



BASELINE SURVEY REPORT

Submitted to:

**Quality Assurance Manager
FEED Project
World Vision South Sudan**

By:

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We thank you all for your valuable contributions and hope that the evaluation report will be a key step and resource for facilitating development of communities in the project area.

Robert Waswaga
Team Leader
Kenwill International Limited

Affirmation

Except as acknowledged by the references in this report to other authors and publications, the report and research described herein consists of our own work undertaken to advance learning as part of the requirements of FEED Performance Measurement Framework.

The primary qualitative and quantitative data collected throughout the evaluation process remain the property of the communities described in this report and must be used only with their consent.

Robert Waswaga
Principal Consultant
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Abbreviations

CBOs	:	Community Based Organisations
CEQ	:	Central Equatoria
C	:	CARE
CIGs	:	Common Interest Groups
EEQ	:	Eastern Equatoria
FEED	:	Fortifying Equality and Economic Diversification
FFS	:	Farmer Field Schools
FGD	:	Focus Group Discussions
FHH	:	Female-headed Household
GPS	:	Global Positioning System
HH	:	Households
KIIs	:	Key Informant Interviews
LS	:	Lakes
M&E	:	Monitoring and Evaluation
MHH	:	Male-headed Household
NBG	:	Northern Bahr el Ghazal
NGOs	:	Non-Governmental Organisations
ODK	:	Open Data Kit
SSP	:	South Sudanese Pound
UN	:	United Nations
VSLA	:	Village Saving and Loan Association
WBG	:	Western Bahr el Ghazal
WEQ	:	Western Equatoria
WFP	:	World Food Program
WS	:	Warrap
WV	:	World Vision
WVSS	:	World Vision South Sudan

Indicator Summary Sheet

FEED Project Indicator Baseline Values Summary Sheet

Log Frame Code	Expected Results	Indicator	M	F	Overall (average)
Ultimate Outcome	Basic food security needs met and vulnerability reduced amongst empowered communities and households in Eastern Equatoria, Central Equatoria, Western Equatoria, Lakes, Warrap, Northern Bahr el Ghazal, and Western Bahr el Ghazal states in South Sudan	% of household able to provide basic needs for their family needs	28.6% of MHH	25.1% FHH	27.6%
		Proportion of vulnerable households as per the vulnerability index score	31.76	34.97	32.67 ¹ on a scale of 0 - 72
Intermediate outcome 1	Enhanced adaptive capacity of individuals, households and communities for sustained gains in agricultural production and productivity				
Immediate Outcome 1.1	Increased awareness and knowledge among households and communities of sustainable agricultural practices and technologies	Proportion of male and female households practicing improved agricultural technologies	32.8%	35.0%	34.4%
Immediate Outcome 1.2	Improved incomes through increased access to financial services, market systems and information for vulnerable communities	Percent of targeted beneficiaries who accessed financial services	2.9%	3.0%	3.0%
		agricultural market sales for men and women	32.1%	26.6%	28.0%
		% of women and men operating viable income generating activity	5.8%	4.1%	7.3%
Immediate Outcome 1.3	Improved knowledge and skills among community members and civil society to mitigate and respond to conflict and natural disasters	Proportion of households who employ appropriate adaptation strategy(s) in time of conflict, natural disasters/emergencies/other shocks.	22.1%	28.8%	23.9%.
Intermediate outcome 2:	Improved equitable and inclusive agriculture and protection policies, services and structures, particularly for women and marginalized populations				
Immediate Outcome 2.1	Increased knowledge and skills of civil society to influence and participate in the planning, implementation and evaluation of relevant policies	Level of awareness and participation of CSO in planning, implementation and evaluation of relevant policies	23.1%	26.8%	24.2% ²

¹ Please refer observation in chapter four on this indicator.

² Percentage of respondents who reported their group engaged the government in some form

Immediate Outcome 2.2	Improved knowledge and skills to empower women and girls to claim their productive assets and protection rights	Proportion of women and girls who are willing to report incidences of sexual violence	77.8%	77.5%	77.5% ³
Immediate Outcome 2.3	Increased opportunities for women, men, girls and boys to reduce prevalence of Gender-based Violence in their respective counties	Proportion of women in positions of leadership in community structures or groups.	44.2%	55.8%	55.8%
		Perception of men and women regarding ability of women to take a roles in decision making	50.0%	59.0%	54.5%. ⁴

³ Indicator refers to men and women who believe women are willing to report incidents of sexual violence

⁴ Indicates that more than half of respondents believe women have the ability to participate in decision making

Executive Summary

The FEED project is being implemented by World Vision, Oxfam and CARE in Greater Bahr el Ghazal and the Equatorias for three years. The project is funded by Government of Canada's Department of Foreign Affairs, Trade and Development (DFATD) through World Vision Canada, the lead agency. The ultimate outcome of the project is to meet basic food security needs and reduce vulnerability amongst empowered communities and households in Greater Bahr el Ghazal and the Equatorias in South Sudan. A baseline survey of the project was commissioned in June/July 2015 by World Vision on behalf of the consortium. The purpose of the baseline was to provide benchmarks from which changes or positive/negative impacts will be measured after the project has been implemented over the three years and inform further transition into longer term development oriented programming.

