End of Project Evaluation Report

The Food Security Through Agribusiness in South Sudan

Project-SSADPII (Project Number: 4000001744)

FUNDED BY:

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South Sudan

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Evaluation Conducted by DUBELIG Dev-Consulting

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List Abbreviations and Acronyms

BDAs	Business Development Advisor
BPC	Business Plan Competition
BSC	Business Support Centre
BSO	Business Support Officer
BST	Business Skill Training
CMDRR	Community Managed Disaster Risk Reduction
CRA	Conflict Risk Analysis
CRR	Conflict Risk Reduction
FEMA	Farmer Economic and Marketing association
FGD	Focus Group Discussions
FSABSS	Food Security through Agribusiness in South Sudan
GoSS	Government of South Sudan
HH	Household
ISALS	Internal Savings and Lending Schemes
KII	Key Informant Interviews
MSME	Micro, Small and Medium Enterprises – Existing Business
NGOs	Non-Government Organization
PDRA	Participatory Disaster Risks Assessment
RUFI	Rural Finance Initiative
SSAPU	South Sudan Agriculture Producers Union
SSP	South Sudan Pound
SSRA	Seed Security Resilience Assessment
STO	Star Trust Organization
VCA	Value Chain Assessment
VEMSA	Village Economic and Marketing Association
WASH	Water, Sanitation, and Hygiene
YWAE	Youth and Women Agri-Business Entrepreneurship
YWE	Youth & Women Enterprise-Start Business

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Executive Summary

The report presents results of the end of project evaluation of the "The Food Security Through Agribusiness in South Sudan Project-SSADPII (Project Number: 4000001744)". The project was funded by the Embassy of the Kingdom of the Netherlands (EKN) in South Sudan and implemented by a consortium consisting of Cordaid South Sudan (consortium lead), Agriterra and Spark. The evaluation covers the five-year project implementation period of the project which ran from August 2018 to July 2023. The evaluation sought to determine the extent to which the project has achieved its objectives; assess whether the project represents substantial value for money, highlight the key lessons learnt, document challenges and provide recommendations to support future programming in a similar context. The overall goal of the project was to improve food security, income, and employment of 10,000 farmer households in 3 selected counties: Bor (Jonglei state), Torit (Eastern Equatoria state) and Yambio of (Western Equatoria state). The project is based on the Making Markets Working for the Poor (M4P) approach. Key components included the Community Managed Disaster Risk Reduction (CMDRR), peace dialogues and Early Warning Systems.

Evaluation Methodology

Using the OECD/DAC criteria, the evaluation analysed aspects of the project related to relevance, coherence, efficiency, effectiveness, impact, and sustainability. Cross cutting issues related to gender, the environment and conflict management were also assessed. The evaluation used a participatory mixed method approach by utilizing both qualitative and quantitative data collection methods. This included a desk review of existing relevant documents and data, Key Informant Interviews (KIIs) with key project stakeholders, Focus Group Discussions (FGDs) with project beneficiaries and a survey of representative beneficiaries from Bor, Torit and Yambio.

Evaluation Findings

Relevance

The project design and intervention objectives were found to be highly relevant and responded to target beneficiaries' needs, South Sudan development policies and priorities and global development objectives and policies. The SSADP II overall goal and objectives were aligned with the South Sudan Agriculture Sector Policy Framework (2012 - 2017). The project is consistent with the Comprehensive Agriculture Master Plan (2015 – 2040), whose primary focus is to achieve the vision of "food security for all the people of the Republic of South Sudan, enjoying improved quality life and the environment". All components were aligned with the South Sudan National Development Strategy (2018 – 2021) whose goal is to consolidate peace and stabilize the economy. The SSADP II project was also well aligned with the Republic of South Sudan First National Adaptation Plan for Climate Change (2021). At a global level, the SSADP II was consistent with the United Nations Sustainable Development Goals (SDGs), namely Goal 1 on No poverty, Goal 2 on achieving Zero hunger, Goal 5 on Gender equality, Goal 12 on Responsible consumption and production and Goal 13 on Climate Action. The design, approach and intervention objectives were in sync with the Netherlands' Food and Nutrition Security policy objectives that seek to contribute to the objectives of the UN SGD Goal 2: eliminating malnutrition, doubling the productivity and income of small-scale farmers (both women and men) and making food production systems more sustainable. The SSADP II design, approach and intervention objectives were relevant and responded to key needs in the local context, in terms of improving food, nutrition and income security, employment and contributing to reducing poverty. It sought to address some of the major challenges that are faced by the beneficiary households and other players in the targeted value chains.

The programme pillars were relevant for transitioning the farmers from subsistence farmers to farming for the market in line with the M4P approaches.

Coherence

The SSADP II project design and approach were coherent with the strategic priorities of the funding partner (Embassy of the Kingdom of the Netherlands), the implementing partners, the Government of the Republic of South Sudan and other development organisations working in the agricultural sector particularly the United Nations Food and Agriculture Organization (FAO), the International Fertilizer Development Center (IFDC) and the South Sudan Agriculture Producers Union (SSAPU). The project's internal coherence between the components and subcomponents was also strong including with Cordaid mission which is focused on reducing fragility and the vulnerability of people in fragile and conflict-affected societies (FCAS). The SSADP II project was also found to be coherent with other projects funded by other donors in the beneficiary counties for example the Start Trust Organisation (STO) in Yambio County and the Smile Again Africa Development Organization (SAADO) in Bor County.

Effectiveness

Outcome Indicator A1: Enhanced DRR and Trust in Targeted Communities

Quarterly reports show that the targeted number of CMDRR plans that were to be implemented was 105 and the communities eventually implemented 114 of these realising a success rate of 109%. At least that 89.9% of the farmers were aware of CMDRR plans while 72.0% reported having derived some benefits from the plans in terms of successfully using the plans to address shocks such as floods, land disputes and cattle raids. The 89.9% awareness levels reported at the end line is 54.9 percentage points higher than the 35% reported at mid-term evaluation. Overall, 89.2% of the farmers in the three counties reported being aware of the various hazards that can impact their various livelihood activities. At least 88.0% of the farmers in the 3 targeted counties were aware of the existence of early warning systems, while 68.4% reported that they had used information from the systems. The decline in migration for coping from 36% to 28% symbolises the general stability brought about by the relative peace and by the fact that the farming being practiced requires people to stay put in one place. The increased use of assets (38% to 43%) and increased us of savings (33% to 58%) show that the farmers have been able to accumulate these assets to use them. Use of whether information also increased from 29% to 48% which reflects the positive impacts of the programme interventions through the provision of training and relevant whether related information to the targeted communities.

Outcome Indicator A2: Continued Action Research Supporting Informed Decision Making

The end of term evaluation found that 75% (3) out of an overall target of 4 lessons learnt were incorporated in project implementation through evidence-based action research. Continued action research was critical in supporting informed decision making throughout the implementation of the programme. The first research was done in February 2020 and provided a recommendation on conflict sensitivity touching on the need to pay more attention to conflict sensitivity and conflict analysis. The other action research undertaken in February 2022 provided recommendations on opportunities for expanding/ improving the markets along the whole value chains for target groups.

Medium Term Outcome B1: Availability of and Access to Agricultural Inputs (seeds; fertilisers; pesticides; tools) ensured.

The SSADP II project targeted the provision of various inputs to 8,000 farmers and eventually exceeded this target by 138% as it eventually directly benefited 11,054 farmers. The inputs consisted of seed packs and tools such as maloda, hoes, planting ropes, rakes, and tape measures. Across the targeted crops, the most prevalent source of inputs was agency/NGOs supplies, ranging from 42% for cassava to 57% for sorghum. The high dependency on NGOs for seed provision was one of the structural issues that the programme intended to address given that it caused farmers to wait for delayed seed distribution, often throwing the growing season

off track. Seed houses that have participated under the SSADP II training programmes process the seed and put them in the market and farmers get them from the agro dealers to promote and maintain marketing channels.

Outcome Indicator B2: Good Agricultural Practices Enhanced and Extension Services Improved

The number of farmers applying good and climate smart agricultural practices including nutrition education, gender and resilience increased by 118% from 6,500 to 7,690. In addition, the number of farmers who joined cooperatives was 3,810 from a programme target of 4,750, thus attaining an 80% success rate. At least 92.4% of the farmers in the three counties were aware of improved seed production, while 71.8% of these have benefited from use of improved seeds. At least 91.8% of the farmers reported being aware of issues on climate smart agriculture and among these, 74.1% have gone further to apply these practises.

Outcome Indicator C1: Adequate and Relevant Market Information Accessible and Available for Farmers and Agribusiness

The evaluation found that the SSADP II overachieved its target on number of farmers accessing the available improved formal market outlets by 106% (8,000 targeted with 8,507 achieved). There was also an overachievement on targeted number of agri-business owners using market information as part of their decision making from 750 to 1,213 (162%). Overall, 90.8% of the farmers reported being aware of the distribution channels for their agricultural produce. There was an overall increase in the proportion of farmers who reported having access to markets and market information from 45.7% in 2018 to 81.1% in 2023.

Outcome Indicator C2: Improved Post-Harvest Handling and Physical Market Infrastructure

The project target on the number of farmers that make use of the available post-harvest facilities was surpassed by 6%, the target was 8,000 and the achieved was 8,476 which is 106%. Overall, 89.0% of the farmers reported that they were aware of the various post-harvest technologies. At least 88.0% of the farmers were aware of improved warehouse facilities that have been supported by the programme and 65.9% of them indicated that they have made use of the facilities. There has been a slight decline in the percentage of farmers reporting having experienced post-harvest losses in 2018 compared to the past 12 months from 71.8% to 68.7%. Increased losses reported in Torit from 65.8% in 2018 to 83.4% in the past 12 months were attributed to low levels of adoption of post-harvest techniques at the household level due to inadequate extension support. Hermetic bags use was one of the indicators with low level of achievement in this county as reported by FGD participants. However, for products that were brought to cooperative warehouses there were steps taken to reduce losses – such as better protection from moisture, the use of pallets as platform to place bags, use of bags and tarpaulins supplied by Cordaid and FAO.

Outcome Indicator C3: Market Linkages Enhanced Through Cooperatives /Associations/Farmer Organisations

The evaluation found that the SSADP II managed to reach its target of 7 on the number of value chains developed/ upgraded/ updated. It also achieved an 80% success rate on the number of farmers adding value to their commodities (out of a target of 5,000 farmers it reached 3,996 farmers). Membership to cooperative/associations/farmer organisations has increased by 44.0 percentage points from 30.3% in 2018 to 74.3% in 2023. The cooperatives have managed to facilitate the sale of farmers' produce through some international and local NGOs. The availability of local produce at the markets has benefited entire communities given the shortages of vegetable produce that often occur during the dry season. This has also benefited the producers, especially women farmers, who now have access to additional income from the market sales.

Outcome Indicator D1: Cooperatives have Adequate Organisational and Financial Management Capacity

The programme had targeted 135 cooperatives to have improved performance on organisational and financial management and managed to reach 145 making an achievement of 108%. Discussions with FGD participants showed that the associations and groups have received training on organisational and management issues. In almost all instances the members were aware of the organisational structures of committees from the Chairperson to the committee member and the various roles that each one of these members is expected to play.

Outcome Indicator D2: Women, Youth, MSMEs are Capable and Equipped with Skills to Start and Grow their Business.

The number of businesses that grow after one year was 439 out of a target of 500, thus attaining a success rate of 88%. Overall, 85.4% of farmers in the three counties reported that they were aware of functional business support services in the project locations for VEMSA, Cooperatives and MSMEs. At least 93.3% of farmers in the three counties believed that youth and women have improved capacities to start up and grow their businesses. According to the results framework, there were 162 new businesses started by youth and/or women by the end of the project out of an overall target of 200 set at the beginning of the project. Another 133 youth and/or women-led businesses had grown/expanded their businesses by the end of the project from an initial target of 50 enterprises. The training provided to the farmers under the programme has enhanced the capacities of women and youth to start and grow their businesses. There has been an increased level of adoption of good business practices such as record keeping, business premises hygiene and entrepreneurship leadership and best etiquettes for customers.

Outcome Indicator D3: Availability of and Access to Appropriate Financial Products and Services Ensured.

The evaluation found that the number of farmers, VEMSA, Coops and MSMEs that have access to and received an appropriate loan product and financial services was 1,505 from a target of 3,895 representing a 39% achievement. At least 81.4% of the survey participants were of the view that VEMSA and MSMEs could develop bankable business projects. Start-ups business plans funded through RUFI were 20 in total (6 female), while 19 MSMEs were also funded (SSADP II 2022 Annual Report). The number of agribusinesses receiving loans remained low because of limited access to collateral (e.g., land title ownership). Financial services providers feel that the programme has been very good for the farmers but there is a need to scale up their capacity and improve mechanisation. There is limited understanding of how loan systems work among the farmers and agro dealers and as a result, most of them are unable to distinguish between loans and grants. There has also been a lack of resources, especially for travel, to enable loan officers to make follow ups with clients and to provide support.

Efficiency

The analyses of project documents and results of the key informant interviews show that project activities were implemented on time and the expected outputs, outcomes and goals were achieved. The evaluation noted that rural finance/access to finance component of the project was not very successful given challenges by finance providers in recovering money loaned to cooperatives as in some cases some leaders of these cooperatives left their communities. RUFI noted that loans advanced to individuals had better repayment rates than those advanced to groups. The evaluation noted some delays in the procurement of capital equipment for cooperatives with some indicating that they did not receive the promised capital equipment by the time the programme closed. Others received the equipment just before project closure and the equipment was yet to be installed. The use of a consortium of expert organisations (Cordaid, Spark and Agriterra) as implementing partners for the project helped to increase efficiency of project implementation as this helped to cut down on learning time. The evaluation found that there was flexibility with the implementation of the programme as the project team added some activities to ensure fulfilment of the planned outputs and outcomes. Training in good agricultural techniques was implemented using adult-learning approaches such as demonstrations, practicing, coaching and field days which were highly appropriate. The adoption of pluralistic

extension approaches, including government extension services, NGO/project extension officers, and farmer extension agents (farmer-to-farmer extension system) and radio programs increased project efficiency and value for money as this enabled the project to deliver extension services to large numbers of farmers at lower cost.

The project's focus on developing and strengthening community organisations ranging from VSLAs, VEMSAs, FEMA, Peace and CMDRR committees, and co-operatives was important in ensuring efficiency of delivery of project activities. Local organisations that function well were able to engage with other stakeholders to coordinate development activities in their areas to avoid duplication of effort and unproductive competition among agencies. They were also in a prime position to lobby for resources to compliment and support on-going initiatives. The identification, training, and deployment of locally based Business Development Advisors in the project sites increased project efficiency as large numbers of agribusiness, MSME operators could be reached with business skills training and coaching services at low cost. Planned activities were mostly implemented on time, although there were instances where farmers indicated that they did not receive seeds in time which caused them to revert planting retained seed. Effective collaboration and coordination with other organisations and agencies supporting development in the communities enhanced the achievement of the project's outcomes. The project built new infrastructure to help enhance the marketing function but also supported the maintenance of existing facilities to minimise costs and to have more funds available for other activities. The coverage of the project in Torit County was reduced from 8 to 6 payams in year 3, when security challenges emerged in the other 2 payams. The project had a sound project management system at the country office level as well as the national level.

Impact

The project has significantly improved the food security of the households in the three targeted counties. The number of different food groups consumed by an average household almost doubled from 5.3 in 2018 to 9.1 in 2023. The distribution of Household Dietary Diversity Score (HDDS) shows that there has been a significant improvement in food security across the three counties with 71.6% of households now consuming between 9 and 12 food categories compared to only 22.0% in 2018. Overall, the mean Household Dietary Diversity Index (HDDI) increased from 0.81 in 2018 to 0.86 in 2023. For farming households, the proportion of households producing crops for sale increased during the project period. The level of household income increased by 72% during the project period. The percentage of households depending on agriculture as a source of income increased from about 60% in 2018 to about 93% in 2023. The percentage of households depending on employment and other sources of income remained constant during the project period at about 20% and 30%, respectively. The percentage of households without any sources of income, however, increased slightly from about 17% to 20% over the project period. An analysis of main sources of income by gender of household head shows that the proportion of households deriving income from agriculture increased by 36% for male-headed households and by 31% for female-headed households. The percentage contribution of household income sources to total household income over the past 12 months shows that 68% of the household income comes from agriculture whilst about 29% comes from business. Overall, the average household total monthly income increased from SSP 16 000 at baseline to SSP 27 000 with the project.

Household resilience to risks and shocks significantly improved during the project period. Overall, the average household experienced an average of four (4) risks or shocks before the project period, and this decreased to an average of three (3) risks or shocks with the project. A gender analysis of the main risks and shocks shows that for female-headed households, before the project, the main risks and shocks mainly derived from income shocks (25.0%), and insecurities and assaults (21.3%). The Resilience Capacity Index (RCI) for the farming households increased by 9.0% to reach 65.0% during the project period being higher for Bor (70%) and lower for Torit and Yambio (62.0% and 64.0%). Overall, the mean Crop Diversity Index (CDI) was the same for 2018 and 2023, that is, 0.67. The mean yield for: (i) maize was double the target maize yield of 430 kg / ha,

(ii) sorghum is about 215% higher than the target sorghum yield of 240 kg / ha, and (iii) groundnut yield was just a little above double the target groundnut yield of 460 kg/ ha.

Across the major crops, the percentage sales to harvest are 45% for groundnut, 46% for sorghum, and 50% for maize. The percentage sales to harvest in the high to extremely high category was 39% for maize, 40% for sorghum, and 25% for groundnut. The percentage increase in households producing crops between 2018 and 2023 was highest for vegetables (28%) followed by maize and sorghum (14%), and groundnut (11%).

Sustainability

The study found that the project enhanced access to agriculture markets and market information resulting in improved agribusiness market functioning. The evaluation found that the project contributed to improved performance of beneficiary agricultural cooperatives and Agri MSMEs. Improved performance of these farmer led organisations have in turn contributed to creation of new jobs particularly amongst women and youth. Over 90% of respondents from the household survey indicated that they would continue using good agricultural practices they learnt through the project. In addition, 47% of the farmers indicated that they would continue buying inputs from outlets they were introduced to by the project. At least 54% reported that they will continue selling their crops through markets they were introduced to by the project. Many value addition activities such as grinding mills, oil expressers and peanut butter production are already generating income for operators. As such they have a high likelihood of continuing well beyond the project lifespan. Tillage services using tractors and equipment acquired through the project are fee paying and as such are potentially self-sustaining. However, the risk comes if farmers' groups and co-operatives are not able to service and maintain the machinery and equipment. The adoption of pluralistic agricultural extension approaches, and rural advisory services increased opportunities for farmers to receive information on good production practices, business, and financial management. This has increased the likelihood that good agricultural practices will continue to be used by farmers. The project built a strong network of stakeholders in both the public, private and NGO sectors and these are likely to remain on the ground and continue to provide relevant services to the farmers and other value chain players. The State organs such as the Food Security Cluster enable different organizations to learn about each other's activities in the communities and will be instrumental in ensuring continuity of the activities of the project**.**

Crosscutting issues

The study found that nearly half (46.7%) of the beneficiary households are women-headed households. Female-headed households make up a significant number of the (rural) poor and women play a key role in agriculture. The SSADP II project 2022 Annual Report show that 7,390 women had benefited from the project representing 53.4% of the total beneficiaries. Issues of climate change, natural resources management, environmental sustainability and conflict management and prevention were also at the core of the SSADP II project as they were key focal themes identified by the project both during project design and project implementation. The project had conflict sensitive lens in its implementation where community leaders were consulted even at stage of beneficiary selection to avoid potential conflicts of interest. The project recognised that the project locations were prone to resource-based conflicts mainly between farmers and pastoralists.

Lessons learned

- The group approach can be very effective in supporting the development of farmers and other value chain players in a developing, low income and low literacy environment.
- To get buy-in from the local communities and have them adapt new approaches and technologies, it is necessary to introduce these gradually and with the use of demonstrations and lead farmers.
- The phased approach in the development of the farmer and the entrepreneur can be a powerful method in brining development and uplifting of marginalised communities.

- Success of the project is guaranteed by good stakeholder coordination through an all-inclusive multi-sectoral approach which enables buy-in and programme ownership from stakeholders.
- Community based structures if properly capacitated can help complement government and development organisations efforts in addressing challenges brought about by natural disasters and macroeconomic shocks.
- The farmer-to-farmer extension approach through use of lead farmers and group extension approaches offers an alternative viable farmer extension method for increasing extension coverage.
- Practical learning experiences through demonstration plots, farmers field schools, agricultural shows, exchange visits, study tours, and field days among others, are better means of learning for farmers than those that focus on theoretical impartation of knowledge.
- Market linkages can potentially serve as a motivating factor for surplus production and marketing avails income for purchase of inputs, thereby sustaining production.
- Groups especially marketing groups lower transaction costs per farmer as marketing costs are shared by the group and it also increases bargaining power of the farmers.
- Strong gender balancing in the implementation a development projects can result in sustainable local economic growth, social development, and environmental sustainability.
- Capacity building for beneficiaries including the lowest social strata is highly essential to make them more confident on technical and social issues.
- It is difficult to cater for beneficiary needs when an intervention stands and operates in isolation.

Recommendations

1. There is need to further enhance strategies that connect the various value chain players at the different production nodes to facilitate efferent information flows and business activities.
2. There is need to adopt and strengthen a phased-out approach to the capacity building of the farmers that employs train-the-trainer principles.
3. Additional support is required to train farmers on how to create and manage market linkages especially through the farmer associations.
4. Future programmes should consider extending support to other counties and payams to spread and enhance the impact of such interventions.
5. Farming systems will need to be further improved with adoption of additional mechanisation support.
6. There is also a need for a more collective approach which should involve close cooperation and participation of local authorities to the challenges of hazards especially such flooding, land disputes and cattle raiding.
7. There is a need to give more time to interventions designed to promote the development of the rural finance sector as the learning curve for rural finance development require a bit more time.
8. Future rural finance interventions should consider lease financing and matching grants products for the acquisition of farm equipment and machinery.
9. Future interventions should consider recoverable revolving smart subsidies for beneficiaries to increase outreach where resources are limited.
10. Future interventions should consider livelihood diversification from crop-based livelihoods to other sources of livelihoods like apiculture and poultry production.
11. We further recommend adoption of more tailor-made capacity development activities focusing on demonstration and application of techniques. This should enhance understanding and reduce on the time spent away from farm activities by the farmers during training sessions.

1. Introduction

This is an End of Project Evaluation of the **"The Food Security Through Agribusiness in South Sudan Project-SSADPII (Project Number: 4000001744)"**. The evaluation covers the five-year project implementation period of the project which ran from August 2018 to July 2023. The project was funded by the Embassy of the Kingdom of the Netherlands (EKN) in South Sudan and implemented by a consortium consisting of Cordaid South Sudan (consortium lead), Agriterra and Spark. This evaluation sought to determine the extent to which the project has achieved its objectives; assess whether the project represents substantial value for money, highlight the key lessons learnt, document challenges and provide recommendations to support future programming in a similar context.

1.1 Brief Country Context

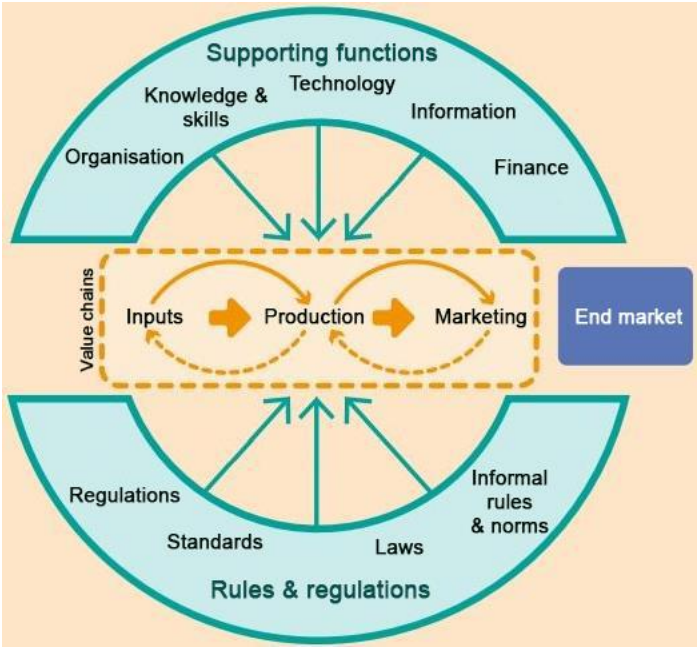
About 80% of the population in South Sudan live in rural areas with livelihoods that revolve mostly around arable or livestock farming. Female-headed households make up a significant number of the (rural) poor and women play a key role in agriculture (GOSS, 2012). Livelihood sources differ across the various communities and can often generate conflict, including conflicts over land use and water, which have occasionally been aggravated by the large influx of returnees, internal displaced persons (IDPs) and refugees.

The agricultural sector is confronted with several interrelated challenges, chief among them, post-conflict resettlement and rehabilitation of communities, low productivity, threats from pests and diseases, lack of quality seeds, inadequate rural infrastructure, limited market access, limited trained human resources and institutional capacities, inadequate agricultural services and extremely limited public and private sector investment. Agriculture is largely rain-fed, which also makes the country more vulnerable to climate change. Since 2013, when a major conflict broke out, the food security situation in the country has worsened with 60% of the population food insecure and malnutrition at high rate (Kingdom of the Netherlands, 2019).

1.2 Project Description

The overall goal of the SSADPII project was to improve food security, income, and employment of 10,000 farmer households in selected 3 counties: Bor (Jonglei state), Torit (Eastern Equatoria state) and Yambio of (Western Equatoria state). The project is based on the Making Markets Working for the Poor (M4P) approach. The project supported the strengthening of market functions and market players to make local markets more inclusive and more enabling for agribusiness to thrive. Moreover, the project strived to increase farmers' and agribusiness' (MSMEs, Cooperatives, VSLAs) access to organizations, technology, markets, and finance.

The SSADII project was implemented by a consortium of Cordaid, Agriterra, and SPARK organizations, with Cordaid as the lead consortium agency. The 3 agencies worked in close collaboration with the relevant line ministries of the Government of South Sudan, and key stakeholders, including local and international NGOs, UN agencies, and the private sector. Through this project, 10,000 farming families would benefit from increased production and productivity. 1000 youths & women and 750 existing MSMEs would benefit from Business Development Services. 230 Farmers Cooperatives would be established or strengthened, and 120 Village Economy, Market and Social Association (VEMSA) would directly benefit from Cooperative Development and VEMSA Development Support. Also, the project would create access to finance in partnership with Rural Finance Initiative (RUFI). The project used a Revolving Loan Fund (RLF) scheme to provide access to finance to the target communities.



Project Implementation Approach

The overall proposed project approach is based on the Making Markets Work for the Poor (M4P) concept. The M4P is an approach that aims to accelerate pro-poor growth by deliberately focusing on the poor in their roles as entrepreneurs, employees, or consumers of markets. M4P focuses on changing the structure and characteristics of markets to increase participation by the poor on terms that are of benefit to them. It addresses the behaviour of the private sector and therefore reinforces the strengths of market systems, rather than undermining these systems. In this way, M4P is based on recent thinking about how to use market systems to meet the needs of the poor and how to support the private sector through market mechanisms that bring about sustainable change. It is thus a facilitative approach to poverty reduction that seeks to understand where market systems are failing to benefit the poor, and how to take action to set them right. The M4P model would be used in combination with the following complementary and mutually reinforcing principles, approaches, methods, and tools:

i. Action Research (AR)
ii. Resilient Business Development Services (RBDS)
iii. Community Managed Disaster Risk Reduction (CMDRR)
iv. Cooperative Development (CD)
v. Value Chain Development (VCD) –cereals, vegetables, and fruits value chains
vi. Farmer Field Schools (FFS)
vii. Conflict Sensitivity and Do No Harm Approach

1.3 Consortium roles and responsibilities

The project had 3 main implementing partners whose roles and responsibilities were defined by their previous experience and expertise. Each consortium partner had specific roles and responsibilities as well as distinct contributions. This ensured optimum resource utilization and efficiency of the project while implementing deliverables to achieve the intended goal of the project. The roles and responsibilities were therefore as follows:

a) **Cordaid** – had the responsibility for leading the consortium. Cordaid also led the process and activities supporting farmers from production to post-harvest. This included the input supply system aimed at increasing production and improving productivity of target farmer households using a Farmer Field School (FFS) and Value Chain Development (VCD) approach. It was also

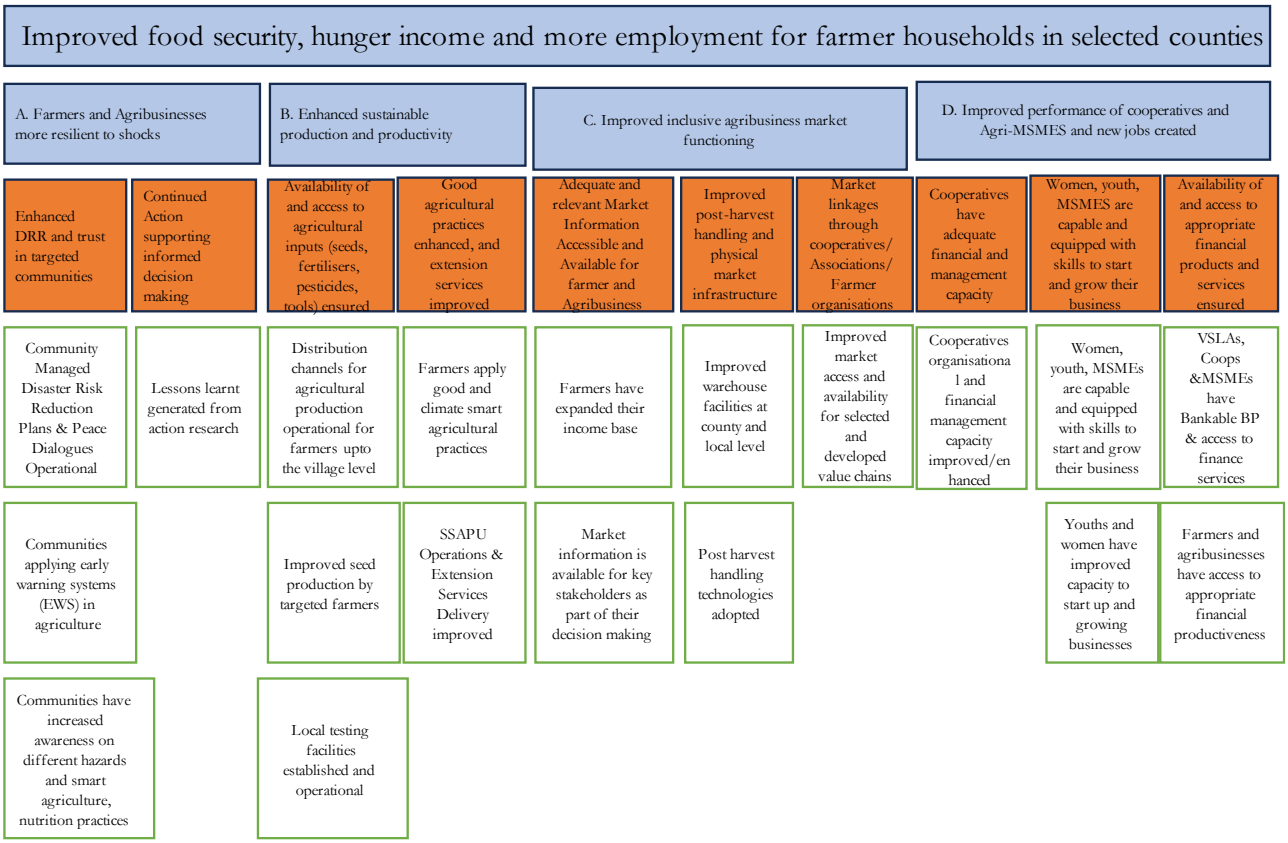
responsible for enhancing the capacity of the target groups in developing their own disaster and risk and reduction coping strategies through Community Managed Disaster Risk Reduction (CMDRR). Together with RUFI and technical support from SPARK and Agriterra, Cordaid created Access to Finance (A2F) for eligible project beneficiaries such as: agribusiness, youth entrepreneurs, women entrepreneurs, MSMEs, Cooperatives and VSLA. In addition, it supported VSLAs to create A2F in rural settings. Cordaid was also responsible for Private Sector Development to contribute to the development of selected Value Chains. Cordaid utilized its tailor-made Resilient Business Development Services (RBDS) approach for supporting MSMEs who have a high potential to create change along the selected value chains. Cordaid was also responsible for sourcing these enterprises through the VSLA groups and the cooperatives. As a cross cutting issues Cordaid led gender equality and inclusiveness, women full participation in selected value chains. Cordaid, together with the consortium partners, ensured to promote gender mainstreaming, as well as Do No Harm, in their day-to-day activities and include sex disaggregated data during reporting. Finally, Cordaid was responsible for conducting annual gender audit to detect if the working culture is not according to the standards.

b) **SPARK** – was responsible for establishing and developing a Business Support Ecosystem which comprised the physical centres, Business Support Centers (BSCs), and a network of trainers and coaches also known as Business Development Advisors (BDAs). SPARK further strengthened some of the work that was developed under SSADP I, through the local partner Premium Agro Consult Ltd. Both new and existing Youth and Women entrepreneurs had core business skills training and coaching services made available to them, using a demand driven approach, which enabled them to start or grow their agribusiness. SPARK ran business plan competitions and scouting missions for existing youth and women MSMEs, to find the strongest entrepreneurs. An Agribusiness Liaison Office (ALO) was established in the BSCs which was be responsible for maintaining a database with market and producer information, which entrepreneurs could utilize to create linkages between value chain actors. In addition, SPARK, through the BDAs sought to enhance the capacity of project targets in business skills, entrepreneurial skills, and bankable business plan preparation. Finally, SPARK was also supporting the consortium in monitoring and evaluation.

c) **Agriterra –** by providing institutional strengthening support to South Sudan Agriculture Producers Union (SSAPU), Agriterra was responsible for training, capacity development and the establishment of cooperative members and non-members. Agriterra focused on cooperative governance, management, and financial management, while also promoting cooperatives to engage in the development of their own enterprises. Agriterra also brought in Agri pool experts from the Dutch Agricultural Sector or from other cooperatives in East Africa for the peer2peer approach, and specialist Agriterra Business Advisors from other East Africa countries to support its training and capacity development activities.

