of financial resources; so behavioural change requires greater coordination between stakeholders and service providers within the value chain in order to overcome the challenges in adopting good practice.

2.2.1.1. Economically competitive - Advancing economic competitiveness

Building the capacity of the Sudanese quality infrastructure to meet global quality standards and SPS requirements is a key intervention in increasing access for Sudanese sesame producers to more stringent global markets and is a key building block in advancing the economic competitiveness of the sector. Building the capacity of producers and post-harvest handlers to meet these global standards is, likewise, a key step in increasing the economic competitiveness of the sector. Focusing on only one of these aspects would be insufficient in accomplishing this objective, so the project rightly adopted a wider view and incorporated measures to increase compliance along the value chain, as well as demonstrate compliance through better testing and certification capacity. However, the scale of the project and its limited budget meant that this wider view was harder to support with the limited project budget. The wider view stretched project resources over a larger number of areas and sacrificed depth in each area, possibly compromising a more sustained change in each area. For example, if the project chose to focus on building capacity in the national testing and certification system, it might have had a greater impact in addressing problems in this area more conclusively. As it is, only a limited number of machines and chemicals could be purchased and the accreditation of SSMO for aflatoxin testing is still to be achieved. A greater focus of monetary resources and project time on addressing this issue might have had a more decisive impact on the quality management system in Sudan.

2.2.1.2. Environmentally sound – Safeguarding environment

Since sound environmental practices are part and parcel of the good agricultural practices (GAP) and the necessary SPS measures promoted by the project within the sesame value chain, the project de facto included a significant educational element regarding sustainable environmental practice. This training included:

- an introduction to organic farming,
- the use of acceptable fertilisers,
- the harvesting of rainwater and proper water management within a dry region reliant on rain-fed agriculture,
- composting of organic waste and proper management of inorganic waste,
- biological control of pests,
- good hygiene practices to prevent the contamination of water and soil; and
- proper soil management through sustainable crop rotation practices.

The project trained 400 farmers and 25 post-harvest handlers¹⁰ about these issues as well as undertaking the training of extension officers and other trainers who can continue this training into the future.

2.2.1.3. Socially inclusive – Creating shared prosperity

Although 62% of the sesame produced by Sudan is cultivated through semi-mechanised rainfed farming undertaken by large farmers and agricultural companies, the project chose to target small farmers who use traditional rain-fed farming methods for subsistence and income generation¹¹, attempting to raise the revenues of this highly vulnerable group of households.

Moreover, the project logframe indicated that women and youth, as marginalised groups, would be targeted as beneficiaries. The logframe shows a target of 30% participation by women and 50% participation by youth within the project. The 30% target for women's participation appears to be rather low for the sesame sector since women make up the majority of sesame farmers in Sudan according to the STDF Project Application. Nonetheless, the project met this target, with the FAO reporting that 32% of the farmers and extension workers trained were women. Moreover, in response to the Draft Evaluation Report, UNIDO reported that 96 (48%) of the 200 farmers they trained were women.

The information presented by the FAO to the evaluation team did not disaggregate the farmer beneficiaries by age, but did report that 50% of the 30 extension officers and lead farmers who received ToT training were youth¹². It is matter of concern that the project appears not to have tracked youth participation within its beneficiary lists after setting a target for this in the logframe, since it is generally the case that what gets measured, gets done.

2.3. Broader adoption

2.3.1. Mainstreaming

Both agencies, the FAO and UNIDO, used local organisations as the means of implementation, using international experts (in the case of UNIDO) and in-house regional experts (in the case of FAO) working in tandem with the Agricultural Research Corporation in Sudan to determine

¹⁰ Figures from e-mail from UNIDO project associate on 1st June 2022, in response to questions of clarification from the evaluation team. Figures included in attached file named, "NTP_National Training Programme".

¹¹ STDF Project Grant Application Form, July 2017

¹² Presentation by FAO titled "Upgrading the Sudanese Sesame Seed Value Chain, Project Evaluation Meeting,7 March 2022"

the most appropriate agricultural practices and technologies to be used in each state in order to improve sesame quality in line with international GAP, SPS and food safety standards. The international experts and ARC worked together to develop training programmes and manuals that were then used to jointly train 30 extension workers from the state Ministries of Production and Economic Resources (MOPER) and lead farmers, so that these local trainers could use the training material to train sesame farmers and post-harvest handlers within the Farmers Field Schools set up in each local area. Moreover, UNIDO mobilised local knowledge in the development of the eight sesame production guides as they were prepared with inputs received from TOTs. The extension workers from MOPER in each state and the lead farmers were supported by ARC in the delivery of the training, which was augmented by the use of demonstration fields set up by ARC in order to demonstrate the greater productivity of the new GAP methods compared to the traditional methods used by farmers in the area. This implementation modality used international expertise and the knowledge of local research organisations to develop the capabilities of the local service delivery organisations tasked with supporting farmers. It therefore represents good practice in mainstreaming the good agricultural practices defined by the project.

2.3.2. Replication

Given current funding constraints in Sudan, the large-scale replication of projects is unlikely to occur in the short term. However, the evaluation found evidence that local organisations have already begun to extend project activities to benefit farmers who were not funded through this project, as indicated in the following quotations paraphrased from stakeholder interviews:

"ARC (in Al Qadarif) participated in provision of training for 100 farmers in three localities and other farmers participated too, especially when sesame insect needs to be treated by the farmers (Hamosh insects). Farmers schools helped the farmers in preventing sesame diseases and allowed them to upgrade their knowledge in improving the cultivation of sesame" (Interview 2).

"MOPER (in North Kordofan) undertook the activities in field farms as an example in farming schools and we added an additional crop, peanuts, upon the request of the farmers. The crop was very profitable, that's why they requested to have knowledge in the additional crop ... The farming (field) school is very efficient to convey the agricultural methods to the farmers. In our plan, MOPER would like to finance additional villages" (Interview 8).

"Yes, all the knowledge conveyed to them through the farming school affected positively their agricultural practices and some of them conveyed the practices to other farmers and also there were about 30 farmers that participated as guests during the school farmers sessions. MOPER (in North Kordofan) established three villages to participate in the farm schools (for this project). We added other 3 villages from our (ARC's) own efforts to disseminate the knowledge to maximize the benefit for other farmers" (Interview 9).

According to the lead farmers,

"We started since June 2021 by attending ToT training in the eight books for agricultural practices and post harvesting skills to be able to convey the knowledge to other farmers in our villages, to know how to use the pesticides and use developed seeds to improve production. The village farmers attended our sessions and benefitted from our presentations. Even the other surrounding villages, we conveyed the messages to them" (Focus Group Discussion 3).

These quotations show that local organisations recognised the value of the training offered by the project and that they began to extend it more widely, making the knowledge available to larger numbers of client farmers, where possible.

2.3.3. Scaling-up

The stakeholder engagements indicate that Sudanese organisations have found value in the services delivered by the project, especially in the training courses and manuals developed by the project in collaboration with local partners. Stakeholders indicated that the capacity building, especially for farmers, was good and that they would like to extend the training to others. However, these organisations also indicated that their budgets are currently severely constrained, so they are unlikely to be able to scale up the services offered by the project.

While the project proactively trained extension officers, ARC staff and lead farmers to act as trainers themselves, there is no agreement on how these trainers will roll out this training. Stakeholder interviews revealed that the costs of the newly trained local trainers in conducting the training for farmers and post-harvest handlers was covered by the project budget. These costs included travel and daily subsistence. It appears that it is unlikely that these trainers will scale up training initiatives to farmers in the absence of dedicated project budgets to cover these costs.

UNIDO, along with its network of donor partners will therefore be integral in sourcing the funding needed to scale up project activities within Al Qadarif and North Kordofan, as well as other sesame producing areas in Sudan.

3. Project's quality and performance

3.1. Design

The design of the project demonstrated many strengths and took a holistic view to improving sesame exports into high value markets by addressing the whole value chain, in addition to improving the quality testing and management system. As noted earlier, addressing production standards without addressing quality testing infrastructure, or vice versa, would likely not result in the increase in export revenue sought by the project. So, this holistic view is correct if one has the resources to address all relevant aspects of the production and quality infrastructure. However, with a very small implementation project budget of USD 904,989.00 and a highly inflationary context, the project did not have the necessary financial resources at its disposal.

The budget constraints were recognised at project initiation since the project design was approved by the STDF in March 2018, with a recommendation that UNIDO seek co-funding from other donors, with their support. However, when co-funding opportunities were unsuccessfully pursued with the World Bank Africa-China Agriculture Collaboration Trust Fund and the Chinese Foreign Economic Cooperation Centre (FECC), the STDF decided to begin the project with funding from their own budget while UNIDO pursued further funding from other donors¹³. However, additional funding could not be secured due to the volatile political situation in Sudan and it appears like the project design was not modified enough in response.

A key respondent from national government, who played a pivotal role in the TEG indicated that they thought that:

"The design of the project was a mistake. The target group, the small farmers, need infrastructure, technical and financial support. The project was all about training and increasing awareness of quality and SPS, there was no implementation in the project. I wrote to UNIDO but they said that the budget was limited, so I said, 'do Outcome 1 in this project and do Outcome 2 separately'. But the project manager promised that he would raise more funding, but nothing happened. If the project targeted big farmers, they have money to implement what they learn from the booklets, they can get finance from the bank, they can mechanise, they sell to the bourse directly. If they have a problem and need help, they can go to the internet. They can sell their product to China and others, but right now they can't reach the Japanese market because of the high technical quality needed. But they can invest. Small farmers have a very long value chain, they need technical support, help to mechanise and for oil extraction, they need water, construction of storage facilities and certified seeds, the costs are too much" (Interview 20).

¹³ STDF Project Inception Report for the period 1 April to 31 June 2019

The respondent added that, "The design was done by international consultants from secondary data, not on what they had seen on ground level. Gap assessments must be done by nationals and they must see how to fill the gap. In any project, if the design is wrong, you must be able to restructure" (Interview 20). It should be noted that the international consultants were unable to travel to North Kordofan and Al Qadarif, as planned, due to the volatile political situation. As a compromise, nine farmers from each of these states met with the consultants in Khartoum to share their knowledge of the local situation.

One of the international experts involved in project design indicated that:

"In Sudan, the infrastructure (for quality testing, accreditation and an export control system) is missing. The project was too ambitious. Smaller would have been better, there were too many involved. The project was too optimistic and too broad. It involved too much coordination, so there was not too much success. It would have been better to do it step by step and not do the whole value chain at once" (Interview 26).

In addition to addressing the whole sesame seed value chain, the project design chose to implement activities in two different states, Al Qadarif & North Kordofan. These states are more than 640 kilometres apart. While the choice of these two localities was based on a technical analysis of their contribution to sesame production in Sudan, it posed logistical and practical difficulties to the implementation of the project, making it difficult for the project personnel to manage and monitor project activities from Khartoum. Moreover, the targeted localities within each state were themselves quite remote, further complicating project implementation. In the paraphrased words of project personnel:

"The two localities posed a challenge, they were very far apart, and often had no water to drink. It is hard to guarantee when people have no food or water that they will follow the right (agricultural) methods. And the extension officers don't reach the farmers regularly because they need fuel, transport and per diems to stay overnight. In Al Qadarif, extension officers would have to leave at 7.00 am every day and return after dark, which is risky for them. North Kordofan was better for this reason and they had better follow-up with farmers" (Interview 13).

While the evaluation understands the technical rationale for choosing each state as an implementation site, the evaluation believes that the limited project budget might have been able to secure greater demonstrable impact if project activities were agglomerated and focused on one agricultural area, rather than stretching resources over two states so far apart from one another. Project personnel indicated that implementation in these states was also complicated by poor internet infrastructure that made it difficult to communicate and coordinate with state ministries and ARC research stations, making project management a challenge. They agreed that a focus on one location might have been more productive.

3.2. Relevance

The agricultural sector is a priority sector within the Government of Sudan's development strategies since two thirds of the population live in rural areas and nearly 50% of the workforce is engaged in agriculture and agro-processing activities. According to the Country Programme Framework:

"The government of Sudan has advocated agriculture as the engine to effectively contribute to economic growth and export performance and to simultaneously advance peoples' livelihoods, reduce poverty, improve food security and nutrition and develop and protect natural resources¹⁴(FAO, 2020: 4-5).

The project is therefore well aligned to the government's development strategies, including pillar "(2) Fostering inclusive and sustainable economic growth" and pillar "(5) Strengthening governance and institutional capacity" of Sudan's Poverty Reduction Strategy¹⁵. It also fits within priority areas 1 and 2 of the Country Programme Framework:

(1) Capacity development and consolidation of policy, laws, planning and information systems, institutions and mechanized reforms and development in agriculture, fisheries and forestry"; and

(2) Capacity development of agricultural research, technology and knowledge development and transfer for enhanced productivity, production and competitiveness institutions, systems and mechanisms in agriculture, forestry and fisheries" (FAO, 2020: 6).