The baseline survey data was collected using structured interviews, key informant interviews, focus group discussions and literature review. An overall sample of 892 persons (446 women and 446 men) participated in the baseline study. This comprised 819 households (585 male-headed households and 232 female-headed households, 2 missing cases) and 73 qualitative study participants (21 women and 52 men). The key findings in line with the project outcome indicators are presented hereunder:

Provision of Basic Needs

Overall, 27.6% (MHH=28.6%; FHH=25.1%) of households were able to provide at least three out of four basic needs (set of clothes, pair of shoes, blanket for sleeping and three meals per day) to all household members without external assistance. The percentage of male and female-headed households was not statistically significant from each other on the aspect mentioned above. It implies that both male and female households are struggling equally to provide the basic needs to the members of their household.

Household Vulnerability

The vulnerability index shows that a significant percentage of households in project areas are vulnerable. Almost eight in ten households (78.7%) of the households were either struggling or destitute. Female-headed households were more vulnerable compared to male-headed households. Vulnerability was driven by level of ownership and access to (cultivation of) land, ownership of livestock, level of incomes and ability to provide food without external assistance.

A vulnerability index measures household livelihood economic security and access to basic needs using a set of variables. The areas for the assessment included: household ability to provide food to members, main household income earner, main source of household income, having alternative income source, land ownership and cultivation, access to medical treatment, ownership of livestock and household experience of adverse events. Each variable had responses, with each having a vulnerability weight. Each variable's response was multiplied by a respective score to get a weighted score. Weighted scores were summed up to generate a household vulnerability score/index. The higher the index, the worse the economic livelihood situation was. Conversely, the lower the index score, the better the household's livelihood economic security and access to basic needs.

The vulnerable index score was classified into three categories to gauge the level of welfare on a scale from 0 - 72. These included; growing (0-19), struggling (20-39) and destitute (40-72).

Sustainable Agricultural Production and Productivity

Agriculture is a major livelihood as seven in ten households (72.6%) were involved in crop farming during the 2014 season. On average, farmers planted two crops during the farming season, implying that the crop diversity is very limited in the project area. Agricultural productivity is extremely low in the project area. For example the average harvest from an acre of sorghum was approximately 125 kilograms, which is lower than an acceptable level of 400 kilograms per acre in South Sudan. . Ground

nuts are the most widely grown and commercialized crop in the project area. The low crop yields are attributed to low and inconsistent adoption of improved farming practices. For example, only 34.4% (MHH=32.8%; FHH=35.0%) of the households had adopted at least four improved farming practices. Not only is the adoption of improved farming practice low, but they are also not practiced consistently across geographic areas or by male and female farmers.

Food Consumption

Generally, households in the project area are faced with food insecurity. This is evidenced by consumption of limited number of meals consumed and their limited dietary diversity. During the time frame when the survey was conducted (lean season), only 11.6% of adult households had consumed at least three meals per day. Among the children, 61.3% of households reported that children ate at least three times per day. Both adults and children consume meals with very limited dietary diversity. For example, only 31.3% and 29.9% of adults and children, respectively, in sampled households consumed at least four different types of food in a day. Adults consumed very few meals and even that which is consumed is insufficient in dietary diversity. Members of MHH consumed 3.07 types of food compared to FHHs, which consumed 2.66 types of food.

Market Systems and Access to Financial Services

Market Access

Overall, commercialisation of agriculture was very low as just 30.6% (FHH=26.6%; MHH=32.1%) of farmer households sold any of their produce. Besides low commercialisation, farmers were not participating in organised marketing of their harvests because production levels were low and there were low levels of marketable surplus. The few households selling portions of their produce sold it mainly to individual traders in the local market (97.2%) and mobile traders at home (76.8%). Not only do farmers have limited control on marketing of their crops, they also get poor returns or prices. Only 28% of such households (FHH=23.8%; MHH=29.3%) said they got good or high prices.

Household Income and Access to Financial Services

Findings show 13.6% of households had a member earning a regular income (income at a given interval). Monthly household income levels were low as male members earned on average 229 SSP while females earned 167 SSP. Engagement in profitable or viable income generating activities was low, with only 7.3% (M=5.8%; F=4.1%) of households having members running such enterprises. Additionally, there is a dearth of access to self-selected financial services within the area as only 2.9% of male and 3% of female members accessing savings services.