1.4 The Results Chain

The following diagram describes the inter-relationship and synergies among the outputs, outcomes and objectives and the overall goal of the project.



1.5 Purpose of the Evaluation

The purpose of the end of project evaluation was to determine the extent to which the project has achieved its objectives; assess whether the project represented substantial value for money, highlight the key lessons learnt, document challenges and provide recommendations to support future programming in a similar context.

1.6 Key Outcomes of the End of Project Evaluation

The key outcomes of the end of project evaluation were to:

- Measure the overall achievements of the project based on relevant indicators defined in the Log frame, with results stipulated in the full indicator table.
- Based on the indicators captured, analyse the key success and constraint factors (both internal and external) for each outcome based on the key indicators captured.
- Analyse the project based on the evaluation criteria stated in next section.
- Recommend on strategies and approaches for learning.

2. Methodology and Approach

This section summarises the methodology employed for the evaluation.

2.1 Evaluation Design

The evaluation adopted a participatory approach utilizing both qualitative and quantitative methodologies. The evaluation engaged a range of stakeholders including the project beneficiaries, country and local government stakeholders, project partners, donors, and other relevant stakeholders. Allowing for stakeholder participation and involvement ensured that evidence obtained was credible, reliable, and useful. The evaluation questions were answered through collection of primary and secondary data that

had good depth and breadth to ensure that the team accomplished the objectives of the evaluation. In addition to providing information to answer the evaluation objectives, qualitative data was also used to provide explanations to emerging themes in the analysis. Quantitative data on the other hand was used to determine progress on the log frame, and data on impact of the project with special focus on changes in outputs to determine specific questions on outcomes and impact of the SSADP II project and efficiency changes. Some quantitative data was also obtained from secondary data sources.

Survey data collection was used for triangulation of qualitative and quantitative information obtained using other methods to ensure validity and reliability of findings, to the extent possible. Specific data collection included a comprehensive desk review, review of project log frame and desired impact; stakeholder analysis; household surveys; key informant interviews with local authorities, relevant project staff; and focus groups with project beneficiaries.

The evaluation was divided in six main phases. The first phase was the inception phase, which was followed by data collection, data analysis, data validation, draft report writing and final report writing.

2.2 Specific Data Collection Methods

The evaluation team used primary and secondary data collection methods. The following were the data collection methods and how they were used during the evaluation.

2.2.1 Desk/Literature Review

The consultants reviewed project documents (the project proposal, project inception report, baseline report, SSADP II log frame, annual progress reports and other reports relevant to the project) to get a general and contextual understanding of the project. The team developed a desk review protocol to guide the process and ensure that all relevant information was captured in the process. This process was used as the basis for the development of data collection instruments. Further document reviews were used to capture both qualitative and quantitative data particularly to capture numbers on project targets, project impact and the reached beneficiaries comparing with the project logical framework.

2.2.2 Stakeholder Analysis

The evaluation team conducted a stakeholder analysis to identify the main players involved in the SSADP project in the country. This was conducted with reference to each intervention activity of the SSADP II and at the governance level of the country, e.g., Boma; Payam; County; State; and national level. The Team took advantage of the participation of staff from SSADP II in identifying these stakeholders who also form part of the institutions and persons who also participated in the evaluation as key informants.

2.2.3 Key-Informant Interviews/ In-depth Interviews

The evaluation conducted in-depth interviews with the key informants to assess the relevance, effectiveness, sustainability, efficiency, and impact of the project from different stakeholder perspective. With guidance from SSADP II project staff, the evaluation team identified and agreed on a list of specific key informants from Cordaid, Agriterra, SPARK, Government of South Sudan line ministries, Local and International NGOs, UN agencies (FAO), public international organisations (IFDC), Private sector (Pro-Seed Ltd and Agrodealers), South Sudan Agricultural Producers Union (SSAPU), Premium Agro Consult Ltd, Rural Finance Initiative (RUFI, various beneficiary farming groups (FEMA, VEMSA, MSMEs, Cooperatives and CMDRR) in all the 3 counties of Bor, Torit and Yambio. A key informant from all relevant institutional stakeholders was engaged to give an in-depth view representing the group he or she belonged to. KII data collection was done by a hired senior enumerator and a technical expert from the evaluation team.

2.2.4 Focus Group Discussions

The evaluation team organized Focus Group Discussions (FGD) with the project beneficiaries, and this enabled the evaluation to gather data from broader and different voices from among the various project participants. The evaluation captured data pertaining project relevance, impact, sustainability, efficiency, and effectiveness from beneficiary perspective. The evaluation also explored the effectiveness of project design (the extent to which the project design was relevant for bringing food and income security and how agricultural productivity had improved as well as how were farmers now acquiring agricultural inputs and marketing their products). The evaluation conducted both mixed FGDs, and group specific FGDs. These groups covered farming families, targeted youths, and women, existing MSMEs, farmers' cooperatives, Framer Economy, and Market Associations (FEMA); Village Economy, Market and Savings Association (VEMSA); farmer vegetables groups, Community Managed Disaster Risk Reduction (CMDRR) committees. These various farmer groups were purposively from the three counties of Bor, Torit and Yambio. FGD data was collected by two hired senior enumerators under the guidance and supervision of a technical expert from the evaluation team.

2.2.5 Household Surveys

The evaluation team administered a household questionnaire to capture beneficiary ratings on different aspects pertaining the project objectives, expected results, activities undertaken and purpose of the project. The questionnaire helped in capturing quantitative information for the evaluation which was used to assess the viability of the project and to determine the overall component/s that provided for an improved outcome for the households. The consultants used KOBO Collect for the household surveys, with the help of nine hired enumerators in each of the three counties. The enumerators worked under the supervision of a hired supervisor and a technical expert from the evaluation team. Prior to commencement of field work, the evaluation team conducted a vigorous 2-day training exercise for the enumerators who participated in the data collection process for the household survey.

2.3 Sampling Strategy

The evaluation team adopted a minimum sample size of 370 respondents from the beneficiary population of 10 000 beneficiaries that was proposed in the evaluation terms of reference for the quantitative data collection. The adopted minimum sample size gave a 95% confidence level and a 5% margin of error which allowed for making statistically valid inferences from the data collected. Selection of households for the quantitative data collection was done randomly. To allow for non-responses, the evaluation team decided to collect data from 150 households from each of the three counties bringing the total sample households to at least 450 households.

For qualitative data, participants for key informant interviews and focus group discussions were purposively sampled.

The household survey collected data from 468 households while 24 Focus Group discussions were held with various beneficiary farmer groups and 27 key informant interviews were conducted (Table 1). The evaluation also managed to collect significant change stories from 6 beneficiaries.

Table 1: Data collection events executed during the SSADP II evaluation by County.

Data Collection Method	County			
	Bor	Torit	Yambio	Total
Household Survey	133	158	177	468
Focus Group Discussions	7	7	10	24
Key Informant Interviews	8	7	12	27
Most Significant Change Stories	1	3	2	6

2.4 Data Analysis

Data validation checks in KoBo were utilised to ensure that only valid data is entered into the computer. From Kobo, the quantitative data was transferred to excel for verification and cleaning and was analysed in SPSS (Statistical Package for Social Sciences). Quantitative data cleaning involved removing incomplete data entry cases and recoding of the EXCEL data variables to SPSS readable format for optimal analysis. From a total of 506 cases that were collected, 38 cases were cleaned leaving 468 cases for analysis.

Qualitative data from both key informants and focus group discussions was analysed using thematic analysis.

2.5 Data Management and Quality Assurance

The lead consultant and the team assured an excellent quality of results for this project and a well-ordered evaluation and risk management. During the evaluation period, the consultants through the lead evaluator reported to the Cordaid Monitoring and Evaluation (M&E) Specialist who acted as the designated focal person and Project Manager. The following measures were adopted by the evaluation team to ensure quality data was collected:

a) Review of drafts and final report: The team conducted internal reviews of inception report, tools, quality checks on collected data and review of reports before submitting to the client for review. A detailed review of the data collection tools was conducted during the inception meeting with Cordaid before the training of enumerators.
b) Engaging with project team: The team engaged the client throughout the review process, and this resulted in consensus on most issues. This was not conducted to get the attention of clients or to seek endorsement but to maintain quality on deliverables since there was room for Cordaid to put in views and to disregard what they felt as not necessary.
c) Overall study coordination: The team had an experienced study coordinator. The coordinator was knowledgeable and competent on all the stages of the evaluation.
d) The evaluation team cross checked and discussed all qualitative data at the end of every data collection day with enumerators. Also, quantitative data was checked with follow-ups to confirm a random questionnaire from each enumerator every data collection day.
e) With the assistance from the project team, the evaluation team recruited local enumerators to ensure that people understand the area and local language. Enumerators were trained on the tools and a pre-test was done and a review and feedback session with enumerators was carried out before the full data collection was done.
f) Throughout the evaluation, the team ensured that all ethical guidelines and principles that includes informed consent, confidentiality, anonymity, honesty, and integrity and safeguarding in the tools and data collected.

2.6 Methodological Limitations

- The main limitation of the study is that it is unable to do a difference in difference analysis for direct attribution of changes to the project as there was control group that was identified during baseline. The study had therefore to assess contribution of project to changes indirectly through asking beneficiaries during focus group discussions and key informants if the observed changes in their lives was a direct result of the beneficiaries having participated in the project or whether it was because of other factors. Through this approach, the study was able to attribute changes observed to project interventions indirectly and not through the difference in difference analysis. The study design, available resources, time and security situation did not allow for the construction of a control group to be able to undertake a difference in difference analysis as this would have involved picking on households outside the project working areas.
- The study used a diverse set of enumerators for collecting data in the three counties (project sites). This has the potential to result in differences in interpretation and framing of survey questions, and to potential inconsistencies in the data gathered. To help minimise such potential inconsistencies, the

team leading the data collection in the three project sites discussed all the data collection tools and how to deal with them during the enumerators' training. Furthermore, an assessment was conducted on whether the enumerators understood and posed the questions as was originally intended in the study.

3. Evaluation Findings

This section presents the main findings of the study.

3.1 Demographic Information of the Sample Households

A total of 468 households were interviewed in the three counties of Bor, Torit and Yambio. Overall, there were more male headed households (53.3%) relative to female headed households (46.7%) (Figure 1).

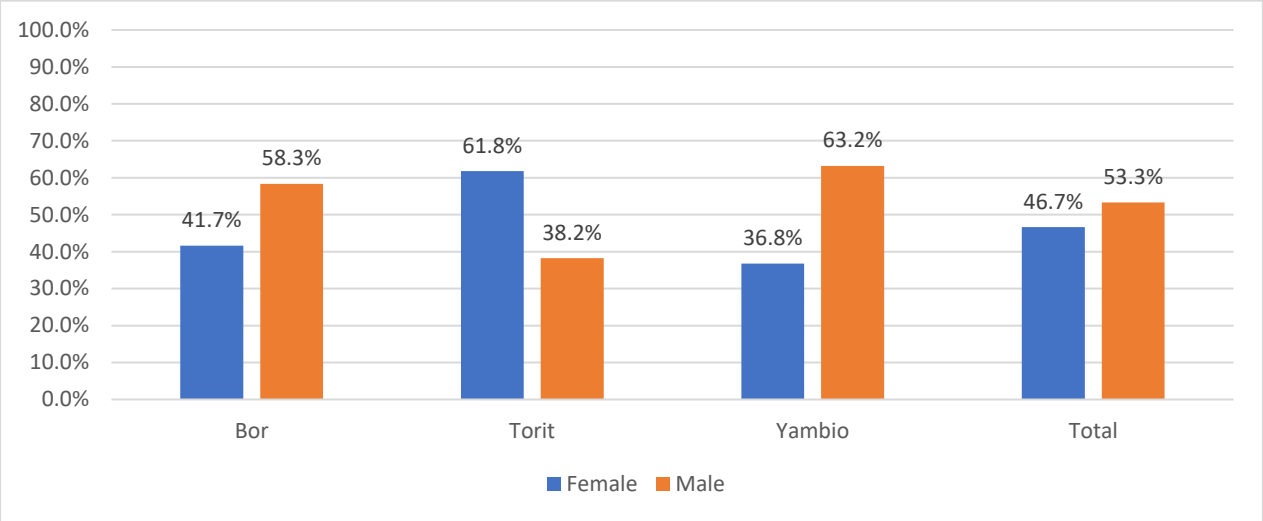


Figure 1: Gender of head of households

Analysis of the age of the head of household show that 24.4% of the head of households were aged 30 years and below, 38.5% were in the age group 31-40 years, 23% in the age group 41-50 years, 11.7% in the age group 51-60 year while only 2.4% were older than 60 years (Figure 2).

Of the total households interviewed, 1.7% were child-headed. Bor had the highest proportion of child headed households at 2.3% followed by Torit at 2.0% and Yambio had the lowest proportion of child-headed households at 1.1% (Figure 4).

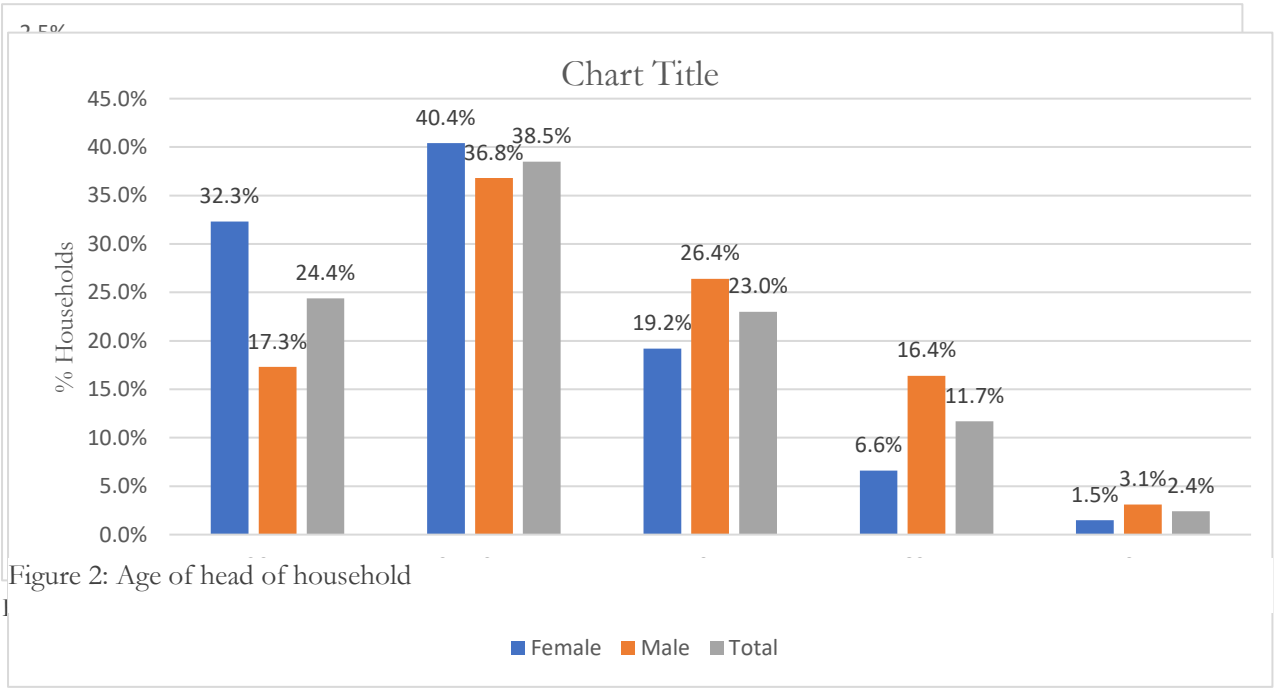
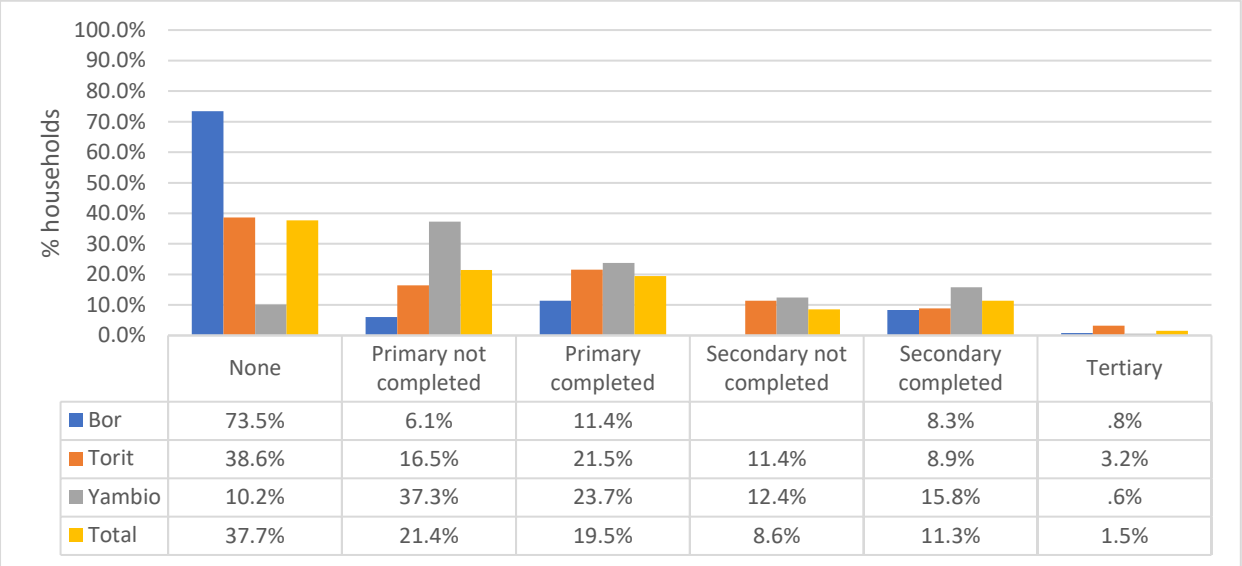


Figure 2: Age of head of household

At least 18.3% of the household heads indicated that they were living with some form of disability while 81.7% were living without disability. On marital status, 80.3% of the head of households were married, 4.5% were separated, 4.9% were single while 10.3% were widowed.

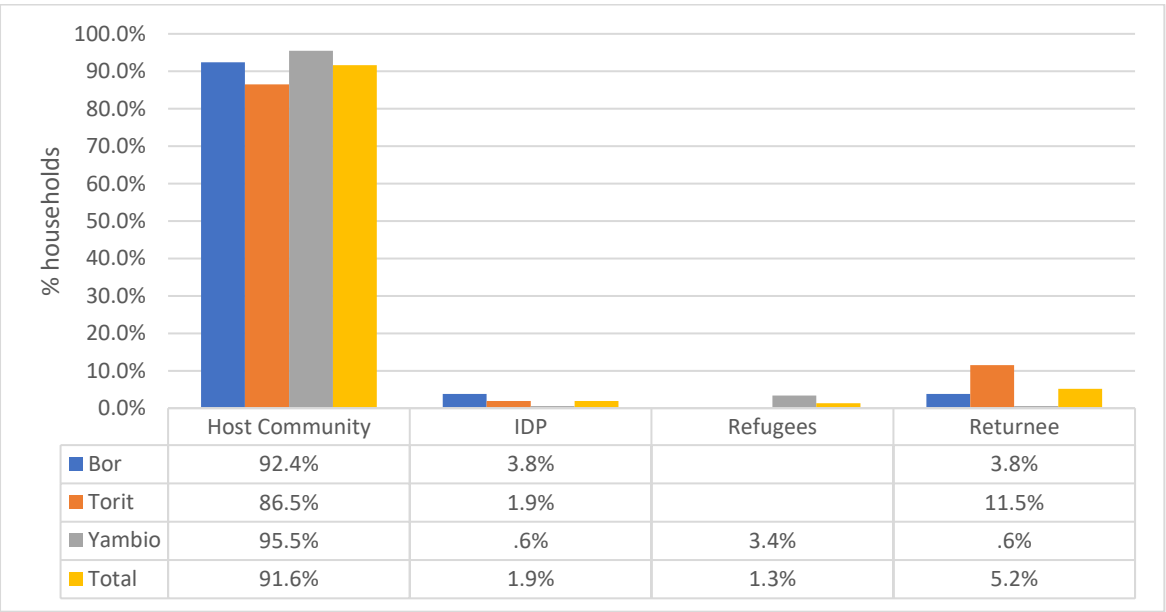
An analysis of the education status of the head of households showed that 37.7% had no formal education, 21.4% had not completed primary education while 19.5% had completed primary education (Figure 4). 8.6% and 11.3% had incomplete secondary education and complete secondary education respectively, while only 1.5% had done tertiary education.



	None	Primary not completed	Primary completed	Secondary not completed	Secondary completed	Tertiary
Bor	73.5%	6.1%	11.4%		8.3%	.8%
Torit	38.6%	16.5%	21.5%	11.4%	8.9%	3.2%
Yambio	10.2%	37.3%	23.7%	12.4%	15.8%	.6%
Total	37.7%	21.4%	19.5%	8.6%	11.3%	1.5%

Figure 4: Education status of head of household

At least 91.6 % of the interviewed households indicated that they were members of the host community, 1.9% indicated they were internal displaced households, 1.3% indicated they were refugees while 5.2% indicated that they were returnees (Figure 6).



	Host Community	IDP	Refugees	Returnee
Bor	92.4%	3.8%		3.8%
Torit	86.5%	1.9%		11.5%
Yambio	95.5%	.6%	3.4%	.6%
Total	91.6%	1.9%	1.3%	5.2%

Figure 5: Household residence status

3.2 Relevance

In assessing the relevance of the SSADP II project, the evaluation looked at the extent to which the project intervention objectives and design responded South Sudan development policies, and priorities and to target beneficiaries.

3.2.1 Relevance to South Sudan Development Priorities

The Food Security Through Agribusiness in South Sudan Project (SSADP II) design and intervention objectives were highly relevant and responded to target beneficiaries needs, South Sudan development policies and priorities and global development objectives and policies. At a national level, the SSADP II project which overall goal was to improve food security, income, and employment of 10,000 farmer households in selected 3 counties Bor, Torit and Yambio of Jonglei, Eastern Equatoria and Western Equatoria states respectively, was well aligned with the Republic of South Sudan's development policies and priorities. The overall objective overall objective of the Republic of South Sudan is to guarantee "food for all" through a radical transformation of the management of the agricultural sector to enhance farm production and productivity on a sustainable basis by addressing key constraints in food and agricultural production, marketing, distribution, and value addition. The Republic of South Sudan also seeks to create an enabling environment for the transformation of agriculture from a subsistence system into a modern, socially, and economically sustainable system through science-based, market-oriented, competitive, and profitable farming while maintaining the integrity of the natural resource base for the benefit of future generations of South Sudanese people.

The SSADP II overall goal and objectives were well aligned with the South Sudan Agriculture Sector Policy Framework (2012 - 2017). The South Sudan Agriculture Sector Policy Framework (ASPF) main objective is to increase agricultural productivity to improve food security and contribute to economic growth and environmental sustainability. The SSADP II design and intervention objectives were well aligned with the ASPF policy thrust which is aimed at increasing farm productivity, conserving post-harvested stocks, diversifying household income, enhancing youth and women empowerment, generating remunerative employment for women, youth and returnees, improving access to markets and rural finance, sustainable utilization of natural resources, enhancing access to technologies and knowledge, and increasing agricultural value-addition so as to ensure food and nutrition security for all households all year round.

The SSADP II project is well aligned with the Comprehensive Agriculture Master Plan (2015 – 2040), whose primary focus is to achieve the vision of "food security for all the people of the Republic of South Sudan, enjoying improved quality life and the environment." South Sudan Vision 2040 seeks to achieve freedom, equality, justice, peace, and prosperity for all. The SSADP II is particularly aligned to South Sudan Vision 2040 Strategic Goal 2 which seeks to build a prosperous, productive, and innovative nation. The SSADP II contributes to the following key objectives of Strategic Goal 2: (a) to promote private sector development, (b) to increase agricultural productive to enhance food security, (c) to improve national marketing system for all national products, (d) to promote sustainable environment, and (e) to strive to achieve full employment.

All the components of the SSADP II project were aligned with the South Sudan National Development Strategy (2018 – 2021) whose goal is to consolidate peace and stabilize the economy. In particular, the SSADP II overall goal contributed to the Economic Cluster goal of improving food security and livelihoods and revitalizing the national economy. The project was also aligned to the South Sudan Revised National Development Strategy (2021 – 2024) whose goal is to consolidate peace, stabilize the economy and return to sustainable development. In particular, the components of the project contributed to the economic cluster's priorities of inclusive growth and economic diversification from petroleum to agriculture. The project also contributed to the gender, youth, and other cross-cutting issues cluster which goal is to mainstream gender and all important cross-cutting development objectives in

development policies and programmes and empower women and youth as drivers of growth and nation-building.

The SSADP II project was also well aligned with the Republic of South Sudan First National Adaptation Plan for Climate Change (2021). The three priority pillars of the plan consist of: (1) building climate resilient communities; (2) building a climate resilient economy and development trajectory; and (3) building a climate-resilient environment and ecosystems. The project also contributed to South Sudan's National Environment Policy (1015 – 2025) which calls for the formulation of a national strategy for climate change adaptation as well as support for efforts to reduce community vulnerability and variability to climate change.

At a global level, the SSADP II was well aligned with the United Nations Sustainable Development Goals (SDGs), namely Goal 1 on No poverty, Goal 2 on achieving Zero hunger, Goal 5 on Gender equality, Goal 12 on Responsible consumption and production and Goal 13 on Climate Action. It is also aligned with the Partnership for Recovery and Resilience which is an inclusive group of donors, UN Agencies and NGOs who are committed to promoting local ownership and working together to reduce vulnerability and increase the resilience of people, communities, and institutions in South Sudan on their way to achieving the Sustainable Development Goals. The SSADP II was also aligned Africa Union's Agenda 2063 Goal 1 on A high standard of living, quality of life and wellbeing for all citizens, Goal 3 on Healthy and well-nourished citizens, Goal 4 on Transformed economies, Goal 5 on Modern agriculture for increased productivity and production and Goal 7 on environmentally sustainable and climate resilient economies and communities.

The SSADP II design, approach and its intervention objectives were also aligned with the Netherlands' Food and Nutrition Security policy objectives that seek to contribute to the objectives of the UN SGD Goal 2: eliminating malnutrition, doubling the productivity and income of small-scale farmers (both women and men) and making food production systems more sustainable. In addition, the policy also seeks to create a better enabling environment for food security through knowledge and capacity building, private sector development and improving the role of women and youth in economic development amongst others.

3.2.2 Relevance to Needs of beneficiaries.

The SSADP II design, approach and its intervention objectives were relevant and responded to key needs in the local context, in terms of improving food, nutrition and income security, employment and contributing to reducing poverty. The evaluation sought to establish the key issues affecting beneficiary farmers and the extent to which the SSADP II design and objectives addressed these issues.

The programme sought to address some of the major challenges that are faced by the beneficiary households and other players in the targeted value chains. According to the Republic of South Sudan's ASPF the major challenges include the following:

a. At least 85% of the South Sudanese are engaged in agriculture and most are subsistence farmers.
b. Low levels of agricultural productivity and entrepreneurial skills.
c. Conflicts and vulnerability to climate change and persistent droughts making farmers hesitant to invest in agriculture.
d. Access to finance almost absent particularly for the agriculture sector.
e. Limited involvement of women and youths in agriculture-based business activities; and
f. Limited agriculture value addition.

To address these challenges, the SSADP II project adopted the Making Markets Working for the Poor (M4P) approach to help beneficiary households transition from subsistence farming to

farming for the market. The project supported the strengthening of market functions and market players to make the local markets more inclusive and more enabling for agribusiness to thrive. The project also strived to increase farmers' and agribusiness' (MSMEs, Cooperatives, VSLAs (Village Savings and Loan Associations)) access to organization, technology, markets, and finance. The project also implemented activities that were meant to address conflicts within the beneficiary communities and to improve both beneficiaries and communities' resilience to disasters through the establishment of community-based disaster risk reduction plans. The project also promoted value addition and reduction of post-harvest losses through improving access to and provision of appropriate value addition technologies like maize and sorghum grinding mills and peanut butter making machines, hand-held tillage tractors and improved storage and warehousing facilities. The project also promoted local seed production and improved agronomic practices and agribusiness skills through a participatory extension approach. Thus, by adopting an agribusiness holistic approach to addressing food security, the SSADP II responded to the key needs and challenges of the beneficiary communities in the three counties.

An analysis of participants' responses from the counties also further shows some of the needs that sought to be addressed by the SSADP II interventions (Box 1)

Box 1: Project beneficiaries' statements testifying to the SSADP II project's relevance.

"In 2018 we had a challenge of failing to produce enough food but when Cordaid intervened with the project starting in 2019 we had a lot of trainings, and we now harvest enough produce and we have increased the numbers of our feddans; as cooperative we have extended our feddans up to 30 where we are planting groundnuts, cassava and maize." – FGD Participant

"SSADP II project improved our life because before, in 2018, we were not planting vegetables for selling. Now we are doing vegetable production for commercial use, and we are now making money out of vegetables." – FGD Participant

"SSADP II was relevant. It changed the mindset of farmers. Farmers now see that improved seed produced by farmers is better than the free seed and traditional seed they were using. Farmers used to produce for subsistence. Now the farmers are agribusiness focused and are now producing for business." – KII Participant

"Cordaid is addressing the needs of the farmers. Most farmers are now engaged in cooperatives. Value addition and livelihoods have improved." – KII Participant

3.2.3 Consistency with Overall Goal and Intended Impacts

The evaluation also found that SSADP II intervention activities and outputs were consistent with its overall goal and attainment of the stated objectives. The project's intervention logic of (i) enhancing sustainable agricultural production and productivity; (ii) improving the functioning of inclusive agribusiness markets; (iii) improving performance of cooperatives and agriculture MSMEs for new jobs creation; and (iv) building resilience of farmers and agribusinesses to shocks and hazards were consistent with its intended impacts of improved food security, higher incomes, and more employment.

The SSADP II pillars were found to be relevant for transitioning the farmers from subsistence farmers to farming for the market in line with Making Markets Work for the Poor (M4P) strategy and approach.' These pillars consisted of (a) access to production inputs; (b) access to agricultural output markets; (c) access to production and value-addition technologies; (d) access to agriculture and rural finance; (e) resilience to shocks and hazards; and (f) access to farmer organizations. Analysis of the responses from the various key informants interviewed during the evaluation show that programme activities have significantly contributed to improved production and productivity, increased engagement of farmers in farmer groups and cooperatives, improved agricultural value addition, improved livelihoods,

improved food security, improved employment of women and youth and increased visibility of marketing of agricultural produce by supported farmers.