The project focused on addressing capacity issues within Sudan's quality and accreditation infrastructure for agricultural produce by reviewing the regulations in place, as well as building quality testing capacity within the MoA & SSMO. The project contributed to inclusive economic growth with its focus on increasing the incomes of small farming households. growth.

Poverty rates are very high throughout Sudan, at 47%; but it is even higher, around 58%, in the rural areas. Agriculture is a significant part of the Sudanese economy, accounting for 34 percent of GDP and employing 43 percent of the labour force. About 9 million hectares of land are farmed using traditional rainfed methods by the poorest and most vulnerable farmers, usually on family farms between two and fifty hectares in size. These farms provide both income and subsistence for these households. Yields on these farming units are low and

¹⁴ Food & Agriculture Organization (2020) Country Programming Framework for Sudan: PLAN OF ACTION (2015-2019): Resilient Livelihoods for Sustainable Agriculture, Food Security and Nutrition

¹⁵ International Monetary Fund (2021) Sudan Poverty Reduction Strategy Paper

vulnerable to weather conditions¹⁶. Sesame seed, the most important cash crop in Sudan, is one of the most prevalent agricultural activities, with approximately 2.53 million hectares of land under sesame in 2014. Sudan was the fourth largest producer of sesame in the world in 2014, and sesame is the country's largest agricultural export, with exports amounting to USD 233 million (8% of total exports) in 2014. However, output levels are vulnerable to external factors like the weather and pests and is therefore highly variable. Traditional, rain-fed small farms account for 38% of Sudan's sesame production¹⁷. So, the project focused on improving the quality of a crop that is already well established, widely grown and familiar to farmers in Sudan. The project also focused on that part of the production base, small farmers, that are most in need, increasing the potential for social returns from the project.

Al Qadarif and Kordofan are two of the most important production areas for sesame within Sudan, with Kordofan accounting for the 52% of sesame production in 2014. Given the rural nature of these two states, their dependence on agriculture as their primary economic activity and their history in sesame production, the project was highly relevant to the needs and potential of the local areas, with its focus on improving the sesame value chain, the quality of the product being exported and the revenue of small farmers.

The Government of Sudan's development priorities focus on growing the economy by increasing trade, diversifying exports (especially agricultural exports) and decreasing poverty through inclusive economic growth. The work undertaken by the project aligns well with these priorities by improving the quality of sesame grown and increasing the capacity of the quality testing infrastructure in Sudan in order to promote the export of sesame into higher value international markets. The project selected methods of delivery that improved the capacity of local organisations, including extension officers, local agricultural research stations and lead farmers to continue the transfer of knowledge about good agricultural practices and SPS requirements within the sesame value chain, making it highly relevant to the needs of these local stakeholders.

The project design aligned fully with UNIDO's mandate to promote inclusive and sustainable industrial development (ISID) within member countries since it focused on increasing quality within the sesame value chain to increase exports and revenues, especially for vulnerable small-scale farmers, women and the youth¹⁸. The project activities also promoted the Standards and Trade Development Facility's (STDF's) goal of increasing sustainable capacity within developing countries to meet SPS requirements and safely trade agricultural goods on the global market. The project especially supported Outcome 2 in the STDF's theory of

¹⁶ International Monetary Fund (2021) Sudan Poverty International Fund for Agriculture Development (2021) Sudan Agricultural Strategy Reduction Strategy Paper

¹⁷ STDF Project Grant Application Form, July 2017

¹⁸ Industrial Development Board (2017) Medium-term programme framework, 2018-2021. Forty-fifth session Vienna, 27-29 June 2017
change, by creating knowledge products that translated international good practices in agriculture and SPS measures into locally relevant actions in the Sudanese context. The focus on increasing agricultural productivity and small farmer revenues fit well into the FAO's mandate since it improved household incomes and food security for poor farming households.

3.3 Coherence

The implementation set up for this STDF-funded project was distinctive, in that it was jointly implemented by two United Nation's (UN) Agencies, UNIDO and the FAO. UNIDO served as the lead agency on the project, and signed an inter-agency agreement with the FAO, agreeing that the FAO would assume responsibility for the implementation of Outcome 1, which focused on the development of small farmer capacity to implement good agricultural practices in growing sesame crops. The project therefore took advantage of the comparative strengths of these two UN agencies, having the FAO focus on developing agricultural capacity for farmers, while UNIDO focused on building the capacity of post-harvest handlers and the capacity for testing, inspection and certification assessment in order to promote the export of sesame into better regulated markets. Despite this initial division of responsibilities according to outcomes and target groups, the project managers realized during project implementation that the training manuals (and training courses) to be developed should address SPS along the entire value chain and decided to jointly develop the training material rather than duplicate work. This kind of joint implementation and reflective implementation encourages greater coherence in the work between UN agencies.

The project fit well within the United Nation's Development Assistance Frameworks (UNDAF) for the period 2013-2018¹⁹, under which this project was initiated. The project contributed to pillar 1 of the 2013-2018 framework: "Poverty Reduction, Inclusive Growth and Sustainable Livelihoods" and adopted an approach that advanced the principles underlying the UNDAF. So, the project supported 'institutional development and human capacity strengthening' through training initiatives, the purchase of equipment and chemicals for the SSMO laboratory and the review of SPS and food safety regulation while using a "sectoral approach as a driving modality" in line with principle 2. In line with principle 3, the project also promoted the involvement of non-government actors in the development process by establishing a 'sesame platform' which will bring together sesame value chain actors, private sector companies, producers associations, service providers and government agencies to develop the sector collectively. The project also aligned with the fifth principle of the UNDAF by using national organisations like ARC and state ministries like MOPER to implement the

¹⁹ United Nations (2012) United Nations Development Assistance Framework for the Republic of Sudan, 31 May 2012, Khartoum

project. The project's adherence to the work areas and the principles underpinning the UNDAF supported coherence within the United Nations development system, as well as coherence with the government development initiatives.

3.4. Efficiency

The design of the project was funded through a project preparation grant from the STDF. The project was then approved by the STDF at the end of March 2018, on the understanding that UNIDO and STDF would seek co-funding from other donors. When this process was unsuccessful, the STDF approved funding for the project, subject to UNIDO continuing to try to access funding from other sources.

Further funding could not be raised from other donors, so the project funds were limited to the USD 904,989.00 approved by STDF on 1 October 2018. In addition, the budget included in-kind contributions from the government of Sudan to the value of USD 376,200. Discussions at the beginning of the project indicated that the Ministry of Agriculture might contribute a further USD 250,000 toward the project for the purchase of equipment and space for the establishment of the laboratory for the Plant Protection Directorate. However, in 2020, the Ministry indicated that the deterioration in the political situation and the continued increase in inflation rates meant that they could no longer make these monies available to the project.

The available project funds of USD 904,989.00 were split between the two project outcomes, with the budget for Outcome 1 which was managed by FAO amounting to USD 291,088 (32% of funding), while the Outcome 2 budget, managed by UNIDO, amounted to USD 613,901 (68% of available funding).

The delay in the negotiation of the inter-agency agreement between UNIDO and FAO, which was only signed at the end of March 2019, delayed the effective start of programme activities by six months, a significant delay in a project that was planned to be implemented in 36 months. The implementation of project activities was also delayed by the deterioration in the political and socio-economic context within Sudan. The factors that affected project implementation included the following:

- In December 2018, just two months after the project start date, popular protests erupted, leading to the national revolution in April 2019. This volatility posed safety and security concerns for project staff and delayed field activities.
- The purchase of goods and services from service providers was complicated by the continued escalation of the inflation rate during the project implementation period.
- The government in Sudan shut down economic activity in early 2020 as a response to the COVID-19 pandemic, seeking to contain the movement of people and slow down the spread of the COVID-19 virus.

 In October 2021, a military coup overthrew Prime Minister Hamdok. The Prime Minister and numerous others were imprisoned, leading to widespread protests and civil unrest. Even though the civilian government was restored in November 2021, faith in the transitional government has collapsed, so protests have continued, especially in Khartoum. The coup intensified safety and security concerns, as well as leading to a number of changes in personnel within government ministries. These personnel changes affected the membership of the PSC and the TEG of the project.

So, the project has had to contend with a number of contextual issues that undermined efficiency in implementation. Moreover, stakeholder interviews reported that UNIDO's lack of capacity on the ground, compromised project efficiency²⁰. According to a key informant from the counterpart agency, "The booklets and training took too long to do, it was very inefficient in terms of time and cost (the cost of consultants and managers in UNIDO). We were not satisfied" (Interview 20). UNIDO indicated that the training delays were due mainly to the COVID restrictions on the gathering of people, while the development of the guides was delayed because of the need to identify current practices used in Sudan and then develop corresponding good practice. COVID related travel restrictions prevented the international expert from conducting such work, so the development of the guides had to await the input of FAO local experts, which was delayed.

These many implementation challenges led to a request for a six-month extension of the project until 31 March 2022 in order to complete project activities. The evaluation team therefore deems project efficiency to have been satisfactory, since targets for project outputs were largely met within the extended project period.

3.5. Sustainability

The project was an important intervention in improving quality within the sesame value chain and increasing exports into high value markets. However, it represents the start of this process and success in achieving and sustaining the intended outcomes will depend on continued work by a host of national organisations. This has been recognised by project stakeholders, with one member of the project team indicating that:

"Government has the capacity to continue the work we started, they now have the guides and the trainers, through the ToT, as well as officials who are trained. So, they are able to continue disseminating good practices. SPS measures and training, as well as the labs and the export control system – government has the capacity to continue developing the new systems, but challenges exist. The political instability might affect continued work on these issues" (Interview 15).

 $^{^{\}rm 20}$ Please see section 4.1 for a more detailed discussion of this issue.

This perspective is also shared by key stakeholders from government:

"This project was important for the sesame value chain. In my opinion, it succeeded in making the framework, but this needs follow-up to ensure effective implementation. The project prepared the guidelines, emphasized health and safety and training for farmers. It needs follow-up for good implementation, otherwise it won't do anything, it won't make a difference. SSMO can handle taking things forward, they have their own resources for chemicals, but the farmers and the guidelines will need follow-up" (Interview 16).

Some of the government organisations engaged indicated a commitment to continuing the project activities into the future:

"We related to ARC during the implementation of the project activities. They provided the technical training in the farming school and the project helped in forming a sesame body with different actors in sesame production. The state governor will formalise the sesame body and legalise it. The suggested members (MOPER, exporters, agents, transporters, technicians and farmers) will discuss all the issues related to... upgrading the sesame. We are going to establish a centre for equipment that will enhance the value chain. We recommended to fix the two machines in that hall. North Kordofan has no cleaning machine that's why we expected a big one not the small one that was provided by UNIDO... The cleaning machine will be used for seeds cleaning. We are planning to work for another village with financing by MOPER, adopting the same activities that were recommended by the project for Outcome 1 and 2" (Interview 8).

This commitment expressed by some stakeholders bodes well for the prospect of sustaining and extending project benefits. However, other stakeholders expressed greater reservations about the sustainability of the project:

"The main goal for the project is very important; but most of the project was designed at Khartoum level without considering the real needs of the states. The project should focus to improve the agricultural societies and cooperatives to ensure the sustainability. The training is not enough to ensure the success of the project, the financing aspects and provision of high technologies and provision of full production packages is needed" (Interview 2).

These reservations were also articulated by beneficiary farmers, who indicated that for sustainability, support organisations would have to,

"... Start helping farmers to utilise suitable seeds and adopt the improved technologies through (making) microfinance facilities available and improving the school farming activities and covering other villages to ensure adoption over the whole value chain. The information should disseminate to other farmers and also support for using the developed technologies in the production process" (Interview 6).

These perspectives underline the fact that some key issues impeding the implementation of the good practices taught were not adequately addressed by the project. In order to ensure that these good practices and SPS measures can be taken on and implemented by those who will be trained in future using the training resources developed by the project, it is essential that these issues are addressed by the local organisations taking forward the work. It is heartening that MOPER in North Kordofan plans to take forward the project work. However, this commitment seems to have arisen 'spontaneously' from a local organisation that seems more capable and more organised than others involved with the project. It does not appear to have arisen from a deliberate dialogue between the project and the local organisations regarding sustainability.