Civil Society and Community Members Knowledge on Conflict and Natural Disasters

In the 12 months prior to the survey 46.9% of households had not faced any type of disaster (MHH=47.7%; FHH=45.2%). The types of disasters experienced were hydro-meteorological in nature, specifically flood and drought episodes.

Of households who had faced disasters, 23.9% (MHH=22.1%; FHH=28.8%) reported to have been able to employ an effective disaster risk reduction or positive coping strategy to avoid disaster at the household level (see table 3.8.3). Only 6% of sampled households reported that their community had a disaster management committee. Of the households who said their community had a disaster management committee, 83.3% (MHH=84.0%; FHH=82.6%) said the committee was functional.

More than a quarter (26.3%) of households reported having some conflicts within their community. Slightly more MHH (26.9%) than FHH (24.9%) reported being directly affected by conflicts. The types of

conflict within the community include: land conflicts (8.7%), water resource conflict (4.8%), grazing land/pasture conflict (2.2%), clan conflicts (1.0%), family conflicts (5.1%) and inter-tribal conflicts (2.7%).

CSO Participation in planning, implementation and evaluation of relevant policies

Only 149 of the 892 household questioned had knowledge of CSOs. Findings show that 24.2% (M=23.1% F=26.8%) or 36 households of the valid sample of 149 households indicated that their common interest groups engaged government on different issues. Issues of engagement were extension services (20 households), access to inputs (18 households) and marketing of produce (18 persons). The number of households engaging government on the above issues at state level is extremely low (not exceeding 10 households).

Gender Based Violence

Findings show that 77.7% of sampled female respondents were willing to report incidents of domestic and child abuse practices. Women and local leaders in this survey acknowledged violence against women to be common in the community, but especially in homes. Reasons why women were unwilling to report include fear of further torture, divorce or separation from the spouse and lack of action against the perpetrator. A separate gender assessment for the FEED project was conducted alongside the baseline study.

Recommendations

The project approach to increase household food production and consumption is appropriate. In addition to increasing food production, emphasis should be put on promoting food diversity to guarantee access to food with the required nutrients. Information on consuming balanced meals will be beneficial for the community members.

The Farmer Field School initiatives are a very good channel for building farmer capacity and influencing their ability to adopt improved farming practices. The project's use of FFS as a key strategy for building farmer capacity is appropriate and should be widely implemented.

The project should carry out value chain studies for the crops being promoted. Results from this study will provide useful insights into how to promote commercialisation and make farming profitable to crop farmers.

The project should promote access to financial services for farmers through savings mobilization. This process should start with improving financial literacy of farmer households; facilitate formation of savings groups and train members on farming as business and micro enterprise management.

There is a need for interventions to raise community awareness on women's rights, violence against women as well engage them in dialogue on strategies that can be effective in eliminating the different forms of violence. The GoSS, including state governments, needs to enforce the existing laws against violence against women and children. Activities aimed at supporting women rights should pass through existing women groups and CBOs where there are a sizeable number of women in leadership positions.

The consultant did not provide recommended actions to respond to conflict, natural disasters or natural resource management.

CHAPTER I: INTRODUCTION

1.1 Overview of FEED Project

World Vision, Oxfam and CARE crafted the Fortifying Equality and Economic Diversification (FEED South Sudan) project in an effort to make a significant contribution in Greater Bahr el Ghazal and the Equatorias. The three year project will be implemented through an adaptive approach to empowering communities and improving food security and livelihoods in seven states of South Sudan namely, Eastern Equatoria (EEQ), Central Equatoria (CEQ), Lakes (LS), Northern Bahr el Ghazal (NBG), Warrap (WS), Western Bahr el Ghazal (WBG) and Western Equatoria (WEQ).

The project targets 60,000 households (approximately 215,000 direct beneficiaries and approximately 353,000 indirect beneficiaries). The ultimate outcome of the project is to meet basic food security needs and reduce vulnerability amongst empowered communities and households in Greater Bahr el Ghazal and the Equatorias in South Sudan. This will be attained through capacity building of small hold farmers, community institutions and social networks in order to improve food production, access and consumption. The ultimate outcome will be attained through two intermediate outcomes.