The consistence of the SSADP II activities and outputs to the overall goal and attainment of its objectives and impacts were also confirmed by various key stakeholders interviewed in the three counties (Box 2).

Box 2: Stakeholders' statements confirming consistence of SSADP II project's activities and outputs.

"Cordaid SSADP II project was very relevant and Cordaid was the most effective organization in the Western Equatoria Region that we have worked with in recent years." – KII Participant

"The project was relevant. Gitikiti cooperative farmers produced enough maize, groundnuts, and cowpeas. It has created employment for young people who are now members of farmer groups. Even women are now employed. Women are also doing value-addition for groundnuts." – KII Participant

"The project addressed the needs of beneficiaries regarding increased production, enhanced access to improved agricultural inputs, access to markets for their products." – KII Participant

3.3 Coherence

In assessing coherence, the evaluation team analysed the compatibility of the SSADP II project with other interventions in the country, sector, or institution. In particular, the evaluation assessed the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa by assessing both internal coherence and external coherence.

The SSADP II project design and approach were coherent with the strategic priorities of the funding partner (Embassy of the Kingdom of the Netherlands), the implementing partners, the Government of the Republic of South Sudan and other development organisations working in the agricultural sector particularly the United Nations Food and Agriculture Organization (FAO), the International Fertilizer Development Center (IFDC) and the South Sudan Agriculture Producers Union (SSAPU). The project's internal coherence between the components and subcomponents was also strong.

The SSADP II project was coherent and directly implemented the Netherlands' international cooperation strategy in South Sudan. During the period 2019 to 2022, the Netherlands' aim was to contribute to building peace and the rule of law, with a focus on reconciliation and human rights while at the same time providing resources that were meant to contribute to the population's capacity and ability to meet basic needs. such as food and water. Through an integrated approach, the Netherlands' programme for South Sudan combined efforts in politics, security, and development. Within the agricultural sector, the Netherlands' strategy involved working with UN agencies and NGOs in improving food and nutrition security by deploying its knowledge to make the South Sudan agricultural sector healthier and more diverse. To address the food insecurity crisis in South Sudan, the Netherlands' focus is on resilience building through value chains and seed development to increase crop production. The Netherlands has also been supporting efforts aimed at private sector development, using innovative finance instruments to support SMEs in value chains with a specific focus on Women and Youth (Youth and Women Agribusiness Entrepreneurship programme to assist them in increasing their income). The Netherlands has also been supporting Seed Sector Development in South Sudan aimed at ensuring access quality seeds for increased crop production and improved own food consumption. The SSADP II project speaks directly to the entire strategic focus and approach of the Netherlands for supporting agriculture in South Sudan. The evaluation found that there is high coherence between the main SSADP II project interventions and the various initiatives that were also funded by the Netherlands in South Sudan like the

seed sector development, private sector development, women and youth agribusiness entrepreneurship development, cooperatives development, and rural finance initiatives.

Results from key informant interviews with various stakeholders also show that the SSADP II was very coherent with Government of South Sudan's agricultural development priorities. For example, stakeholders noted that SSADP II interventions in promoting local certified seed production was very aligned with the government's thrust to promoting local seed production and discouraging the importation of seed which over the years had proved not to be well adapted to the growing conditions in South Sudan. Stakeholders also noted that the South Sudan was focused on encouraging local food production through increased food crops production and productivity.

The project's internal coherence between the components and subcomponents was also strong. The evaluation also found that SSADP II activities had strong internal coherence with the various project components, the strategic business mandates of both the international implementing partners and the local implementing partners. The SSADP II project is coherent with Cordaid mission which is focused on reducing fragility and the vulnerability of people in fragile and conflict-affected societies (FCAS). Part of Cordaid strategic invention areas focuses on increasing the resilience of people, communities, and systems, by increasing their ability to anticipate, respond and adapt to hazards, and to transform systems and structures in order to address the root causes of their vulnerability, and promoting local private sector development by supporting small and medium size enterprises, to increase income and employment opportunities for youth, and to contribute to a strengthened and more accountable financial sector in FCAS. The SSADP II project interventions were coherent with these strategic intervention areas of Cordaid. Private sector development, cooperative development, business support centres and entrepreneurship development interventions supported by the SSADP II project also had strong coherence with the business mandates of SPARK, Agriterra, Premium Agro Consult Ltd, South Sudan Agriculture Producers Union (SSAPU) and the Rural Finance Initiative (RUFI). The Making Markets Working for the Poor (M4P) approach which seeks to transition the beneficiary farmers from subsistence farming to producing for the market is very much aligned to the business mandates of the SSADP II project implementing partners.

The SSADP II project was also found to be coherent with other projects funded by other donors in the beneficiary counties. For example, in Yambio county, the SSADP II interventions were highly coherent with the activities of Start Trust Organisation (STO) which is a community-based initiative founded in 2010 to promote self-reliance by harnessing and utilizing local resources for rural development. STO focuses on empowering communities to boost food production, build livelihoods, improve incomes, and increase access to safe and clean water. It also supports projects in agribusiness and economic empowerment, smallholder agriculture market support, sustainable agriculture for economic resilience, and food security, livelihood, and nutrition. The STO projects are facilitated by FAO and funded by the USAID (United States Agency for International Development).

3.4 Effectiveness

The analysis of effectiveness of the SSADP II Programme assesses the extent to which the project goal and objectives were achieved. The analysis also examines the major factors influencing the achievement or non-achievement of the objectives. There were ten programme indicators under this intervention, and we discuss each of them in detail under this section.

Outcome Indicator A1: Enhanced DRR and Trust in Targeted Communities

Quarterly reports of the SSADP II show that the targeted number of CMDRR plans that were to be implemented was 105 and the communities eventually implemented 114 of these realising a success rate of 109%. Figure 7 shows that 89.9% of the farmers were aware of CMDRR plans while 72.0% reported having derived some benefits from the plans in terms of successfully using the plans to

address shocks such as floods, land disputes and cattle raids. The figures were higher for Bor, in which 94.0% reported were aware of CMDRR plans and 92.6 of them benefited. Torit followed where 94.2% reported being aware and 69.6% had benefited. In Yambio 82.3% reported being aware while 56.1% indicated that they had benefited. These differences were resulted from the fact that Bor is much more prone to flooding which can be widespread in the county and almost occurs on a perennial basis compared to the other two counties.

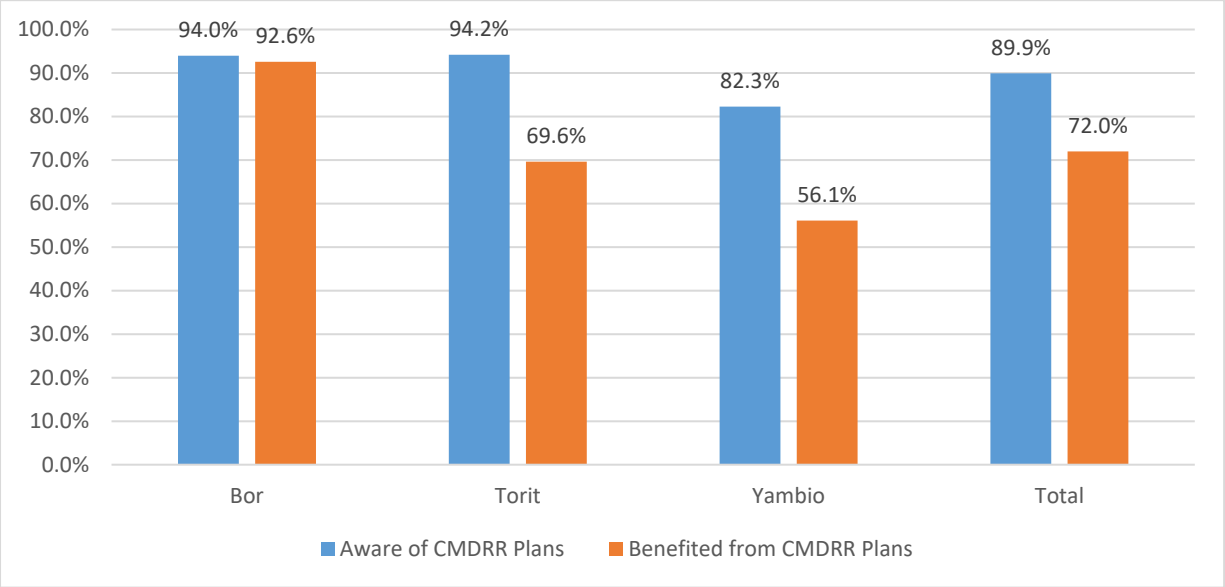


Figure 6: Extent of being Aware and Benefiting from CMDDR by Farmers

The findings represent a major improvement in awareness in the activities of CMDRR committees and the benefits derived by the communities. The 89.9% awareness levels reported at the end line is 54.9 percent higher than the 35% reported at mid-term evaluation. This is also way above the 10% reported at baseline. The findings suggest that there has been a sustained increase in enhanced DRR and trust in targeted communities.

Overall, 89.2% of the farmers in the three counties reported being aware of the various hazards that can impact their various livelihood activities (Figure 8). Of these, 70.5% reported that they have eventually derived some benefits from being aware of these hazards. They are now able to anticipate their occurrence and to take proactive measures to minimise impact. The levels of awareness and benefits varies from one county to another, with Bor topping the list with a 94.0% awareness level and a 93.3% benefit level. Torit had a 95.3% awareness level, and a 70.8% benefit level. Yambio County had a 78.3% awareness level and a much lower level of using the awareness to their advantage (49.6%). In Bor for example, an extension officer reported that farmers are aware of the occurrence of floods and the negative impact that the floods have on their crops, but they lack resources to construct barriers and canals to channel the excess water away from the fields. This is generally believed to be the responsibility of the public officials. In the case of hazards such as cattle raids and land disputes, in almost all the three counties' communities have made use of the conflict resolution mechanisms, some of which have been established through the programme.

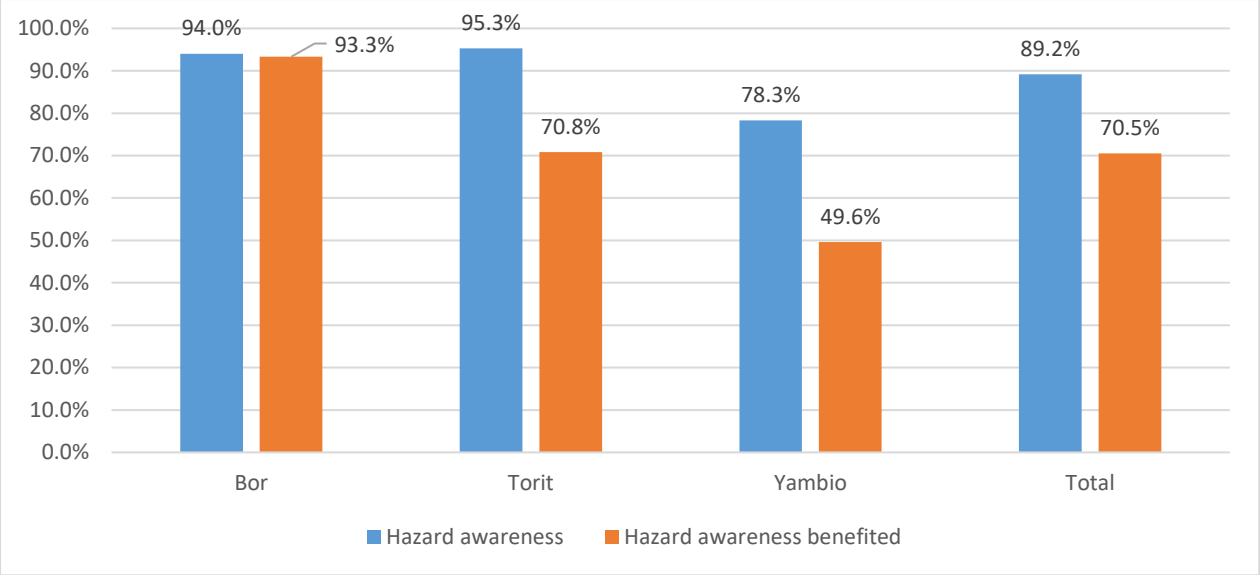


Figure 7: Extent of Awareness of Hazards and Benefits from that Awareness

Animal diseases is one of the hazards of concern, CMDRR committees have been acting as early warning platforms to help manage the hazards. Much of the conflict also takes the form of inter-communal tensions and conflict over resources such as grazing. Droughts and floods are of common concern, with floods being a major perennial challenge in Bor County. Farmers have been trained in and encouraged to use climate smart agricultural practices and integrated soil fertility management principles such as crop rotations, use of drought tolerant varieties. In Bor, FGD participants at Makuach Payam highlighted that the maize crop that they had planted during the beginning of this cropping season got wiped off by a dry spell that subsequently occurred. The project has promoted sustainable production practices including correct use of inorganic fertilizers. However, sometimes communities do not heed early warning information. For example, in 2023 farmers in Torit were advised not to plant crops during the short rainy season as it was expected to be followed by a dry spell. Many farmers planted crops, which subsequently did poorly leading to losses.

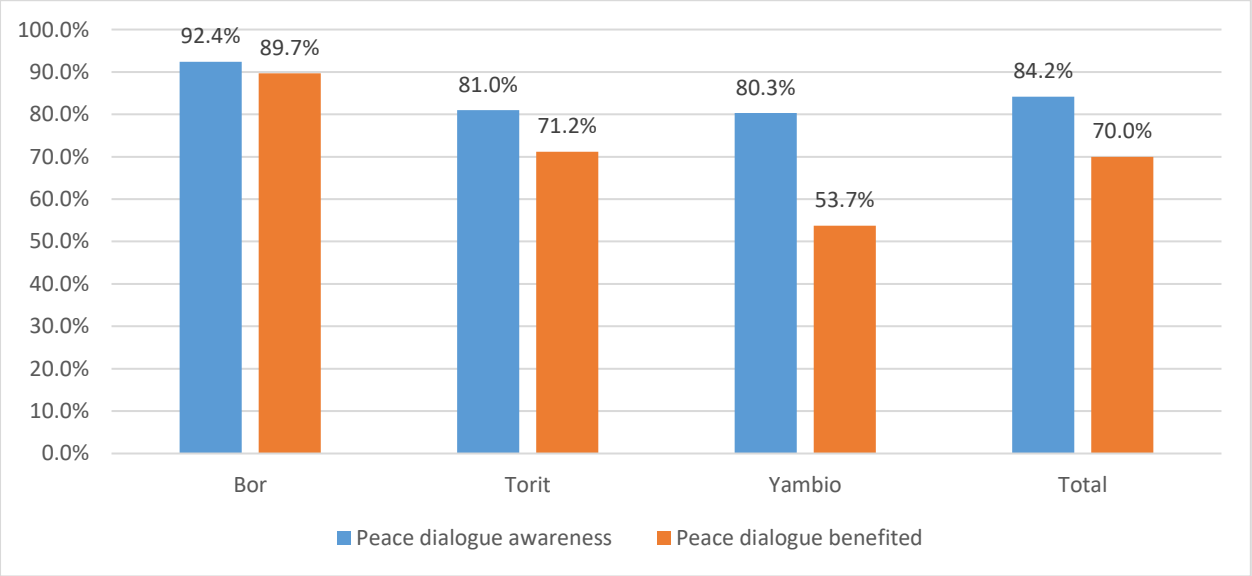


Figure 8: Extent to which Famers have Benefited from Peace Dialogues

At least 88.0% of the farmers in the 3 targeted counties are aware of the existence of early warning systems, while 68.4% reported that they benefited from these systems (Figure 10). The levels of awareness and benefiting are higher in Bor County, which recorded 90.2% awareness level and 90.0% benefit level. This was followed by Torit, which recorded 96.7% awareness, but a relatively lower benefit ratio of 63.0%. Yambio on the other had recorded an awareness level of 76.3% and a benefit ratio of only 50.4%.

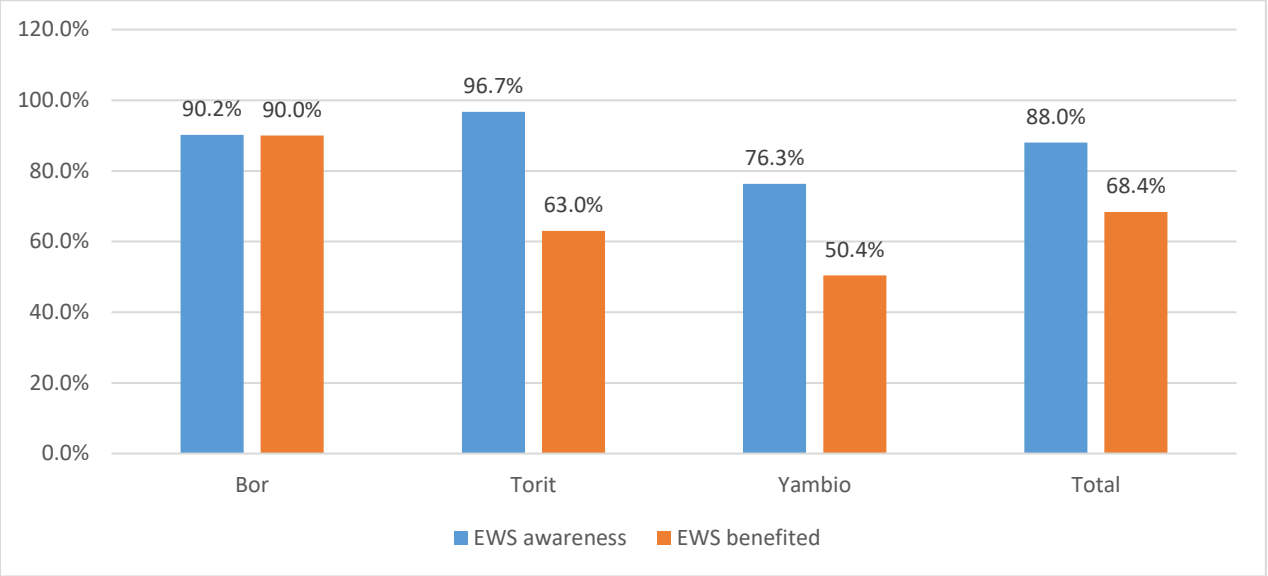


Figure 9: Extent to which Farmers are Aware of and have Benefited from EWS

Overall, 82.6% of the households reported having access to early warning systems after the project. Bor had the highest proportion, (92.7%), followed by Torit with 87.4%. Yambio's level of access was reported to be 70.9%. The increased level of access to EWS has resulted in an increase in the adoption of EWS information to navigate around adverse weather conditions. The positive developments have been a result of the training activities conducted by the project. For example, in 2022, 5 CMDRR Committees were formed and strengthened with knowledge and skills to conduct Participatory Disaster Risk Analysis (PDRA) assessments in communities. At least 174 (55F, 119M) community members selected from CMDRR committees were trained on early warning and early action (SSADP II Annual Report, 2022). The trained CMDRR committee members led communities in developing community led action plans. The PDRA exercises resulted in development of 37 community led action plans (CLAP). During the PDRA, the major hazards identified in Torit included dry season fire outbreaks, lack of clean drinking water, and water logging of fields especially during heavy rains. The main hazards identified in Bor South were prevalent floods from the River Nile and associated human and livestock health challenges, and insecurity in some of the Payams bordering the Greater Pibor Administrative. In Yambio, project team only strengthened the CMDRR committees formed in 2020 and 2021.

Figure 11 summarises the changes that have occurred in the adoption of information shared through EWS, with 32.5% highlighting that they have highly adopted EWS information over the past 12 months compared to 10.3% in 2018. Moderate adoption over the past 12 months was reported by 15.6%, while 31.8% indicated less adoption. Those that did not adopt recommendations from the EWS in 2018 were 52.6% compared to 20.1% in the past 12 months.

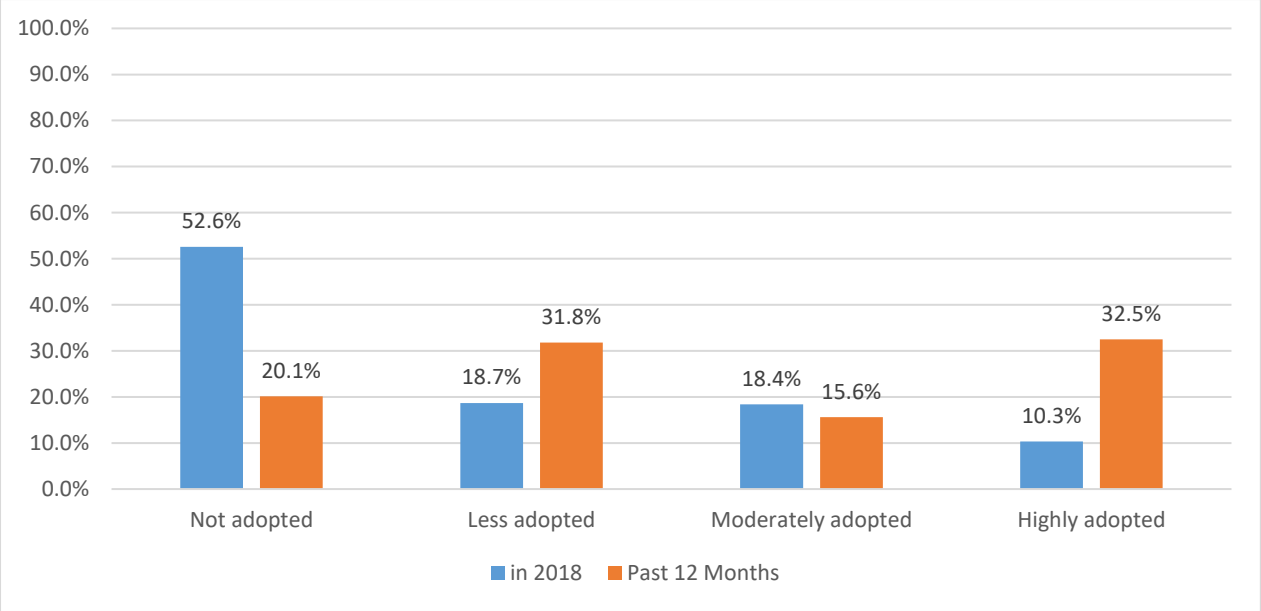


Figure 10: Extent of Changes in Use of EWS Information

While there has been increased adoption of EWS for decision making over the previous 12 months, there has been low level adoption in Yambio compared to the other two counties mainly because of lack of new hazards being identified especially during mid-point of project implementation. For example, in 2022, the programme only strengthened the CMDRR committees formed in 2020 and 2021 in Yambio. The data shows that the level of "highly adoption" over the past 12 months was higher in Bor on 50.8% over the past 12 months (12.6% in 2018); followed by Torit on 31.8% over the past 12 months (11.0% in 2018) and Yambio on 16.2% over the past 12 months (7.7% in 2018). On the other extreme, the levels of "not adopted" of EWS per county were as follows: Bor 9.0% over the past 12 months (47.1%) in 2018; Torit 11.3% over the past 12 months (41.5% in 2018); and Yambio 40.8% over the past 12 months (64.6% in 2018).

Except for migration, which decreased as coping strategy with the project by 8%, the use of all the major coping strategies increased as follows: (i) saving money (25%), (ii) use of early warning system information (19%), sale of assets (5%), (iii) use of emergence credit or loans (2%), and (iv) having fewer meals (2%) (Figure 12). Based on the extent to which the farming households used the coping strategies before and with the project, a coping strategy score was calculated for each household. The coping strategy scores before and with the project were compared for each household. Overall, the changes in use of coping strategies reflect the positive influence of the project. Firstly, the decline in the use of migration for coping from 36% to 28% symbolises the general stability brought about by the relative peace and by the fact that the farming being practiced requires people to stay put in one place. The increased use of assets (38% to 43%) and increased us of savings (33% to 58%) are positive indications because shows that the farmers have been able to accumulate these assets to use them. Use of whether information also increased from 29% to 48% which reflects the positive impacts of the programme interventions through the provision of training and relevant whether related information to the targeted communities.

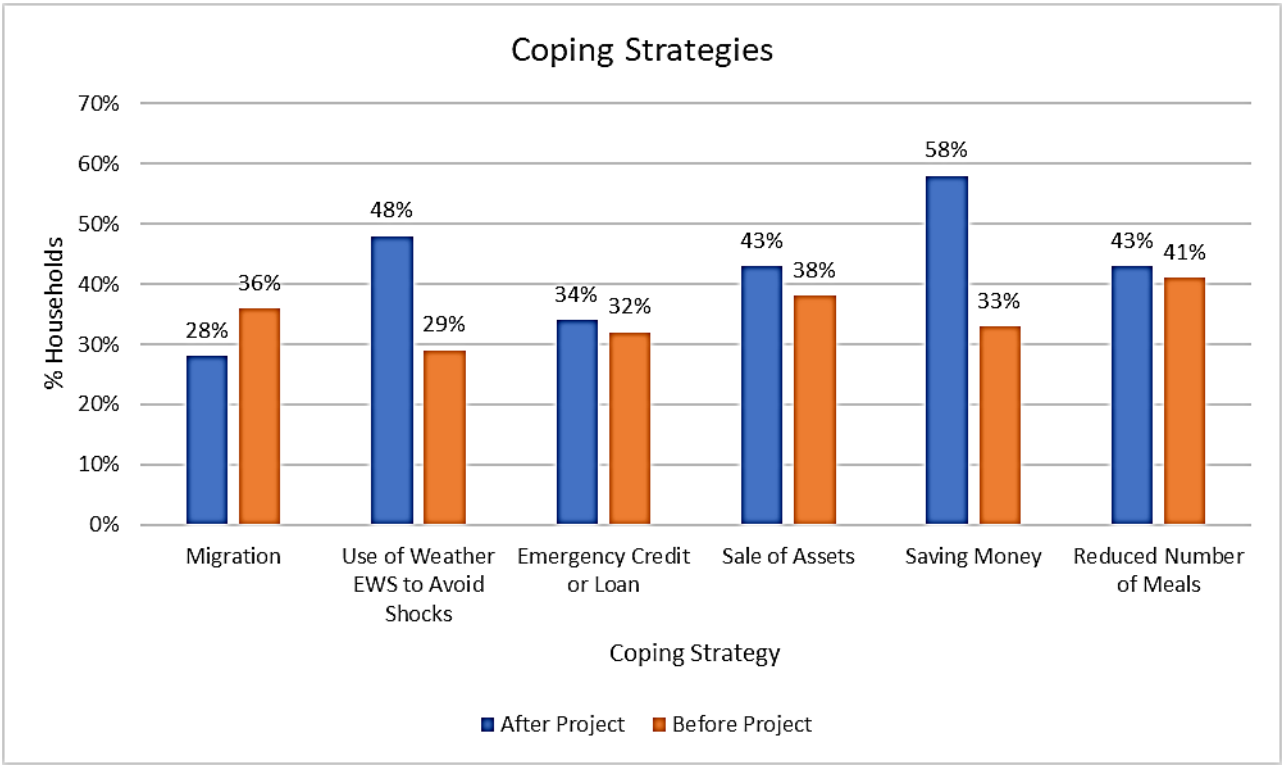
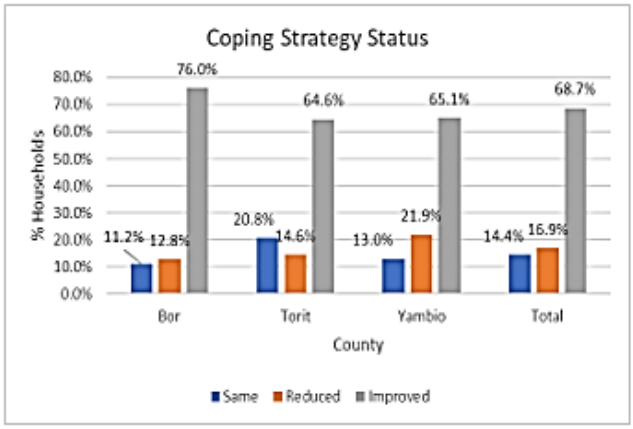


Figure 11: Percent Households Indicating Coping Strategies Adopted by Period

Overall, during the project period, the coping strategy score improved for 69% of the households, remained the same for 14% of the households, and decreased for 17% of the households (Figure 11). An



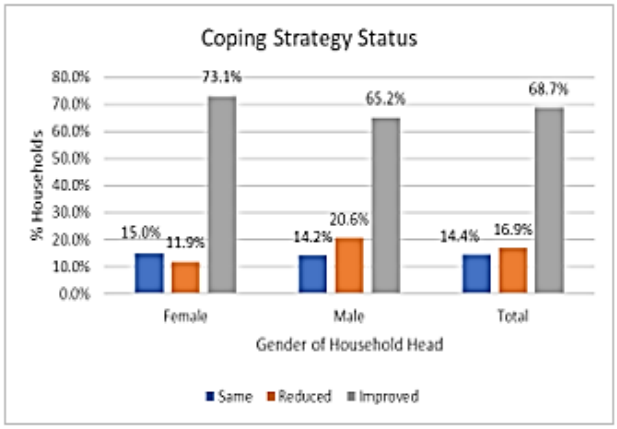


Figure 12: Percent Households with Coping Strategies Status between 2023 and 2018 by County

analysis by county shows that the percent households whose coping status improved with the project was higher for Bor (76%) compared to that for Torit and Yambio (65%). An analysis by gender of household head shows that the percentage of households whose coping status improved with the project was 8% higher for female headed households.

Overall**, 84.2% of the participants highlighted that they were aware of peace dialogues, while 70.0% of the participants indicated that they have benefited from the peace dialogues (Figure 13).**

Peace dialogues have had a significant positive contribution to the communities especially in Bor County where 92.4% reported being aware of the peace dialogues with 89.7% eventually realising some benefits such as effective mediation on land conflicts. In Torit 81.0% highlighted being aware and 71.2% reported having benefited. For example, farmers reported reduced incidences of crop damage following raising of awareness among pastoralists on the damage caused to crops by animals in Himodonge payam1. On the other hand, in Yambio 80.3% reported that they were aware of the dialogues but only 53.7% reported having realised some benefits from the peace dialogues.

It was reported that peace building, and conflict resolution involved local authorities; company officials; local chiefs; County Administration and RRC (Relief and Rehabilitation Commission) and other stakeholders. The project conducted training on conflict management through identifying the types of conflicts and establishing Community Action Plans in issues for example cattle raining in Bor. Land disputes were also some of the issues addressed – for example sometimes solutions would involve issuing of certificates of ownership of land. The project also organised meetings and conferences to address these issues. In total 150 chiefs were trained in Bor County through 6 rounds of training about peace and conflict management.

Outcome Indicator A2: Continued Action Research Supporting Informed Decision Making

The end of term evaluation found that 75% (3) out of an overall target of 4 lessons learnt were incorporated in project implementation through evidence-based action research. Continued action research was critical in supporting informed decision making throughout the implementation of the programme. The first research was done in February 2020 and provided a recommendation on conflict sensitivity touching on the need to pay more attention to conflict sensitivity and conflict analysis. The recommendations from the peace dialogues have been mainstreamed during the implementation of the CMDRR action plans. For example, during dyke construction members of the neighbouring communities equally participated without discrimination.

Following this recommendation an assessment was conducted on existing CMDRR committees and need to establish new ones. The programme continued to strengthen 52 CMDRR committees formed in 2020 and 2021 through training on early warning signs, identification of disasters and shocks, preparation of participatory community disaster management plans, awareness, and training of community members on disaster management. In 2022, only five CMDRR committees were formed only in communities that were prone to conflicts and floods. The second recommendation from the February 2020 action research was on agribusiness and value chains emphasising focus on one value chain per intervention area the project focused on sorghum, groundnuts, and maize value chains with minimal focus on vegetables to supplement the major value chain interventions. In Yambio the main priority value chain is Maize while in Bor and Torit the main value chain is Sorghum.

The other action research which was undertaken in February 2022 provided recommendations on opportunities for expanding/ improving the markets along the whole value chains for target groups. This involved training leaders how to operate the machines for business and link the leaders managing the equipment to sources of spare parts and service providers able to repair the machines in case of major breakdown. The 2022 annual data harvesting FGD revealed that those who got technology items were trained by the suppliers on how to operate the machines. Cordaid linked the cooperatives who benefited from the technology machine support to DOSHI Motors for supply of spare Parts. Technicians from Doshi Motors trained the group leaders on basic repair and maintenance.

1 Source: SSADP II, 2022 Annual Report

Medium Term Outcome B1: Availability of and Access to Agricultural Inputs (seeds; fertilisers; pesticides; tools) Ensured.