The evaluators acknowledge that the project has had to contend with serious challenges that slowed down implementation. However, these challenges indicated a greater need for good sustainability planning to ensure that project activities are continued, and in some cases, completed, beyond the project timeframe. Project personnel indicated that sustainability was part of the project implementation strategy, for example, UNIDO was to engage with Chamber of Commerce for cooperation in the establishment of the national network of value chain actors and B2B linkages with international buyers. However, the Chamber's management was not operational and the Chamber could therefore not work jointly with UNIDO on this issue. Project personnel indicated that similar experiences were encountered with other agencies in Sudan due to high turnover of officers, including steering committee members and master trainers, due to political instability. To support knowledge transfer, UNIDO and FAO trained extension officers and lead farmers and established six Farmers Field Schools.

Sustainability planning should focus on mechanisms and options for the continuation of project activities and benefits and should be integrated into the whole project life cycle; it should be incorporated into the dialogue with local implementing organisations right from the outset. These sustainability strategies should be agreed as early as possible and then monitored during implementation and revised as necessary. "In the absence of early and active planning, the conditions that would most enhance the prospects for sustainability in the long term are not created and sustainability does not occur" (Shediac-Rizkallah and Bone 1998: 89).

3.6. Gender mainstreaming

According to the STDF Project Grant Application, women make up the majority of sesame farmers in Sudan and the application indicates that the project will target women for capacity

development on good agricultural practices and SPS measures to improve the quality of sesame crops while also addressing gender equality within communities. One of the OVIs included in the project logframe indicates that at least two farmer cooperatives will be developed, with membership consisting of at least 30% women and 50% youth. During project rollout, the FAO found that the sesame farmers in the targeted villages were already organised into producers associations with a pre-existing membership, so in practise this OVI would have related not to the membership of a newly established farmer's organisation, but rather to the targeting of women during the beneficiary selection process for the project.

The following table summarises the quantitative achievements of the project in terms of numbers of women benefitting directly from Outcome 1.

PROJECT ACTIVITIES	TOTAL	WO	MEN
	No.	No.	%
OUTCOME 1			
North Kordofan			
Farmers trained	100	35	35
Extension Officers (ToT)	10	3	30
Lead Farmers (TOT)	5	2	40
Al Qadarif			
Farmers trained	100	29	29
Extension Officers (TOT)	10	3	30
Lead Farmers (TOT)	5	2	40
TOTAL	230	74	32

 Table 2: Number of women beneficiaries on Outcome 1 of the Project

Source: Presentation by FAO titled "Upgrading the Sudanese Sesame Seed Value Chain, Project Evaluation Meeting, 7 March 2022"

Table 2 reflects the numbers of sesame farmers and extension workers trained by the project under Outcome 1. It indicates that 35% of the farmers trained in North Kordofan and 29% of the farmers trained in Al Qadarif, were women. Moreover, only 30% of the extension workers trained as part of the Training of Trainers programme were women. So, 32% of the farmers trained in Outcome 1 across both states, were women. While the project has met the target for female participation, the target itself was rather low, since the majority of sesame farmers are women and it was an explicitly named objective of the project was to target female farmers. Since the project trained female extension officers through the ToT training, these extension officers could have undertaken targeted workshops for female farmers in order to address concerns arising from conservatism within rural communities. Interestingly, the ARC expert retained by FAO to oversee implementation of the project indicated that for projects, "To succeed you have to be involved with gender issues. I would only choose women to participate (if I could) because they are always committed, you will find them in the fields. (Addressing) gender participation is important for success" (Interview 25).

ACTIVITIES	Total	Won	nen
	beneficiaries		
		No.	%
OUTCOME 2			
Output 2.1 Improved quality and hygiene conditions in the supply chain			
Extension officers from MoA, MoH, MoT & SSMO trained on the guides	17	7	41
Joint training on the guides with FAO and ARC for 30 extension officers	30	11	37
Output 2.2 Strengthened SPS measures			
Ten workshops on SPS measures (MoA, MoH, MoT, MoI & SSMO)	34	25	74
Workshop on WTO/SPS principles &risk assessment	19	14	74
Training of Trainers from MoA, MoH & SSMO on ISO 17020 (inspection)	11	7	64
Output 2.3 Improved laboratory testing, inspection and certification assessment capacity and procedures			
Training on labs, certification, ISO 17025 &17020 (MoA, MoH, SSMO & SDAC)	9	7	78
Output 2.4 Development of new business linkages in the international market			
Coaching event on B2B & traceability: companies & gov officials	16	6	38

Table 3: Number of women beneficiaries on Outcome 2 of the Project

Source: Presentation by UNIDO titled "Upgrading the Sudanese Sesame Seed Value Chain, Funded by STDF, Jointly implemented by UNIDO (lead) and FAO, Mr. Cong Wu, Mr. Elwathig Mukhtar Hamid, 7 March 2022"

Table 3 reflects the numbers of the beneficiaries who benefitted from the project work on Outcome 2. The activities under Output 2.1 show fairly low participation by women, with only 41% and 37% of government workers (who accessed training from the project being women. The gender breakdown of those trained under Output 2.2 and 2.3 was very different, with more than 70% of the beneficiaries who participated in the SPS, and the laboratory testing and certification capacity development work being female. This reflects the gender make-up of the government institutions involved in these functions, with women in these organisations far outnumbering the men (Interview 17). Women's participation in the coaching for the B2B event was again low, at only 38%. Overall, there does not appear to have been an aggressive effort to target women farmers or enterprise owners to participate in the capacity building activities of the project, while the gender participation in those activities focused on government capacity building reflected the rates of gender transformation already achieved in said organisations.

4. Performance of Partners

4.1. UNIDO

Stakeholders reported that the implementation of Outcome 2 was delayed by the fact that UNIDO did not have a presence 'on the ground' in the two states to manage, coordinate and oversee implementation and relied on FAO for this assistance. Project personnel indicated that project activities were also delayed by UNIDO's strict COVID protocols, so the Outcome 2 training was able to begin only at the end of 2021. Stakeholder interviews indicated that the implementation of project activities had not been completed in Al Qadarif at the time of the evaluation mission, while in North Kordofan the implementation was late. MOPER in North Kordofan reported that the transfer of funds from UNIDO to the department was delayed. The Department therefore used their own resources to 'bridge finance' project activities so that farmers did not miss the planting season for sesame. UNIDO reported that the delays were due to the inability of MOPER in both states to meet the reporting and administrative requirements of UNIDO's financial system in order to release payments. These delays resulted in less observable 'Impact' on project beneficiaries because training activities took place so late in the project period, allowing little time for possible implementation of good practices.

Given the possible capacity challenges within local organisations, UNIDO should improve the follow up, monitoring and support of implementation activities at field level in order to ensure that the activities 'outsourced' to these organisations are properly undertaken in a timely manner and that they are able to meet the reporting and administrative requirements of UNIDO's systems. The field mission engagements indicate that UNIDO activities needed more follow up with several partners, including MOPER, the ARC research stations and private sector actors in local markets. Follow-up on the activities related to the formation of the sesame coordination body is particularly important to ensure that project activities are completed and benefits sustained after the project period.

This project was unusual in the staffing assembled by UNIDO to implement the project, with limited human resource capacity in-country. The lack of a UNIDO presence was especially felt in the two states in which the production and post-harvest handling aspects of the project were conducted. UNIDO project personnel included a Project Manager and a Project Associate based in Vienna. In Sudan, UNIDO project personnel was based in Khartoum and included only a National Project Coordinator (NPC), who is also the main coordinator for government and is seconded from MoA, a part-time logistics officer (a quarter of his time for 13 months of the 42 month project) and a driver for the first part of the project. This project team was augmented at different times with specific expertise, local or international, to undertake particular pieces of work.

The Ministry of Industry, UNIDO's main counterpart organisation in Sudan, indicated that they have a very close relationship with UNIDO and often work with UNIDO on projects in Sudan. They indicated that the "project is unique in that there is no Chief Technical Advisor (CTA) to talk to directly. The project only has a co-ordinator from government who focuses on facilitation and international experts who work on very limited areas: X on the labs and Y on the training with the farmers" (Interview 23). The two international experts visited Sudan three times in 2019 before the COVID pandemic restricted international travel. However, the coup in April 2019 and the ongoing political unrest meant that the international experts were unable to travel to the two states to engage with stakeholders. Instead, seventeen farmers were brought to Khartoum to meet with them. Since subsequent trips to Sudan were prevented by the pandemic, the international experts did not visit the two project areas. International travel restrictions have likewise prevented visits from the Project Manager and the Project Associate, while the Khartoum-based NPC has undertaken only one mission to Al Qadarif and North Kordofan. The NPC was prevented from undertaking more missions to the two states by UNIDO's strict COVID protocols, which allowed for only essential travel. The project manager indicated that a CTA was not recruited for this project since the limitations of the small project budget did not allow for such an appointment.

Interviewees reported that the lack of UNIDO project personnel within Sudan meant that even small project management activities were conducted out of Vienna, complicating and delaying project implementation. The lack of project support staff within Sudan reportedly meant that the National Project Coordinator (NPC), who was appointed in April 2020, was also required to undertake administrative, communication and financial duties like verifying financial documents, dealing with payments to service providers in the two states, overseeing contract payments to partnering organisations, etc. These were reported to be too time-consuming and often delayed the implementation of project activities (Interview 13). Project personnel in Vienna had a different view, indicating that the part-time logistics officer (who provided a quarter of his time to this project for 13 months over the 42-month project timeframe) dealt with the administrative and financial issues, and that a national consultant organised meetings until July 2020. They reported that the project also received support from the field office on financial and administrative issues, and that the project could have recruited more local personnel to support the NPC, but that the NPC repeatedly indicated that this was unnecessary.

In summary, interactions with stakeholders indicated that project management was undermined by the lack of project staff 'on the ground'. More 'hands-on' management from UNIDO, especially at state-level, would have assisted in overcoming the challenges to project implementation posed by the COVID pandemic and the political unrest in Sudan.

4.2. Food and Agricultural Organization (FAO)

Outcome 1 was reportedly better implemented by FAO, with stakeholders and beneficiaries reporting that their expectations were met by the project for this Outcome. Stakeholders indicated that this Outcome was better managed than Outcome 2. This is likely to be due to the fact that the FAO had prior experience of working with MOPER on the Farmer Field Schools and was able to mobilise more human resources for the implementation of Outcome 1 project activities in Al Qadarif and North Kardofan. In addition to the FAO project manager based in Khartoum, the FAO also has small offices in 14 of the 18 states in Sudan, including Al Qadarif.

The Al Qadarif component of this project benefited from the prior presence of FAO in the state even though the FAO Office in Al Qadarif is small, with one employee coordinating project activities and two others employed full-time on a European Union funded project. In addition, FAO contracted an expert in farmer field schools and pest management and control for a period of three years to manage the implementation of Outcome 1. This person was also assisted by other consultant resources contracted for shorter periods, as well as benefitting from technical support from the FAO Regional Office in Cairo, especially in the finalisation of the content to be included in the training manuals developed by the programme.

However, some stakeholders indicated that the FAO was somewhat bureaucratic and that approvals and feedback from the organisation took a long time (Interview 18). Indeed, the start of the project implementation activities were delayed in 2018 due to the delay in concluding an agreement between UNIDO & FAO. The project began on 15 October 2018, but the Inter-agency Agreement was signed by FAO only on 31 March 2019, a delay of almost six months. According to the FAO project manager, the delay was due to administrative issues within the organisation. Despite these administrative issues, stakeholders on the ground reported that they were satisfied with the work undertaken by the FAO in Outcome 1.

4.3 National counterparts

The engagements with stakeholders indicate that the political changes within Sudan seriously affected project implementation. The coups led to changes at the Ministerial level, which then filtered downward, causing changes at the level of Heads of Department and then lower down into the more technical levels of departments. This turnover meant that the members of the Project Steering Committee (PSC), as well as the Technical Experts Group (TEG) changed often, as did decision makers within government departments involved in implementation. This meant that administrative and political decisions often had to be renegotiated with new incumbents, slowing down implementation (Interview 13, 15, 18). Moreover, due to political

changes and inflationary pressures, the USD 250,000 promised by the Ministry of Agriculture for use in improving the department's laboratories, did not materialise.

However, government organisations at state and federal level did engage in the implementation of project activities and some indicated that the monies made available by the project allowed them to provide services to their clients despite shortfalls in their own budgets. Other state level government organisations conducted project activities using their own budgets, while awaiting transfer of funding from UNIDO. This all indicates a willingness and a commitment to the project and the services being provided, regardless of the difficult political situation in which national counterpart organisations find themselves.

4.4 Donor

The STDF played a proactive and supportive role on the project, especially in the project design phase. The STDF made a project preparation grant available for the initial scoping and design of the project and appears to have engaged proactively in shaping the project at this stage. Once the application was prepared and accepted, the STDF also assisted UNIDO in approaching other sources of project funding, albeit unsuccessfully. When these initial attempts at fundraising failed, the STDF decided to allocate own funds to the project and initiate project activities while UNIDO continued to pursue other funding opportunities, indicating great support for and commitment to the project.