The first intermediary outcome is “enhanced adaptive capacity of individuals, households and communities for sustained gains in agricultural production and productivity”. This is founded on three immediate outcomes namely: 1) increased awareness and knowledge among households and communities of sustainable agricultural practices and technologies, 2) improved incomes through increased access to financial services, market systems and information for vulnerable communities, and 3) Improved knowledge and skills among community members and civil society to mitigate and respond to conflict and natural disasters. To achieve these outcomes, the project will facilitate the provision of extension services and essential inputs improvement of post-harvest handling techniques, promote the adoption of appropriate food utilization practices, enhance access to market systems building the capacity of local farmers and savings groups, increase the employability of vulnerable women, youth and men, organize communities and prepare them to respond to natural disasters and other “shock” situations, and sustainably manage natural resources and enhance community ability to resolve and manage conflict and maintain peace.

The second intermediary outcome, “improved equitable and inclusive agriculture and protection policies, services and structures, particularly for women and marginalized populations” is founded on three immediate outcomes namely: 1) Increased knowledge and skills of civil society to influence and participate in the planning, implementation and evaluation of relevant policies, 2) Improved knowledge and skills to empower women and girls to claim their productive assets and protection rights, and 3) Increased opportunities for women, men, girls and boys to reduce prevalence of Gender-based Violence in their respective counties. To achieve these outcomes, the project will enhance informed civil society organizations’ participation in the policy making process and understanding of women’s entitlements and protection rights in agriculture and livestock, empower vulnerable community members, including women and children, increase women’s access to productive assets including land rights and enhance participation in Gender-based Violence prevention and responses by all community members.

1.2 FEED Project Baseline Survey

1.2.1 Introduction

Kenwill International Limited was contracted by World Vision South Sudan to undertake the FEED baseline study and gender assessment. The contract was signed on June 5th, 2015. The signing of the contract marked the commencement of the two assignments. Pre-field work preparation activities took

place between June 5th and 12th, 2015. Consultants then travelled to Juba on June 14th, 2015 to begin field work which ended on Sunday, July 5th, 2015.

At the commencement of field work, an inception meeting between the FEED project consortium staff and the consultants was held. During the meeting, views were exchanged to harmonise understanding and interpretation of FEED project indicators and the extent to which these were covered in the draft data collection tools. The data collection tools were revised and uploaded in ODK for pre-testing.

1.2.2 Purpose and objectives of the Baseline

The purpose of the baseline was to provide benchmarks from which changes or positive/negative impacts will be measured after the project has been implemented over three years and inform further transition into longer term development oriented programming.

The specific objectives of the baseline survey were to:

- Establish benchmarks for core project indicators-This will serve as the measurement of all core Impact and outcome project indicators thus establishing the foundation for the project monitoring and evaluation system.
- Document new knowledge and relevant findings that would affect and have implications on refinement of the project design.
- Provide specific and practical recommendations and document lessons to be utilized for future programming.
- Collect data on other key areas which contribute to the conceptualization of each of the indicators being assessed for the baseline survey.

In accordance with the contractual obligations of this assignment, all the above mentioned tasks were fulfilled and appropriate recommendations made to inform project implementation strategy as detailed in the sections that follow below.

1.2.3 Deliverables/Products

The baseline survey generated three deliverables meeting the different specifications as presented in the terms of reference for the assignment: These deliverables were:

1. Raw data set
2. Fact sheet: A two to three pages summary report of the findings that indicates the baseline values of each indicator, brief explanation and recommendations.
3. FEED Baseline Survey Report, consistent with the outline presented in the terms of reference and any agreements reached between consultants and FEED partners.

1.3 Structure of the Report

The report is organised in three parts. These parts include preliminary information, main body and appendices/annexes of the report. Part one presents preliminary information which includes the title page, table of contents, acknowledgment, list of abbreviations and executive summary and indicator summary sheet. Part two is the main body or text of the report. The main text is organised in four chapters which include; Introduction (Chapter 1), Methodology (Chapter 2), Baseline survey findings (Chapter 3), and Conclusions and Recommendations (Chapter 4). Part three contains appendices or supportive information for the main text such as reference documents, terms of reference and baseline survey tools.

CHAPTER 2: METHODOLOGY

2.1 Survey design

The study followed a mixed research design. The mixed research design combined a quantitative cross-section design and a qualitative phenomenological design. A cross-sectional design was chosen since different study indicators/variables required gathering information from a cross-section of many respondents. A quantitative survey of households was done. While most information required for indicators was generated from households, other aspects of the study required acquiring information from other categories of stakeholders. These stakeholders include; consortium staff, other NGOs, CBOs and government workers. The information was therefore generated from a cross section of respondents within the community.

A phenomenological qualitative design is concerned with generating information on specific qualitative aspects or events at the time of the survey. Although almost all indicators were quantitative in nature, there was need to understand perspectives that may underlie such quantitative measures to inform recommendations for improving the design of the project.