The SSADP II project targeted the provision of various inputs to 8,000 farmers and eventually overachieved this target by 138% as it eventually directly benefited 11,054 farmers. The inputs consisted of seed packs and tools such as maloda, hoes, planting ropes, rakes, and tape measures. This intervention was done to address the problems of low levels of uptake of mechanised services and limited access to farm inputs that had been established at the baseline stage.

Across the targeted crops, the main source of inputs is agency/NGOs supplies, ranging from 42% for cassava to 57% for sorghum as an inputs source (Figure 14). The next most prevalent source of inputs is purchasing inputs, ranging from 21% for cassava to 33% for maize as an inputs source. An analysis by county and gender of household head shows a similar pattern across counties with agency supplies as the main source of inputs followed by purchases. The high dependency on NGOs for seed provision was one of the structural issues that the programme intended to address given that it caused farmers to wait for delayed seed distribution, often throwing the growing season off track. Limited access to farm inputs due to lack of a strong private sector supply of seed was caused by supply of free inputs by mainly FAO through NGOs[1]. The project therefore supported capacity strengthening of agro-input dealers to promote access to marketed inputs relative to free provision by NGOs. Out of a target of 9 input dealers the programme succeeded in establishing 7, thus achieving a 78% success rate.

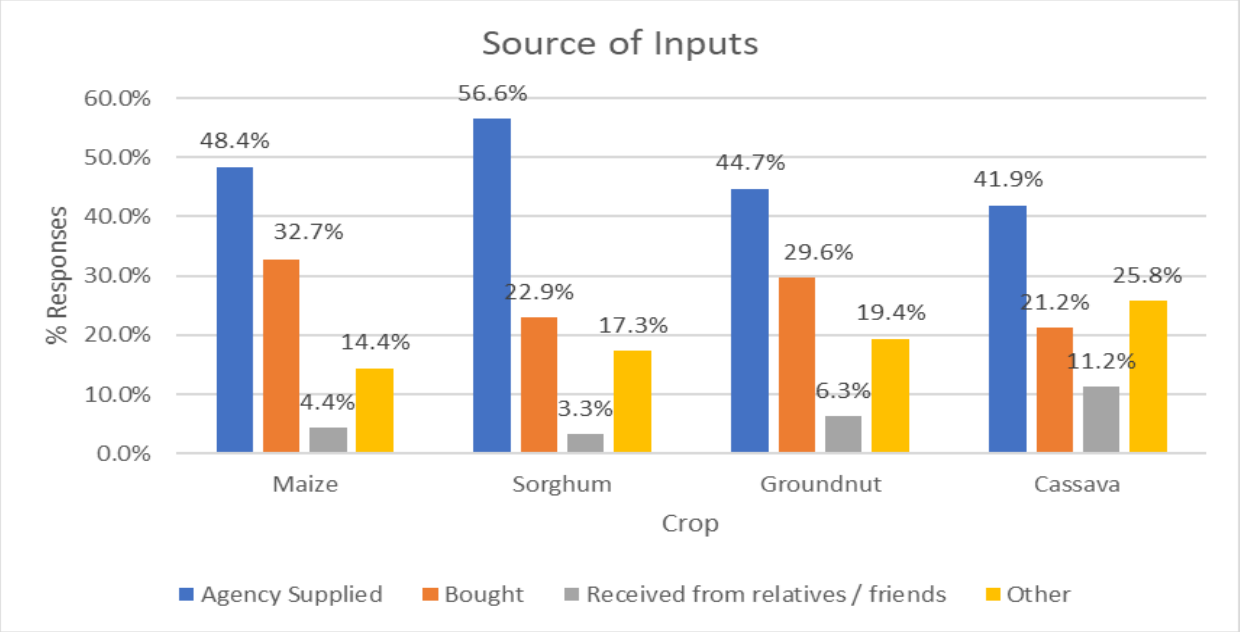


Figure 13: Rate of Use of Inputs Suppliers by Major Crop

The programme partnered with input providers to enable efficient input provision for the farmers. For example, in Yambio County Pro-seed facilitated seed production and training of farmers on maize Longe-5, groundnut serenut and cowpeas Narrow gram 1 & 2 for three groups totalling 50 members. Pro-seed gave the farmers breeder seeds, and the farmers were able to produce for them foundation seeds. Pro-seed also gave farmers preseason training on activities such as site selection; knowledge on the crop; land clearance and characteristics of a particular crop. Pro-seed also provided farmers with mid-season training on agronomic practices such as planting; spacing; isolation and distancing of the crop from others; tilling; cropping; weeding; and ridging or pulling the infected crops among health ones.

Seed houses that have participated under the SSADP II training programmes process the seed and put them in the market and farmers get them from the agro dealers to promote and maintain

marketing channels. In Yambio for example, two agro dealers have been promoted in the distribution of the seed which is mostly OPVs. This is done through giving out seeds of about 10 kg to the agro-dealers on credit (1kg at 500 SSP) and the agro-dealers sell the seeds at their own price (1200 – 1500 SSP). The intention of Cordaid in Yambio is to have more agro dealers coming in the following places:

- Yambio market, 2 Agro dealers
- Masia market, 1 Agro dealer
- Nzara, 4 agro dealers
- Kidi in Gangura payam, 1 agro dealer

Seed production and distribution has increased because of the programme interventions. For example, the biggest seed producer is in Nzara County, and this producer – a female farmer - has produced 70 Feddans, (20 of foundation seeds and 50 of certified seeds). The farmer started producing the maize in 2 feddans when her father was under the SSADP II project producing maize as well. She has constructed a store for keeping the seeds and has acquired a tricycle for transporting the produce from the farm to the store. The SSADP and IFDC had been cooperating and this farmer went into seed production after seeing the results from his father who had been supported by SSADP. She then approached IFDC for support.

However, despite the improvements described above, there have also been some challenges hampering more widespread timely distribution of seed and other inputs. For example, the security situation does not allow movement of the staff to reach with the service to the remote sites. Other factors include the following:

- Farmers keep relocating their farming Sites from one place to another.
- Some farmers are slow learners.
- Some farmers still mix grains with the seeds produced.
- Most farmers do not have better storage facility.
- Infrastructure- bad roads networks.
- Constraint with enough finance for extending the service to other parts of the State.
- Policies- Seeds are given by some NGOs for free which are not viable and later reduces the production rate of the farmers.
- As a pro-seed, we cannot meet the demands of all the farmers at a time.
- Seed processing is done manually.
- Seed marketing as most farmers want only Free seeds.

The programme provided farmers with various farming implements and processing equipment, which have made a significant contribution towards improved production efficiencies. In Yambio the Yambio County Cooperative Union reported that Cordaid gave the farmers one walking tractor after they had been successful in a business plan writing competition. They were also provided with a groundnut paste machine which was still to be delivered at the time of the study at hand. In Bor County, the Bor Multi-Purpose Union reported that the SSADP II provided the cooperatives under the union with 2 groundnut shelling machines; a walking tractor; and a grain mill machine. In Torit County the Arthuro Multi – Purpose Cooperative reported that their farmers received farm tools and items such as tape measures, planning lines, quality seeds, empty sacks, and tarpaulin sheets. The cooperative members were also provided with a walking tractor to facilitate more efficient preparation of the fields.

Accordingly, there has been an increase in the area planted especially because of improved tillage capabilities due to the use of the walking tractors. In Bor County it was estimated that the area planted has increased five-fold due to the Cordaid support. For example, for the Anyaak Cooperative which has 35 members the statistics have been as follows:

- 2021 = 10 feddens
- 2022 = 22 feddens

- 2023 = 47 feddens

Outcome Indicator B2: Good Agricultural Practices Enhanced and Extension Services Improved

The number of farmers applying good and climate smart agricultural practices including nutrition education, gender and resilience increased by 118% from 6,500 to 7,690. In addition, the number of farmers who joined cooperatives was 3,810 from a programme target of 4,750, thus attaining an 80% success rate. This intervention was intended to address that lack of extension services as identified at baseline. As a result, at least 89.3% of farmers in the three counties reported being aware of the extension services support offered by SSAPU (Table 2). Out of these farmers, 73.9% reported having benefited from the extension activities offered by SSAPU. The levels of awareness and benefit were higher in Bor on 94.7% and 90.9%, respectively. This was followed by Torit, which had an awareness level of 92.8% and a benefit level of 75.0%. Yambio had an awareness level of 81.3% and a benefit level of 55.6%. The study found that the provision of extension support in Yambio may have been less effective compared to the other two counties. The supervision and monitoring of the farmer-to-farmer extension approach should have been stronger.

Table 2: Extent to which Farmers are Aware of and have benefited from SSAPU.

	Bor	Torit	Yambio	Total
SSAPU awareness	94.7%	92.8%	81.3%	89.3%
SSAPU benefited	90.9%	75.0%	55.6%	73.9%

Table 3 shows that overall, the largest percentage of farmers (81.5%) were trained on maize production, followed by 73.6% on groundnuts, 69.2% on sorghum and 54.2% on cassava.

Table 3: Crops Grown in the Targeted Counties

Value Chain	Bor	Torit	Yambio	Total
Maize	68.5%	79.1%	91.0%	81.5%
Sorghum	90.2%	73.2%	43.4%	69.2%
Groundnut	51.6%	75.5%	84.6%	73.6%
Cassava	27.7%	50.0%	73.0%	54.2%

There was significant more training in Yambio on maize (91.0%) and groundnuts (84.6%) compared to the other two counties. Sorghum was prominent in Bor (92.0%), while cassava was big business in Yambio (73.0%).

Table 4 shows that 92.4% of the farmers in the three counties are aware of improved seed production, while 71.8% of these have benefited from improved seeds. The level of awareness and benefit is higher in Bor with 96.2% having reported being aware while 91.7% have benefited. This is followed by Torit, where 94.8% are aware while 72.4% of them have benefited. On the other hand, in Yambio 86.8% reported being aware and 54.9% of them have benefited.

Table 4: Extent to which Farmers are Aware of and have benefited from Improved Seed Production

	Bor	Torit	Yambio	Total
Improved Seed Production awareness	96.2%	94.8%	86.8%	92.4%
Improved Seed Production benefited	91.7%	72.4%	54.9%	71.8%

At least 91.8% of the farmers reported being aware of issues on climate smart agriculture and among these, 74.1% have gone further to derive some benefits from the practises (Table 5). With respective to the targeted counties, Bor reported a 96.2% awareness level and a 91.0% benefit level. Torit reported a 95.3% awareness level and a relatively lower 65.8% benefit level. On the other hand, Yambio reported an 84.0% awareness level and a 64.0% benefit level.

Table 5: Extent to which Farmers are Aware of and have benefited from Climate Smart Agriculture

	Bor	Torit	Yambio	Total
Climate smart agriculture awareness	96.2%	95.3%	84.0%	91.8%
Climate smart agriculture benefited	91.0%	65.8%	64.0%	74.1%

There is positive change brought about by the training given to the farmers by Cordaid. For example, in Bor, farmers have been taught on the processes of clearing the land before the rainy season. They have also been taught-line planting of which traditionally they just would scatter the seeds in the fields. In Yambio the Union reported that farmers have learned the best agronomic practices – crop nutrition, crop spacing, pests and disease control, proper field demarcation and local storage mechanisms. In Torit County the Arthuro Multi-Purpose union highlighted that farmers were provided with training including post-harvest handling and agro technical dealing in agricultural best practices. The farmers have been putting these new skills into practice including the use of the walking tractors which has resulted in more than 5-fold increase in the area prepared for planting.

Outcome Indicator C1: Adequate and Relevant Market Information Accessible and Available for Farmers and Agribusiness

The evaluation found that the SSADP II overachieved its target on number of farmers accessing the available improved formal market outlets by 106% (8,000 targeted with 8,507 achieved). There was also an overachievement on targeted number of agri-business owners using market information as part of their decision making from 750 to 1,213 (162%). Overall, 93.4% of the farmers highlighted that they were aware of market information that is available for use among the stakeholders (Table 6). Among these farmers, 73.8% indicated that they have been able to use that information for their benefit. With regards to the three counties, Bor recorded 97.0% awareness rate and a 90.9% benefit rate. This was followed by Torit which had a 94.1% awareness rate and a 78.5% benefit rated. Lastly, Yambio had an 89.3% awareness rate and a 55.3% benefit rate. Yambio was on the lower side due to the relative inadequateness extension support raised in an earlier section.

Table 6: Extent to which Farmers are Aware of and have benefited from Market Information

	Bor	Torit	Yambio	Total
Market information awareness	97.0%	94.1%	89.3%	93.4%
Market information benefited	90.9%	78.5%	55.3%	73.8%

Overall, 90.8% of the farmers reported being aware of the distribution channels for their agricultural produce (Figure 15). Out of this proportion, 78.3% reported that they have been able to benefit from their awareness of these distribution channels. Bor County tops the list with 94.7% proportion of awareness and 94.2% benefit ratio. This is followed by Torit which has a 90.8% awareness ratio and a 76.9% benefit level. Yambio comes last with an 87.0% benefit level accompanied by a 65.0% benefit ratio.

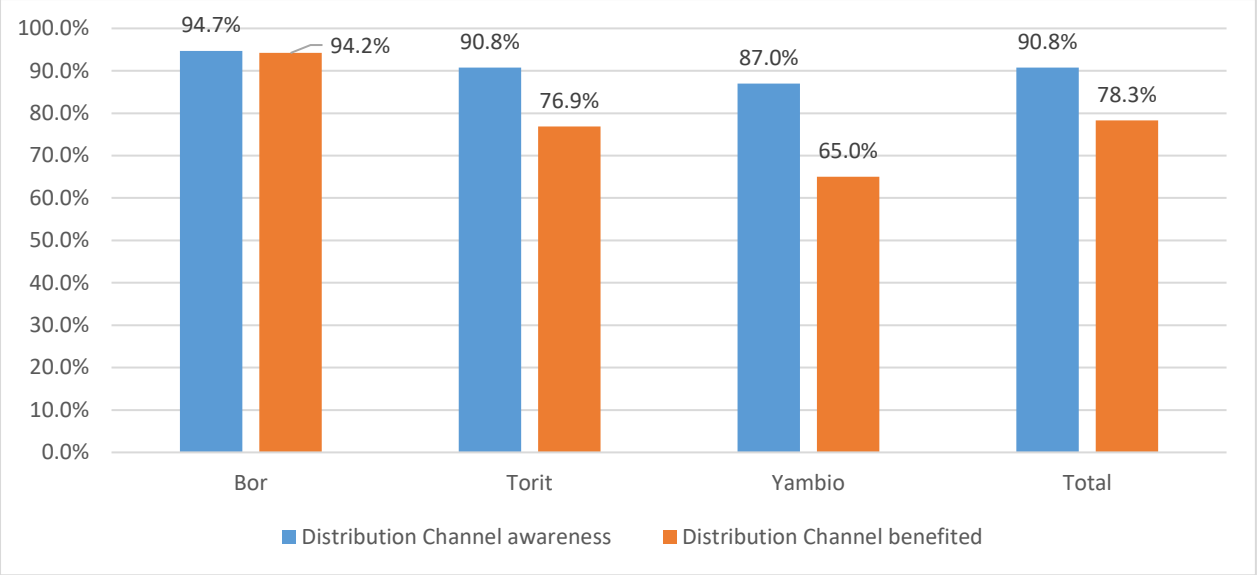


Figure 14: Level of Awareness and Benefits from Agriculture Distribution Channels

There was an overall increase in the proportion of farmers who reported having access to markets and market information from 45.7% in 2018 to 81.1% in 2023 (Table 7). The biggest increase has been on issues of Market Demand for Agricultural Commodities which rose by 43.0% from 47.6% in 2018 to 90.6% in 2023. This was followed by information on new buyers which increased by 34.8%, and information on market prices which increased by 34.1%. Information on source and price of inputs recorded an increase of 34.1% from 58.5% in 2018 to 92.6% in 2023.

Table 7: Percent Households Indicating Access to Markets and Market Information by Period by County

County	Market Information on Produce Sold	Market Demand for Agricultural Commodities	New Buyers	Source and Price of Farm Inputs	Market Prices	Other
2023						
Bor	96.4%	94.4%	85.4%	92.5%	95.0%	81.0%
Torit	89.9%	81.2%	58.6%	58.5%	87.8%	23.7%
Yambio	95.0%	96.8%	88.8%	91.3%	96.2%	75.3%
Total	**93.6%**	**90.6%**	**75.6%**	**79.0%**	**92.6%**	**55.2%**
2018						
Bor		60.5%	50.0%	63.1%	61.9%	56.8%
Torit		45.6%	33.3%	43.2%	68.6%	15.7%
Yambio		37.9%	33.8%	33.0%	47.5%	25.7%
Total		**47.6%**	**40.8%**	**47.8%**	**58.5%**	**33.8%**

Farmers were asked to state the sources of market information they depend upon, and as highlighted in Table 8 local leadership (89.4%) tops the list. The other more important sources consist of extension officers (86.4%) and community meetings (85.7%). Radio also plays a significant role as highlighted by 50.9% of the farmers. This may be contrasted with the situation before the programme in which the importance of local leadership as an information source was highlighted by only 59.6% while community meetings were important to only 53.9% of the farmers. Forty-seven percent (47.0%) reported that radio was an important source of market information in 2018.

Table 8: Percent Households Indicating Sources of Market Information by Period by County

County	Newspaper	Local Leaders	Community Meetings	Television	Extension Officers	Posters	Radio	Other
2023								
Bor	18.7%	95.9%	94.2%	23.5%	94.8%	64.8%	67.3%	64.7%
Torit	18.9%	79.0%	73.0%	7.6%	74.8%	25.0%	32.8%	16.1%
Yambio	24.7%	95.5%	93.5%	16.7%	91.8%	54.3%	92.5%	85.1%
Total	**20.4%**	**89.4%**	**85.7%**	**14.0%**	**86.4%**	**43.6%**	**64.0%**	**50.9%**
2018								
Bor	11.6%	66.1%	69.8%	13.8%	51.4%	34.3%	30.1%	46.9%
Torit	30.2%	37.3%	46.3%	13.6%	47.1%	31.4%	26.9%	20.3%
Yambio	5.3%	66.7%	43.2%	0.0%	42.5%	32.5%	55.0%	55.8%
Total	**15.0%**	**59.6%**	**53.9%**	**8.9%**	**47.0%**	**32.7%**	**39.5%**	**42.0%**

Table 9 summarises the extent of changes in importance of the various sources of market information over the course of project implementation, with major increases in use of extension officers (39.4%), community meetings (31.8%), local leaders (29.8%) and radio (24.5%). The use of extension officers increased the highest in Yambio (49.3%); followed by Bor (43.4%); with Yambio increasing by 27.7 percentage points. Community meetings have had a more increasing role in Yambio (50.3%); Torit (26.7%) with Bor recording 24.4%. The use of local leaders as information providers has been increasing more in Torit (41.7%); Bor (29.8%); while it increased by 28.8 percentage points in Yambio. The use of radio has particularly been high in Yambio which increased by 37.5 percentage point followed by 37.2 percentage points in Bor. There has only been a light increase 5.9% in use of radio as market information source in Torit.

Table 9: Extent of changes in importance of the various sources of market information

County	Newspaper	Local Leaders	Community Meetings	Television	Extension Officers	Posters	Radio	Other
Overall	**5.40%**	**29.80%**	**31.80%**	**5.10%**	**39.40%**	**10.90%**	**24.50%**	**8.90%**
Bor	7.10%	29.80%	24.40%	9.70%	43.40%	30.50%	37.20%	17.80%
Torit	-11.30%	41.70%	26.70%	-6.00%	27.70%	-6.40%	5.90%	-4.20%
Yambio	19.40%	28.80%	50.30%	16.70%	49.30%	21.80%	37.50%	29.30%

The results show that the project is likely to have contributed towards the positive outcomes of interventions by the programme related to peacebuilding and conflict resolution, promotion of radio programmes and use of extension officers. The growth in importance of community leaders and community meetings as sources of information shows the increasing confidence that the communities are having in the local establishments. In Bor for example there were radio shows that were undertaken covering various issues on agriculture involving the Jonglei Radio Frequency 95.9; and Voice of Reconciliation Radio Frequency 84.9. The provision of extension services through extension officers has also increased allowing farmers access to more credible information.

Outcome Indicator C2: Improved Post-Harvest Handling and Physical Market Infrastructure

Training on harvest and post-harvest handling to covered important aspects such as maturity index of the crops (maize); estimation of the output; transportation of the products; moisture issues; drying techniques; winnowing; storage handling (local granary); and storage bags.

The project target on the number of farmers that make use of the available post-harvest facilities was overachieved by 106% from 8,000 to 8,476. The project piloted the use of hematic storage bags, each farmer received at least 2 bags. It also built 2 joint warehouses and renovated 5 across the three payams. There has been reported increase in the use of various grain storage technologies including traditional bins, 74.8% (compared to 54.8% in 2018; wooden walled silos, 52.8% (29.0% in 2018); plastic bins, 58.1% (18.4% in 2018); brick-mud walled silos, 38.1% (20.6% in 2018), and storage bags, 73.6% (Table 10). The baseline had observed that traditional jute bags were used to store the produce but were prone to attack by pests. Storage facilities where mainly traditional wooden granaries hoisted a few meters off the ground and grass-thatched and this is however still largely the case. However, there has been an improvement in the use of such facilities through the training that the farmers have received from the programme, which has reduced the extent of attacks by pests such as rats and weevils. For example, the farmers have been taught how to reconstruct the granaries so that rodents do not enter and consume the crops. They have also been taught on ways to properly dry the grain so that the moisture content is exactly right for preservation.

Table 10: Changes in Use of Various Grain Storage Technologies

Technology	**Bor**	**Torit**	**Yambio**	**Total**
Traditional bins				
2018	48.2%	27.4%	69.0%	54.8%
Past 12 months	78.4%	60.7%	87.1%	74.8%
Wooden walled silos				
2018	53.8%	12.3%	14.9%	29.0%
Past 12 months	91.2%	26.5%	48.5%	52.8%
Plastic bins				
2018	30.1%	13.3%	10.0%	18.4%
Past 12 months	73.9%	52.6%	50.0%	58.1%
Brick-mud walled silos				
2018	22.9%	15.2%	22.2%	20.6%
Past 12 months	66.0%	10.7%	50.0%	38.1%
Storage bags				
2018				
Past 12 months	86.8%	65.7%	69.8%	73.6%

Figure 16 shows that there has been a slight decline in the percentage of farmers reporting having experienced post-harvest losses in 2018 compared to the past 12 months from 71.8% to 68.7%. The major improvement was recorded in Yambio County where there has been a decrease in reported losses from 84.1% in 2018 to 59.8% over the past 12 months. The opposite has however happened in Torit where more farmers have reported losses from 65.8% in 2018 to 83.4% in the past 12 months. The increased losses in Torit have been attributed to low levels of adoption of post-harvest techniques at the household level due to inadequate extension support. Hermetic bags use was one of the indicators with low level of achievement in this county as reported by FGD participants. However, for products that were brought to cooperative warehouses there were steps taken to reduce losses – such as better protection from moisture, the use of pallets as platform to place bags, use of bags and tarpaulins supplied by Cordaid

and FAO. The situation for Bor has however was found not to have changed significantly with regards to post-harvest losses.

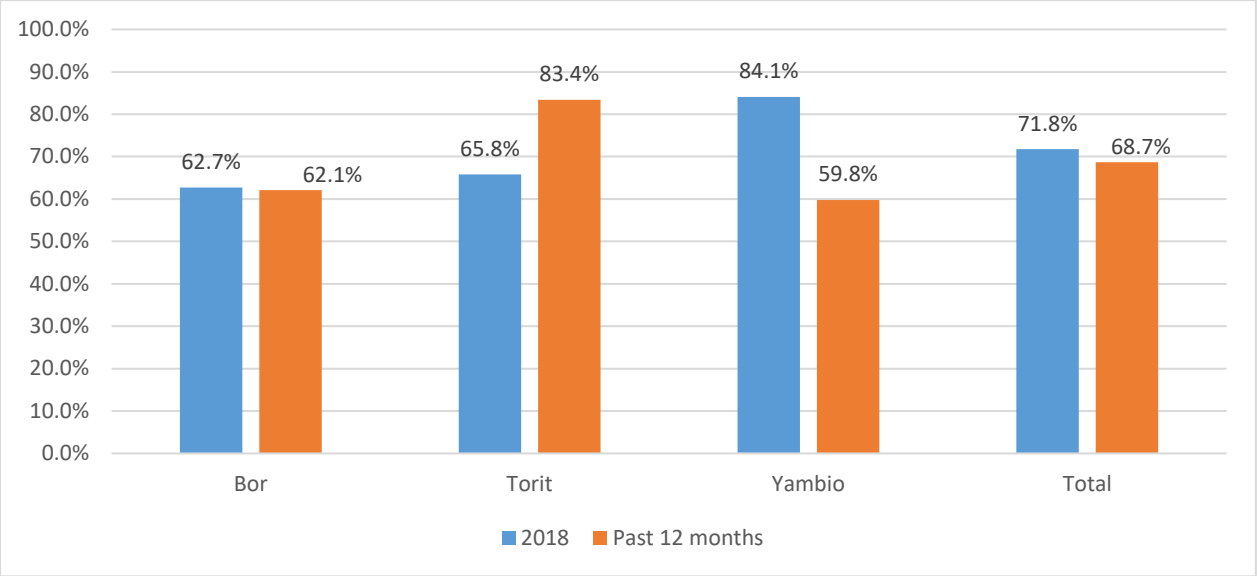


Figure 15: Changes in Post-Harvest Losses

Overall, 89.0% of the farmers reported that they were aware of the various post-harvest technologies (Figure 17). Among these farmers, 76.8% highlighted that they have gone a step further to benefit from the use of these technologies. With regards to the counties, Bor had the highest level of awareness of 94.5% and a benefit level of 90.6%. This was followed by Yambio which had an awareness level of 88.5% and a benefit level of 67.9%. Torit recorded an awareness level of 84.9% and a benefit level of 71.1%.

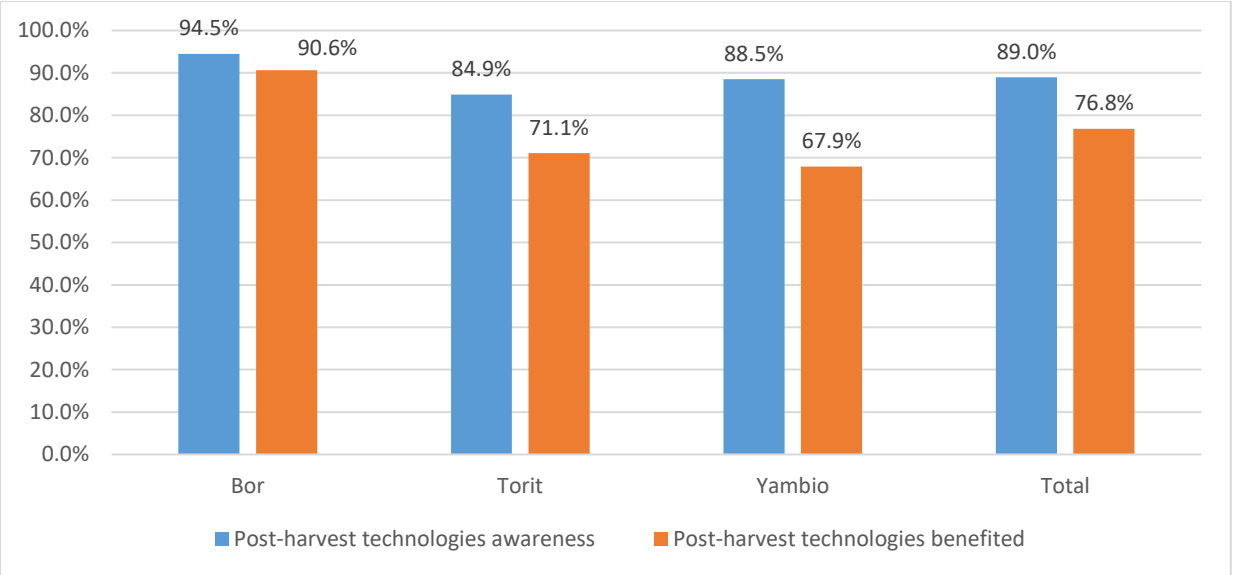


Figure 16: Level of Awareness and Benefits from improved post-harvest technologies

Figure 18 shows that 88.0% of the farmers were aware of improved warehouse facilities that have been supported by the programme. Out of these, 65.9% indicated that they have benefited from these facilities. The level of awareness was greater in Bor with 91.7% and a benefit level of 88.1%. This was followed by Torit which recorded an awareness level of 91.3% and a benefit level of 69.7%. Yambio had an awareness of 81.1% and a benefit level of 45.0%.

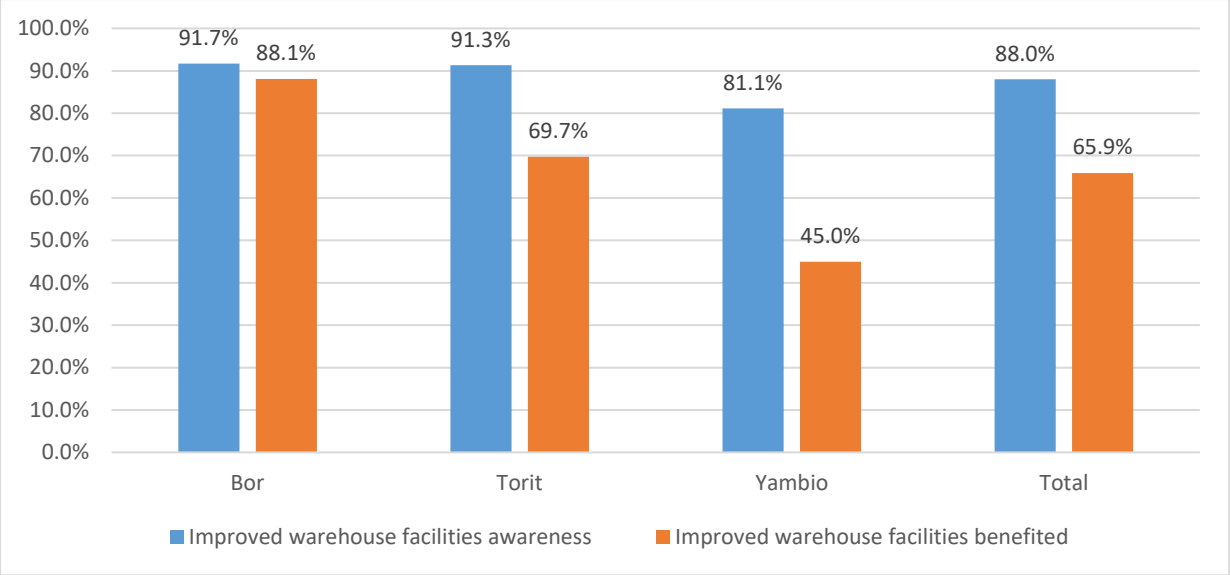


Figure 17: Level of Awareness and Benefits from Improved Warehouse Facilities

The programme constructed warehouses in the three counties which are expected to benefit farmers in terms of safely storing their produce especially as they prepare for the markets. Each county has been provided with a warehouse which are administered and managed through the respective agricultural unions. However, at the time of the study, although in some of the payams the facilities were already being in use, the facility in Bor had not been used given that it had been constructed quite recently. The expectations among farmers of the positive contributions of the warehouses were remarkably high as they prepare for the upcoming harvest in a few months' time. However, the only major challenge raised was that the warehouses might not have adequate space to cater for produce from most of the farmers. In Bor, for example, it was mentioned that the warehouse could easily be filled up by produce from only one or two payams.

Outcome Indicator C3: Market Linkages Enhanced Through Cooperatives /Associations/Farmer Organisations

The evaluation found that the SSADP II managed to reach its target of 7 on the number of value chains developed/ upgraded/ updated. It also achieved an 80% success rate on the number of farmers adding value to their commodities (out of a target of 5,000 farmers it reached 3,996 farmers). Membership to cooperative/associations/farmer organisations has increased by 44.0 percentage points from 30.3% in 2018 to 74.3% in 2023 (Table 11). Significant increases have occurred in Torit, 56.2%; Yambio 53.1%; and Bor, 20.9%.

Table 11: Being members of a farmer association.