STDF also appears to have been a reasonable and accommodating donor during the project implementation phase, accepting the reasons advanced for the delays in project activities and agreeing to extend the project timeframe.

5. Factors facilitating or limiting the achievement of results

5.1. Monitoring & Evaluation

Annex II of the Inception Report for the project sets out the monitoring framework for the project and its partners. The framework indicates that "UNIDO has developed an Implementation Monitoring Scheme (IMS), which will provide information on conduct and progress of programme activities at any given time (or over time) relative to respective targets and outcomes" (2019, unnumbered page)²¹. The Implementation Monitoring Scheme was to include output mapping and an Excel-based monitoring matrix, "an easy template to record performance and efficiency against predefined targets" (ibid.) Since the six-monthly monitoring reports reflected only on achievements for each six-month time period and it was

²¹ Inception Report, Annex II: Framework for Monitoring and Evaluation of Project Activities (2019)

unclear whether figures were sometimes repeated, the evaluation team sent a number of questions of clarity regarding targets achieved to the project team. The length of time taken to respond to these queries and the incomplete nature of the responses suggest that the monitoring system established was not effective in monitoring and tracking project performance.

It should be noted that the presentation by FAO to the evaluation team included a reflection of crop production data from 2019-2021 for a handful of farmers who were trained by the project. The Terms of Reference issued by UNIDO to MOPER also asked for crop production data to be tracked for the farmers being trained. This reflects a mindfulness about tracking the outcomes of the training undertaken and suggests that FAO might have established a monitoring system that tracked outcomes data. However, the crop production information eventually made available to the evaluation team was incomplete and it is not clear to the evaluators how the information was used for results-based management of the project or to understand the effectiveness of the work being undertaken.

5.2. Results-Based Management

Within UNIDO²², Results-Based Management (RBM) is conceptualised as "a broad management strategy aiming at improving management effectiveness and accountability by defining realistic expected results, monitoring progress toward their achievement, (and) integrating lessons learned into management decisions and reporting" (UNIDO, 2018: 12). UNIDO project managers have indicated that the project logframe is used as the basis of results-based management within the organisation. Unfortunately, as discussed in section 1.4, the logframe for this project did not set up realistic prospects for expected results. The overall and specific objectives for the project were seriously over-estimated given the size of this project, the resources available and the three-year implementation timeframe.

Given the improbable expectations set up from the outset of the project, as well as the severe external circumstances that impacted on implementation, one would have expected to see a review and revision of the logframe in order to better undertake realistic results-based management. The six-monthly project reports indicate that project implementation was monitored as closely as possible from afar and that the challenges posed by two political revolutions, a hyper-inflationary context and the severe limitations imposed by the COVID pandemic elicited resilient and flexible management responses in order to deliver the project outputs. The project team is therefore commended for negotiating the challenging environment and delivering project outputs. However, a timely review and improvement of the project logframe and a tightening of the project focus area in response to resource

²² UNIDO Independent Evaluation Division (2018) Evaluation Manual. Vienna

limitations and changing circumstances might have improved results-based management of the project.

5.3. Other factors

As already discussed, the project budget was a limiting factor in achieving results, given the overly ambitious objectives established for the project. If these objectives were a holdover from a larger intervention designed with a bigger budget in mind, the project logframe (at the very least) should have been updated in order to reflect the amount of funding available to the project, especially when attempts to secure further funding failed.

The presentation from the project team indicated that the following factors affected project implementation:

- The political instability and civil unrest in 2019 and again at the end of 2021.
- The COVID-19 restrictions in 2020 and 2021 prevented international travel, preventing the missions planned for international experts as well as backstopping missions from project managers from UNIDO headquarters and support from the FAO regional office.
- High turnover among government personnel delayed decision-making and slowed down project implementation.
- The worsening of macro-economic conditions and continued inflation increased the cost of inputs, impacting negatively on farmers' ability to implement the good practice 'packages' recommended by the project.
- The long dry spells and limited rainfall in 2021 decreased the crop yield of participating farmers in many locations.

5.4. Overarching assessment and rating table

UNIDO evaluation policy calls for project performance to be rated against several criteria in order to summarise the qualitative assessment of evaluators, to allow for comparability across projects and to track project progress over time. UNIDO uses a six-point rating scale for each criterion, as reflected on Table 4 below.

	Score	Definition*	Category
6	Highly satisfactory	Level of achievement presents no shortcomings (90% - 100% achievement rate of planned expectations and targets).	CATICEACTORY
5	Satisfactory	Level of achievement presents minor shortcomings (70% - 89% achievement rate of planned expectations and targets).	SATISFACTORY

 Table 4: UNIDO Evaluation Rating Scale

4	Moderately satisfactory	Level of achievement presents moderate shortcomings (50% - 69% achievement rate of planned expectations and targets).	
3	Moderately unsatisfactory	Level of achievement presents some significant shortcomings (30% - 49% achievement rate of planned expectations and targets).	
2	Unsatisfactory	Level of achievement presents major shortcomings (10% - 29% achievement rate of planned expectations and targets).	UNSATISFACTORY
1	Highly unsatisfactory	Level of achievement presents severe shortcomings (0% - 9% achievement rate of planned expectations and targets).	

Source: UNIDO Independent Evaluation Division Evaluation Manual²³

 $^{^{\}rm 23}$ UNIDO Independent Evaluation Division (2018) Evaluation Manual. Vienna

Table 5: Evaluation Rating Table: Upgrading the Sudanese Sesame Seed Value Chain Project

	Evaluation criteria	<u>Mandatory</u> <u>rating</u>
A	Impact: Likely positive & negative, primary and secondary long-term effects produced by the development intervention, directly or indirectly, intended or unintended, including redirecting trajectories of transformational process and the extent to which conditions for trajectory change are being put in place.	4
В	Project design	4
1	Overall design: Assessment of the design in general	5
2	Project Logframe: Assessment of Logical Framework	4
С	Project Performance	4
1	Relevance: Extent to which the project suited the priorities and policies of the target group, recipient and donor.	6
2	Effectiveness: Extent to which objectives were achieved.	4
3	Efficiency: A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.	5
4	Sustainability of benefits: The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.	4
D	Cross-cutting performance criteria	4
1	Gender mainstreaming: The extent to which the intervention has contributed to better gender equality and gender related dimensions were considered in an intervention.	4
2	 M&E: Refers to all the indicators, tools and processes used to measure if a development intervention has been implemented according to the plan (monitoring) and is having the desired result (evaluation). M&E design M&E implementation 	4
	Environment and socio-economic aspects	4
3	Results-based management (RBM): Assessment of issues related to results-based work planning, results-based M&E and reporting based on results.	4
E	Performance of partners: Assessment of the contribution of partners to project design, implementation, monitoring & reporting, supervision and backstopping and evaluation. The performance of each partner will be assessed individually, based on its expected role and responsibilities in the project life cycle.	
1	UNIDO	4
2	FAO	5
3	National counterparts	4
F	Overall assessment: Overarching assessment of the project, drawing upon the analysis made under the Project Performance and Progress to Impact Criteria above, but not an average of ratings.	5

6. Conclusions, recommendations and lessons learned 6.1. Conclusions

As indicated in Table 5, the evaluators have found that the performance of the project has been satisfactory and that the project has delivered the planned project outputs with a small delay of six months. The project has been less effective in achieving higher level results, due largely to a lack of adequate financial and human resources, as well as a number of external challenges. The project budget was a limiting factor in achieving envisaged results, given the overly ambitious objectives established for the project. If these objectives were a holdover from a larger intervention designed with a bigger budget in mind, the project logframe (at the very least) should have been updated in order to reflect the amount of funding available to the project, especially when attempts to secure further funding failed.

In addition to the limited project budget and overly ambitious objectives, the presentation from the project team indicated that the following external factors affected project implementation:

- The political instability and civil unrest that beset the country in 2019, and again at the end of 2021, increased safety and security concerns and made work, especially field work, difficult.
- The COVID-19 restrictions in 2020 and 2021 prevented international travel, preventing the missions planned for international experts as well as backstopping missions from project managers from UNIDO headquarters and support from the FAO regional office.
- High turnover among government personnel, linked to the political changes, delayed decision-making and slowed down project implementation.
- The worsening of macro-economic conditions and continued inflation increased the cost of inputs, impacting negatively on farmers' ability to implement the good practice 'packages' recommended by the project.
- The long dry spells and limited rainfall in 2021 decreased the crop yield of participating farmers in many locations.

6.2. Lessons learned

The experience of this project underscores two particular lessons. Firstly, as discussed in section 3.1 of the report, the project is likely to have had more demonstrable impact if the project was smaller and more tightly defined. In the words of stakeholders from Sudan:

"For projects with limited budgets, we would concentrate on the most important area first before moving on to the next issue. To improve the value chain, the problem is the residue on products. We have good production, the problem starts with the storage. We need good traceability - the project should have focused here and also on the main labs" (Interview 23).

"The terrible state of warehouses in Khartoum indicate that post-harvest handlers will need convincing to adopt good SPS measures. This might be done through a project that targets a small number of players from the entire value-chain, perhaps three farmers, two warehouses, a small number of transporters and a couple of exporters, so that the project can control practices and demonstrate the increased value that can be realised through better management & SPS measures" (Interview 18).

A member of the UNIDO project team who was not involved in the project design phase shared the same view and indicated that:

"The project was small and targeted too many stakeholders. In future, for projects in a value chain, the project should focus on a limited supply chain, for example, we could identify twenty exporters, identify associated warehouses, farmers and processing facilities. We could focus on getting their practices to be ISO accredited, establish good manufacturing practices, the use of organic sesame seeds ... we need to focus on small projects" (Interview 14).

These quotations indicate the importance of greater focus in the number of beneficiaries and the objectives of the project, especially when project budgets are limited. The objectives of this project and the number of stakeholders/beneficiaries were unreasonably large, undermining the effectiveness and diluting the benefits of the project. If the original design of a project is too ambitious for the budget that is eventually secured, reflective practice demands that project managers, jointly with relevant partners, give due consideration to how a project should be realigned in order to maximise effectiveness and impact within budget constraints.

Secondly, the project experience also teaches that providing training and capacity building is of limited use in improving production activities unless input issues are also addressed. The Ministry of Agriculture indicated that farmers engaged by the project were speaking a new language related to GAP and that they demonstrated an understanding of what constituted good practice during each production process. However, farmers were still to implement the good practices they had learnt because they needed financial support to do so (Interview 13).

The evaluation notes that the FAO and ARC did invite other service providers to an event at the Farmers Field Schools in order to connect beneficiaries with other services, including access to finance. However, the project outcomes would have benefitted from the development of more consistent and structured relationships with other service providers, including local microfinance organisations and/or other sources of input funding. The Access to Finance (A2F) experience gained by the "Fostering Inclusive Economic Growth in Sudan

Kassala State through Agro-value Chain Development and Access to Financial Services, Proj. No.: 170074" and its successor project, would have important lessons in this regard. The Kassala project, in its first iteration, selected a microfinance institution (MFI) through a competitive procurement process each year. The contracted MFI then entered into agreements with the producers associations to finance the purchase of technical packages defined by UNIDO and the ARC. These packages were partially subsidised using project funds. Once member farmers had repaid their MFI loans, a portion of the UNIDO funding contribution was released to the relevant producers association to kickstart the association's savings (sunduk), which would be applied to productive activities identified by the association in the future. On the processing side, the project entered into an arrangement with the University of Kassala to provide entrepreneurial training and to assist selected entrepreneurs to develop their business plans. The business plans were then assessed by the Entrepreneurship Development Committee (EDC), consisting of representatives from the public sector, financial institutions and UNIDO. If the committee judged the business to be viable, they issued a Certificate of Financial Pledge committing Kassala Project funds. This funding covered part of each business's costs and acted as a risk-sharing mechanism, allowing MFI's to finance the rest of the business plan.

The Kassala Project successfully facilitated access to small loans for 1568 small farmers and enterprises and piloted a model for the provision of micro-finance loans to small farmer collectives, persuading partnering MFIs to update their policies to allow for group lending. However, the microfinance component of the project also suffered a number of challenges: (a) the long and bureaucratic procedures caused some farmers to miss the planting season; (b) some entrepreneurs found that equipment and raw materials had become unaffordable in the highly inflationary context while awaiting loan approvals; (c) in some cases, the size of the microfinance loan was inadequate for business needs; (d) the MFI procedures were difficult for some beneficiaries to meet because they lacked documents and guarantees; (e) defaulting farmers and producers associations ran the risk of legal action against them; and (f) the model used limited involvement to a small number of MFIs.