2.2 Sampling Design

An overall sample of 892 persons (446 women and 446 men) participated in the baseline study. This comprised 819 households (585 male-headed households and 232 female-headed households, 2 missing cases) and 73 qualitative study participants (21 women and 52 men). For some questions the response rate was less than 100%, so the consultant only considered valid responses from households that provided data. Detailed information on sample size determination and sampling procedure is presented hereunder:

2.2.1 Quantitative Sample Size Determination

A 30 by 30 sampling approach was used to determine the sample size. This entailed sampling 30 clusters and 30 households in each cluster (payam). The planned sample was therefore 900 households. However, the actual sample was 819. This is equivalent to 27.3 clusters, which is considered sufficient for the survey. The shortfall was as a result of failure to conduct full data collection in VBG due to security limitations. Generally, the sampling approach was appropriate because of the absence of household lists which would support simple random sampling techniques. It was also cost effective given absence of household sampling frames and vast project area. Selection of clusters and households was done using simple random sampling and systematic sampling. The findings from this approach should therefore have minimal variations.

2.2.2 Sampling Procedure

A two-stage sampling procedure was adopted in sampling households. The two stage approach involved (1) selecting enumeration areas and (2) sampling of households. Details are presented hereunder:

I. Enumeration Areas

The sampling of enumeration areas entailed random sampling of counties, payams (clusters) per county, bomas and villages. The steps and approach for sampling these different areas are described below:

a. Sampling Counties

The selected number of counties per state was proportional to the size of anticipated beneficiary population. The proportion to size distribution of counties showed Warrap State and Western Equatoria had two counties each. Central Equatoria, Eastern Equatoria, Lakes, Northern Bahr Ghazal and Western Bahr El Ghazal had one county each. In total nine out of sixteen counties were sampled. After determining the number of counties per state, the counties for data collection were selected.

Where a state had only one county, this county was automatically selected. However, states which had more than one county required a given number to be selected. In such states, counties were selected using simple random sampling procedure without replacement. The procedure involved writing the names of the counties in the states in question on separate pieces of paper, folding them and dropping them into a bowl. The bowl was then shaken and one member of the survey team picked one folded paper while their eyes were closed. The name on the selected paper was read out and recorded as the sampled county. The procedure was repeated for the selection of the second county until the required number was realised in each and all states.

The counties selected include: Juba County in Central Equatoria (CEQ), Torit County in Eastern Equatoria (EEQ), Wulu County in Lakes State (LS), Awiel East in Northern Bahr El Ghazal (NBG), Gogrial West and Tonj South Counties in Warrap State (WS), Wau County in Western Bahr El Ghazal (WBG) and Tambura and Yambio Counties in Western Equatoria (WEQ).

b. Selecting Payams

Payams were regarded as clusters during the study. Where a county had more than one payam, selection was done using simple random sampling without replacement. As per the sample size determination, each cluster was to have a sample of 30 households. The allocated sample per county was therefore divided by 30 to determine how many clusters/payams were to be selected in a given county. A total of 30 clusters of payams were selected for the study. Payams were selected in each county as per the allocated number of clusters. Where a county had fewer payams, the entire sample was done in one payam for reference.

c. Selecting Bomas and Villages

After the sampling of clusters was complete, bomas were selected with each boma being treated as a mini-cluster. In each mini-cluster ten households were to be interviewed. In such a boma, a village was selected using simple random sampling approach without replacement and households were sampled for interviews.

2. Sampling of Households

In each sampled village, a team of two data collectors were deployed. A village headman was identified and village household population was ascertained. A sampling interval was then computed. None of the villages had a village household population list to aid random identification of households on such a list. To solve this gap, after ascertaining the sampling interval, data collectors were taken to the centre of the village. The random start household was identified using a randomly selected compass direction point. The first household in chosen direction marked the random start. The direction was followed while adding the sampling interval to that household until the required number of households were realised. Where a chosen homestead had more than one household, a left hand rule was used. Where village household population could not be ascertained, the team was guided to the centre of the village by a resident of the area and a random start point was identified using a compass direction and one household in each homestead in the chosen direction was interviewed till the sample was realised.

2.2.3 Qualitative Sample

A total of nine Focus Group Discussions (FGDs) and three Key Informant Interviews (KIIs) were conducted for the baseline survey. A total of 21 women and 52 men participated in qualitative investigations. Both FGD and KII participants were purposely sampled on the basis of their role as agricultural officers or being farmers.