Period	Bor	Torit	Yambio	Total
2018	37.3%	25.7%	26.7%	30.3%
2023	58.2%	81.9%	79.8%	74.3%
Change	**20.9%**	**56.2%**	**53.1%**	**44.0%**

The cooperatives have managed to facilitate the sale of farmers' produce through some international and local NGOs. For example, in Torit the World Food Programme (WFP) has purchased grain and legumes and is willing to buy more from the local farmers. In Bor County farmers reported selling sorghum through the Norwegian People's Aid (NPA) and the Food and Agricultural Organisation (FAO).

There has been an emergence of a number of transporters ferrying products to markets. Transport charges were reported to range from 2000 SSP to 4000 SSP per single trip depending on the distance and the weight of the produce. Some youths in Torit have invested in boda bodas (motorized) that they use to transport produce.

The philosophy of markets working for the poor was reported to be working well. There is a change as the vegetable farmers are selling their vegetable products to the market on a daily basis in Yambio. The same was also reported in Bor County where key informants and FGD participants have highlighted the increased availability of local vegetable products at the local market. A respondent from the Ministry of Agriculture in Bor highlighted that:

Box 3: Agricultural Ministry Official in Bor County on extent to which agriculture is now a business.

> *"The farmers are starting to take farming as a business. In the past people used to say, 'I cannot eat greens like an animal.' This has now changed as some green vegetables and other products are now daily available at the local market which used not to be the case a few years back."*
> KII with Agricultural Ministry Official in Bor County

The availability of local produce at the markets has benefited entire communities given the shortages of vegetable produce that often occur during the dry season. This has also benefited the producers, especially women farmers, who now have access to additional income from the market sales. Participants in FGDs have noted that income from the vegetable markets is being used to meet basic needs such as school fees and medical bills. Some farmers also create jobs for others as they hire casual labourers to work for them in the farms.

Outcome Indicator D1: Cooperatives have Adequate Organisational and Financial Management Capacity

The programme had targeted 135 cooperatives to have improved performance on organisational and financial management and managed to reach 145 making an achievement of 108%. Figure 17 shows that 91.9% of farmers in the three counties were aware that cooperative organisational and financial management capabilities had been enhanced through the programme. In Bor at the Makuach Payam cooperative, the evaluation was informed that if a member comes late for a meeting, they are fined SSP500 and in the case of VSLA the Treasurer does not have access to the keys where the money is kept and there are three members who oversee keeping of the money. Seventy-five percent (75.0%) reported that they have been beneficiaries of the improved standards. Bor topped the list with 94.7% reporting that they have been aware of this situation, while 92.5% reported that they had derived some benefits from these improvements. This was followed by Torit, which reported 94.8% awareness level and a 76.0% benefiting. Yambio came third with an 86.5% awareness level and a 60.0% benefiting.

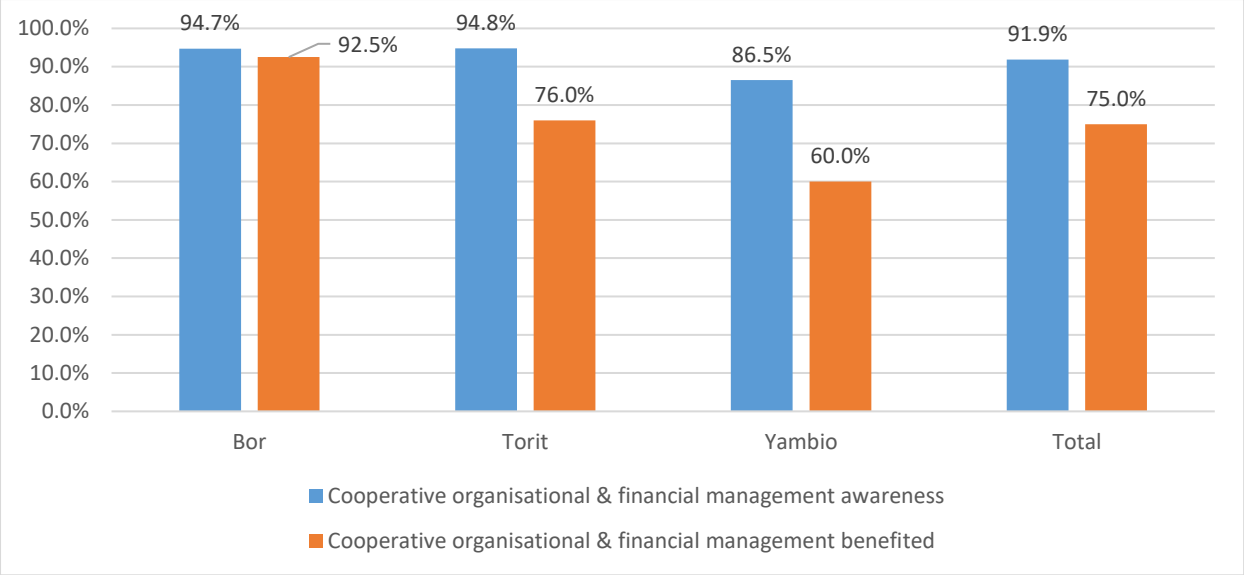


Figure 18: Level of Awareness and Benefits from improved Cooperative organisational and financial management

Discussions with FGD participants in the various groups showed that the associations and groups have received training on organisational and management issues. In almost all instances the members are aware of the organisational structures of committees from the Chairperson to the committee member and the various roles that each one of these members is expected to play. In Bor at Makuach Payam, for example, the study was informed that the treasurer of the association does not keep the keys to the funds of the association, but these must be kept by at least two other members of the committee. It was further also highlighted that when members are late to meetings, they are charged a nominal fine of 500 SSP.

Outcome Indicator D2: Women, Youth, MSMEs are Capable and Equipped with Skills to Start and Grow their Businesses

The number of businesses that grew after one year was 439 out of a target of 500, thus attaining a success rate of 88%. Overall, 85.4% of farmers in the three counties reported that they were aware of functional business support services in the project locations for VEMSA, Cooperatives and MSMEs (Table 12). Among these, 69.0% indicated that they have been beneficiaries of the improved services. The highest responses were recorded in Bor where 94.0% reported being aware of these services with 92.5% having benefited. Torit followed this with an awareness level of 84.9% and a benefit level of 71.6%. Yambio had an awareness level of 77.9% and a much lower benefit level of 46.7% mainly due to relatively low level of extension provision.

Table 12: Level of Awareness and Benefits from Functional Business Support Services

	Bor	Torit	Yambio	Total
Functional business support services awareness	94.0%	84.9%	77.9%	85.4%
Functional business support services benefited	92.5%	71.6%	46.7%	69.0%

Figure 20 shows that 93.3% of farmers in the three counties believe that youth and women have improved capacities to start up and grow their businesses. Out of this number, 74.4% indicated that they were beneficiaries of the initiatives. The proportion of awareness was higher in Bor (96.2%), with 92.3 % reported to have benefited. This was followed by Torit which recorded an awareness level of 92.7% and a benefit level of 73.1%. Yambio recorded an awareness level of 91.5% and a benefit level of 61.1%. According to the results framework, there were 162 new businesses started by youth and/or women by

the end of the project out of an overall target of 200 set at the beginning of the project. Another 133 youth and/or women-led businesses had grown/expanded their businesses by the end of the project from an initial target of 50 enterprises.

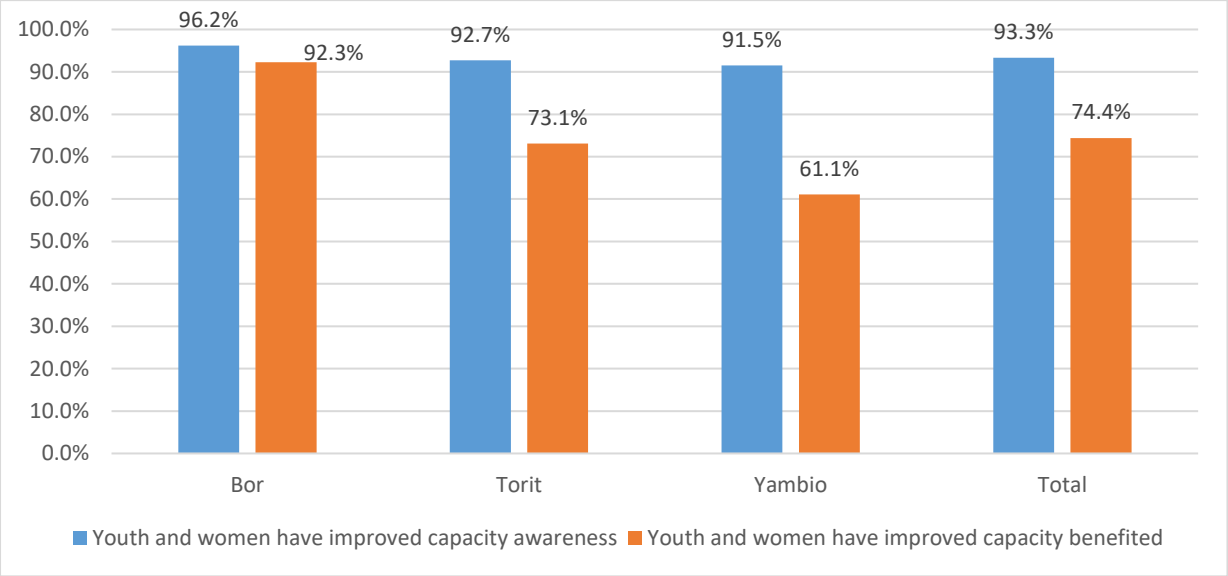


Figure 19: Level of Awareness and Benefits on Youth and Women Improved Capacities

The training provided to the farmers under the programme has enhanced the capacities of women and youth to start and grow their businesses. The study was informed that business skills that were received covered introduction to entrepreneurship, business plan writing, marketing, and sales, operational planning, financial management and human resources planning, and management. It also covered processing and packaging, especially for follow-up groundnut processors. Some indicated that they were trained in groups of 30 in 2021 with durations of up to 5 days plus an additional 3-days training on value addition issues. One of the implementing partners highlighted that in response to the COVID situation the project developed a strategy to pre-record scripts that were later played in the different locations of Yambio, Torit and Bor. This alone hugely impacted on the nearby communities in adopting. new farming techniques and other skills for running their farming as a business. There was also follow-up coaching and mentorship by business development agents (BDAs).

Due to the training activities, there has been an increased level of adoption of good business practices such as records keeping, business premises hygiene and entrepreneurship leadership and best etiquettes for the customers. It was for example highlighted that before the SSADP II programme business operators used not to separated household expenses from the business expenses. This has now changed, as they are now able to separate the two and track progress in the business. Some of the producers were further supporter through a US$2,500 grant towards the end of the SSADP II aimed at enabling them to further boost they business operations. A woman who as a groundnut processor in Bor town reflects on what she achieved by adapting good business practices, see the box below.

Box 4: An Agro-Processor in Bor Town Highlighting her achievements.

"I was motivated to venture into this business by the desire to succeed and help myself. When you help yourself, this can also be extended to others, including family members. South Sudan culture depends a lot on cattle keeping. We did not have the cattle therefore I decided to venture into this business. I used to sell bed sheets until I was able buy a groundnut/peanut butter processing machine. I then received training and the US$2,500 grant from Cordaid".
KII with a Women Agro-Processor in Bor Town

Outcome Indicator D3: Availability of and Access to Appropriate Financial Products and Services Ensured

The evaluation found that the number of farmers, VEMSA, Coops and MSMEs that have access to and received an appropriate loan product and financial services was 1,505 from a target of 3,895 representing a 39% achievement. Figure 19 shows that 81.4% of the survey participants were of the view that VEMSA and MSMEs could develop bankable business projects. Out of this figure, 69.1% of them highlighted that they have been able to develop bankable business projects. The responses were higher in Bor where 94.6% indicated that they were aware of the situation, while 93.3% indicated having benefited. This was followed by Torit where 77.3% were aware and 75.0% benefited. In Yambio, 73.8% were aware of this while 69.1% of them reported having benefited. Under this component, the BDAs conducted one-on-one coaching of MSMEs and Start-Ups that were seeking credit to develop business plans. Prior to the business plan development, the agribusinesses were tasked to conduct market research on prices, market demand, competitors, branding, and promotion, among other activities. In the end 209 (77F) Start-Ups and 353 (239F) MSMEs benefited from coaching to developed business plans in 895 sessions (SSADP II Annual Report, 2022).

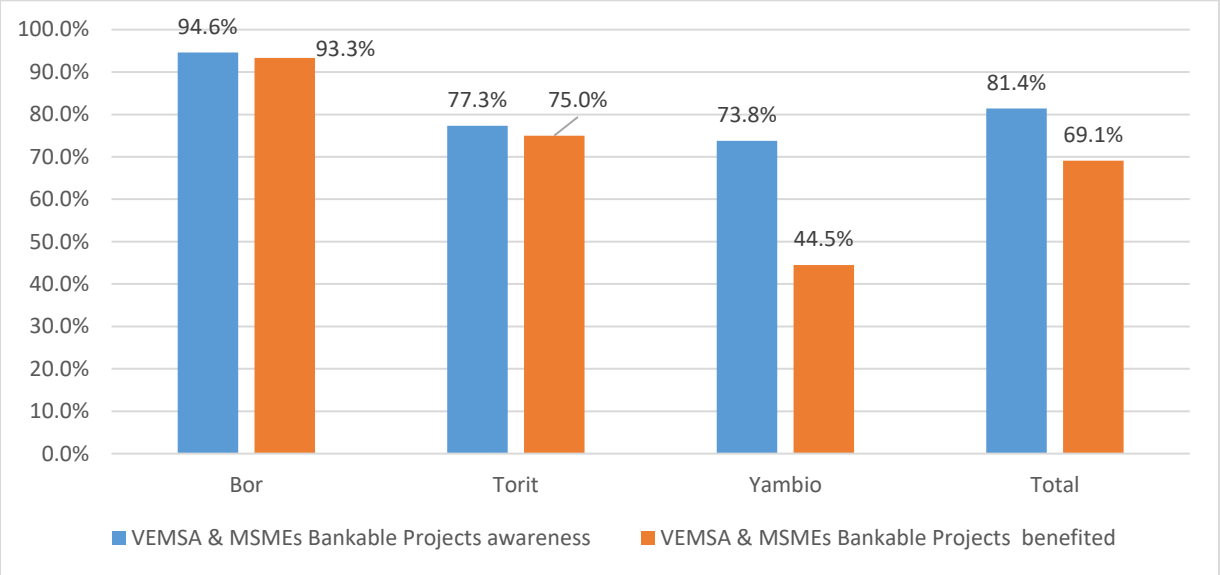


Figure 20: Level of Awareness and Benefits of Bankable Business Projects

Access to finance was promoted through two main channels which involved a more formal approach through the Rural Finance Initiative (RUFI) and a much less formal system through the Village Saving Loan Associations (VSALs). The start-ups business plans funded through RUFI were 20 in total (6 female), while 19 MSMEs were also funded (SSADP II 2022 Annual Report). The number of agribusinesses receiving loans remained low because of limited access to collateral (e.g., land title ownership). However, RUFI was a very appropriate partner in this programme by virtue of it being a cross-border microfinance institution incorporated in South Sudan and Uganda. It is a leading provider of tailored financial products and services offered to refugees and host communities, despite typical barriers to financial inclusion. These services include loans, money transfers, savings accounts, financial literacy training, and digitalization of VSLAs. Cordaid provided a grant to RUFI, and the aim of the grant was for lending to the individual farmers and cooperatives under the project. It was a recovery grant where farmers can borrow from. For enterprises, the grant covered activities in groundnuts; green gram; cowpeas; and maize, etc. while for individual enterprises it covered maize; groundnuts; sorghum and vegetables. Project implementing partners trained the stakeholders and assisted them in writing up business plans, and completion of loan applications before referring them to RUFI for loan consideration.

The study found convincing evidence of access to finance and financial products by both the farmers and agri-business in all the three targeted counties. In Bor for example, RUFI has so far

provided seasonal loans to farmers involved in sorghum production through their cooperatives. The loans are given to the farmers over a payback period of 10 months, which is inclusive of a first 3-months grace period under which the borrowers should pay only the month interest. The exact structure of the deal will be finalised after field visits and discussions with the farmers. There is an interest rate provision of 1.8% per month for the farmers' groups, which is lower compared to the 4.75% monthly interest charged to other borrowers. In Torit key informants indicated that funds attracted an interest rate of 21% per annum or 1.75% per month and the loans were to be fully repaid in one year. The repayment rate among individual borrowers was reported to be 67% in Torit which could severely compromise the sustainability of the support.

In Torit, RUFI are very satisfied with the role they played in the SSADP II programme. They reported that there are many entities whom the organisation provided loans that have gone on to become successful businesses. A good example is a vegetable farmer who now supplies large and regular volumes to Torit boma market. There have also been many borrowers who consistently take out loans and repay in full and on time.

The financial services providers feel that the programme has been very good for the farmers but there is a need to scale up their capacity and improve mechanisation. It was reported that more needs to be done for the farmers especially on capacity building and entrepreneurial skills so that they can improve their productivity. Farmers need to move towards a more commercial oriented level of production. Diversification will also help the farmers as it allows them to spread risk and allow earning of income from several sources. Factors that should be contributed to the successes of the financial services provision aspects include the following:

- Building capacities of producers, marketers/merchants, processors increased their knowledge and skills so that they can manage their enterprises well.
- RUFI has developed and maintains a good record keeping system and can easily track performance of their clients.
- Co-operatives were among first borrowers to receive loans, many failed to repay loans.

There is, however, limited understanding of how loan systems work among the farmers and agro dealers. As a result, most of them are unable to distinguish between loans and grants. There has also been a lack of resources, especially for travel, to enable loan officers to make follow ups with clients and to provide support. Insecurity also affects some of the areas in which support has been provided. For example, in Bor County RUFI were unable to reach the groups that had been supported with funding.

Heavy rains and flooding are a major challenge in terms of compromising yield from the farmers and making accessing other parts of the farming communities exceedingly difficult. In Bor County for example, RUFI highlighted that the previous season some of the groups have not been able to fully pay back their loans because of poor harvest due to the flooding. However, these farmers are expected to pay back this year given the expected good harvests. In Yambio County some cooperatives that received the loans did not reimburse the loan and even they are not showing up in their farm fields. Some of the cooperatives in Yambio also thought it was a grant given to them without knowing that it was a loan to be recovered back after the loan period elapses.

3.5 Efficiency

The analysis of the efficiency of project implementation encompasses an assessment of the effectiveness of the activities in utilizing resources to deliver on results and goals. This involves an assessment of the extent to which target outputs were achieved on budget and on time, whether the choice of activities and implementation approaches were appropriate to meet the needs of beneficiaries. It also includes an analysis of the ability of the project team to adapt to the changing environment in which the project activities were

undertaken, and the use of robust monitoring, evaluation and learning systems to help in improving the efficiency of project implementation. The overall finding was that the efficiency of programme implementation was generally high in terms of the planned activities, project management, management of human and other resources, coordination, and collaboration with other organisations.

The analyses of project documents and results of the key informant interviews show that project activities were implemented on time and the expected outputs, outcomes and goals were achieved and in many cases the targets set by the project were exceeded. Overall, regarding impact of the project, the goals of improved food security, higher income and more employment for beneficiary farmer households was achieved in the five-year timeframe of the project. The project had a target of supporting 8000 households to enable them to attain at least 30% increase in production and productivity for the selected crops, and 7857 (98%) households were reached. The projected achieved 104% for the target number of agribusinesses established and expanded and 102% for number of farmers with increased income sources. Planned targets for 12 of the 19 outcome indicators were achieved 100% or exceeded, while 19 of the 35 output indicators were achieved 100% or surpassed. In cases where the outcome and output indicator targets were not met the achievement level was at least 70%, except for targets for farmer adoption of post-harvest handling technologies promoted by the project, and some indicators related to access to finance.

The evaluation noted that rural finance/access to finance component of the project was not very successful. RUFI indicated that it experienced challenges in recovering money loaned to cooperatives as in some cases some leaders of these cooperatives left their communities with some moving to the capital Juba. RUFI noted that loans advanced to individuals had better repayment rates than those advanced to groups. The non-payment of loans in turn affected RUFI's ability to repay the grant advanced to it on recoverable terms (Revolving Loan Fund).

While providing farmers, agribusiness and MSMEs operators with training in business and financial management and business plan development can contribute to efficiency of the project, other strategies such as providing further training for borrowers on use of the loan after it has been received and support to help households maintain consumption levels after they experience negative shocks may be required to help improve loan repayment rates.

The evaluation also noted some delays in the procurement of capital equipment for cooperatives. A few cooperatives visited indicated that they did not receive the promised capital equipment by the time closed, while others received the equipment in the just before project closure and the equipment was yet to be installed so that it can be utilised. This was also noted by key informants who were interviewed for the evaluation.

Box 5: Respondent on Delays in Delivery of Capital Equipment to Some Cooperative

> *"Some cooperatives received the equipment for grain milling, cassava pressing machine and for expressing oil from groundnuts late, towards the end of the project. There was no time for project staff to help with installation of the equipment so most of those assests are not being used."* KII Participant

The SSADP II is a unique project and the first of its kind implemented in South Sudan and within a context where beneficiaries were accustomed to free handouts provided by many NGOs and donors to support the population through the many years of conflicts and natural disasters experienced in the country. That the project was able to achieve and surpass its targets on over 50% of its outcome and output targets shows a high degree of efficiency. Changing mindsets from subsistence to a market-oriented agriculture in a context where there are still interventions by some agencies based on providing free handouts is very challenging. However, evidence from project documents and the results of the mid-term

and endline evaluations show that there is growing effective demand for improved agricultural inputs and participation by farmers in markets for the selected products. The project's efforts at creating market linkages are bearing results, however increased focus on a market development approach that goes beyond just supporting market linkages is needed. This should include more effort being made to better integrate relief activities involving provision of free handouts and support for the emergence and development of markets, clear communication of objectives and goals of grants to recipients, and improvement selection of project activities of production activities in view of the nature of relief initiatives that may be on-going in the project sites.

The use of a consortium of expert organisations (Cordaid, Spark and Agriterra) as implementing partners for the project helped to increase efficiency of project implementation as this helped to cut down on learning time. The partners in consortium leading the implementation of the project were each assigned to lead the implementation of activities in which they had comparative advantage and had a significant footprint on the ground. This enables them to leverage their experience built over many years of working in the field and contributed to the efficient implementation of project activities.

The project established a field level project office in each county and housed staff from each implementing organisation under one roof. This made it easier to coordinate activities and for collaboration among the implementing partners. Close coordination and collaboration with the government line ministries at all levels (county, state and national) also helped to increase operational efficiency. Government line ministry key informants testified that they had a good participatory and collaborative working relationship with SSADP II.

Box 6: Respondents on Cooperation and Coordination Between SSADP II and Government

"SSADP II project staff always shared ahead of time the schedule of project activities with the County Department of Agriculture and supported us in form of transport and allowances for our staff which enable our presence in the communities and participation in project activities." KII Participant

The project had a robust monitoring and evaluation system. This enabled the project to pick on areas of concern early and address these. The M & E system enabled the project to trek progress towards achievement of its outcomes in a timely manner. The use of action research also enabled the project to identify challenges and to take appropriate action.

The evaluation found that there was flexibility with the implementation of the programme as the project team added some activities to ensure fulfilment of the planned outputs and outcomes. An analysis evaluation of the added activities showed that they met the needs of and were acceptable to the beneficiaries. These additional activities were mainly derived from the findings of action research activities that were implemented by the programme. This is confirmed from interviews with key informants, farmers' reports during focus group discussions and from the results of household interviews.

Training in good agricultural techniques was implemented using adult-learning approaches such as demonstrations, practicing, coaching and field days. Approaches used during farmer training such as demonstration and farmer field schools allowed farmers opportunities to observe and participate in performing tasks associated with the improved production practices which were promoted by the project. Given the low levels of formal education among the farmers in the project sites, opportunities to participate in practical application of improved production practices and observation of the results from demonstration plots at the end of the season increased farmers confidence of their ability to apply the new technologies. Farmers were also more willing to apply the improved production practices in their own fields after first observing the good performance of the new practices at demonstration plots. The results from the project's mid-term evaluation indicate that farmers reported that their knowledge of new

practices including climate smart agriculture had improved and that this had enabled them to increase production and profitability of their crop production enterprises.

The adoption of pluralistic extension approaches, including government extension services, NGO/project extension officers, and farmer extension agents (farmer-to-farmer extension system) and radio programs increased project efficiency and value for money as this enabled the project to deliver extension services to large numbers of farmers at less cost. Participation in the delivery of extension services by more stakeholders and the use of innovative approaches for delivery of extension services such as use of farmers to bring extension messages to fellow farmers and use of radio programs helped to make extension services accessible to more farmers than can be reached with only the government provided extension services and reduced the cost of the service. Some ago input dealers participated in trainings offered to farmers and this helped improve their own knowledge and helped them to be a reliable point of information on effective use of improved agricultural inputs and new technologies which farmers purchased from their outlets.

Moreover, farmer extension agents were always readily available for farmers to consult given their proximity to the other famers within the communities. In Bor County for example, two of the lead farmers were provided with one agro net each for raising seedlings for vegetables. These are like small greenhouses measuring 4 x 3 meters and 2 meters high. These structures were established in June 2023 when the programme was ending and were also expected to be part of the exit strategy to ensure that farmers continued to have access to good quality seed beyond the project timelines. One of the lead farmers in in the Panchaat Cooperative, had trained at least 100 other farmers by the time of the study. The lead farmer reported that he grows the seed, and the other farmers access the seedlings free of charge and he then recovers his money when he eventually sells produce to the local Bor market. In many situations, the other farmers have brought their own seed to grow their own seedlings within the agro net. An analysis of the information obtained from key informants supports importance of farmer extension agents to compliment the government agricultural extension officer's assignment to communities.

Box 7: A Respondent on Challenges faced in Training Farmers

"Farmers tend to stop or not follow teachings or forget the lessons. Having in the community always some people whom farmers can consult is extremely helpful." KII Participant

The project's focus on developing and strengthening community organisations ranging from VSLAs, VEMSAs, FEMA, Peace and CMDRR committees, and co-operatives is also important for ensuring efficiency of delivery of project activities. Local organisations that function well were able to engage with other stakeholders to coordinate development activities in their areas to avoid duplication of effort and unproductive competition among agencies. They are also in a prime position to lobby for resources to compliment and support on-going initiatives.

The establishment, training and support for Peace and Community Disaster Risk Reduction committees in the project sites presented an efficient way for improving awareness of disaster risks and strategies for their management, and methods for conflict resolution for large numbers of households and communities**.** Many communities were able to conduct participatory disaster risks assessments for the areas and to formulate their own disaster risks management plans. It would have been expensive and time consuming to carry out such exercises and achieve this high reach using only the project's officers. The use of the information generated from the work of the Peace and CDRR committees by households, farmers, agribusiness and MSMEs has improved the resilience of these entities to shocks and conflicts. Farmers in Himodonge Payam in Torit County reported a reduction in incidences of crop damage from livestock during the 2022 season following dialogues between crop farmers and livestock herders, and overall, the resilience capacity index of project beneficiaries increased with the project.

The identification, training, and deployment of locally based Business Development Advisors in the project sites increased project efficiency as large numbers of agribusiness, MSME operators could be reached with business skills training and coaching services at low cost. In total a network of 65 Business Development Advisors was put in place in the 3 counties. This enabled the project to reach more agribusinesses, MSMEs and entrepreneurs at a lower cost than would have been possible using only the project's Business Development Advisors. As a result, the 2022 Annual Project report that the project had achieved a 98% reach in respect of the target number of agribusinesses and MSMEs to be provided with training in business skills, and 89% of entrepreneurs received on-going coaching and support from BDAs. The same entrepreneurs reported an improvement in how they carried out marketing, financial management and record keeping functions for their businesses, and this led to improved profitability.

Planned activities were mostly implemented on time, although there were instances where farmers indicated that they did not receive seeds in time which caused them to revert planting traditional seed. During FGDs, farmers in Himodonge payam in Torit indicated that they had been negatively affected by late delivery of farm inputs. In Torit and Yambio some cooperatives received processing equipment such grinding mills late. Since project staff were no longer available to help with the installation of the equipment, there were delays in commencing processing activities for the affected cooperatives. In Bor, the study was informed that the warehouse had been constructed quite recently and the famers had not started making use of the facility.

During KIIs, county level project officers highlighted the late delivery of processing equipment to the cooperatives because of challenges with procurement processes including the impact of the COVID-19 pandemic which affected global supply chains. This could also have been a result of the incremental approach for recruiting project beneficiaries, whereby new waves of beneficiaries were added yearly. For the beneficiaries recruited in the later phases of the project, the importation of the equipment allocated to them was impacted by the slow down and backlogs in global supply chains following the pandemic. A general observation that can be made in this case is the need to plan for procurement of big and complex machinery in good time so that there is adequate time for project staff to provide close support to farmers as they learn to operate the new equipment.

Effective collaboration and coordination with other organisations and agencies supporting development in the communities enhanced the achievement of the project's outcomes. For example, after the project supported the rehabilitation of the co-operative's warehouse in Imurok Payam in Torit County, UNFAO supported the co-operative with scales, pallets and bags for packaging maize, groundnuts, and tarpaulins tents for protecting farmers' harvested crops from moisture. The ability of the project to leverage resources from other organisations working in the same areas was key to the efficiency of the project as it was able to leverage additional resources.

The project built new infrastructure to help enhance the marketing function but also supported the maintenance of existing facilities to minimise costs and to have more funds available for other activities. The strategy of rehabilitating existing infrastructure, where such existed, increased the efficiency of the project as it built on existing organizational structures for managing such infrastructures as well leveraged the sense of local of ownership of the facilities by beneficiaries. The infrastructure development and maintenance activity also contributed to the success of other activities for which such infrastructure was contributory. For example, building or rehabilitating warehouses for cooperatives enabled them to better perform the function of aggregating and marketing their members' produce. With the improved storage facilities raw materials could be made available for longer for local agro processors, without experiencing high losses and deterioration in quality.

The coverage of the project in Torit County was reduced from 8 to 6 payams in year 3, when security challenges emerged in the other 2 payams. The project team decided to stop project activities in the affected areas and redirected activities to the remaining payams. The redirection of project activities in response to changes in the security situation in the project sites was also necessary in Yambio County. The evaluation revealed that the decision was in line with the project's conflict sensitivity lens and the Do No Harm principle in order to avoid endangering community members and project staff in the course of implementation of project activities.

The project had a sound project management system at the country office level as well as the county level. The county level project team was well supported, and guidance provided by the senior project management team from Cordaid. The senior project management based at the country office of Cordaid carried out the overall project management, development of annual implementation plans and budgets. It also decided on implementation approaches, reporting procedures, communication, as well as providing the necessary technical support to the county project officer and field level personnel. The project officer at the county was responsible for integration of field officers and implementing partners' staff at the county level. The county level project officers also ensured co-ordination with the officials and staff of the county and state governments and the other organisations implementing development activities in the county.

3.6 Impact

The impact objective was focused on improved Food Security, Higher Income and More Employment for Farmer Households in Selected Counties of South Sudan.

3.6.1 Improved Food Security

The project has significantly improved the food security of the households in the three targeted counties.

The Household Dietary Diversity Score (HDDS) and the Household Dietary Diversity Index (HDDI) were used as a proxy measure for household food security. The HDDS and HDDI measures were calculated based on 12 food groups as shown in Table 13. The Simpson Index was used to calculate the HDDI. The index ranges from 0 (no diversity at all) to 1 (highly diversified).

Table 13: Food Groups Used to Calculate HDDS

Food Group	**Food Group**
Cereals	Fish and other seafood
White tubers and roots	Legumes, nuts, and seeds
Vegetables	Milk and milk products
Fruits	Oils and fats
Meat	Sweets
Eggs	Spices, condiments, and beverages

The number of different food groups consumed by an average household less than doubled from 5.3 in 2018 to 9.1 in 2023 (Table 14). The increases were higher in Bor from 4.9 groups in 2018 to 9.6 in 2023 groups, followed by Torit which moved from 5.5 groups to 8.9 groups. For Yambio it increased from 5.6 groups in 2018 to 8.9 groups in 2023.

Table 14: Mean Number of Food Groups Consumed by the Average Household by County

County	**Food Groups Consumed 2023**	**Food Groups Consumed 2018**
Bor	9.6	4.9
Torit	8.9	5.5
Yambio	8.9	5.6
Total	**9.1**	**5.3**

The distribution of HDDS by period in summarized in Figure 22 and shows that there has been a significant improvement in food security across the three counties with 71.6% of households now consuming between 9 and 12 food categories compared to only 22.0% in 2018. Consequently, there has been a decline in the 5 to 8 food categories which moved from 27.0% in 2018 to 19.7% in 2023. Those that consumed 0 to 4 categories decreased significantly from 51.0% in 2018 to only 8.8% in 2023.