Given the challenges encountered, the second phase of the project was considering the use of a credit guarantee facility as a means of extending the access to microfinance work to include a larger number of MFIs. The most important lesson learnt from the A2F activities of the Kassala project is the importance of reflective practice when designing projects to improve production and access to finance. The experience indicated that programme activities should be closely monitored and practice should be thoughtfully recalibrated to address implementation challenges as evidence emerged²⁴.

²⁴ For more information, refer to: Aniruth, J. & El-Karouri, A. (2021) Terminal Evaluation: Fostering Inclusive Economic Growth in Sudan Kassala State through Agro-value Chain Development and Access to Financial Services (ID: 170074) Revised Draft Report. UNIDO, Vienna

6.3. Good practices

The provision of farmer training through local Farmers Field Schools appears to have been an example of good practice that worked very well on the project. These schools, established within the local project areas, provided training throughout the sesame production cycle, directly linking each session to the production activity then being undertaken. The ARC also established demonstration fields alongside participant farmers' fields in order to physically demonstrate the improvement in quality and productivity with the use of GAP. As indicated by a stakeholder interview:

"Application of Farmers Field Schools (FFS) with engagement of research and extension is an efficient and effective approach for bridging the knowledge gap among small farmers. In addition, the FFS approach contributes to extension of knowledge beyond direct project beneficiaries" (Interview 4).

The Farmers Field Schools, coupled with the demonstration fields, therefore appears to have been a particularly useful, hands-on, immediate and practical exercise in learning-by-doing and proved to be a very effective manner in which to provide training to farmers.

6.4. Recommendations

1. Greater focus, in terms of geographical area or a particular area of focus within the value chain, for example, on capacity building for laboratory testing, or a smaller number of targeted stakeholders along the value chain, might have improved project results, given the limited budget and human resources. The evaluation therefore recommends that future UNIDO projects properly reconsider project objectives, together with local stakeholders and the project funders, if the budget sourced falls short of that needed for all project activities. The Project Managers should record any changes to the project and should revise the logframe so that it continues to be a useful tool that directs implementation and project M&E.

2. UNIDO Project Managers should assemble sufficient human resources in-country and close to the project implementation site in order to ensure effective, hands-on implementation. On this project, the COVID pandemic, UNIDO's strict COVID regulations and political unrest intensified the need for such human resources since the movement of international project people and Khartoum-based staff was prohibited at different times.

3. The evaluation recommends that UNIDO and FAO consider the packaging of the ToT training developed by the project for the sesame value chain as interactive and participatory online

training course/s in order to improve these organisations' ability to capacitate in-country stakeholders to act as trainers in GAP and SPS measures within the sesame value chain. The demand for online training is likely to increase in future, driven by cost constraints, environmental concerns and health risks, making the investment of resources in ensuring that this online offering is effective, worthwhile. This online training package can be made available to other communities within Sudan as well as other countries with which UNIDO and the FAO work, with appropriate adjustments.

4. The illustrated guides and training manuals that have been developed by the programme are reportedly user-friendly and very useful for sesame producers and post-harvest handlers. It is therefore recommended that this training material be shared more widely within Sudan, with other organisations and other states that might find it useful. It is suggested that each partner organisation disseminate soft copies of the material to other projects within their respective organisations as well as and sister organisations with whom they cooperate.

5. While the project proactively trained extension officers, ARC staff and lead farmers to act as trainers themselves, there is no agreement on how these trainers will roll out this training. Stakeholder interviews indicated that the costs of the newly trained local trainers in conducting the training for farmers and post-harvest handlers was covered by the project budget. These costs included travel and daily subsistence. It appears that it is unlikely that these trainers will scale up training initiatives to farmers in the absence of dedicated project budgets to cover these costs. UNIDO, along with its network of donor partners, will therefore be integral in sourcing the funding needed to scale up project activities within Al Qadarif and North Kordofan, as well as other sesame producing areas in Sudan. The evaluation recommends that the UNIDO project team, FAO and national partners develop a plan on how the training will be rolled out, with designated responsibilities for implementation, as well as a list of potential donors to be approached for funding.

6. The dissatisfaction of some stakeholders regarding the choice of equipment purchased by the project points to the need to proactively engage local stakeholders in decision-making through relevant decision-making structures, with a clear definition of roles and responsibilities, so as to improve the effectiveness of interventions and to improve chances of sustaining development gains achieved by the project. Likewise, it is essential that government departments in beneficiary countries honour their commitments to internationally funded projects, regardless of which party or individuals are in control of government or particular departments. Without this commitment, developing countries will see the exit of international donors as projects become less effective and less sustainable. Whether UNIDO will cover costs of local stakeholders to participate in meetings, needs to be clarified by the organization and a general practice established. Currently, some projects appear to cover costs while others don't. The evaluators recommend that the policy allows a small payment to cover essential costs like travel or data costs for online meetings, but only if these costs are not already being reimbursed by government.

7. The suppliers of the sesame cleaning and oil production equipment from China were unable to get permission to travel to Sudan. However, the company agreed to translate the equipment manuals into English, to provide videos on the use and maintenance of the machines and to conduct virtual training sessions. It is essential that the FAO project team facilitates the provision of this training to the relevant organisations/users before the close out of the project.

8. Sustainability planning is essential for all projects and programmes and is made even more essential by a difficult implementation context, such as the one prevailing in Sudan. This sustainability planning should be spearheaded by the UNIDO Project Manager, should focus on mechanisms and options for the continuation of project benefits and should be integrated into the whole project life cycle. The Project Manager should incorporate this issue into the dialogue with local implementing organisations right from the outset of the project. These sustainability strategies should be agreed as early as possible, be monitored during implementation and revised as necessary.

9. UNIDO projects should set ambitious targets for women's participation, based on the reality within the sector. If women make up the majority of sesame farmers in Sudan, as indicated in the project documents and capacity building projects don't reflect this reality on their beneficiary lists, then male sesame farmers are advantaged and might displace women's participation in the sector over time. UNIDO Project Managers and implementing partners should understand the reasons that inhibit the participation of women within projects and address these issues appropriately. For example, if conservatism and patriarchal attitudes make it difficult for women farmers to mix with male farmers and trainers in the Farmers Field Schools, then specific training courses for female farmers with female extension officers as trainers should be considered.

10. UNIDO IED should consider producing simple Excel-based monitoring tools that can be easily adapted for use by each project. This tool should be offered as an illustration of the kind of tool required to monitor and track project outputs and outcomes. This example can then be adapted to the needs of projects by each project team, who can increase the complexity of their own tool according to their project needs and the team's capabilities.

11. While the GAP training conducted at the Farmers Field Schools was reported to be very good, the adoption of good practices was undermined by the fact that many small farmers lacked the financial resources to implement the GAP measures advocated. The effectiveness of the project would therefore have been greatly improved through the coordination of work with local microfinance organisations and/or other sources of input funding. The Access to

Finance (A2F) experience and models used by the "Fostering Inclusive Economic Growth in Sudan Kassala State through Agro-value Chain Development and Access to Financial Services, Proj. No.: 170074" and its successor project, would have important lessons in this regard²⁵. It is recommended that future projects seeking to improve GAP and SPS compliance within value chains take cognisance of the need to develop relationships with providers of finance in order to enable the adoption of good practices being taught.

²⁵ Please refer to page 55 for a discussion of this project experience.

Annexes Annex A: Terms of Reference for International Evaluator



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	International Project Evaluation Expert
Main Duty Station and Location:	Home-based
Mission/s to:	NA
Start of Contract (EOD):	14 February 2022
End of Contract (COB):	31 March 2022
Number of Working Days:	21 workdays

ORGANIZATIONAL CONTEXT

The United Nations Industrial Development Organization (UNIDO) is the specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability. The mission of UNIDO, as described in the *Lima Declaration* adopted at the fifteenth session of the UNIDO General Conference in 2013, is to promote and accelerate inclusive and sustainable industrial development (ISID) in Member States. The relevance of ISID as an integrated approach to all three pillars of sustainable development is recognized by the 2030 Agenda for Sustainable Development and the related Sustainable Development Goals (SDGs), which will frame United Nations and country efforts towards sustainable development in the next fifteen years. <u>UNIDO's mandate is fully recognized in SDG-9</u>, which calls to "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation". The relevance of ISID, however, applies in greater or lesser extent to all SDGs. Accordingly, the Organization's programmatic focus is structured in four strategic priorities: <u>Creating shared prosperity</u>; Advancing economic competitiveness; <u>Safeguarding the environment</u>; and <u>Strengthening knowledge and institutions</u>.

Each of these priorities is pursued through a number of individual programmes, which are implemented in a holistic manner to achieve effective outcomes and impacts through UNIDO's four enabling functions: (i) technical cooperation; (ii) analytical and research functions and policy advisory services; (iii) normative functions and standards and quality-related activities; and (iv) convening and partnerships for knowledge transfer, networking and industrial cooperation. Such core functions are carried out in Departments/Offices in its Headquarters, Regional Offices and Hubs and Country Offices.

The Directorate of Digitalization, Technology and Agri-Business (DTA), coordinates and mainstreams the Fourth Industrial Revolution (4IR) in its technical cooperation, strategic,

normative activities aiming at fostering the inclusive and sustainable development in the era of 4IR. The Directorate creates new and innovative technical cooperation deliverables in the areas of trade, investment, technology innovation and agro-industry and agribusiness. The Directorate comprises the Department of Digitalization, Technology and Innovation (DTI) and the Department of Agri-Business (AGR).

Responding to the growing demand for supporting inclusive and sustainable industrial development (ISID) in the era of the new industrial revolution, the Department of Digitalization, Technology and Innovation (DTA/DTI) leads the way in addressing opportunities, challenges and risks stemming from the fourth industrial revolution (4IR) and its contribution to sustainable socio-economic progress. The Department is responsible for the strategic coordination of 4IR-related matters with designated focal points in other technical Departments and organizational entities of UNIDO, as appropriate. In consultation with public and private partners, DTI designs and implements holistic interventions that are tailored to specific country needs. The Department's interventions actively identify and combine complementary services from across three Divisions, namely:

- Innovation and Digitalization Division (DTA/DTI/IDD)
- Investment and Technology Promotion Division (DTA/DTI/ITP)
- Quality Infrastructure and Smart Production Division (DTA/DTI/QIS)

This position is within the Quality Infrastructure and Smart Production Division (DTA/DTI/QIS), which seeks to build national and regional quality infrastructure systems needed to provide internationally recognized services, including strengthening institutional capacities (i.e. metrology, standardization and accreditation); building conformity assessment capacities (testing, inspection, certification, calibration, etc.); supporting small and medium enterprises (SMEs) to take advantage of new technologies and standards for smart production and thus participate in global value chains; trade facilitation and promoting quality awareness with the public sector, economic operators and consumers.

PROJECT CONTEXT

This project aims to increase export revenues of sesame-seed in Sudan by improving the quality of sesame-seed, increasing capacity to comply with food safety and SPS measures, and enhancing market access to value-added markets. The project encompasses a series of interventions, based on a value chain approach, involving stakeholders from sesame-seed farmers, post-harvest handlers, facility owners, exporters, cooperatives and sesame-seed producer/exporter associations, etc.

Stakeholders in the sesame-seed value chain including small farmers (of which many are women) will play a key role in implementation of activities. The project will engage public and private partnership for promoting sesame-seed exports to value added markets. Local government departments takes responsibility in extension and training, and related Ministries responsible for demonstrating compliance with the SPS requirements for trading partners.

The project has six outputs as follows:

- **Output 1.1**: Set-up farmer cooperatives in targeted two regions to develop baseline for horizontal cooperation among farmers.
- **Output 1.2**: Sesame-seed growers strengthen their capacity to implement GAP and develop better understanding of international standards.
- **<u>Output 2.1</u>**: Competency and skills developed for post-harvest handlers, such as primary collectors and regional traders to comply with international food safety requirements.
- **Output 2.2**: Traceability system along sesame-seed seed value chain developed.
- **Output 2.3**: Testing, inspection and certification assessment capacity and procedures strengthened.
- <u>Output 2.4</u>: Economic activities of sesame-seed industry enterprises improved by enhancing development of new business linkages in the international market.