2.2.4 Description of the Survey Sample

The household sample size was 819. Distribution of the sample according to state included; 34.6% from WEQ, 26.4% from WS, 15.3% from EEQ, 8.1% from CEQ, 6.5% from LS, 6.2% from WBG and 3.1% from NBG. The sample distribution reflects the relative distribution of targeted beneficiaries in each state. The characteristics of respondents and households, is presented below:

Characteristics of Respondents

The analysis showed that 54.5% of respondents were female while 45.4% were male. The average age of respondents was 35 (median=34 years). Female respondents were younger (mean=32 years; median=30 years) than their male counterparts (mean=38 years; median=37 years). Most of the respondents were heads of households (54%), followed by spouses (36.5%), extended family members (5.4%), children (3.7%), and “others” were half of a percentage point. The highest level of education attained by respondents is as follow; slightly above half (51.8%) never attained formal education, 28.1% attained basic education, 9.2% attained secondary education, 7.9% attended pre-school while three percent attained either post-secondary education or their level of education was unknown. Respondents indicated that 48.1% of male respondents, compared to 61.2% of female respondents, never attained any formal education.

Head of Household Characteristics

Findings revealed that 71.4% of households were male-headed and 28.4% were female-headed. The average age of heads of household was 39.82 (median=39 years). Female-heads of household (FHH) were younger (mean=38.22; median=36 years) than male heads of households (MHH) - mean=40.45; (median=40 years). Only a half percentage point of heads of household was children (below 18 years). Analysis shows that 82.8% of household head were married, 8.2% were widowed, 4.2% were single and 4.8% were either divorced or separated. The main occupation of heads of household was crop farming at 71.5% (MHH=67.7%; FHH=81.0%), followed by salaried employment (4.9%), agro-pastoralists (4.8%), casual labour (4.0%), caring for the family (3.1%), petty trade (2.2%) and other occupations⁵ (4.8%).

Furthermore, 44.7% of heads of household never attained any formal education. About a quarter of heads of household had some basic education (25.4%), secondary education (15.2%), pre-school (7%), post-secondary (4.8%), and those with unknown levels of education (2.9%). Findings show that 39.8% of male compared to 60% of female household heads never attained any formal education. The average household size was 7.85 persons (median=7 persons).

2.3 Data Collection Methods

Data was collected through a combination of methods which included: review of documents relevant to baseline survey; key informant interviews with different key informants, structured interviews with household representatives; focus group discussions and observations. Use of primary data collection methods was supported with different tools presented in Appendix I.

2.4 Facilitating and Limiting Factors

A field work report was prepared by documenting what worked well and what needed to have been done better. The following key factors facilitated successful implementation of the survey:

- Real-time feedback on the inception report and data collection tools by the quality assurance manager
- Relatively good programming of the questionnaire in open data kit and timely technical support from the programmer

⁵ Includes pastoralists, bricklaying and carpentry

- Logistical support in terms of transportation to the field for data collection was generally excellent, with the exception of Torit
- Contracting was done within a very short-time
- Good collaboration with state authorities in most states except in Lobonok Payam (Juba, Central Equatoria) and Wau (WBG)
- Participation of consortium partner staff in Western Equatoria, Northern Bahr el Ghazal and Lakes states.

The following key factors limited the implementation of the survey:

- Lack of reconnaissance visits to areas in Central Equatoria and Eastern Equatoria which compromised timely data collection
- Lack of adequate understanding of project implementation areas among partners led to selection of inaccessible and insecure areas. This could have been avoided if the partners first introduced the project to government officials before start of the baseline assessment.
- Hiring enumerators who did not know the dominant language of project areas (Lakes, Torit and Wau). Enumerators had to allocate themselves to sampled respondents depending on the language in which they were proficient. In some areas enumerators were hired when consultants were already in the location.
- Lack of and limited internet in some World Vision sites made downloading and real-time uploading of data impossible (Aweil and Tonj South). The Aweil team had to travel to Wau to support downloading and installation of ODK and questionnaires. One day was lost.
- Challenges of using tablets included failure to record GPS coordinates, short battery life, malfunctioning of switches and failure to recharge. Solutions to these challenges included using Samsung phones from KENWILL, making GPS location reading optional and extending data collection period.
- Failure to upload the questionnaires for initial surveys until a new version was developed. Manual download of files and sending to the programmer for uploading used but then it created a problem of too many duplicates (66 questionnaires), even after the programmer had removed some.
- Community fatigue for participation in project related assessment not only for World Vision and Oxfam but may apply to other NGOs operating in project areas. In some cases survey teams were almost turned away by the communities on the pretext that they had previously participated in similar assessments without receiving feedback (promised farm inputs) from such organisations.
- There were varying numbers of respondents for each question based on valid responses thereby creating different denominators for most questions. Bad road network, coupled with bad weather, due to lack of routine maintenance and rainfall made roads impassable and increased travel time.
- Insecurity in Wau (WBG), Torit (EEQ) and originally selected bomas in Lobonok Payam (Juba County). Data was not collected on schedule. However, security clearance was sought before data collection in Wau; for Lobonok Payam, new villages were selected.