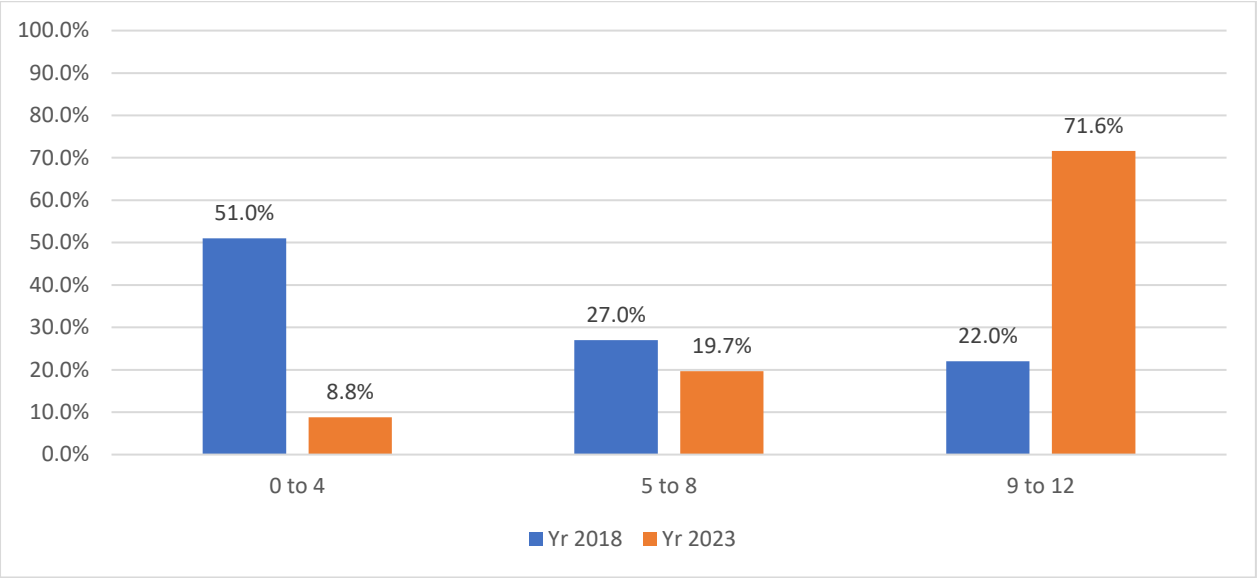


Figure 21: Percent Distribution of HDDS by Period

Overall, the mean HDDI increased from 0.81 in 2018 to 0.86 in 2023 (Table 15). An analysis by County shows that the increase in the adult HDDI is similar and higher for Bor and Torit (0.06 points) and lower for Yambio (0.037 points). An analysis by gender of household head shows that the HDDI is marginally higher in female headed households (0.869) relative to male headed households (0.8577).

Table 15: Mean Household Dietary Diversity Index by Period by County

County	HDDI 2018	HDDI 2023
Bor	0.806	0.8656
Torit	0.803	0.8671
Yambio	0.8232	0.8579
Total	0.810	0.8632

Figure 23 presents the percent distribution of the HDDI and shows that, overall, the proportion of households in the Very High HDDI category increased from 72.6% in 2018 to about 92.9% in 2023. The percentage increase in households in the Very High HDDI category was highest for Bor County (30.4%) followed by Torit County (17.0%) and lowest for Yambio county (13.5%). An analysis by gender of household head shows that the percentage increase in households in the Very High HDDI category is similar between male and female headed households at 20.0%.

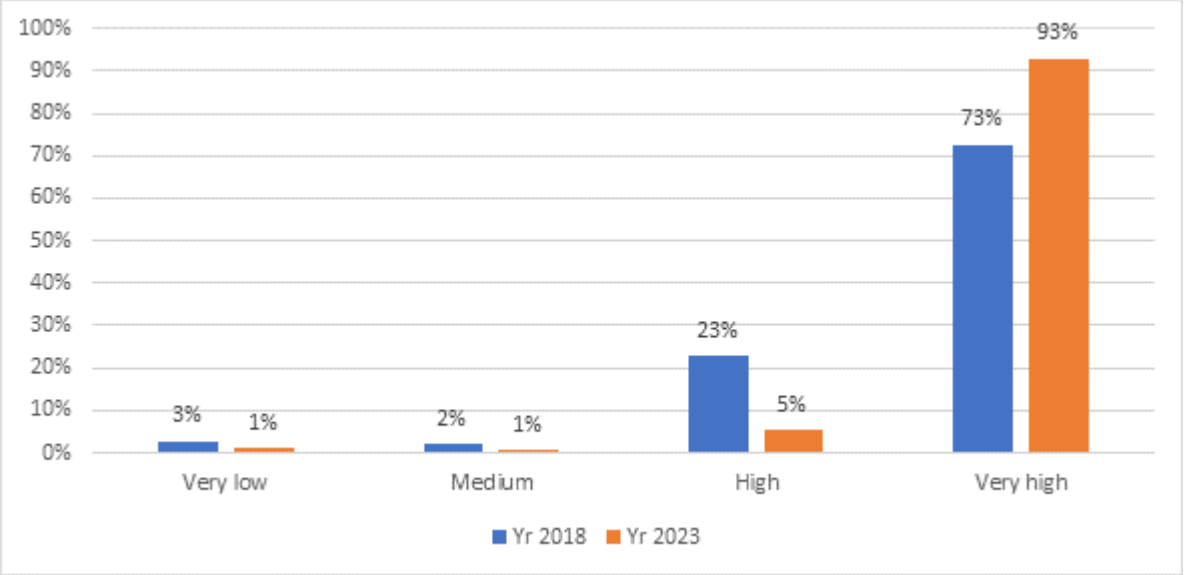


Figure 22: Adults HDDI percent Distribution by Period

3.6.2 Higher Income

The main sources of household income are agriculture and business. For the farming households, the percent households producing crops for sale increased during the project period. Also, the level of household income increased by 72% (in SSP terms) during the project period.

Main Sources of Household Income

The percentage of households depending on agriculture as a source of income increased from about 60% in 2018 to about 93% in 2023 (Figure 24). Those that depended on business as a source of income also increased from about 47% in 2018 to about 62% in 2023. The farmer survey results show that the main sources of household income are agriculture, business, and employment. The percentage of households depending on employment and other as sources of income remained constant during the project period at about 20% and 30% respectively. The percent households without any sources of income increased slightly from about 17% to 20% over the project period.

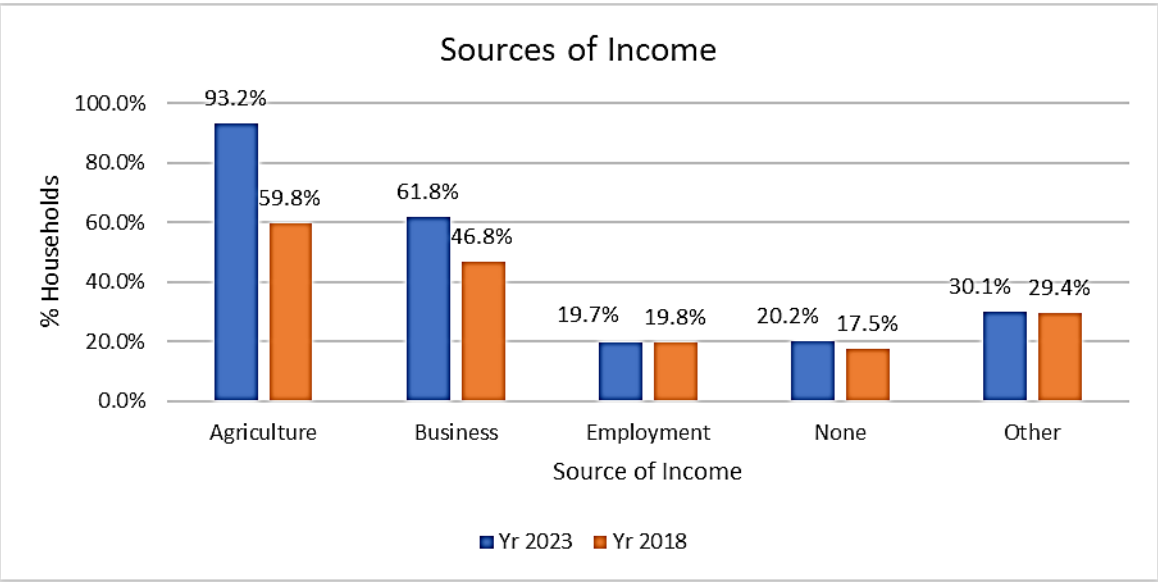


Figure 23: Percent Households Indicating Main Source of Income by Period

An analysis by county in Table 16 shows that over the project period, Bor and Yambio counties had a higher increase (39%) in percentage of households deriving income from agriculture than Torit (22%). Similarly, Bor and Yambio had at 21% to 29% increase in households deriving income from business compared to only a 3% increase for Torit County. Bor and Torit counties experienced a decrease in households deriving income from employment of 3% and 6%, respectively over the project period whilst Yambio enjoyed a 17% increase. Whilst the increase in percent households without sources of income was low (less than 3%) in Bor and Torit Counties, Yambio had a 12% increase.

Table 16: Percent Households Indicating Main Source of Income by Period by County

	2023				2018			
Source of Income	**Bor**	**Torit**	**Yambio**	**Total**	**Bor**	**Torit**	**Yambio**	**Total**
Agriculture	98.5%	82.7%	98.8%	93.2%	59.5%	60.6%	59.6%	59.8%
Business	70.6%	49.6%	72.5%	61.8%	49.3%	47.1%	44.0%	46.8%
Employment	10.7%	8.9%	46.8%	19.7%	13.2%	14.9%	29.9%	19.8%
None	17.9%	9.5%	38.7%	20.2%	15.3%	9.0%	27.0%	17.5%
Other	32.3%	13.0%	53.9%	30.1%	36.4%	20.3%	32.9%	29.4%

An analysis of main sources of income by gender of household head shows that the percent households deriving income from agriculture increased by 36% for male-headed households and by 31% for female-headed households (Table 17). The percentage of households deriving income from business increased by 17% for male-headed households and by 13% for female-headed households.

Table 17: Percent Households Indicating Main Source of Income by Period by Gender of Household Head

	2023			2018		
Source of Income	**Female**	**Male**	**Total**	**Female**	**Male**	**Total**
Agriculture	89.7%	96.3%	93.2%	58.7%	60.6%	59.8%
Business	57.2%	66.7%	61.8%	44.4%	49.6%	46.8%
Employment	15.0%	25.2%	19.7%	18.9%	20.9%	19.8%
None	16.4%	23.6%	20.2%	10.2%	23.6%	17.5%
Other	26.2%	33.9%	30.1%	30.3%	29.2%	29.4%

Household Income

The percentage contribution of household income sources to total household income over the past 12 months shows that about 68% of the household income comes from agriculture whilst about 29% comes from business (Figure 25). The contribution of agriculture to total household income ranges from about 61% in Bor to about 77% in Yambio (Figure 25a). An analysis by sex of household head shows that the contribution of agriculture to total household income is slightly higher for male headed households at 71% compared to 65% for female headed households (Figure 25b).

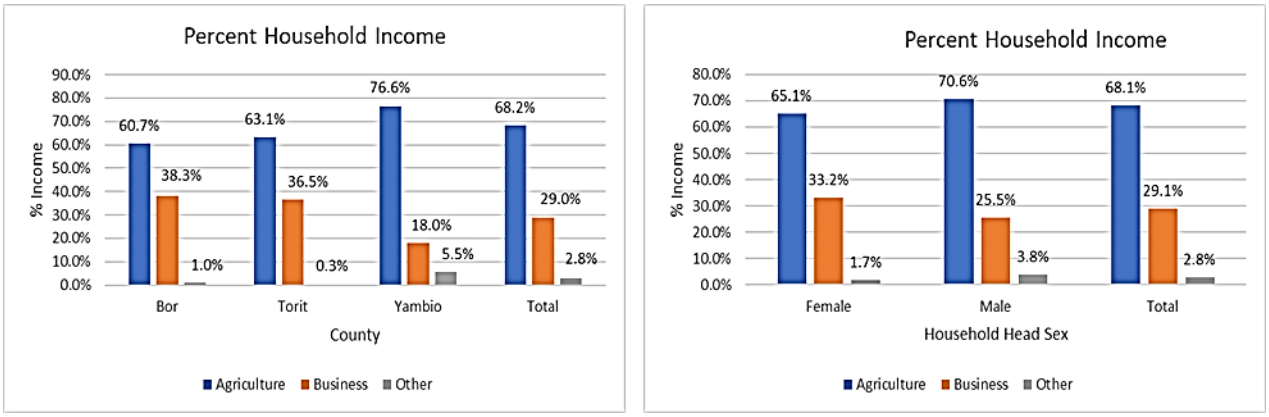


Figure 24: Contribution of Income Sources to Total Household Income

Overall, the average household total monthly income increased from SSP 16 000 at baseline to SSP 27 000 with the project (Figure 26). An analysis by county shows that over the past 12 months, the average household total monthly income is lowest in Torit (SSP 23 600) and highest in Bor (SSP 30600). Table 18 shows that the average household agriculture monthly income ranges from about SSP 15 700 in Torit to about SSP 21 400 in Yambio.

An analysis by sex of household head shows that the average household total monthly income is similar between female and male headed households (SSP 27,187 and SSP 27,476 respectively). Table 19 shows that the average household agriculture monthly income is slightly higher for male headed households at SSP 20 200 compared to about SSP 18 100 for female headed households.

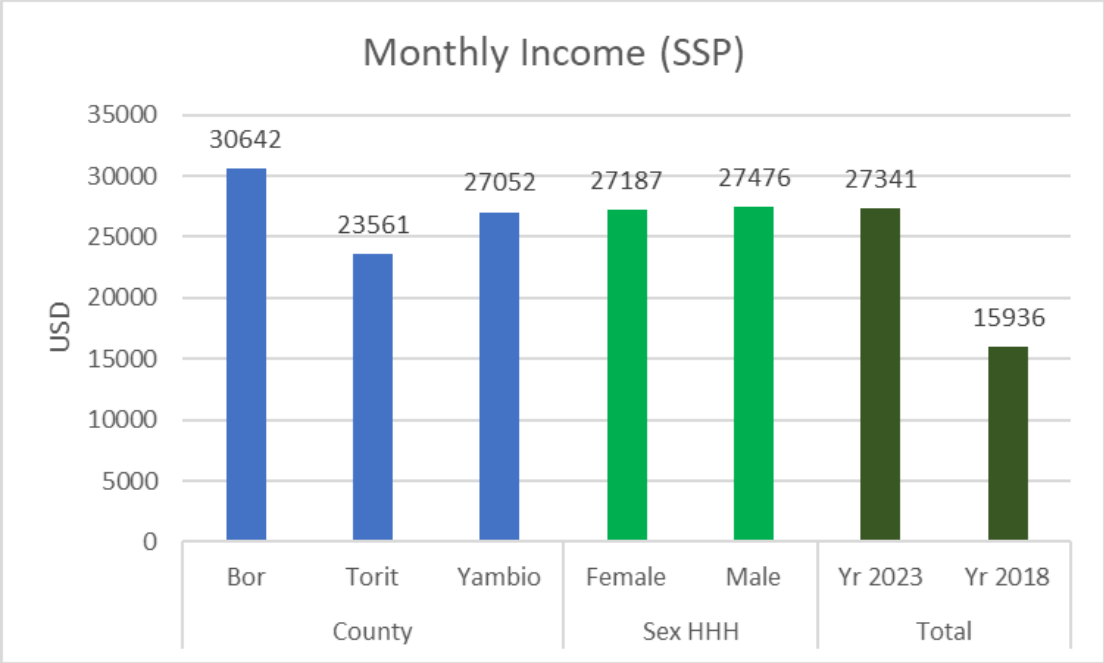


Figure 25: Mean household Income by County, Gender, and Period

Table 18: Annual and Monthly Household Income Estimates Over the Past 12 Months by County (SSP)

	Estimated Annual Income				Estimated Monthly Income			
County	**Agriculture**	**Business**	**Other**	**Total Income**	**Agriculture**	**Business**	**Other**	**Total Income**
Bor	225,596	342,847	15,000	367,704	18,800	28,571	1,250	30,642
Torit	188,722	181,905	4,235	282,737	15,727	15,159	353	23,561
Yambio	256,422	212,097	86,112	324,626	21,368	17,675	7,176	27,052
Total	230,434	243,138	41,318	328,092	19,203	20,261	3,443	27,341

Table 19:Annual and Monthly Household Income Estimates Over the Past 12 Months by Sex of Household Head (SSP)

	Estimated Annual Income				Estimated Monthly Income			
Household Head Sex	**Agriculture**	**Business**	**Other**	**Total Income**	**Agriculture**	**Business**	**Other**	**Total Income**
Female	217,240	247,053	21,771	326,243	18,103	20,588	1,814	27,187
Male	242,220	238,866	63,388	329,716	20,185	19,906	5,282	27,476
Total	230,434	243,138	41,318	328,092	19,203	20,261	3,443	27,341

3.6.3 Improved Resilience

Outcome A: Farmers and Agribusinesses More Resilient to Shocks and Hazards, Both Natural and Conflict

Household resilience to risks and shocks significantly improved during the project period.

Overall, the average household experienced an average of four (4) risks or shocks before the project period, and this decreased to an average of three (3) risks or shocks with the project. Figure

27a shows that on average, the mean number of risks and shocks affecting the farming households decreased during the project period. This is for crop and livestock losses, insecurities and assaults, household deaths and disturbances, weather, and diseases. Figure 27b presents the percent distribution of the sources of shocks that affected the farming households. Before the project, risks and shocks mostly derived from income shocks (23.4%), insecurities and assaults (21.0%), and crop and livestock losses (18.5%) whereas after the project the risks and shocks derived still mainly from income shocks (33.5%), now followed by crop and livestock losses (21.0%), and the weather (15.0%).

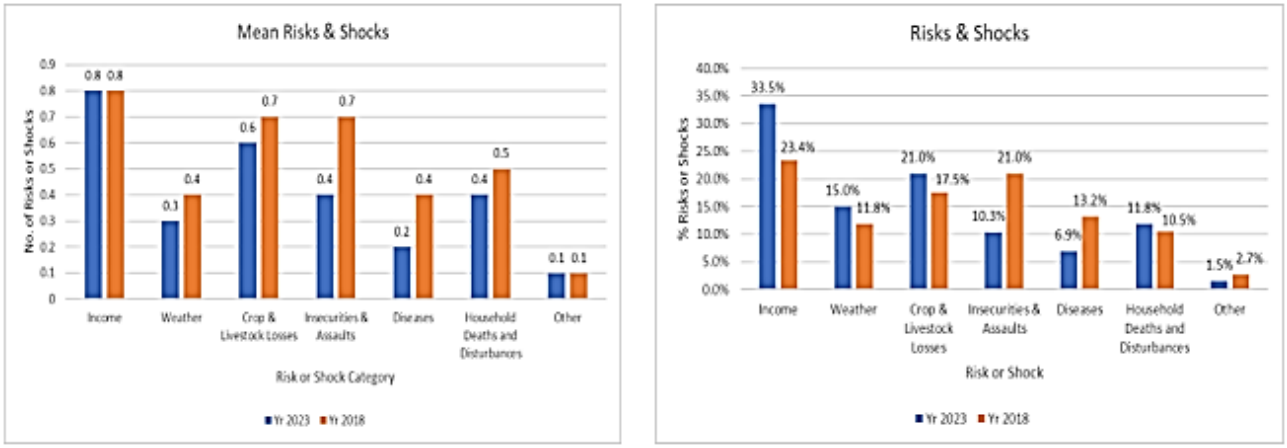


Figure 26: Mean Number of Risks and Shocks by Type Experienced by Households by Period

An analysis of the main risks and shocks shows that for Bor County the main risks and shocks before the project mainly derived from income shocks (24.7%), insecurities and assaults (21.6%), and crop and livestock losses (18.9%) (Table 20). Through the project, the risks, and shocks for Bor mainly derive from income shocks (26.4%) and crop and livestock losses (18.2%). For Torit County, the main risks and shocks before the project mainly derived from income shocks (30.8%), insecurities and assaults (19.0%), and crop and livestock losses (17.4%). Through the project, the risks and shocks for Torit mainly derive from income shocks (48.7%) and the weather (27.1%). For Yambio County, the main risks and shocks before the project mainly derived from income shocks (20.5%), insecurities and assaults (21.0%), and diseases (18.4%). Through the project, the risks, and shocks for Yambio mainly derive from crop and livestock losses (34.6%) and income shocks (27.0%). Thus, through the project period, (i) income as a source of risk increased in Torit and Yambio; (ii) insecurities and assaults greatly decreased as sources of risk; and (iii) crop and livestock losses as a source of risk increased in Bor and Yambio.

Table 20: Proportion (%) of Risks and Shocks by Type Experienced by Households by Period by County

	2023				2018			
Risk / Shock Category	**Bor**	**Torit**	**Yambio**	**Total**	**Bor**	**Torit**	**Yambio**	**Total**
Income	26.40%	48.70%	27.00%	**33.50%**	24.70%	30.80%	20.50%	**23.40%**
Weather	13.00%	27.10%	6.50%	**15.00%**	10.80%	4.20%	14.40%	**11.80%**
Crop & Livestock Losses	18.20%	7.80%	34.60%	**21.00%**	18.90%	17.40%	16.40%	**17.50%**
Insecurities & Assaults	16.60%	4.50%	9.70%	**10.30%**	21.60%	19.00%	21.10%	**21.00%**
Diseases	6.50%	2.50%	11.00%	**6.90%**	8.00%	9.00%	18.40%	**13.20%**
Household Deaths and Disturbances	16.60%	8.10%	10.60%	**11.80%**	12.50%	14.80%	7.80%	**10.50%**
Other	2.70%	1.20%	0.60%	**1.50%**	3.60%	4.70%	1.50%	**2.70%**
No. of Risks and Shocks	4.7	1.9	2.2	**2.8**	6.7	0.7	4	**3.6**

A gender analysis of the main risks and shocks shows that for female-headed households, before the project, the main risks and shocks mainly derived from income shocks (25.0%), and insecurities and assaults (21.3%) (Table 21). With the project, the risks and shocks for female-headed household mainly derive from income shocks (39.6%) and the weather (18.3%). For male-headed households, before the project, the main risks and shocks derived from income shocks (22.4%), insecurities and assaults (21.1%), and crop and livestock losses (19.8%). With the project, the risks and shocks for male-headed households mainly derive from income shocks (27.8%) and crop & livestock losses (26.1%).

Table 21: Proportion of Risks and Shocks by Type Experienced by Households by Period by Gender of Household Head

	2023			2018		
Risk / Shock Category	**Female**	**Male**	**Total**	**Female**	**Male**	**Total**
Income	39.60%	27.80%	33.50%	25.00%	22.40%	23.50%
Weather	18.30%	11.90%	15.00%	11.20%	12.40%	11.90%
Crop & Livestock Losses	15.80%	26.10%	21.10%	14.20%	19.80%	17.40%
Insecurities & Assaults	7.00%	13.50%	10.40%	21.30%	21.10%	21.20%
Diseases	5.70%	8.10%	6.90%	11.50%	13.70%	12.80%
Household Deaths and Disturbances	12.60%	10.80%	11.60%	13.40%	8.30%	10.50%
Other	1.10%	1.90%	1.50%	3.40%	2.30%	2.80%
No. of Risks and Shocks	2.8	2.81	**2.8**	3.75	3.56	**3.6**

Resilience Capacity Index

The resilience capability index (RCI) was calculated for each farming household. The RCI is a measure used to assess household resilience in the face of risks and shocks. The calculation of the RCI was based on four pillars: (i) access to basic services (ABS), (ii) assets (AST), (iii) adaptive capacity (AC), and (iv) social security network (SSN). The RCI ranges from zero (0) to 100, with the higher values on the scale representing higher resilience.

Figure 28a shows that, overall, the RCI for the farming households increased by 9.0% to reach 65.0% during the project period. An analysis by county shows that the RCI was higher for Bor (70%) and lower for Torit and Yambio (62.0% and 64.0%). During the project period, the increase in the RCI was highest for Torit (17.0%), followed by Bor (9.0%) and again the lowest for Yambio (2.0%). An analysis by gender of household head shows that the RCI was 64.0% for female-headed households and 65.0% for male-headed households. During the project period, the increase in the RCI was higher for female-headed households (12.0%) compared to an increase of 6.0% for male-headed households. The percentage distribution of the RCI (Figure 28b) shows that about 66.0% of the households had an RCI in the high to extremely high categories for 2023 compared to 57.0% for 2018.

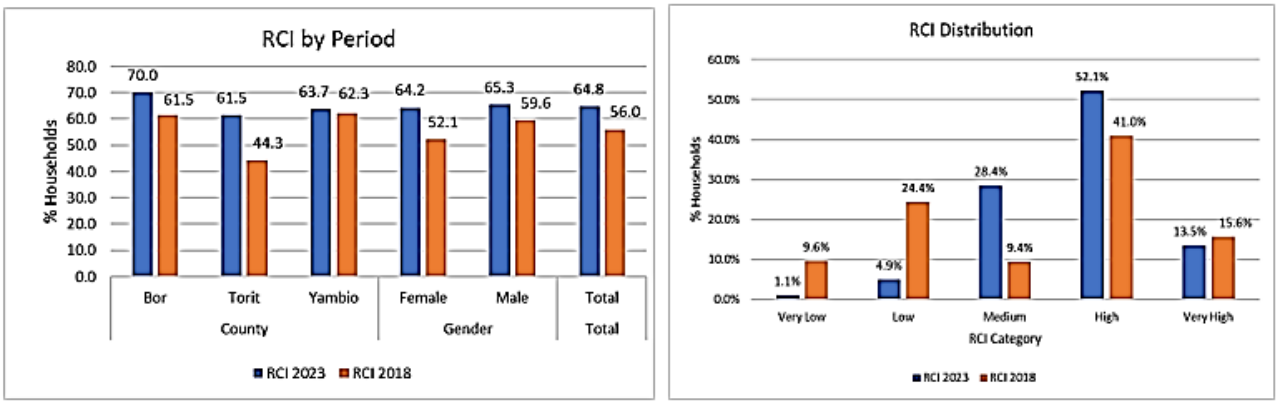


Figure 27: Resilience Capability Score by Household Characteristics and Percent Distribution of RCI

The percent distribution of RCI by county is presented in Table 22 and shows that the percentage increase in households in the high to extremely high RCI categories was highest in Bor (25%), followed by Torit (13%). An analysis by gender of household head shows that the percentage increase in households in the high to extremely high RCI categories was higher for female-headed households (13%).

Table 22: Percent Distribution of RCI by County

	2023				2018			
RCI Category	**Bor**	**Torit**	**Yambio**	**Total**	**Bor**	**Torit**	**Yambio**	**Total**
Very Low	2.3%		1.1%	1.1%	7.5%	20.9%	1.1%	9.6%
Low	.8%	5.1%	7.9%	4.9%	20.3%	32.9%	19.8%	24.4%
Medium	9.0%	41.8%	31.1%	28.4%	9.0%	5.7%	13.0%	9.4%
High	68.4%	44.3%	46.9%	52.1%	39.8%	32.3%	49.7%	41.0%
Very High	19.5%	8.9%	13.0%	13.5%	23.3%	8.2%	16.4%	15.6%

3.6.4 Enhanced Crop Production and Productivity

The study found that crop diversity did not change during the project period. The area under cultivation did not significantly increase during the project period. However, yields for the major crops significantly increased during the project period, at least doubling the crop target yields.

Crop Diversity

To assess the extent to which the range of crops grown by the farming households changed during the project period, the crop diversity index was calculated based on five (5) crop groups, i.e., cereals, roots and tubers, pulses, vegetables, and fruits.

Overall, the mean CDI was the same for 2018 and 2023, that is, 0.67 (Figure 29). This means that the range of crops grown by the farming households did not change during the project period. Irrespective of time, the CDI is lowest in Bor County and highest in Yambio County. During the project period, the mean CDI did not change for Yambio County (0.74), marginally increased for Bor County (from 0.59 to 0.61), and marginally decreased for Torit County (from 0.67 to 0.64). An analysis by gender of household head shows that the CDI increased for the male headed households (from 0.67 to 0.70) and decreased for female headed households (from 0.67 to 0.64) during the project period.

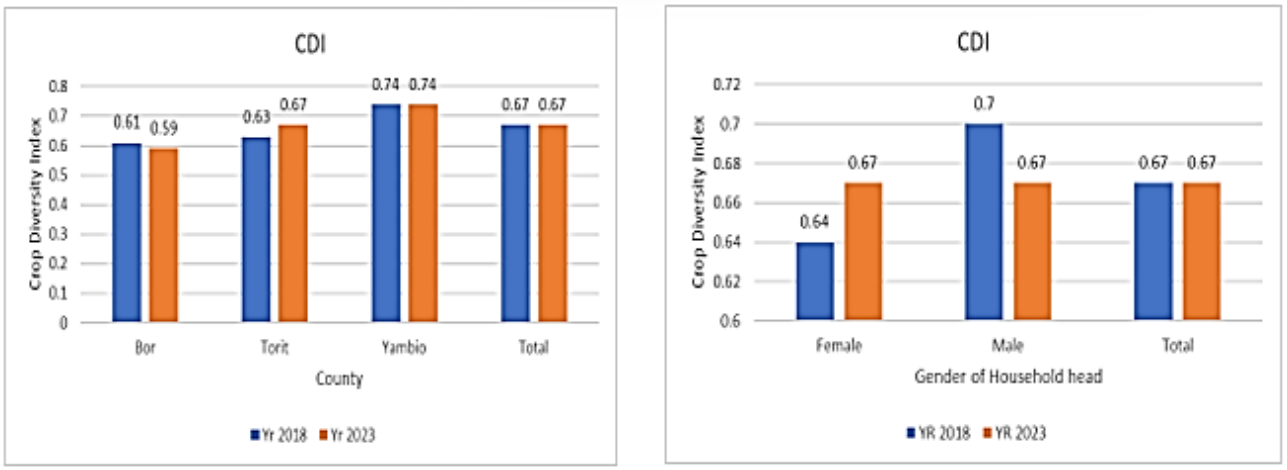


Figure 28: Mean Crop Diversity Index by Period by County by Gender of Household Head

Area Cultivated

The mean area harvested to the major crops is presented in Table 23 showing that the average area under maize production remained constant during the project period. During the project period, the average area under sorghum production increased by about 14% whilst the average area under groundnut production increased by about 6%. An analysis by county shows that the mean area harvested to sorghum was 46% higher in Bor over Torit whilst the mean area under groundnut production was highest in Bor (1.07 ha) and lowest in Yambio (0.44 ha).

Table 23: Mean Area Harvested (Ha) for Major Crops, the Past 12 Months by County

Crop	County			Past 12 Months Total	Baseline
	Bor	Torit	Yambio		
Maize			0.50	0.50	0.50
Sorghum	0.79	0.43		0.67	0.59
Groundnut	1.07	0.55	0.44	0.67	0.63

An analysis by gender of household head shows that the mean area under production was similar for sorghum (0.67 ha) for female and male headed households (Table 24). The area harvested for maize and groundnut was marginally higher for maize for male headed households (by 0.08 ha) and groundnut (by 0.06 ha).

Table 24: Mean Area Harvested (Ha) for Major Crops, the Past 12 Months by Gender of Household Head

Crop	Gender of Household Head		Total
	Female	Male	
Maize	0.47	0.55	0.50
Sorghum	0.68	0.67	0.67
Groundnut	0.64	0.70	0.67

An analysis of the percentage of households with an area harvested greater than the mean targeted area of 50% more than the baseline area was 24% for maize, 8% for sorghum, and 14% for groundnut (Table 25). The percent households with an area harvested greater than the mean targeted area was 43% for groundnut in Bor and 11% for sorghum in Bor, about 7% to 8% for sorghum for both female and male headed households (Table 26), 12% and 18% for groundnut for female and male headed households, respectively.