FUNCTIONAL RESPONSIBILITIES

Under the overall supervision of the Project Manager (PM) and in close coordination with the Project Management Team, the Project Evaluation Expert will guide a national project evaluator in the entire evaluation process and carry out the following duties:

	Main duties	Concrete/ measurable outputs to be achieved	Expected timing and duration (workdays)	Location
1.	Desk study of project documentation and the country context	 Background, progress and achievements of the project well understood. 	February 2022 (3 workdays)	Home-based
2.	Prepare and submit an overall work plan and required tools of the assignment and a TOR in consultation with the project management team	 Work plan and TOR submitted to the PM. 	February 2022 (2 workdays)	Home-based
3.	Ensure the smooth, effective and efficient data and information collection required for designing and carrying out the terminal evaluation in coordination with the project implementation team and the national evaluator	 The terminal evaluation framework designed with indicators and means of data collection (i.e. evaluation methodology, evaluation grid, questionnaire and surveys). 	February 2022 (3 workdays)	Home-based
4.	Guide the national evaluator to conduct the terminal evaluation as per UNIDO Evaluation Manual and STDF evaluation guidelines; draw lessons learned and make recommendations to improve the next planning cycle.	 The evaluation conducted and its lessons learned and recommendation shared with the PM and the project implementation team. 	March 2022 (5 workdays)	Home-based

5.	Consolidate inputs from the national project evaluator, and prepare and submit a terminal evaluation report focusing on the impacts of the project	The terminal evaluation report and the report focusing on the impacts of the project prepared and submitted to the PM.	March and April 2022 (6 workdays)	Home-based
6.	Prepare and submit an End- of-Assignment Report.	The End-of-Assignment Report submitted to the PM.	April 2022 (1 workday)	Home-based
7.	Brief the PM and the project implementation team the results of the project evaluation.	The PM and the project implementation team well debriefed about the results of the evaluation	April 2022 (1 workday)	Home-based
		Total number of workdays	21 workdays	

REQUIRED COMPETENCIES

Core Values

WE LIVE AND ACT WITH INTEGRITY: work honestly, openly and impartially.

WE SHOW PROFESSIONALISM: work hard and competently in a committed and responsible manner.

WE RESPECT DIVERSITY: work together effectively, respectfully and inclusively, regardless of our differences in culture and perspective.

Key Competencies

WE FOCUS ON PEOPLE: cooperate to fully reach our potential –and this is true for our colleagues as well as our clients. Emotional intelligence and receptiveness are vital parts of our UNIDO identity.

WE FOCUS ON RESULTS AND RESPONSIBILITIES: focus on planning, organizing and managing our work effectively and efficiently. We are responsible and accountable for achieving our results and meeting our performance standards. This accountability does not end with our colleagues and supervisors, but we also owe it to those we serve and who have trusted us to contribute to a better, safer and healthier world.

WE COMMUNICATE AND EARN TRUST: communicate effectively with one another and build an environment of trust where we can all excel in our work.

WE THINK OUTSIDE THE BOX AND INNOVATE: To stay relevant, we continuously improve, support innovation, share our knowledge and skills, and learn from one another.

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education: Advanced university degree in economics, agricultural/rural development, development studies, evaluation or equivalent with training in social research and M&E methodologies.

Technical and Functional Experience: 7 years working experience in M&E for development programmes/projects in developing countries. Working experience in Sudan is an asset. Sound computer proficiency is essential.

Languages: Fluency in both written and spoken English and Arabic is required.

Annex B: Evaluation Matrix

EVALUATION CRITERIA	EVALUATION	PROPOSED	SOURCES OF EVIDENCE
Progress to impact	To what extent has the project helped put in place the conditions to address the key drivers, overcome barriers and contribute to the long- term objectives?	EVALUATION TOOLS Content review of documents. Focus group discussions with beneficiary farmers & post-harvest handlers. In-field observation of beneficiaries. Semi-structured interviews with Sudanese partners and stakeholders.	Project documents, Sudanese policy documents, and donor strategy documents. Stakeholder interviews. Focus groups. Field notes.
Project design, relevance, efficiency	Has the project done the right things? Has the project done things right, with good value for money? To what extent is the project suitable to the needs of the beneficiaries and the policies and priorities of Sudan and the donor. To what extent has the project incorporated gender issues? To what extent has the project management utilized good M&E systems/practices and Results Based Management?	Analysis of project M&E information; Analysis of project financials; Content review of project documents. Semi-structured interviews with Project Team. Focus group discussions with beneficiaries. Semi-structured interviews with Sudanese stakeholders and international partners.	M&E database, Project documents, Stakeholder interviews. Focus groups.
Effectiveness	How well has the project performed? What are the project's key results? To what extent have the expected results been achieved or are likely to be achieved?	Content review of project documents. Analysis of project M&E information. Focus group discussions with beneficiaries. Semi-structured interviews with Sudanese partners, stakeholders and donors.	M&E database, Project documents, Stakeholder interviews. Focus groups.
Sustainability	To what extent will the achieved results be sustained after the completion of the project? To what extent have local stakeholders taken ownership and responsibility for the continuation of project activities.	Focus group discussions with beneficiaries. Semi-structured interviews with Sudanese partners, stakeholders and donors.	Focus groups, stakeholder interviews.

Lessons for practice	What are the lessons arising from the successful and unsuccessful practices in implementing and managing this project throughout the project cycle?	Content review of project documents. Focus group discussions with beneficiaries. Semi-structured interviews with Sudanese partners, stakeholders and donors.	Project documents, Stakeholder interviews. Focus groups.

Annex C: National Context in Sudan

Socio Political and Economic Events that Occurred During the Implementation of the Project: Upgrading the Sudanese Sesame Seeds Value Chain 2019-2021.



Source: Map of States of Sudan including Alqadaerf and North Kordofan States, Mappr.

Sudan has been facing macro-economic challenges since the secession of South Sudan in 2011, which took three-quarters of the oil output, leaving the Sudan with half of fiscal revenues and one-third of export earnings. After the secession, the country has been also suffering from a shortage of foreign exchange reserves, mainly due to low foreign investments, limited access to international financing and fiscal deficits as a result of weak revenue collection and heavy subsidies on fuel (more than 10 percent of Gross Domestic Product [GDP] in the 2018-2019 period, according to the International Monetary Fund [IMF]).

Economic conditions significantly worsened since late 2017, following a sharp devaluation of the local currency. The weakening of the currency is a result of the increased demand for imports and, consequently, for the US dollar after the removal of international sanctions on the country. This prompted high inflationary pressures and particularly an increase in prices of imported goods, such as fuel and wheat, and triggered widespread protests. As a result, the President was ousted and a transitional Government was established to rule until the general elections that are scheduled to be held in late 2022. In December 2020, the country was removed from the United States of America's list of state sponsors of terrorism and allowing access to international financial aid and debt relief programmes.

The Central Bureau of Statistics (CBS) estimates the country's GDP in 2020 at about SDG 4 066 billion (at current prices). The IMF estimates indicate that GDP contracted for the third consecutive year and at a steeper rate (8.5 percent) in 2020, reflecting reduced investment and large deficits, exacerbated by reduced economic activities due to the COVID-19 pandemic. At the end of the third quarter of 2020, the trade balance recorded a deficit of about USD 3.9 billion, slightly higher than 2019's already elevated level. Compared to the same period in 2019, exports of crude oil decreased by more than 60 percent in volume terms due to a decline in international demand after the outbreak of the COVID-19 pandemic. By contrast, exports of gold in the first nine months of 2020 increased by nearly 50 percent year on year, mainly reflecting higher foreign demand. With regard to agricultural commodities, exports in volume terms in the January-September 2020 period were 15 percent higher than the same period in 2019.

According to its estimates, the agricultural sector contributed to about 20 percent of the GDP in 2020, while contributions of the industrial and service sectors were 23 and 57 percent, respectively. In the agricultural sector, the contribution to the GDP is highest in livestock (about 65 percent), followed by staple and cash crops (about 33 percent), while the importance of the forestry and fishing sectors is marginal. Total revenues from exports of sesame and groundnut, which generate the highest export earnings, are estimated at USD 855 million between January and September 2020, about 32 percent higher than in the same period in 2019. The increase in exports of these crops is due to strong international demand, especially from China (mainland), as well as the above-average production in 2019. The country was the most important supplier of sesame and the second largest supplier of groundnuts to China (mainland) in 2020.

Exports of watermelon seeds and hibiscus flowers also increased by 50 and 60 percent, respectively. By contrast, exports of sorghum and sugar declined substantially year on year, reflecting the reduced 2019 production and strong domestic demand. In the case of sorghum, the increasing use of sorghum flour in wheat bread-making, due to the limited availability of wheat, mainly imported, supported the high domestic demand. Imported quantities of wheat products (grain and flour) during the first three quarters of 2020 were slightly lower than in 2019, despite the rising domestic demand. Imports of other food items, such as dairy products, vegetables and animal and vegetable oils were generally higher than in 2019, and imports of sugar more than doubled in the first nine months of 2020. The upsurge in sugar purchases is due to limited domestic availabilities from declining production and low carryover stocks following the below-average imports in 2019.

The average annual inflation rate, estimated at 50 percent in 2019, continued to soar at a steeper rate in 2020, reaching 250 percent in November 2020 to rising to 422% in Oct. 2021. The upsurge is mainly due to the intensified monetization of the increasing fiscal deficit in 2020. On one hand, revenues decreased as oil transit fees that the country receives from South Sudan as well as oil exports decreased on account of the decline in international oil prices amid the outbreak of the COVID-19 pandemic. On the other hand, expenditures increased due to higher wages for civil servants and sustained subsidies following the soaring inflation. According to the CBS, prices in food and beverage as well as transport sector increased most sharply, reflecting higher input costs, including fuel, which are mostly imported. High inflationary pressures have contributed to diminish the purchasing power of urban consumers and farmers, significantly constraining their access to food and agricultural inputs.

The Sudanese Pound (SDG) was devaluated from SDG 45.2 to SDG 51.5 in February 2020 and to 55.3 per US dollar in March 2020 to narrow the increasing gap with the exchange rates in the parallel market, which was as high as 550 SDG in March 2022. The Sudanese Pound has been weakening since late 2017 as the lifting of international sanctions on the country increased the demand for US dollars. The weakening of the Sudanese Pound exerted upward pressure on prices, especially those of imported goods, including fuel, wheat and agricultural inputs.

Furthermore, the difficult macro-economic situation, exacerbated by the COVID-19 pandemic, prevented the country from attracting foreign investments. The Central Bank of Sudan estimates that foreign investments during the first nine months of 2020 were 22 percent lower than in the same period in 2019, with a negative impact on economic growth. In September 2020, in an effort to restore economic stability and strengthen competitiveness, the Government agreed with the IMF to implement a comprehensive reform of the monetary and financial sectors. It also aims to strengthen revenue mobilization, gradually phase out fuel subsidies, reduce corruption and improve the business environment. As a part of the reform plan, the Government reduced fuel subsidies in October 2020 and introduced the Sudan Family Support Programme, a cash-transfer scheme aiming to provide a safety net to the vulnerable households whose livelihoods are threatened by the increasing food and fuel prices. In addition,

international partners pledged, in June 2020, to provide USD 1.8 million to support the country's efforts on economic stabilization.

The traditional rainfed agricultural sector, which includes Alqadaerf and North Kordofan covers about 9 million hectares and accounts for the largest number of farmers. The sector is characterized by small family units farming from 2 to 50 hectares for both income and own consumption. On larger units, mechanization is used for land preparation, but the rest of the agricultural operations are carried out manually. The traditional rainfed sector prevails mainly in western parts of the country, in the Greater Darfur Region and in most of Greater Kordofan Region, where the main cereal crops are millet and sorghum. Input levels are low and yields are especially vulnerable to unfavourable rainfall. Other important crops in this sector include groundnuts, sesame, hibiscus (karkade), watermelon and Gum Arabic (FAO, April 2021, Sudan Crop and Food Supply Assessment, Special Report).

Sudan is once again lurching towards economic collapse in the aftermath of a coup in October 2021, with exports plummeting more than 85% in January 2022 according to Central Bank data and the currency sliding on the black market. Cut off from billions in foreign assistance, a military-led government is raising prices and taxes on everything from healthcare to cooking gas, angering struggling citizens. Sudan's long-running economic crisis - a legacy of decades of war, isolation, and sanctions - had shown signs of abating before the coup, but now poses a fresh humanitarian risk as its population faces renewed violence and rising levels of hunger (Sudan's economy tumbles in post-coup deadlock, Reuters, March 2022).