2.5 Ethical Considerations

First, all research assistants were required to sign and abide by the World Vision child protection policy before engaging in any activity with the consultants. The consultant ensured the appropriate, safe, and non-discriminatory participation of all respondents in the survey. This included obtaining free and informed consent and withdrawal, and ensuring that data was kept in a secure and confidential manner and the anonymity of respondents was protected in the presentation of findings. Where data was collected on protection topics, specifically Gender-Based Violence, additional considerations to ensure confidentiality and respect for respondents was ensured, in addition to enumerators being provided with specific training on protection sensitivity.

2.6 Validity of the Study

The study's margin of error based on the actual sample is 3.4%⁶. This translates to about 96.4% confidence level. The cluster sampling approach is one of the probability sampling techniques which was appropriate within the project context. The results should therefore apply to project areas. In addition to the quantitative survey, qualitative data was gathered to strengthen the extent to which findings apply to studied households (internal validity) and how they apply to the rest of the population (external validity). The use of mixed-design strengthened both internal and external validity of findings. It should be added however, the margin of error may be large for variables where the response rate is lower than 90% such as Northern Bahr el Ghazal. Data collection was interrupted by insecurity in this state

⁶ Using Cochran's Z-formula of proportional allocation

CHAPTER 3: BASELINE SURVEY FINDINGS

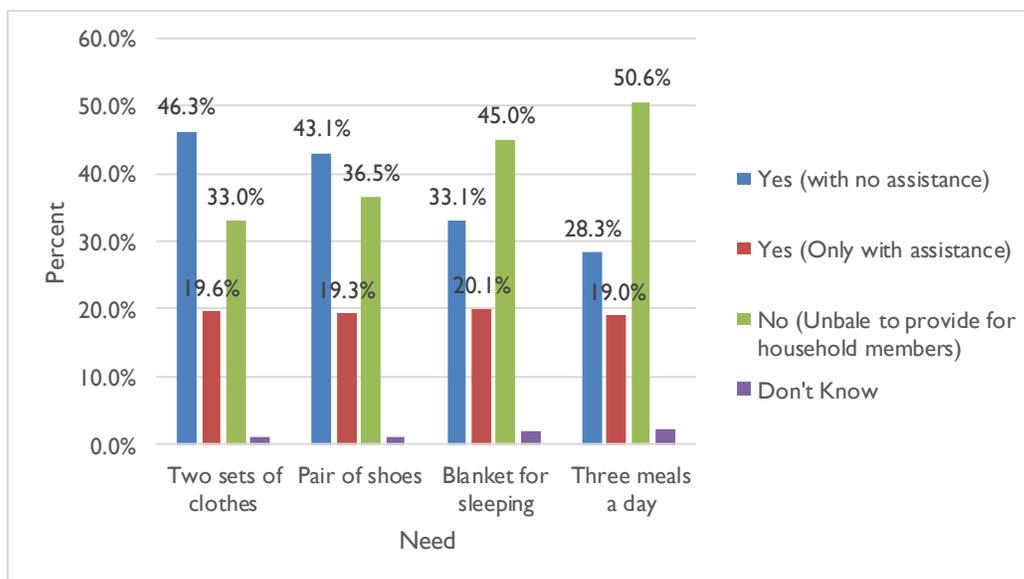
Ultimate Outcome: Basic food security needs met and vulnerability reduced against empowered communities and households in Eastern Equatoria, Central Equatoria, Western Equatoria, Lakes, Warrap, Northern Bahr el Ghazal, and Western Bahr el Ghazal states in South Sudan

3.1 Indicator #1 for Ultimate Outcome Percent of household able to provide basic needs for their family needs

3.1.1 Households able to provide selected basic needs

Respondents were asked whether in the past 12 months, their household heads were able to provide selected basic needs for all members including children, living in their household, without assistance from other family members, relatives, the government or NGO. Findings revealed that 46.3% reported to have been able to provide two sets of clothes without assistance, a pair of shoes (43.1%), blanket for sleeping (33.1%), and three meals a day (28.3%). Those able to provide only with assistance were 19.6% for two sets of clothes, 19.3% for a pair of shoes, 20.1% for a blanket and 19% for three meals a day. Those unable to provide for household members were 33% for two sets of clothes, 36.5% for a pair of shoes, 45% for a blanket and 50.6% for three meals a day as summarized in the bar chart below.

Figure I: Ability to Provide Basic Needs for All Household members



Source: FEED Baseline Survey Data

Household heads able to provide at least three of the above four basic needs to all household members were 27.6% across the sample. These were 26.7% in CARE areas, 36.7% in Oxfam areas and 25.9% in World Vision areas, while these were 28.6% in male-headed households compared to 25.1% in female-headed households. The distribution of household heads able to provide at least three of the above four basic needs to all household members by state is summarized in the table below.