Table 25: Percent Households with Area Harvested Greater than Mean Expected Area

Crop	County			Total
	Bor	Torit	Yambio	
Maize			23.6%	23.6%
Sorghum	11.0%			7.6%
Groundnut	42.5%	3.9%	1.4%	14.3%

Table 26: Percent Households with Area Harvested Greater than Mean Expected Area

Crop	Female	Male	Total
Maize	18.2%	31.5%	23.6%
Sorghum	8.2%	6.7%	7.6%
Groundnut	11.9%	17.8%	14.3%

Overall, about 71% of the households increased the land under cultivation (Figure 30). The percentage households increasing the land cultivated was lowest for Torit (55%) and similar and higher for Bor and Yambio (76% and 81% respectively). An analysis by gender of household head shows that the percentage of households who increased the land cultivated was 14% higher for male-headed households. For those who did not increase the land under cultivation, the main reasons given are included that family already has adequate land; they did not have money to purchase land; and there was no available land on which to expand the farm or open new farm.

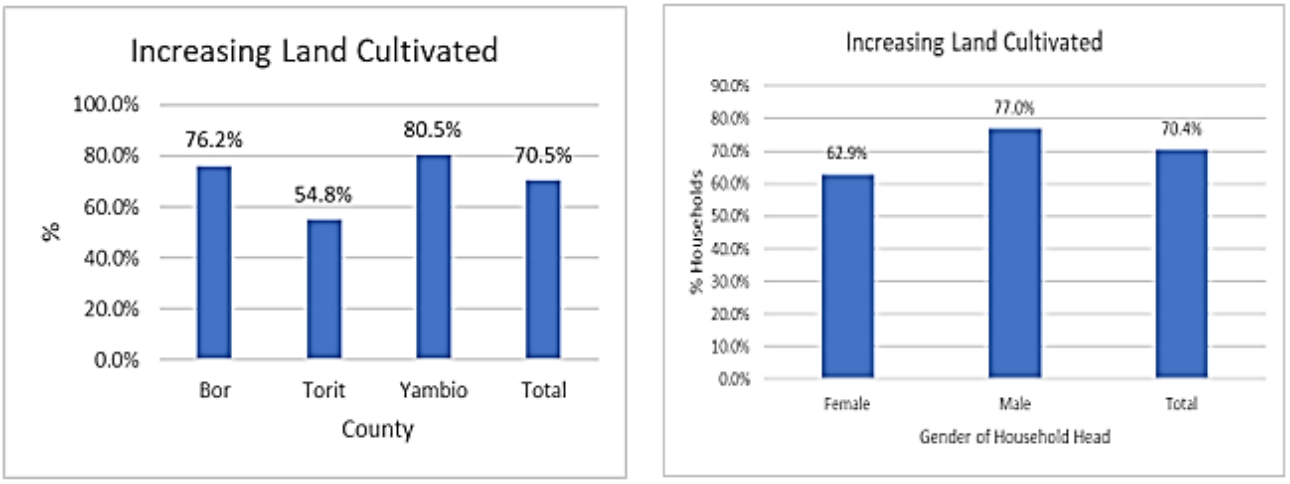


Figure 29: Percent Households Indicating Increasing the Land Under Cultivation Between 2018 and 2023 by County and by Gender of Household Head

Crop Productivity

The mean yields (Kg / Ha) for the major crops are presented in Table 27 which shows that the mean yield for: (i) maize is double the target maize yield of 430 kg / ha, (ii) sorghum is about 215% higher than the target sorghum yield of 240 kg / ha, and (iii) groundnut yield is just a little above double the target groundnut yield of 460 kg/ ha. An analysis by county shows that the mean sorghum yield is about 25% higher in Bor over Torit whilst the mean groundnut yield is 9% higher in Torit and 100% higher in Yambio over Bor.

Table 27: Mean Yield (Kg / Ha) for Major Crops, the Past 12 Months by County

Crop	County	

	Bor	Torit	Yambio	Past 12 Months Total
Maize			862	862
Sorghum	805	645		756
Groundnut	569	622	1707	948

An analysis by gender of household head (Table 28) shows that the mean yield for sorghum and groundnut are similar between female and male-headed households whilst the mean maize yield is 17% higher for male-headed households.

Table 28: Mean Yield Harvested (Kg / Ha) for Major Crops, the Past 12 Months by Gender of Household Head

	Gender of Household Head		
Crop	**Female**	**Male**	**Total**
Maize	806	940	862
Sorghum	759	751	756
Groundnut	954	938	948

An analysis of the percent households with crop yields greater than the mean targeted yields of 30% more than the baseline yields is 78% for maize, 94% for sorghum, and 84% for groundnut (Table 29).

Table 29: Percent Households with Yields Greater than Target Yields by County

	County			
Crop	**Bor**	**Torit**	**Yambio**	**Total**
Maize			78.4%	78.4%
Sorghum	93.3%	94.7%		93.8%
Groundnut	70.4%	90.1%	88.3%	83.8%

An analysis by gender of household head (Table 30) shows that the percent households with yields greater than the target yields are 12% higher for male-headed households whilst similar for sorghum and groundnut.

Table 30: Percent Households with Yields Greater than Target Yields by Gender of Household Head

Crop	**Female**	**Male**	**Total**
Maize	73.6%	85.4%	78.4%
Sorghum	93.1%	94.7%	93.8%
Groundnut	84.4%	82.8%	83.8%

Crop Sales

Across the major crops, the percentage sales to harvest are 45% for groundnut, 46% for sorghum, and 50% for maize (Table 31). The percent sales to harvest for sorghum is about 10% higher in Bor when compared to Torit. The percent sales to harvest for groundnut is about 5% and 3% higher in Bor when compared to Torit and Yambio, respectively.

The percentage sales to harvest in the high to extremely high category is about 39% for maize, 40% for sorghum, and 25% for groundnut. An analysis by county shows that the percent sales to harvest in the high to extremely high category is highest in Bor for sorghum (50%) and groundnut (31%%).

Table 31: Major Crop Sales Information by County

	Maize	**Sorghum**	**Groundnut**

Variable	Yambio	Total	Bor	Torit	Total	Bor	Torit	Yambio	Total
Sales as a Percentage of Harvest (%)	49.5%	49.5%	49.9%	38.4%	46.3%	47.7%	42.7%	44.0%	44.6%
Sales: Harvest Category									
➢ Low	8.5%	8.5%	10.4%	25.7%	15.2%	11.7%	16.4%	19.2%	16.0%
➢ Medium	53.0%	53.0%	38.9%	54.9%	43.9%	57.1%	63.2%	54.8%	58.5%
➢ High	34.4%	34.4%	49.8%	18.8%	40.0%	27.5%	19.4%	23.1%	23.0%
➢ Very High	4.1%	4.1%	0.9%	0.7%	0.8%	3.8%	1.0%	2.8%	2.4%
Mean Sales (SSP)	93082	93082	171152	28465	126405	112150	43174	46169	64260

An analysis by gender of household head (Table 32) shows that the percent sales to harvest in the high to extremely high category is higher for male headed households for maize (by 13%) and groundnut (by 4%) and is higher for female headed households for sorghum (by 3%).

Table 32: Major Crop Sales Information by Gender of Household Head

	Maize			Sorghum			Groundnut		
Variable	**Female**	**Male**	**Total**	**Female**	**Male**	**Total**	**Female**	**Male**	**Total**
Sales as a Percentage of Harvest (%)	47.3%	52.7%	49.5%	47.0%	45.4%	46.3%	43.9%	45.6%	44.6%
Sales: Harvest Category									
➢ Low	10.9%	5.1%	8.5%	15.0%	15.6%	15.2%	16.4%	15.4%	16.0%
➢ Medium	56.2%	48.3%	53.0%	42.6%	45.7%	43.9%	59.6%	57.0%	58.5%
➢ High	30.6%	39.9%	34.4%	41.3%	38.3%	40.0%	22.3%	24.0%	23.0%
➢ Very High	2.3%	6.7%	4.1%	1.1%	0.5%	0.8%	1.6%	3.6%	2.4%
Mean Sales (SSP)	58181	143670	93082	128992	123003	126405	63374	65543	64260
	33	46		42	39		24	28	

For the farming households, the percentage of households producing for sale increased during the project period. Figure 31 presents the percentage of households that produced crops for sale in 2018 and 2023. In 2023, at least 50% of the households produced maize, vegetables, groundnut, and sorghum. The percentage increase in households producing crops between 2018 and 2023 was highest for vegetables (28%) followed by maize and sorghum (14%), and groundnut (11%).

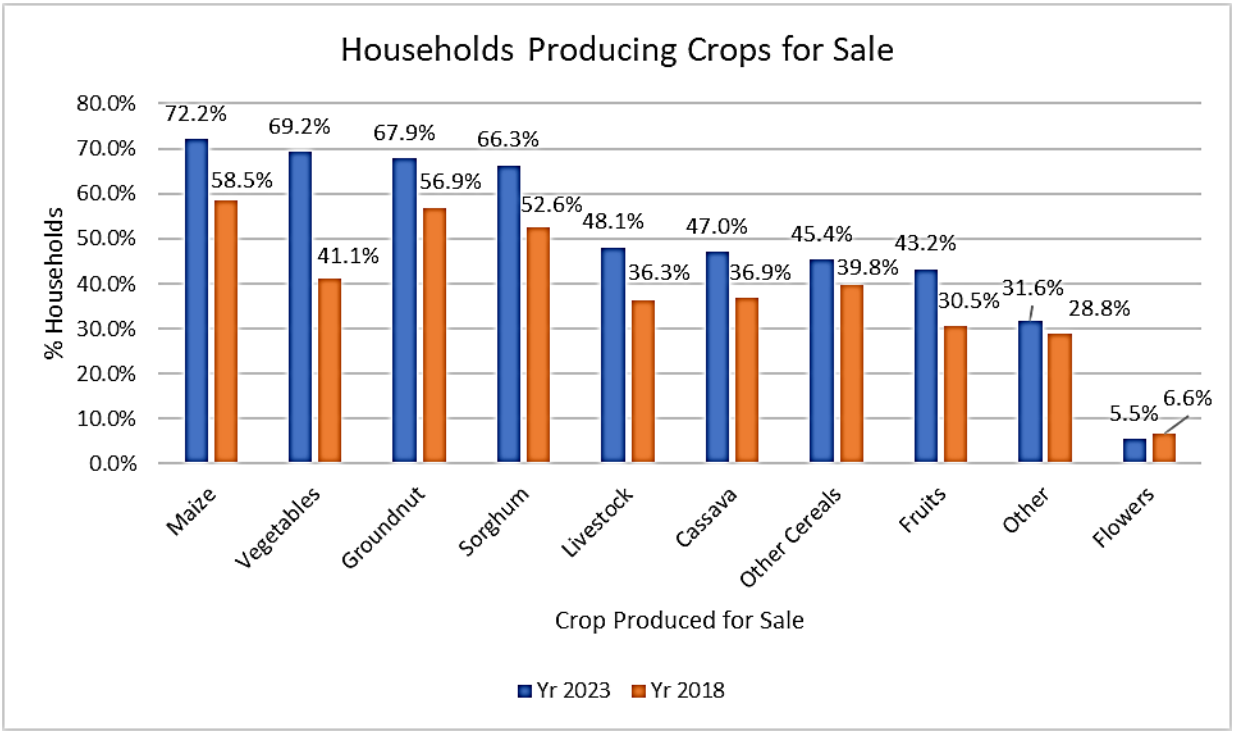


Figure 30:Percent Households Producing Crops for Sale by Period

The percent increase in households producing crops for sale by county shows that Bor was highest for vegetables (19%) followed by maize and sorghum (15%) (Table 33). Torit is at least 20% across all crops except for maize, flowers, and other; and (iii) in Yambio is at least 20% for vegetables, maize, and livestock.

Table 33: Percent Households Indicating Crops Produced for Sale by Period by County

	2023				2018			
Crop	**Bor**	**Torit**	**Yambio**	**Total**	**Bor**	**Torit**	**Yambio**	**Total**
Maize	58.4%	57.2%	94.1%	72.2%	43.1%	53.8%	72.7%	58.5%
Sorghum	90.2%	63.8%	36.0%	66.3%	74.6%	39.1%	30.7%	52.6%
Other Cereals	63.2%	31.4%	46.8%	45.4%	61.5%	9.7%	42.3%	39.8%
Groundnut	51.6%	53.1%	89.7%	67.9%	54.5%	16.1%	78.9%	56.9%
Cassava	27.8%	31.7%	79.3%	47.0%	19.7%	11.7%	69.8%	36.9%
Vegetables	77.1%	62.2%	70.1%	69.2%	58.2%	26.2%	33.3%	41.1%
Fruits	55.1%	36.3%	42.0%	43.2%	46.9%	14.9%	26.4%	30.5%
Flowers	7.5%	1.5%	10.1%	5.5%	3.8%	1.6%	14.9%	6.6%
Livestock	62.9%	37.0%	48.5%	48.1%	62.5%	10.8%	27.4%	36.3%
Other	44.8%	16.0%	40.5%	31.6%	44.4%	9.9%	30.0%	28.8%

An analysis of households producing crops by gender of household head is presented in Table 34. The percent increase in households producing crops for sale: (i) is higher for female headed households for groundnut (3%), vegetables (7%), flowers (3%), and livestock (5%); and (ii) is higher for male headed households for maize (13%), sorghum (6%), and cassava (2%).

Table 34: Percent Households Indicating Crops Produced for Sale by Period by Gender of Household Head

	2023			2018		
Crop	**Female**	**Male**	**Total**	**Female**	**Male**	**Total**
Maize	59.2%	83.3%	72.2%	52.3%	63.3%	58.5%
Sorghum	64.8%	66.9%	66.3%	54.2%	50.7%	52.6%
Other Cereals	39.7%	51.4%	45.4%	33.3%	45.1%	39.8%
Groundnut	60.7%	74.4%	67.9%	47.9%	65.0%	56.9%
Cassava	32.9%	59.3%	47.0%	23.5%	47.5%	36.9%
Vegetables	68.9%	68.8%	69.2%	36.7%	43.7%	41.1%
Fruits	38.1%	47.3%	43.2%	24.8%	34.2%	30.5%
Flowers	5.9%	5.3%	5.5%	5.4%	7.8%	6.6%
Livestock	44.1%	51.2%	48.1%	29.1%	41.3%	36.3%
Other	28.4%	34.0%	31.6%	26.9%	29.3%	28.8%

3.6.5 Improved Agribusiness Market Functioning

The study found that the project enhanced access to agriculture markets and market information and hence resulted in improved agribusiness market functioning.

Access to Markets and Market Information

Figure 31 presents the percent households with access to markets and market information by period. The percent households with access to: (i) information on market demand for agriculture commodities increased by 43% during the project period, (ii) new buyers increased by 35%, (iii) market/ produce prices increased by 34%, and (iv) sources and prices of farm inputs increased by 31%.

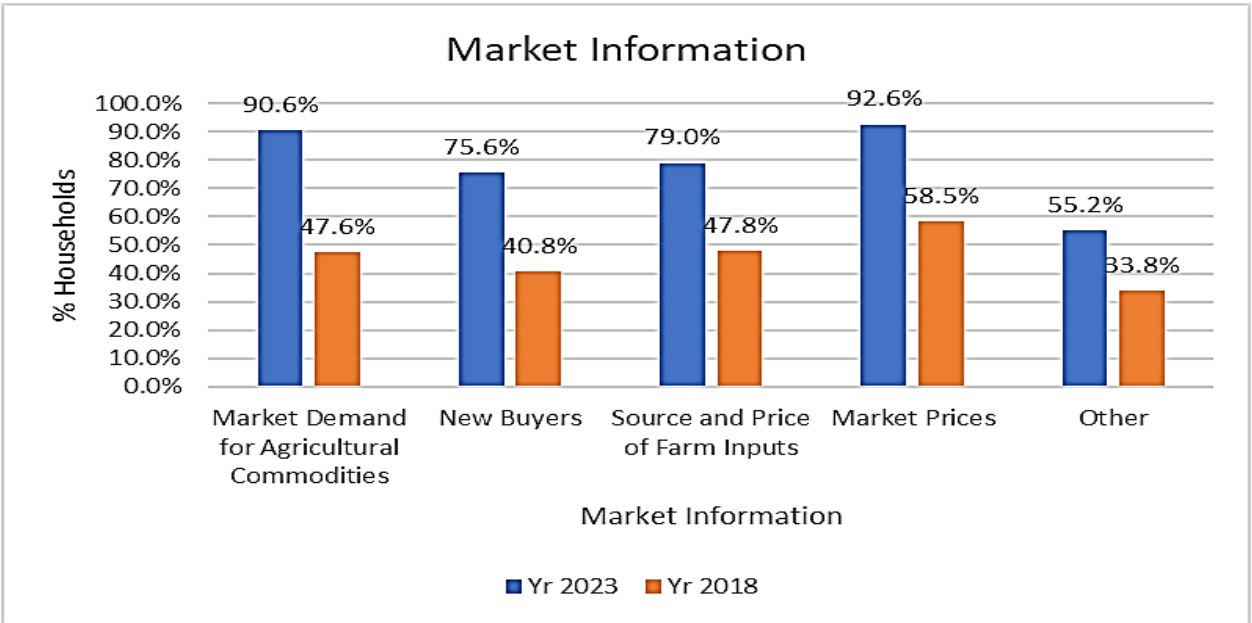


Figure 31: Market Information

An analysis by County shows that the increase in percent households with access to (Table 35): (i) information on market demand for agriculture commodities was highest in Yambio (59%) and lowest in Bor (34%), (ii) new buyers was highest in Yambio (55%) and lowest in Torit (25%), (iii) market/ produce prices was highest in Yambio (49%) and lowest in Torit (19%), and (iv) sources and prices was highest in Yambio (58%) and lowest in Torit (15%).

Table 35: Percent Households Indicating Access to Markets and Market Information by Period by County

Markets and Market Information	2023				2018			
	Bor	Torit	Yambio	Total	Bor	Torit	Yambio	Total
Market Demand for Agricultural Commodities	94.4%	81.2%	96.8%	**90.6%**	60.5%	45.6%	37.9%	**47.6%**
New Buyers	85.4%	58.6%	88.8%	**75.6%**	50.0%	33.3%	33.8%	**40.8%**
Source and Price of Farm Inputs	92.5%	58.5%	91.3%	**79.0%**	63.1%	43.2%	33.0%	**47.8%**
Market Prices	95.0%	87.8%	96.2%	**92.6%**	61.9%	68.6%	47.5%	**58.5%**
Other	81.0%	23.7%	75.3%	**55.2%**	56.8%	15.7%	25.7%	**33.8%**

An analysis by gender of household head shows that the increase in percent households with access to (Table 36): (i) information on market demand for agriculture commodities was similar for female and male headed households (42% - 45%), (ii) new buyers was higher by 5% for male headed households, (iii) market/ produce prices was the same at 34% for both male and female headed households, and (iv) sources and prices was higher by 12% for male headed households.

Table 36: Percent Households Indicating Access to Markets and Market Information by Period by Gender of Household Head

Markets and Market Information	2023			2018		
	Female	Male	Total	Female	Male	Total
Market Demand for Agricultural Commodities	86.70%	93.90%	**90.60%**	41.80%	51.90%	**47.60%**
New Buyers	72.20%	78.50%	**75.60%**	39.80%	41.30%	**40.80%**
Source and Price of Farm Inputs	73.40%	84.10%	**79.00%**	48.80%	47.10%	**47.80%**
Market Prices	89.80%	95.10%	**92.60%**	55.90%	60.80%	**58.50%**
Other	46.00%	63.80%	**55.20%**	24.30%	41.70%	**33.80%**

3.6.6 Improved Performance of Cooperatives and Agri MSMEs

The evaluation found that the SSADP II project has significantly contributed to employment along all nodes of the value chain for the priority crops supported in the 3 counties. Through increased agricultural production, beneficiary farmers are now employing casual labour especially during land preparation, weeding, harvesting, sorting, and grading. There is also a noticeable increase in traders who buy produce from farmers and sell in urban markets like the Yambio main produce market. Value additions activities like grain flour processing mills and peanut butter making that were promoted by the project have also created employment in the beneficiary communities. The surplus production has also created employment for transporters as farmers hire transporters to transport their produce to urban markets even as far as the capital Juba. Project reports show that 547 jobs were created in agribusinesses across the value chains.

Box 8: Comments by Stakeholders on Extent to which Employment has been created.

"The SSADP II project has created employment for young people. Youths are now involved in group farming. Even women are now employed as they are mostly involved in value addition activities." – KII Participant

"We have a woman here in Yambio who started seed production on 2 feddans. She is now using 20 feddans to grow foundation seed and 50 feddans to grow certified seed. The woman is employing on average 30 youths permanently on her farm now. Seed companies are also employing more casual labour for seed sorting and packaging" – KII Participant

The evaluation found that the SSADP II project contributed to the improved performance of beneficiary agricultural cooperatives and Agri MSMEs and that the improved performance of these farmer led organisations have also in turn contributed to creation of new jobs particularly amongst women and youths. The improved performance of the cooperatives and Agri MSMEs is evidenced by the beneficiary households who testified that they had benefited from the services of these cooperatives and Agri MSMEs both during the household focus group discussions and results of the sample survey. Most focus group discussions with farmer cooperatives revealed that the farmer cooperatives were formed well before the SSADP II but had not been performing well. Farmers noted that the cooperatives improved their performance only after the support of the SSADP II project and that most cooperatives managed to establish value addition services with support from SSADP II. For example, Green Farmers' Cooperative was formed in 2011 and Gitikiri Seed Producers Cooperative was formed in 2007.

3.7 Sustainability

Sustainability of the SSADP II project's impacts can be viewed in terms of the continued use of good agricultural production practices by producers and functioning of agribusinesses. It should also be viewed from the continued thriving of MSMEs established and supported by the project through its various activities. However, sustainability encompasses many other dimensions such as commitment from government to provide on-going support, the provision of a conducive policy environment and availability of resources.

The evaluation found that project initiatives are likely to continue and grow beyond the project life. The project design included a number of steps discussed here, to ensure the project activities will continue and with the potential of being up scaled.

Some of the key factors of the project promoting sustainability, included targeting the needs of building capacity of beneficiaries and other stakeholders, support for development and strengthening local organisations and institutions, coherence of project objectives and activities with government goals and policies, use of the value chain development approaches, coordination and collaboration with stakeholders supporting development in the communities.

The project resulted in increased incomes for the beneficiaries from agricultural production, agribusinesses and MSMEs. Incomes also increased through employment opportunities created in the communities. Some of the beneficiaries have made investments in farming tools, household goods and some have started income generating activities. The importance of the benefits produced by activities of VEMSAs is supported by analysis of the views of project participants exemplified by following statement during FGDs:

Box 9: Comments on impact of VEMSA by farmers

"VEMSAs have helped to improve the lives of our members, many of whom have been able to start businesses which are generating profits and incomes. Even if the project stops, we will continue with our VESMA because it has made a significant difference in our lives" FGD Participant

The evaluation found that beneficiaries have adopted and fully incorporated good production practices. This has been a result of the business and financial management principles introduced by the project. Many beneficiaries clearly expressed their intension and plans to continue using the productivity enhancing practices that they learnt through the project. Over 90% of respondents from the household survey indicated that they would continue using good agricultural practices they learnt about through the

project (Figure 32). One of the activities of the project was to help linked farmers to input and output markets with 47% of the farmers indicated that they would continue buying inputs from outlets they were introduced to by the project. At least 54% reported that they will continue selling their crops through markets they were introduced to by the project. The low numbers reporting willingness to engage with the same markets that were introduced by the project may reflect the availability of alternatives that have emerged since the project started.

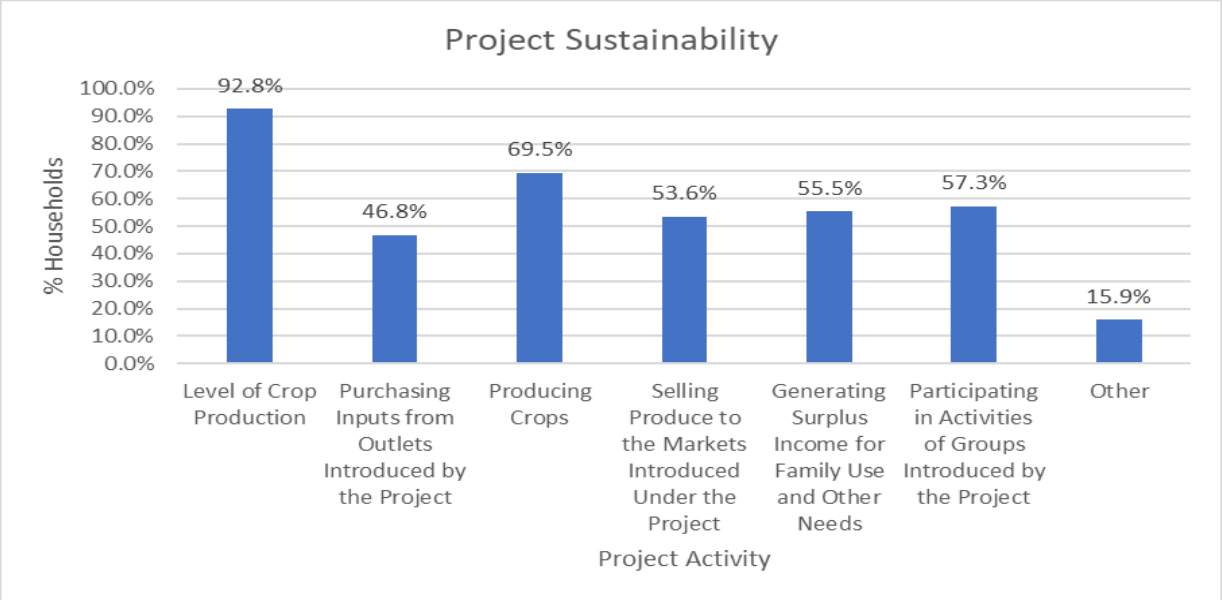


Figure 32: Percent Households Indicating they will continue With Project Activities without the Project

Among female-headed households, equally large numbers indicated their intention to continued undertaking activities that keep crop production and productivity high (Table 37).

Table 37: Percent Households Indicating they will Continue with Project Activities without the Project by Gender of Household Head

Project Activity	Female	Male	Total
Level of Crop Production (maintain and improve)	89.6%	95.5%	92.8%
Purchasing Inputs from Outlets Introduced by the Project	38.5%	54.5%	46.8%
Producing Crops	62.4%	75.3%	69.5%
Selling Produce to the Markets Introduced Under the Project	41.0%	64.5%	53.6%
Generating Surplus Income for Family Use and Other Needs	43.9%	65.8%	55.5%
Participating in Activities of Groups Introduced by the Project	49.3%	64.5%	57.3%
Other	13.7%	17.7%	15.9%

The main reasons that were proffered by those who indicated that they will not continue with a certain project activity are the need for further financial and material support and the need for more capacity building and technical assistance.

Many other activities initiated by the project are likely to be continued and expanded upon by project participants. For example, the quality seed production and distribution initiative have a high likelihood of being sustainable because the seed produced has a ready market from the company Pro Seeds. The seed multipliers also have the benefit of receiving breeders' seed for free from which to produce foundation seed.

Many value addition activities such as grinding mills and oil expressers and peanut butter production are already generating income for operators. As such they have a high likelihood of continuing well beyond the project lifespan. Tillage services using tractors and equipment acquired through the project are fee paying and as such are potentially self-sustaining. However, the risk comes if farmers' groups and co-operatives are not able to service and maintain the machinery and equipment.

The various capacity building initiatives that include training of beneficiaries, equipment provision and institutional support will go a long way to ensure that project gains are maintained and even up scaled into the future. Beneficiaries also received training on climate smart agriculture and how to make their agricultural production, agribusinesses, and other enterprises more resilient to shocks that may emanate from a wide array of hazards.

The adoption of pluralistic agricultural extension approaches, and rural advisory services increased opportunities for many farmers to receive information good production practices, business, and financial management. This has increased the likelihood that good agricultural practices will continue to be used by farmers. There are also significant opportunities for farmer-to-farmer learning going into the future that will likely increase the number of farmers who will adopt the good agricultural practices.

The evaluation found that all the levels of government seconded agricultural extension officers working in the communities to the project to support the implementation of activities. During interviews with key informants from county agriculture departments and state government line ministries involved in the implementation of the project it was clear that they felt that the project objectives and outcomes complimented governments' policies and programs. These departments had eagerly provided all the required support during implementation to ensure its project success. These government agricultural officers also benefited from the trainings provided by the project ensuring that they will be able to continue providing support to farmers beyond the life of the project.

The project built a strong network of stakeholders in both the public, private and NGO (Non-Governmental Organizations) sectors and these are likely to remain on the ground and continue to provide relevant services to the farmers and other value chain players. The participatory approaches that were employed ensured that inputs were solicited from all stakeholders and were taken on board and informed the choice of approaches for implementation of activities. Roles and contributions were clearly defined and assigned in-line with the expertise of the respective stakeholders. This ensured that co-ordination and communication among the stakeholders was effective and augers well for the continuation of project activities going into the future.

The State organs such as the Food Security Cluster enable different organizations to learn about each other's activities in the communities and will be instrumental in ensuring continuity of the activities of the project. State Clusters are involved in identifying areas where synergies can be created and leverage on resources already available in certain projects and sites. Examples of collaborations with other organizations noted during the evaluation include the support provided by UNFAO to cooperatives for whom the SSADP II project built or rehabilitated warehouses under its market functioning strengthening activities.

Some risks and factors that may affect continuation and scaling up.

Low incomes will make it difficult to mobilise resources from community members to support the continuation of some activities that are not directly linked to income generation, such as Peace and CMDRRs (Community Managed Disaster Risk Reduction). While the SSADP II project significantly contributed towards the ability of households to earn income through sale of field crops and

vegetables, and from enterprises established with the support of the project, household income as reported in the various project reports still low to meet agricultural production costs and farm capital investments.

VEMSAs mobilise funds to meet the borrowing needs of members but they are not linked to other sources of financial resources such micro-finance institutions. This may hinder VEMSA members from accessing adequate funds to finance the expansion of current businesses and the establishment of larger businesses in the future. It should be noted that VEMSAs are one of the most successful interventions of the SSADP II project and are an area where women's involvement was very strong. The continuation of their activities would obviously facilitate the continuation of major aspects of project interventions.

3.8 Cross-cutting Issues

The SSADP II project had a strong women and youth involvement. There was a deliberate focus on women and youth participation at project design phase and during project implementation. The project deliberately targeted 1,000 women and youths out of the 10,000 beneficiaries to benefit from business development services. The study also found that nearly half (46.7%) of the beneficiary households are women-headed households. Female-headed households make up a significant number of the (rural) poor and women play a key role in agriculture. The project encouraged women and youth participation in all its activities. The SSADP II project 2022 annual report show that 7390 women had benefited from the project representing 53.4% of the total beneficiaries.

The findings from information gathered directly from the beneficiaries – household survey, focus groups, and Key informant interviews – also show that women and youths are actively participating in the various cooperatives and MSMEs that were supported by the project. Women and youths also constitute management committees of the various cooperatives and MSMEs.

Issues of climate change, natural resources management, environmental sustainability and conflict management and prevention were also at the core of the SSADP II project as they were key focal themes identified by the project both during project design and project implementation. All project activities supported by the project mainstreamed climate change, natural resources management and environmental management issues. The project supported the establishment of CBDRRs that spearheaded disaster risk reduction and management awareness in the beneficiary communities. The project also promoted the adoption of climate smart agricultural practices to ensure the sustainable utilization of natural resources in the beneficiary communities.

The project had conflict sensitive lens in its implementation where community leaders have been consulted even at stage of beneficiary selection to avoid potential conflicts of interest. The project recognized that the project locations were prone to resource-based conflicts mainly between farmers and pastoralist. The project also promoted the establishment of peace dialogue committees that spearheaded conflict management and resolution issues in the beneficiary communities. The project also conducted peace building training in the three Project locations which targeted the local government authorities, CMDRR and peace committees and other stakeholders involved in peace building. The recommendations from the peace dialogues have been mainstreamed during the implementation of the CMDRR action plans.

4. Lessons Learned

From the above analysis several lessons can be drawn which could be used in the constructing and development of future related interventions.

1. **The group approach can be very effective in supporting the development of farmers and other value chain players in a developing, low income and low literacy environment.** The

approaches ensure that those members of the value chain that seem to lag behind are pulled up by the others along the way and their weaknesses or challenges are generally be overcome by the combined efforts and successes of the groups that they belong to.