Annex D: Logical Framework

	Description	Measurable indicators/targets	Sources and means of verification	Assumptions
Goal	To increase revenue of stakeholders, in particular small farmers, along the sesame- seed value chain by enhancing the competitivenes s of their product on the global market.	Increase of gross income (including labour costs) of 20% at the level of the small-farmer household	National incomes survey Central Bureau of Statistics	Increase in quality is accompanied by an increase in productivity, supported by the extension services and implemented by farmers
Immediate objective	Increase export revenues through compliance with food safety and SPS measures along the sesame- seed sector value chain in Sudan.	 c) Export revenues increase by 25% by accessing premium markets d) 50% decrease in rejection s in export markets 	Export statistics National Bank of Sudan EU RASFF Ministry of Health, Labour and Welfare (Japan)	Climate change does not impact negatively on productivity of the sesame sector International demand not undermined by economic shocks in main markets
Expected results	 7.Farmers in two target states apply GAP successfully. 8.Testing, certification and inspection procedures related to sesame VC strengthened, with additional capacity for internationally- 	At least 200 farmers in target states improve their awareness and understanding on the importance of implementing GAP and practices to comply with SPS measures to increase their yields and revenue. Testing, certification and inspection gaps identified Increase in No. of	Reports from extension services MOAF, SSMO and MoH laboratory reports Testing, certification and inspection gap assessment report Laboratory test services offered on laboratory website or brochures	MOAF provides the necessary resources for extension services to provide guidance in the field Testing, certification and inspection improvement plan agreed by beneficiary and implemented

	recognized testing of all quality and safety parameters required by export markets.	test parameters offered		
Outcome 1 Implementatio n agency: FAO+MOAF]	Capacity of farmers in two target states strengthened to improve compliance with SPS measures by enhancing implementatio n of GAP.	• At least 2 farmer cooperatives are developed at target states which consist of at least 30% women and 50% youth.	 Workshop reports Interview from farmers 	 Expert/ resource person available Security stability of targeted region
Output 1.1	Support the development of farmer cooperatives in targeted two states to develop baseline for horizontal cooperation among farmers	• 2 communities / farmer cooperatives organized	• Mission reports	• Resource person that has leadership of project implementation with farmers available
Activity 1.1.1	Organize farmer cooperatives taking enhancing gender equality and youth employment into consideration. Select trainers for leading the cooperatives on strengthening their capacity.	• 2 communities / farmer cooperatives organized	• Mission reports	• Farmers are willing to work together under cooperatives
Activity 1.1.2	Conduct inception workshops for farmers in the target regions of North Kordofan and Al Qatarif, in partnership with local authorities and sector associations.	• 2 workshops conducted	 Workshop report Interview from farmers 	• Farmers are willing to commit to receive training in sesame-seed GAPs

Output 1.2	Sesame-seed growers strengthen their capacity to implement GAP and develop better understanding of international standards			
Activity 1.2.1	Develop training materials and training curricula on adapting GAP for sesame-	• 1 training manuals and curricula prepared	 Mission reports Training materials 	• Farmers have decent level of literacy
Activity 1.2.2	Conduct ToT and expert capacity building training programme to build the technical and outreach capacities of sector associations and/or advisors to provide advice to farmers in the area of GAP, compliance with SPS measures.	10 workshops conducted 30 trainers/facilitators trained	 Training registered Mission reports Training reports 	
Activity 1.2.3	Organize practical training on GAP implementation and monitoring, compliance with SPS measures for farmers and sector associations in the target regions of North Kordofan and Al Qadarif.	4 workshops conducted 200 sesame-seed growers trained 200 training packages distributed	 Training registered Mission reports Training reports 	
Outcome 2 Implementation agency: UNIDO+MOAF]	Export opportunities for Sudanese sesame-seed improved by complying with SPS measures	Number of new markets accessed Number of testing, certification and inspection operations demonstrating compliance with	 Export statistics Test and inspection reports 	Main export markets are willing to pay premium prices for higher and consistent quality of products

	and other international food safety standards.	requirements in export markets		
Output 2.1	Improved quality and hygiene conditions in the supply chain			
Activity 2.1.1	Baseline survey of product quality and hazards	The quality and safety issues impacting on the sector assessed	Assessment report	The Government counterparts continue to be supportive in improving quality and hygiene conditions in the supply chain.
Activity 2.1.2	Establish national network of sesame producer and marketing operators	A national network of producer and marketing organizers strengthened	Annual report of Chamber of Commerce	
Activity 2.1.3	Prepare and pilot GAP and quality manuals, training materials etc.	A range of guides to best practices in the production and marketing of sesame	• MOAF, SSMO and MoH reports	
Activity 2.1.4	Identify and train trainers and implement national training programme	Future trainers from farmers' associations, Chambers of Commerce, Ministry of Agriculture and Irrigation QCEDU and Plant Protection Department, etc. identified and trained.	• MOAF, SSMO, MoH and Chamber of Commerce reports	
Activity 2.1.5	Develop traceability along the value chain (traceability manual)	Training materials on traceability prepared and training on traceability conducted	MOAF, SSMO, MoH and Chamber of Commerce reports	
Output 2.2	Strengthened SPS measures			
Activity 2.2.1	Review and amend legal basis for SPS measures (sanitary conditions, pesticide management)	Legal measures setting out requirements for food safety and quality, for plant health and management of associated agro- chemicals (such as pesticides) reviewed and gaps and dysfunctional aspects identified.	• MOAF, SSMO, MoH reports	The Government counterparts continue to be supportive in strengthening SPS measures.
Activity 2.2.2	Design and	Design of the	 Operations 	
Activity 2.2.3	implement strengthened export control system (farm level controls, approved exporters) Training of inspectors (SSMO, QCEDU) responsible for export control and certification	scheme, integrating requirements at each level of the export supply chain to provide the guarantees developed. The staff of the competent authorities responsible for implementation of the export approval system (from the MOAF QCEDU and SSMO) trained in the operation of the system.	manuals, recording forms, certificates, etc. • Reports of MOAF QCEDU and SSMO	
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Output 2.3	Improved laboratory testing, inspection and certification assessment capacity and procedures	Improvement plan of laboratory testing, inspection and certification assessment capacity and procedures endorsed by relevant Ministry or government No. of test parameters offered	 Government decision or policy document or similar Availability of testing services and fees published on website of laboratories 	Relevant Ministry formally takes responsibility for undertaking to upgrade laboratory testing, inspection and certification assessment capacity and procedures Producers/exporter s interested to use testing services
Activity 2.3.1	The capacity for testing, certification and inspection services needed in the sesame value chain will be assessed, the needs for supporting quality at all levels of the value chain (production, processing, storage, export- ready) will be identified, proposals for filling any gap will be made and the following activities will be implemented under the project:	Gaps in testing, inspection and certification identified and agreed by testing and calibration laboratories, certification and inspection bodies Laboratories to be supported and strengthened though procurement of equipment and training selected and agreed upon Selected laboratories publish their quality manuals and participate in proficiency testing programmes Mock assessments of selected labs against ISO/IEC 17025 show decreasing non-	 Training programmes Mission reports Report/feedback from trainees Laboratory assessment reports 	Experts available for conducting training Experienced laboratory personnel available at selected laboratories Basic chemical testing services already offered by selected laboratories Upgrade of laboratories possible within allocated budget State budget State budget supports laboratory investment and operating costs Laboratory heads receiving equipment commit to prepare for accreditation Business operators not required to

 a) The	conformities	finance higher	
laboratories that	Selected	laboratory	
are the best	laboratories	overheads support	
capable of	prepared for	increased testing	
providing testing	accreditation for	capacity (through	
services under	relevant scopes	fees for mandatory	
this project will	Number of training	testing)	
be confirmed	activities held	Foreign	
after evaluation	Number of tests on	accreditation body	
of their current	sesame increases by	agrees to undertake	
canacities and	20% every year as	accreditation of	
competencies.	from second year of	selected	
Prenare	project	laboratories	
coherent and	implementation		
viable laboratory			
development			
nlans including			
evaluation of			
testing required			
and the most			
and the most			
appropriate test			
Supply and			
commission			
laboratory			
equipment			
required for			
effective testing			
in the field, in the			
form of test kits			
for basic			
parameters and			
(2) in the official			
laboratories so			
designated by			
Sudan, in the			
form of advanced			
instruments for			
reference tests,			
e.g. pesticide			
residue			
monitoring,			
arrain laborater			
at aff			
stall In conducting tests			
using evicting			
and new			
equipment for			
sesame.			
Train laboratory			
staff in setting up			
the laboratory			
management			
system in			
accordance with			
ISO/IEC 17025,			
and support			

	official			
	laboratories with			
	calibration			
	support,			
	proficiency			
	testing, internal			
	audit, mock			
	assessments, etc.			
	with the			
	objective of			
	getting them			
	ready for			
	accreditation for			
	selected scopes of			
	testing,			
	Initiate the			
	process of			
	accreditation for			
	selected			
	laboratories			
	Carry out 1			
	training			
	workshop for			
	inspection staff			
	from relevant			
	authorities and			
	organizations on			
	150/1EC 1/020,			
	conduct one			
	Contraining for			
	SSIVIO In the area			
A 11 11 2 2 2 2	of certification.		T 1 1 1	0.1.1.11
ACTIVITY 2.3.2	The national	SSMO technical	• Technical	Stakeholders
	Sudanese	programme	reports and	technical
	standards for	includes revision	minutes	committee work
	Sesame	work items	minutes	and share
	(SDS116:2009)	Technical		information on their
	and Sesame Oil	committee		products
	(SDS0047:2009)	discusses work		F
	will be reviewed	items		
	following testing			
	of these			
	products to			
	determine			
	whether product			
	characteristics			
	specified in the			
	current			
	standards are			
Output 2.4		1 1	- M'- '	D and the state
Output 2.4		1 buyer's mission	• Mission	Buyers interested in
	activities of	conducted with at	from potential	Sudeness with
	sesame- seed	huvers who are	huvers	seeds exporters
	ontorreisos	from value added	 Feedback from 	Non-SPS issue does
	improved by	markets, or sells to	post-harvest	not exist or does not
	onbansing	value added	handlers who	give major impact
	ennancing	markets.	joined the event.	on business in

	development of new business linkages in the international market.	At least 50% of the post-harvest handlers who participated in the event receive order/letter of intent from buyers or business partners.		value added market
Activity 2.4.1	Organize a buyer's mission for importers of value added markets (EU, Japan, US, Korea, etc.) to visit Sudan.	1 buyer's mission organized in cooperation with UNIDO/counterpar t (002) 12 potential buyers invited	 Mission reports/feedbacks from potential buyers Mission programme 	Stable security in Sudan Potential buyer identified
Activity 2.4.2	Organize a business networking event between trained and coached Sudanese sesame-seeds post-harvest handlers (including exporters) and potential buyers visiting Sudan.	1businessnetworkingeventorganized5050post-harvesthandlersandexportersparticipate	• Feedback forms completed by participants after the event	Exporters willing to join the event in his/her own expense

Annex E: List of Documentation Reviewed

- STDF Project Application Form, July 2017
- STDF Project Inception Report and Annexures
- Upgrading the Sudanese Sesame Seeds Value Chain Project Flyer
- 1st STDF Project Progress Report and Annexed Project Outputs
- 2nd STDF Project Progress Report and Annexed Project Outputs
- 3rd STDF Project Progress Report and Annexed Project Outputs
- 4th STDF Project Progress Report and Annexed Project Outputs
- 5th STDF Project Progress Report and Annexed Project Outputs
- 6th STDF Project Progress Report and Annexed Project Outputs
- 7th STDF Project Progress Report and Annexed Project Outputs
- Presentation by UNIDO to Project Evaluation Team on 7 March 2022
- Presentation by FAO to Project Evaluation Team on 7 March 2022
- Documents Submitted by UNIDO & Government of Sudan to STDF requesting Project Extension
- Final Report by International Expert on Value Chain Analysis & SPS Compliance
- Document setting out the B2B Approach for the Sesame Sector
- Draft document on Export Control/Inspection System
- Answers to Questions on Logframe (partially answered)
- Document to Clarify Questions about Project Deliverables
- Summary of the meeting with MoPER, Al Gadarif, held on 7 April 2022
- Sesame Directory List, 22 May 2022
- Terms of Reference for MOPER North Kardofan
- Terms of Reference for MOPER Al Qadarif
- Training Reports from MOPER North Kardofan
- Training Reports from MOPER Al Qadarif
- FAO Outcome 1 Inception Workshop Report
- Minutes of First PSC Meeting, 5 August 2019
- Minutes of Second PSC Meeting, 25 August 2019
- Minutes of Third PSC Meeting, 16 October 2019
- Minutes of First TEG Meeting, 4 August 2019
- Minutes of Second TEG Meeting, 25 August 2019
- Minutes of Third Meeting, 16 October 2019
- Minutes of Fourth TEG Meeting, 28 November 2019
- Minutes of Fifth TEG Meeting, 9 January 2020
- Minutes of Sixth TEG Meeting, 10 Feb 2020
- Agenda of Seventh TEG Meeting, 17 December 2020
- Consolidated Training Guide: Promoting Good Practices in the Sesame Value Chain for Improved Quality and Enhanced Market Access
- National Project Coordinator's Back to the Office Report-North Kordofan Mission, 8-13 August 2021
- National Project Coordinator's Back to the Office Report-Al Qadarif Mission, 13-16 July 2021

Annex F: List of Stakeholders Engaged

Terminal Evaluation

Upgrading the Sudanese Sesame Seed Value Chain (Proj. No: 160177)

STAKEHOLDERS INTERVIEWED

ORGANISATION	REPRESENTATIVE	ROLE
SUDANESE STAKEHOLDERS		
Ministry of Production and Economic Resources – Al Qadarif	Omer Ahmed Mohammed	Director-General
	Abdelmoniem Ahmed M. Zien	Head of the Extension Department
	Nahid Ali Mohamed	Extension Department – previous Manager
Ministry of Production and Economic Resources - North Kordofan	Dr. Hatim Gumaa Almardi	Director-General
Galaa Alnahal Cooperative Farmers association	Mohamed Osman Haroun	Lead farmer – participated in ToT
Sudanese Standards & Metrology Organisation (SSMO) - Khartoum	Ilham Salih Alobied	Quality Assurance Manager
SSMO – Airport Branch	Nahla Awad	Head of Branch
Al Qadarif Crops Market	Mustafa Ahmed Alhussien	Market Manager until December 2021
North Kordofan Crops Market	Seiefeldin Ahmed Alhadi	Market Manager
Agricultural Research Corporation – Al Qadarif	Mohamed Ali Abdallah.	General Manager
Agricultural Research Corporation – North Kordofan	Dr. Mohamed Mustafa Lazim Dr. Adao Mohamed Idriss	General Mangers
SSMO Al Qadarif	Abdelhay Ahmed Idriss	Import and Export Unit Manager - Al Qadarif
SSMO North Kordofan	Dr. Basheer Badr Basheer	Manager
Ministry of Agriculture	Samia Gafar Bitik	Director: Quality Control Administration

MOA - Plant Protection Directorate	AFAF Osman Fethalrahman	Director of the Plant Health Laboratory
Ministry of Industry	Limyaa Elnur Mohamed Saeed	Director of International Organizations Department
Private sector	Mamoun Ibrahim Gali	Sesame Exporter
PROJECT IMPLEMENTATION TE	AM	
FAO	Elwathig Mukthar Hamid	Project Manager
	Bannaga Elfaki	Al Qadarif Coordinator
	Dr. Amir Malik	IPM & FFS Expert/Project Coordinator
UNIDO	Cong Wu	Project Manager
	Dr. Toshiyuki Miyaki	Project Manager until June 2020
	Suvdaa Dukhumbayar	Project Associate
	Ula Makkawi	National Project Coordinator
	Haider Khamis	Part-time Logistics Officer
INTERNATIONAL EXPERTS		
	Dr. Ali Qazilbash	Value Chain Analysis & SPS Compliance
	Dr. Thomas Gude	Quality Assurance Systems
FOCUS GROUPS DISCUSSIONS	WITH PROJECT BENEFICIARI	ES
Farmers: Al Qadarif	Abdelwahab Mohamed	Almadag and Galaa Alnahal Farmers School
	Zien Mutawakil Haroun	
	Abbakr	
	Abdeimman Monamed	
Post-harvest Handlers: North	Osman Adam Hussien	North Kordofan Transporters, Exporters and
Kordofan	Yousif	Agents
	Salah Abbas Musa	
Farmers: North Kordofan	Alsadig Monamed	Field Schools in 3 villages North Kordofan
runners. North Kordoldh	Hukmalla Ahmed	There series in 5 villages for thir kondorum
	Berier Alnour Alatia	
	Alzien Khaleefa Alzien	
	Balaiel Abdalla	
	Mufeeda Ibrahim	

Annex G: Primary Data Collection Instruments



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Semi-structured Questions to Guide Interviews with Stakeholders Terminal Evaluation: Upgrading the Sudanese Sesame Seed Value Chain UNIDO ID: 160177

INFORMED CONSENT

We are conducting an end-of-project evaluation for the project: Upgrading the Sudanese Sesame Seed Value Chain. The findings from this evaluation will be used to improve future projects implemented by UNIDO and its partners.

Your views and experiences as a project stakeholder are important and we appreciate your participation in this evaluation. This discussion usually takes about 60 minutes. The information you provide will be kept confidential and we won't use your name when reporting the study results. Do you have any questions about the evaluation?

Date:

Part One Basic Information

- 1. Respondent's Name:
- 2. Organisation:
- 3. Designation in Organisation:

Part Two

- 1. When did you/your organisation become involved with the project?
- 2. In what project activities did your organisation take part?
- 3. Did your organisation have to recruit new staff as a result of this project? How many?
- 4. Did staff have to undergo training as part of this project?
- 5. How were staff members chosen for training?
- 6. Did you participate in any of the training courses? If so, which one/s?
- 7. What do you think of the quality and usefulness of the courses provided?
- 8. Do you think that this project helped build the capacity of your organisation to serve beneficiaries? If so, please explain how.
- 9. Has the project changed the way your organisation will provide services in the future? How?
- 10. How well did the project perform? Do you think that the project increased the capacity of farmers in North Kordofan & Gedaref to comply with SPS measures and implement GAP?

- 11. How have farmers improved their agricultural practices?
- 12. Do you think the project improved export opportunities for the Sudanese sesame-seed value chain? How?
- 13. Do you think the project improved compliance with SPS measures and international food safety standards within the sesame value chain in North Kordofan & Gedaref?
- 14. How have post-harvest practices changed?
- 15. Did the project reach the right beneficiaries? How were beneficiary farmers chosen? How were postharvest beneficiaries chosen?
- 16. How do you think that the project could have been improved?
- 17. Do you think that the project benefits will continue after the UNIDO project ends?
- 18. What lessons (good and bad) have been learned from this project?



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Questions to Guide Focus Group Discussions with Beneficiaries Terminal Evaluation: Upgrading the Sudanese Sesame Seed Value Chain UNIDO ID: 160177

INFORMED CONSENT

We are conducting an end-of-project evaluation for the project: Upgrading the Sudanese Sesame Seed Value Chain. The findings from this evaluation will be used to improve future projects implemented by UNIDO and its partners.

Your views and experiences as a project beneficiary are important and we appreciate your participation in this evaluation. This discussion usually takes about 1.5 - 2 hours. The information you provide will be kept confidential and we won't use your name when reporting the study results. Do you have any questions about the evaluation?

Date:....

4.	Area:
5.	Organisation:
6.	Type of Beneficiaries:

Ouestions

- 1. Tell us your names and how long you've been part of this project.
- 2. How did you learn about the project?
- 3. What did you have to do to join the project?
- 4. What services did you get from this project (e.g. training, access to inputs, access to equipment)?
- 5. What do you think about these services? Were they good? Why?
- 6. Did you receive training from the project? Was the training helpful?
- 7. Did this project help you change the way you farm/ manage your business?
- 8. FOR POST-HARVEST HANDLERS: Has the project improved the quality of sesame produced in the area?
- 9. How will you continue the changes started by the project (e.g. use new type of seeds, GAP, testing services, etc.)?
- 10. How could the project have been improved?



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION Semi-structured Questions to Guide Interviews with Stakeholders Terminal Evaluation: Upgrading the Sudanese Sesame Seed Value Chain **UNIDO ID: 160177**

الموافقة لاجراء المقابلة:

نحن نجري تقييما لنهاية المشروع للمشروع: ترقية سلسلة قيمة بذور السمسم السودانية. وستستخدم نتائج هذا التقييم لتحسين المشاريع المقبلة التي تنفذها اليونيدو وشركاؤها.

وجهات نظركم وخبراتكم كمستفيد من المشروع مهمة ونحن نقدر مشاركتكم في هذا التقييم. تستغرق هذه المناقشة عادة حوالي 1.5 - 2 ساعة. سيتم الحفاظ على سرية المعلومات التي تقدمها ولن نستخدم اسمك عند الإبلاغ عن نتائج الدراسة. هل لديك أي أسئلة حول التقييم؟

Date:....

Part One Basic Information

- 1. اسم المستجوب:
 2. المنظمة:
- 3. الوظيفة في المنظمة:

Part Two

- a. متى شاركت أنت/ مؤسستك فى المشروع? b. ما هي أنشطة المشروع التي شاركت فيها منظمتكم؟
 - هل اضطرت مؤسستك إلى تعيين موظفين جدد نتيجة لهذا المشروع؛ كم عددهم؟ .C

.....

هل كان على الموظفين الخضوع للتدريب كجزء من هذا المشروع؟	.d
كيف تم اختيار الموظفين للتدريب؟	.e
هل شاركت في أي من الدور أت التدريبية؟ إذا كان الأمر كذلك ، أي واحد ؟	.†
ما بالراك في حددة مالاندة الأدير إن المقدم في	a
له ريب يي جوده وينده المورات المصفر.	.y
هل تعتقد أن هذا المشروع ساعد في بناء قدرات منظمتكم لخدمة المستفيدين؟ وإذا كان الأمر كذلك، يرجى توضيح كيفية القيام بذلك <u>.</u>	.h
هل غير المشروع الطريقة التي ستقدم بها مؤسستك الخدمات في المستقبل؟ كيف؟	.i
ما مدى جودة أداء المشروع؟ هل تعتقد أن المشروع زاد من قدرة المزارعين في شمال كردفان والقضارف على معاييرسلامة الاطعمة النباتية وتنفيذ برامج لمعالجة القصور ؟	.j

كيف قام المزار عون بتحسين ممارساتهم الزراعية؟	. k
•••••••••••••••••••••••••••••••••••••••	
هل تعتقد أن المشروع حسن فرص التصدير لسلسلة قيمة بذور السمسم السودانية؟ كيف؟	.I
••••••	
هل تعتقد أن المشروع حسن الامتثال لتدابير الصحة والصحة النباتية والمعايير الدولية لسلامة الأغذية	.m
ضمن ساسلة قامة السمسم في شمال كردفان والقضار ف	
العلمل مسملك ليبه المسملم في مسال فرادقال والفعقاري.	
كيف تغيرت ممارسات ما بعد الحصاد؟	n
هل وصل المشر وع إلى المستفيدين المناسيين؟ كيف تم اختيار المز ار عين المستفيدين؟ كيف تم اختيار	.0
كيف تعتقد أنه كان من الممكن تحسين المشر و ٤؟	n
كيف تعتقد أنه كان من الممكن تحسين المشروع؟	. p
كيف تعتقد أنه كان من الممكن تحسين المشروع؟	.p
كيف تعتقد أنه كان من الممكن تحسين المشروع؟	.p
كيف تعتقد أنه كان من الممكن تحسين المشروع؟	.p
كيف تعتقد أنه كان من الممكن تحسين المشروع؟	. p

17- هل تعتقد أن فوائد المشروع ستستمر بعد انتهاء مشروع اليونيدو؟

19. ما هي الدروس (الجيدة والسيئة) التي تم تعلمها من هذا المشروع؟



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION Questions to Guide Focus Group Discussions with Beneficiaries Terminal Evaluation: Upgrading the Sudanese Sesame Seed Value Chain UNIDO ID: 160177

الموافقة لاجراء المقابلة :

نحن نجري تقييما لنهاية المشروع للمشروع: ترقية سلسلة قيمة بذور السمسم السودانية. وستستخدم نتائج هذا التقييم لتحسين المشاريع المقبلة التي تنفذها اليونيدو وشركاؤها.

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Date	
	1_المجال
	2 .التنظيم
(مثل	3. نوع المستفيدين:
	المذارعين والمصدرين)

Questions

أخبرنا بأسمائك وكم من الوقت كنت جزءا من هذا المشروع:

2. كيف تعرفت على المشروع؟

د. ماذاكان عليك أن تفعل للانضمام إلى المشروع؟

ما هي الخدمات التي حصلت عليها من هذا المشروع (مثل التدريب، والوصول إلى المدخلات، والحصول على	.4
المعدات)؟	
ما رأيك في هذه الخدمات؟ هل كانت جيدة؟ لماذا؟	.5
هل تلفيت تدريبا من المشروع؟ هل كان التدريب مفيدا؟	.6
	7
هل ساعدك هذا المسروع على تعيير طريفة (راعلك 7 إداره عملك؟	• • •

. لمناولة ما بعد الحصاد: هل قام المشروع بتحسين جودة السمسم المنتج في المنطقة؟	8
S	
و. كيف ستستمر في التغييرات التي بدأها المشروع) على سبيل المثال استخدام نوع جديد من البذور ، برامج لمعالجة	9
القصور ، خدمات الاختبار ، إلخ)؟	
6 a 11 b b c c c c c c c c c c	^
)1. حيف کان يمکن تحسين المسروع ؟	U