2. **To get buy-in from the local communities and have them adapt new approaches and technologies, it is necessary to introduce these gradually and with the use of demonstrations and lead farmers.** The programme allowed for a participatory approach that involved the farmers, for example, continuing to make use of local seed varieties. The lead farmers and demonstration plot approach also helped the farmers in observing the differences between their traditional approaches and the more modern ways of farming.
3. **The phased approach in the development of the farmer and the entrepreneur can be a powerful method in brining development and uplifting of marginalised communities.** The project allowed for the gradual movement of individuals from being an individual farmer, to a group of less than 30 people and into a cooperative of 30 people and above. It also allowed the farmer access to various support services at each of these stages including participating in vegetable production and VSLAs.
4. **Success of the project is guaranteed by good stakeholder coordination through an all-inclusive multi-sectoral approach which enables buy-in and programme ownership from stakeholders.** Community based structures including CMDRR committees, Peace Dialogue committees, FEMA Groups, VEMSA groups and Cooperatives are effective methods for monitoring and delivery of extension support to farmers on the ground during Covid-19 imposed restriction.
5. **Community based structures if properly capacitated can help complement government and development organisations efforts in addressing challenges brought about by natural disasters and macroeconomic shocks.** ISALs are the bedrock upon which rural finance development interventions can be anchored. In an economic environment where access to formal sources of finance for agricultural activities are limited, community-based microfinance institutions offer a viable alternative for financing smallholder agriculture and increasing financial inclusion for the marginalised farmers.
6. **The farmer-to-farmer extension approach through use of lead farmers and group extension approaches offers an alternative viable farmer extension method for increasing extension coverage.** This is especially so in an environment where the traditional public extension system struggles to raise enough resources to fund its extension programs. It also motivates fellow farmers to adopt new technologies as they are afforded the opportunity to learn through observation.
7. **Practical learning experiences through demonstration plots, farmers field schools, agricultural shows, exchange visits, study tours, and field days among others, are better means of learning for farmers than those that focus on theoretical impartation of knowledge**.
8. **Market linkages can potentially serve as a motivating factor for surplus production and marketing avails income for purchase of inputs, thereby sustaining production.**
9. **Groups especially marketing groups lower transaction costs per farmer as marketing costs are shared by the group and it also increases bargaining power of the farmers.**
10. **Strong gender balancing in the implementation a development projects can result in sustainable local economic growth, social development, and environmental sustainability.** The active involvement of women in leadership positions of associations and groups can result in stronger and more durable local institutions.
11. **Capacity building for beneficiaries including the lowest social strata is highly essential to make them more confident on technical and social issues.** It also facilitates participation by all and enhances the ownership of project interventions.
12. **It is difficult to cater for beneficiary needs when an intervention stands and operates in isolation.** Effective coordination, coordination and resource sharing among stakeholders is

essential as this generates synergies and increases project effectiveness, efficiency, and sustainability.

5. Conclusions

The programme has made significant positive contributions in the economies of the three targeted counties and the livelihoods of the farmers and small businesses. The various training activities for the farmers have resulted in the adoption of good agricultural practices, with farmers moving away from traditional approaches in terms of methods of production and the adoption of improved seed varieties. Small businesses have adopted more business oriented approached and practices such as separating household from business income, record keeping, human resources management and management of finances.

The support that has been provided in creating or supporting farmers associations and MSME associations has greatly enhanced the level of cooperation and trust among the various value chain stakeholders. The peace building and conflict management initiatives have further helped to bolster this cooperation and trust among the key players. Through the associations farmers are now able to speak with one voice of major issues such as security, access to inputs and access to better markets. Collective access to resources such as farming equipment has enabled farmers to more than triple the area planted and productivity, which can only increase going into the future if the current standards are allowed to at least remain in place.

The SSADP II design and approach were relevant and the adoption of recommendations from action research activities undertaken during project implementation ensured timely adaptation of the SSADP II project to changes in the project context. The SSADP II project has demonstrated that it is possible to transition, develop and transform smallholder agriculture in South Sudan from subsistence farming to producing for the market through a Making Markets Work for the Poor (M4P) approach.

Anticipated project objectives were met, and this was made possible by the high efficiency achieved in the delivery of planned activities and results. The modalities used to implement activities including building the capacity of beneficiaries and stakeholders, institutional development, improving the functioning of markets and value chain development, coordination and collaboration with other stakeholders helped to increase project efficiency and sustainability.

Many of the project interventions have a high likelihood of sustainability, including use of improved agricultural production techniques, institutions such as VEMSAs and F2F extension, quality seed production, and agribusinesses and MSMEs started with project support. The design of the project built in strategies to ensure sustainability of the activities and benefits after the project has ended. These include trainings and other activities to improve the knowledge and skills of beneficiaries and stakeholders so that they can take ownership of project interventions. The enthusiasm for use of improved production practices and the confidence exhibited by many beneficiaries on technical and social issues demonstrates the seriousness with which project activities are taken. Beneficiaries appreciate the income from crop production, agribusinesses and MSMEs. Co-ordination and collaboration with other stakeholders, for example, with UNFAO on improving functioning of markets, and Pro Seed on production of quality seed also contribute to increase project sustainability.

However, there are still areas that need to be improved including information flows among various stakeholders at all the levels of the value chains. Players at each value chain node need to be aware at any

particular time all the available opportunities within the local communities that they may want to exploit. This should allow for further consolidation of the gains being made by the local programme interventions.

6. Recommendations

There is need to further enhance strategies that connect the various value chain players at the different production nodes to facilitate efferent information flows and business activities. In Bor, for example, the study found that processors of groundnuts and sorghum in Bor Town were sources raw material inputs from as far and Juba, Yirol in Lakes State, and Aweil in Northern Bahr El GhazalState from which they are incurring huge transportation costs and other inconveniences. These situations could be improved in the processors can work closely with local producers of these raw materials.

There is need to adopt and strengthen a phased-out approach to the capacity building of the farmers that employs train-the-trainer principles. This is mainly because of the relatively low literacy rates within the targeted communities which are estimated at 27%. Taking the rule that maybe 5% of the farmers would succeed it implies the need to target this 5% of the farmers in an initial phase with demonstration plots as lead farmers and also provide them with start-up kits component. These will form the nucleus for the further and sustainable training of the remainder of the farmers.

Additional support is required to train farmers on how to create and manage market linkages especially through the farmer associations. Further support on market linkages will also help in enhancing excitement towards market solutions for the farmers and gradually reduce the current heavy reliance on donors and development partners for key items such as agricultural inputs. For example, where they can obtain inputs such as herbicides, seeds, and equipment so that they know where to go when they face some challenges.

Future programmes should consider extending support to other counties and payams to spread and enhance the impact of such interventions. There is currently a reported influx on returnees and IDPs coming back into places such as Bor, Torit and Yambio being attracted by the agricultural achievements associated with the SSADP II programme. This entails an increase in demand for such services for the incoming farmers in the targeted counties and payams.

Farming systems will need to be further improved with adoption of additional mechanisation support. So far, mechanisation, especially using the walking tractors has significantly enhanced the production capacities of the farmers. Participants in the research feel that the use of big tractors in the future will be a major game changer as far as capacities and production levels go. Other mechanisation approaches should be considered and adopted especially those related to harvesting and post-harvesting.

There is also a need for a more collective approach which should involve close cooperation and participation of local authorities to the challenges of hazards especially such flooding, land disputes and cattle raiding. The increased efforts towards controlling flooding in Bor town for example, should make a significant positive impact on the productivity of the farmers. The same applies to issues of land disputes which should build upon the gains that have been made so far that involves the issuing of land titles to improve on the security of tenure.

There is a need to give more time to interventions designed to promote the development of the rural finance sector as the learning curve for rural finance development require a bit more time. This is especially so in an economy that is characterized by an infant or non-existent rural finance sector.

Future rural finance interventions should consider lease financing and matching grants products for the acquisition of farm equipment and machinery. These should be some of the more viable options for addressing the collateral challenges that most smallholder farmers face. This is much more ideal in, and more so in an economy where land titles are not clearly developed. The performance of the subsidy facility provided for the acquisition of capital equipment by the farmers demonstrates potential for both lease financing and matching grants.

Future interventions should consider recoverable revolving smart subsidies for beneficiaries to increase outreach where resources are limited. The use of recoverable revolving smart subsidies will encourage beneficiaries to make better productive use of the resources acquired through the subsidies as they will be knowing that they will have to pay back.

Future interventions should consider livelihood diversification from crop-based livelihoods to other sources of livelihoods like apiculture and poultry production. This will allow the value chain players, especially farmers, some room to choose the interventions that are much more in line with their skills sets. It will also allow for the use of outputs from one activity to be used as an input into the other activity. For example, maize produced by the farmer can be used by the same farmer in poultry or pig production, while the pig or poultry enterprise can also provide raw materials for the fishery aspects of the enterprise.

We further recommend adoption of more tailor-made capacity development activities focusing on demonstration and application of techniques. This should enhance understanding and reduce on the time taken away from farm activities during training sessions. This comes from the observation that most of the project beneficiaries in the targeted communities were not highly literate. Low levels of literacy make it difficult for beneficiaries to easily and quickly understand the knowledge and skills imparted during classroom-based trainings provided by the project. Farmer trainings were offered in slots of 4 to 5 days which made it difficult for the farmer to manage their time as she/he had to be away their activities for the full training period.

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ANNEXES

Annexes 1: List of people interviewed.

List of Key Informants

Key Informant Name	Organization	Role	Contact
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List of Groups Engaged as Focus Group Discussion

County	**List of Groups Engaged**
Yambio	Anidu Vegetable Group
	Bodo CMDRR Group
	Gitikiri Seed Producers Cooperative
	Green Farmers' Cooperative Society
	Naduru Vegetable Group
	Napisi FEMA Group
	Navura VEMSA Group
	Ngindo CMDRR group
	Uzee VEMSA Group
	Yabongo II Cooperative
Bor	Bor Processors
	Makuach Producers Group
	Malualchaat farmers' group
	Piny Ngaroor Cooperative
	Arek women
	Groundnut and Sorghum Processors
	Makuach producers Group
Torit	Arthuro Multi-Purpose Cooperative
	Bule women united
	Stella group in Nyong payam (Women)
	Stella group in Nyong payam (men)
	Muhaba group in Nyong payam (men)
	Muhaba group in Nyong payam (Women)

Annexes 2: Evaluation Matrix

The table below highlights the evaluation matrix. Using the OECD/DAC criteria, the evaluation will analyse the following areas:

Evaluation focus	**Evaluation Questions**	**Measure/indicator of progress**	**Main sources of data/information**	**Methodology**	**Analysis Plan**
Relevance and Coherence: *On Relevance and coherence the consultants will look at the context of the project in relation to local needs around food security and improvements in household income score (HHIS) and Dietary Diversity (DD) score among the beneficiary households. The evaluator will assess the relevance of the whole project design and Theory of Change (ToC). The team will This is the extent to which the intervention objectives and design responds to target beneficiaries needs and South Sudan development policies, and priorities. It will also analyse the relevance of the project in the context of national policies and priorities of the Government and donors.*	To what extent are the objectives of the Programme valid to the needs of the beneficiaries? To what extent are the activities and outputs of the Programme consistent with the overall goal and the attainment of its objectives? To what extent are the activities and outputs of the Programme consistent with the intended impacts? **Coherence:** were the project actions implemented logically and clearly according to the designed strategies? If there was any change in strategy, was it executed according to the adjustments, leading to the anticipated output and outcomes?	Level of coherence between project expected results and project design internal logic. Level of coherence between project design and project implementation approach. Level of utilization of generated outputs and outcomes by final beneficiaries Alignment of project outcomes and impacts to ENK Strategic objectives, program strategies, Degree to which project outcomes and impacts contribute to SDG (Sustainable Development Goals) outcomes Change of South Sudan's priorities and policies related to agriculture.	Document review (Project document, Results Matrix, Logical framework, South Sudan Agricultural Development Policy, Disaster Risk Management) Interviews with final beneficiaries ENK country programme	Review of secondary sources Qualitative data will be collected through desk review to understand the design of the project. Key informant interviews and focus group discussions will help to understand the relevance of the design and project focus from different stakeholders' perspective. Project Partners, Local Leadership and Government Stakeholders, and Project Beneficiaries will be involved in the process. Quantitative tool will have a scoring system for Household Income Score (HHIS), Household Food Security and Dietary Diversity (HHFSDD). This will target mainly project beneficiaries.	Qualitatively will analyse the relevance in line with local needs and government policies. Thematic and critical analysis will form the basis of qualitative analysis with the data collected. Quantitative Ratings for relevance will include: 1. Relevant (R), 2. Not-relevant (NR).
Effectiveness: *The extent to which the intervention achieved, or is expected to achieve, its objectives and its results, including any differential results across groups. This refers to the*	To what extent were the project goal and objectives achieved? (Are farmers and agribusinesses more resilient to shocks and hazards – both natural and conflict	# of HHs better prepared and able to cope with shocks and hazards # of Communities implementing CMDRR Plan		The evaluator will start by establishing if the methodology has been appropriate and effective determining the extent to which the project has performed against its targets. The team will assess how far the intended outputs and results were achieved in relation to	We will analyze achievements and the level of uptake on the knowledge of Agribusiness, income generation, market linkages and value addition

aggregate measure of the extent to which the expected outputs and outcomes have been achieved so far or are expected to be achieved by the end of the project. The team will further explore the extent that the farmers are now able to best Agric practices, exploring the extent to which the famers are producing surpluses and how these surpluses are preserved and marketed. This will also include an analysis of the extent of participation of the households in village savings and lending schemes.	Is there enhanced DRR and trust in targeted communities? Community Managed Disaster Risk Reduction Plans & Peace Dialogues Operational Have communities have increased awareness on different hazards and smart agriculture, nutrition practices Improved inclusive agribusiness market functioning Adequate and relevant Market Information Accessible and Available for Farmers and Agri-businesses Availability of- and Access to Appropriate Financial Products and Services Ensured Farmers and agribusinesses have access to appropriate financial products/services Target farmers and agribusinesses have improved financial literacy	# of "Peace & CMDRR Committees" Operational # of joint risk assessment and analysis made include climate smart agriculture practices # of trainers (ToT (Training of Trainers)) trained in facilitation of peace dialogue and CMDRR (disaggregated by sex) # of "Peace & CMDRR committees" trained in peace dialogue and CMDRR # of communities have increased awareness on different hazards and smart agriculture, nutrition practices # of targeted HHs with improved access and availability to improved markets # of Appropriate Financial Products and Services adopted by the targeted users # of farmers and agri-businesses with need for finance that have access to appropriate financial products (disaggregated by sex) # of target farmers and agribusinesses trained in		targets set in logical framework for the target beneficiaries and the extra beneficiaries. Was the project able to reach these targeted number of beneficiaries? We will further explore the number of lead famers that have been trained.	amongst the targeted beneficiaries. This will be disaggregated in terms of age and sex of the beneficiaries with particular interest in the extent to which women and youth have participated and benefited. We will establish the extent that productivity (yield per hectare) has increased for targeted crops. Ratings for Effectiveness will be as follows: 6: Highly Satisfactory (HS): no shortcomings; 5: Satisfactory (S): minor shortcomings; 4: Moderately Satisfactory (MS); 3. Moderately Unsatisfactory (MU): significant shortcomings; 2. Unsatisfactory (U): major problems; 1. Highly Unsatisfactory (HU): severe problems

	Have farmers and agribusinesses have received required financial product What were the major factors influencing the achievement or non-achievement of the objectives? What is the extent of uptake of the training by the beneficiaries who have regularly attended the training sessions?	financial literacy (disaggregated by sex) # of farmers and agri-businesses that have received a financial product (disaggregated by sex)			
Efficiency: *This is the extent to which the interventions have been delivered or likely to be delivered in an economical and timely manner. This refers to the "Economic" conversion of inputs (funds, expertise, natural resources, time, etc.) into outputs, outcomes, and impacts, in the most cost-effective way possible, as compared to feasible alternatives in the context.*	Were activities delivered on budget? Were objectives achieved on time? Was the project implemented within the defined scope? Was the project implemented according to the defined strategy?	Availability and quality of financial and progress reports. Timeliness and adequacy of reporting provided Level of discrepancy between planned and utilized financial expenditures Planned vs. actual funds disbursed Quality of results-based management reporting (progress reporting, monitoring, and evaluation) Occurrence of change in project design/ implementation approach (i.e., restructuring) when needed to improve project efficiency	Project financial reports Interview with finance staff & PM (Programme Managers)	We will conduct key informant interviews with the project team to determine if the project has been cost-effective as well as establishing if the level of expenditure on the project has been appropriate given the outputs/results/outcomes. Also, in the limelight will be the assessment of how the set-up (partnerships, structures, processes) of project implementing structure has contributed to the effectiveness of the project delivery. A survey will help to capture some quantitative ratings	Qualitatively we will analyse the project execution, organisation, experience of the personnel, technical expertise, administration, and financial management, Quantitative Ratings for efficiency will be: 6: Highly Satisfactory (HS): no shortcomings; 5: Satisfactory (S): minor shortcomings; 4: Moderately Satisfactory (MS); 3. Moderately Unsatisfactory (MU): significant shortcomings; 2. Unsatisfactory (U): major problems; 1. Highly Unsatisfactory (HU): severe problems)
Impact: *The evaluation team will establish the lasting positive and negative changes produced by the project, intended and*	What has changed because of the project? To what extent is the project likely to contribute to	Incremental change of impact indicators	Project documents Project logframe & M&E system	Desk review will help to understand the situation before project implementation. Key informant interviews and Focus group discussions with key	Thematic analysis will be done for qualitative data. We will also pick significant stories of change. Beneficiary rating

unintended. Both positive and negative consequences of the project would be explored. The team will focus on describing the main changes and results, intended or unintended, and to what extent they can be attributed as a direct result of the intervention.	improved food security, higher incomes, and employment opportunities for households What range of outcomes (intended and unintended) has the project contributed to – taking account of each of social, economic, environmental, and cultural considerations How did the action of the project meet the needs of the target beneficiaries particularly gender, youths, and women, IDPs (Internally Displaced Persons), Returnees and People with disability What was the added value of this project to the lives of the target communities, both regarding its design and implementation?	Level of utilization of delivered outputs by beneficiaries. Level of attribution of project impacts to increase provision of food security in target areas	Interview with project beneficiaries	stakeholders and beneficiaries will be conducted to explore the impact at beneficiary level. Household Survey will help to determine specific impact and ratings from beneficiaries.	and impact rating will be used to quantify the impact. Ratings for Impact will be as follows: 3. Significant (S), 2. Minimal (M), 1. Negligible (N).
Sustainability: *The evaluation team will establish if the changes are likely to be sustainable in the long term. The Team will also examine if there have been changes to policies, practices, attitudes of decision and policy makers to benefit the project's target groups in terms of their understanding of the issues and participation.*	Is there evidence that the initiative is likely to grow – scaling up and out – beyond the project life? To what extent will the benefits of the project continue after donor funding ceased? Continued Action Research Supporting Informed Decision Making What were the major factors which influenced the achievement or non-achievement of sustainability of the project?	Intensity and magnitude of operational, technical, and financial gaps in execution of SSADP II after project implementation Level of acceptance and understanding of perceived benefits of implementing of SSADP II farmers Roles and mandates and priorities of government agencies and community organisations and priorities in execution of SSADP II after project phase out	Program documents Interview with project staff, farmers and financial sector and agribusiness representatives.	Key informant Interviews, Focus Group Discussion and Survey will be central in collecting data to determine the sustainability of the project results. The main factors that affect, either positively or negatively, the sustainability of project outcomes will be established as well as the mechanisms that were put in place to ensure sustainability of project results.	We will analyze the developments that have occurred in the key agricultural value chains and the extent to which they likely to have a long-lasting positive benefit to the households and communities. We will provide recommendations for strengthening sustainability.

		Intensity and magnitude of risk factors affected to operationalizing of innovative approaches # of lessons learnt incorporated in Programme Implementation through evidence-based action research			
Lessons learned	Are there lessons learned from project implementation that have the potential to improve future actions by being broadly replicated or by being avoided? - Types of lessons learned (process related/ achievement related) identified and documented? - Level of incorporation of lessons learned to knowledge management system? - What is the level of dissemination of lessons learns and who were the targeted audience? - Are the dissemination methods being appropriate and effective	Number of lessons learns identified documented and incorporated to knowledge management system Relevance and validity of identified lessons learned pertaining to SSADP II Level of dissemination Level of appropriateness for targeted audience	Data collected through surveys, key informants' evaluation Lessons learned from project reports Interviews and other PMT and stakeholders ME& and Knowledge management system	Review of documents Interviews with beneficiaries, project staff	
Cross cutting Issues	To what extent were gender considerations taken into account in designing and implementing the project? . Was the project implemented in a manner that ensures gender equitable participation and benefits? To what extent and how did the project include minority groups, including indigenous peoples, disadvantaged, vulnerable and people with				

	disabilities, and youth in the design and implementation? To what extent were environmental and social concerns taken into consideration in the design and implementation of the project?				

Overall Cross Cutting Issues

The team will examine the extent that gender, HIV/AIDS, disability, and the environment has been successfully mainstreamed in the project. We will assess the extent to which activities were sensitive of the needs of men and women, and how they were tailor made to address the needs of these different groups given their socio-cultural differences for example selection of project beneficiaries, times of attending meetings, etc. We will establish the strategies that have been put in place to redress differential access/ power imbalance between men and women in participation. How could gender be better mainstreamed?

Annex 4. Case Studies or Most Significant Change Stories

Most Significant Change Mrs Santia Naban - Torit

Mrs. Santina Naban (54) is among the beneficiaries of the SSADPII project in Nyong Payam, Torit Boma. She is widowed and a mother of four adult children.

Mrs. Santina Naban has been doing several enterprises even before the project. She has been engaging in farming in her home village, as well as renting land near Torit Boma. She cultivates a total of 3 feddans (about 3 and a quarter acres) in her village, where she grows maize, sorghum, millet, beans, and groundnuts. She also runs an informal tavern (drinking place) where she sells beer at her homestead in Torit Boma. Before participating in the SSADP II project, she used to plant local seeds and did not use fertiliser or pesticides in her farming. This inherently resulted in low yields. She started participating in the SSADP II project activities in 2020. She participated in trainings on good agricultural practises and received some seeds for groundnuts, sorghum, and maize, as well as some farming equipment. Through the project, she joined the Muhaba Village Loans and Savings Association (VLSA)/ VEMSA in her area. Under the VSLA, they save money by putting it in a box (piggy bank) and receive the money back at the end of the year after it has accumulated to a large lump sum. This enables her and other members to be able to purchase items that require a considerable sum. VEMSA allows her and other members to borrow money if they need capital to finance a business idea. She also joined the local cooperative.

Since she started participating in the project, Mrs. Santina Naban has increased her crop production. In the 2022 season, she earned SSP 1,000,000.00 from crop sales. She borrowed money from the VEMSA, and together with the income from farming activities, my savings with the cooperative and from her other business activities, she has started building flats/apartments for renting out (see picture).

She is planning to continue with my farming activities using improved inputs in line with the knowledge she gained from participating in the project. She wants to increase groundnut production so that she can produce cooking oil for sale. She realised that the demand for food in Torit is growing with the growth in population and local incomes. She wants to invest in more income generating activities.

Significant Change Story - Viola Ernesto: Torit County

Viola Ernesto is a MSME grain dealer with her main products as maize and sorghum. Before the project staff met her, she was operating the business without much business management knowledge. She had no knowledge and skills in marketing, stock control, customer care, financial management, and record keeping. She has been operating for a period of closer to 2 years, but she could not know her daily profits from the business. She did not have accountability systems in her business and could not calculate losses and profits. The business was stagnant and did not register any significant growth.

She got an opportunity which she praised as an 'golden opportunity' to attend a Business Skills Training provided by the SSADP II project. She said these trainings opened 'her eyes' and gave her priceless business management skills. She was able to acquire skills in marketing and sales, operational management, and financial management. Additionally, the project staff were able to coach and mentor in bookkeeping and record keeping, financial management, stock and quality control, customer care and business development. This elevated her from being an unorganized businessperson to an organized businessperson. She was able to track her daily records, have good relationship with customers, keep quality control of her stock. Hence, she was able to grow in her sales. She had this to say "I gave thanks to Cordaid for this profound knowledge and skills they have given to me. I can rely on confess that I am now a different businessperson. I also appreciate them for their tremendous worked and for making sure I always look unique than my competitors. God bless each one of you" She concluded.

Viola is now a changed businessperson; her profits is worth 500,000 ssp per year. She can take her children to a better school, give them good feeding and shelter. Her contribution to her household significantly improved. She plans to open a new branch in Juba by 2023.

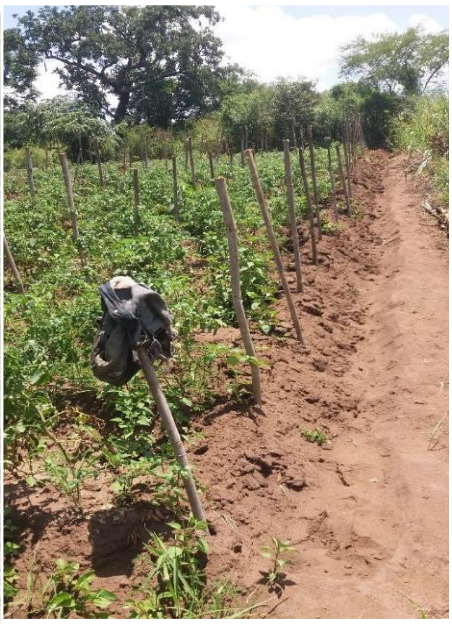
Pictures of Viola's market in Torit Main Market

Most Significant: Mr Obruk Oburak Gabriel - Torit

Mr Obruk Oburak Gabriel (38) from Himodonge payam, Torit is among the people who benefited from the project. He is married, lives with his 2 wives and children. Before the project he was farming in Himodonge payam producing maize, groundnuts, and sorghum. He also operated a vegetable garden on the banks of Kinaite river (passes on the eastern edge of the village). He produced vegetables including kale, onion, tomato, and okra. The garden was small. He worked in the garden with his family. They used to fetch watering water from the river using cans. He was producing enough vegetables to meet the needs of the family and sold any surplus within the village and transported some to sell at the market in Torit boma. The garden was located close to the river to make it easy to irrigate crops. During heavy rains, the garden sometimes got washed away by flood waters.

He started participating in the Food Security through Agribusiness project in 2020. He attended trainings in good agricultural practices and the production of vegetables and received some seeds to try to use in his garden. He also participated in training in agribusiness planning and management. He was assisted to develop a business plan which he used to apply for a loan from RUFI. The project ended before he could receive the loan. However, with knowledge and skills that he gained from trainings he was confident enough and decided to increase production so that he can increase my income. He relocated his garden to a site where there is enough land to allow me to open a bigger garden and to be able to increase the size of the garden over time if in future if he manages to raise enough money to buy inputs and equipment, and to hire labour. The new site is on higher ground which reduces the risk of crop loss due to flooding. He purchased a motorised water pump and a collapsible/ flexible pvc water pipe so that he can pump water from the river and to irrigate a larger area (see pictures).





Before receiving training from the SSADP II project he was earning an average of SSP100 000 from selling vegetables. Following the training he was able to increase his production and his income from vegetable sales is now around SSP200 000. He is now growing a wider range of vegetables including eggplant, tomatoes, kale, cabbage, okra, sweet potato, onion, and spinach. Sometimes he hires labour to assist with tasks when required, such as during land preparation.

He plans to increase production and sell more vegetables of different types. The demand for vegetables is high and growing. Himodonge is only 9 miles (about 15 kilometres) from Torit boma, and the road is good, so he can easily deliver my produce to market. Inputs such as improved seeds, fertiliser and pesticides are easily available in Torit boma. He plans to invest in a new irrigation system (using rain hose) and move away from the current flood irrigation system as it is difficult to control water because of the slope of the land.

Significant story of change: Lakot Christine Olum owner of Happy Farmers Agro Input Shop -Yambio

Lakot Christine Olum (42) is a mother of 5 children living in Yambio started Happy farmers agro Input Shop in 2017, she started on ground with only 2-3 tins of Tomato Seeds when selling in Yambio Open market as a retailer. she started improving in procuring Agro-Chemicals through farmers' order of 1-2 liters.

Due to the scarcity of quality vegetable and certified seeds in the market, she started imported vegetable seeds from Uganda and selling in Yambio market. She realized high demand for quality and certified seeds by the farmers in Yambio and worked towards sourcing the seeds. Farmers were recycling their own seeds which were lower quality and not treated and certified. She was importing these seeds but without much business knowledge and understanding of farmers' needs until she started attending SPARK business skills trainings which she started attending in 2020. Spark identified and provided her with at least 2 liters of Dudu accelamatins and there was not enough capital that time to expand the business with few clients/customers for the business. She participated in the business skills training, agro-technical training, business-To-Business Linkages, Business plan development, financial literacy training. The project has already improved her lives through the project. It has helped her to get enough money, feed her family, pay her children to school and create employment opportunities to the youth of Yambio County. She said, "I used to import some seeds from Uganda on small quantity and sold on a small table with limited knowledge on how to select quality and certified seeds before SPARK offered me business Skills Training and Agro-technical training on selected vegetables."

When spark took her for the training on business skills and developed plan and spark introduced her to RUFI for financial Support which gave her money to support her idea. She applied for a loan worth 1'200, 000 South Sudanese pounds but she was given 900,000 SSP. She went and purchased inputs from Uganda on what was planned in the business Plan with the money she received. The inputs she is trading are the vegetable Seeds, agricultural tools, and also giving basic advisory services to the farmers on the application agro-chemicals, crop nutrition. She now employed a person on her business which paved her way to start vegetable farm.

She also can now train farmers in the best agronomic practices on vegetable production and the application of Agro-chemicals, scouting of pests and diseases in the vegetable farm. In the nearby Future, her ambition is to become a multi-billionaire through the agribusiness activities.

She said the project has significant impact on her business activities, through the business skills training, Agro technical training, and financial literacy she was able to open a vegetable farm that produces vegetables to back the agro input Shop.

In January 2022 she started vegetable production in Zambando residential area Yambio County. With the support from BDAs providing coaching on basic skills on good Agronomic practices, though she was new to the business at the start, she managed to start and run a successful vegetable farm.

She benefitted from a 4 days Agro-Technical Training conducted by premium Agro-consult in partnership with SPARK and one-on-one coaching from the BDAs in bookkeeping and record keeping, financial management, stock and quality control, customer care and business plan development. The opportunity was an eye opener and game changer for my business.

The vegetable farm which is available now has supported the agro input shop in financing which do not allow her to take loan any more from RUFI. She said, "*I will continue financing agro input shop with the money got from the vegetable farm as well as finance the vegetable farm with the Inputs from the Input shop since there is Records noted for justification.*"

Most significant story of change - Nyuon Panchol Nyuon (32) Male in Makuach Payam, Bor County

Nyuon Panchol Nyuon (32) Male in Makuach Payam, Bor County has been a beneficiary of the SSADPII project. They are 3 in the family, him and wife and kid. Before the project he was growing sorghum he was growing 0.5 of a feddan. This was at a different place; this was 1 km from where he is operating now. He was growing the local varieties of sorghum. He was doing on his own at that time and not as a group. At that time yield was 2 to 3 bags (50 kg) and the production was just for subsistence. The quantity he used to produce could not sustain him for the entire year. He would then borrow from others or depend on donor food distribution.

Some of his neighbours were in groups being supported by donors they were receiving training from donors. Then he consulted them, and they encouraged him to join. He started participating in the Cordaid Programme in 2020. He participated in agricultural skills trainings and covered issues around how to clear the farm, planting along lines and the distances of the rows, timely weeding, post-harvest technologies; marketing skills and how to mobilise resources – e.g., forming loan groups VSLA, how to get a loan from banks or micro credit companies. Through the project he acquired knowledge, received equipment which included maloda, a hoe, a panga, and a circle. He was also given sorghum seed 15 kg and plastic sheet – tarpaulin 4 x 6 meters, fifty empty bags for storage. As a group they also got 2-wheel tractor for the group which is kept by the treasurer. He hires this tractor for the services at his farm.

Since joining the project in 2020 he managed to increase the yield and agricultural production. In the season 2020 to 2021 he planted 3 feddans from which he harvested 30 x 50kg bags for sorghum. He sold 15 bags @ $110 per bag to the Norwegian People's Aid (NPA). In the 2021-2022 he increased to five feddans and he managed to get 50 x 50kg. He sold 40 bags - @ $110 to FAO and NPA. In the 2022-2023, he has planted 14 feddans and he is expecting a harvest of 140 x 50 kg bags. He uses the money for medical expenses for the family and school fees for the kids. Some of the money he ploughed back into the farm. Some of the money went to the VSAL groups. He wants to continue growing he wants to get to 30 feddens next year. He may employ other people to work for him on the farm as it grows.

Annex 5. Tools for the evaluation (These will be embedded)