Table I: Head of household ability to provide for basic needs without assistance by state

Indicator	CEQ	EEQ	LS	NGB	WS	WBG	WEQ	Total
HHH able to provide at least three	39.4%	26.7%	34.0%	N/A	31.2%	29.4%	23.3%	27.6%

basic needs for all household members without assistance								
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Indicator: Percentage of male and female heads of households that were able to provide for all members in the household with at three important items, through their own means in the past 12 months were 27.6%

Numerator: Households reporting to have provided at least three basic needs to all household members

Denominator: Total number of households with at least one positive response on ability to provide basic needs to household members

3.1.2 Food Consumption

On average, adult household members consumed 1.6 meals (median=1) while children ate 1.64 meals (median=2). . The percentage of households with adult members consuming no meal, one meal, two meals and at least three meals was 4.4%, 45.4%, 37.7% and 11.8% (n=806) respectively. Similarly, 4.1% of households indicated that children under their care did not eat any food the previous day. Children eating one and two meal(s) were 33.5% and 40.1% respectively. Households who had children eating three meals per day were 10.2%.

Indicator	CEQ	EEQ	LS	NGB	WS	WBG	WEQ	Total
Number of meals adults ate yesterday	1.95	1.88	1.26	1.32	1.41	1.33	1.68	1.60
Number of meals children ate yesterday*	1.86	1.94	1.47	1.42	1.48	1.40	1.71	1.64

Source: FEED Baseline Survey Data

Findings also show that the 12.2% of a valid sample of 716 households did not know whether children ate or did not eat the previous day. Overall, only 11.6% of the households reported that children ate at least three times the previous day. The wide use of negative food security coping mechanisms among households (85%) pointed to reduced food consumption for both children and adults. Indeed 79.9% of a valid sample of 766 households indicated that they used reduced number of meals eaten per day as a coping strategy to food shortage. Overall, food consumption for both adults and children is very constrained due to limited availability of food in the community (including market places). One respondent reported;

“There is no food in the local market here (referring to Wulu Centre). If we are to get food, we have to board and go to Rumbek. But even when you get there, you are not even sure whether you will get enough food in the market. The only solution is to eat very little of what we have”. Female Community Member, Wulu Centre, Lakes State

3.1.3 Dietary Diversity

The survey captured information on specific types of food consumed in the 24 hours preceding the survey. Respondents were told to indicate foods consumed by household members (including respondents) the day before the survey. The different types of food consumed are presented in Table 3. Overall, the average number of type(s) of foods consumed was 2.96 (median 2). Oxfam areas had a higher average of food types consumed (3.41 (median=3), followed by World Vision (3.01) and CARE

(2.24)⁷. A comparison across states indicated that CEQ households consumed an average of 3.49 types of meals, followed by Lakes State (3.4082), WBG (3.30), Warrap (3.3), WEQ (3.96), EEQ (2.24) and NGB had the least (1.70). These findings show that while households in EEQ to eat more meals and use fewer coping strategies, their food diversity is limited and therefore they were likely not to be eating a balanced diet. Conversely, while Warrap and WBG households ate few meals, they were more diverse and more likely to be balanced in diet. As indicated in other sections, FHH continued to fare worse than MHH in terms of food dietary diversity. MHH consumed 3.07 types of food compared to FHHs, which consumed 2.66 types of food. Overall this demonstrates that FHH use fewer coping mechanisms, eat fewer meals and also eat food which is nutritionally insufficient.

On average, only 31.3% had sufficient dietary diversity (consumed at least four food types). The percentage of households with a sufficient diet was highest in WBG (46%) but lowest in NGB (4.3%). The most popular food type was carbohydrates from grains (73.8%) while the least consumed food type was food made with oil, fat or butter. Additional information is presented in the table below:

Table 2: Types of Foods Consumed by Households in FEED Project Area

Food Type	Base	Percent
Any bread, rice, biscuits or any other foods made from millet, sorghum, maize, rice, wheat or <i>(other locally available grain)</i>	759	73.8
Any vegetables	745	67.8
Any potatoes, yams, cassava or any other foods made from roots or tubers	733	34.1
Any fruits	688	24.3
Any food made from beans, peas, nuts	704	23.3
Any beef, pork, lamb goat, rabbit, , chicken, duck or other birds, liver, kidney, or other meats	705	22.7
Any sugar or honey	678	21.7
Any fresh or dried fish	705	19.0
Any other foods such as, coffee or tea	664	16.0
Any eggs	699	15.9
Any cheese, yogurt, milk or other milk product	676	14.2
Any foods made with oil, fat or butter	669	12.3

Source: FEED Baseline Survey Data

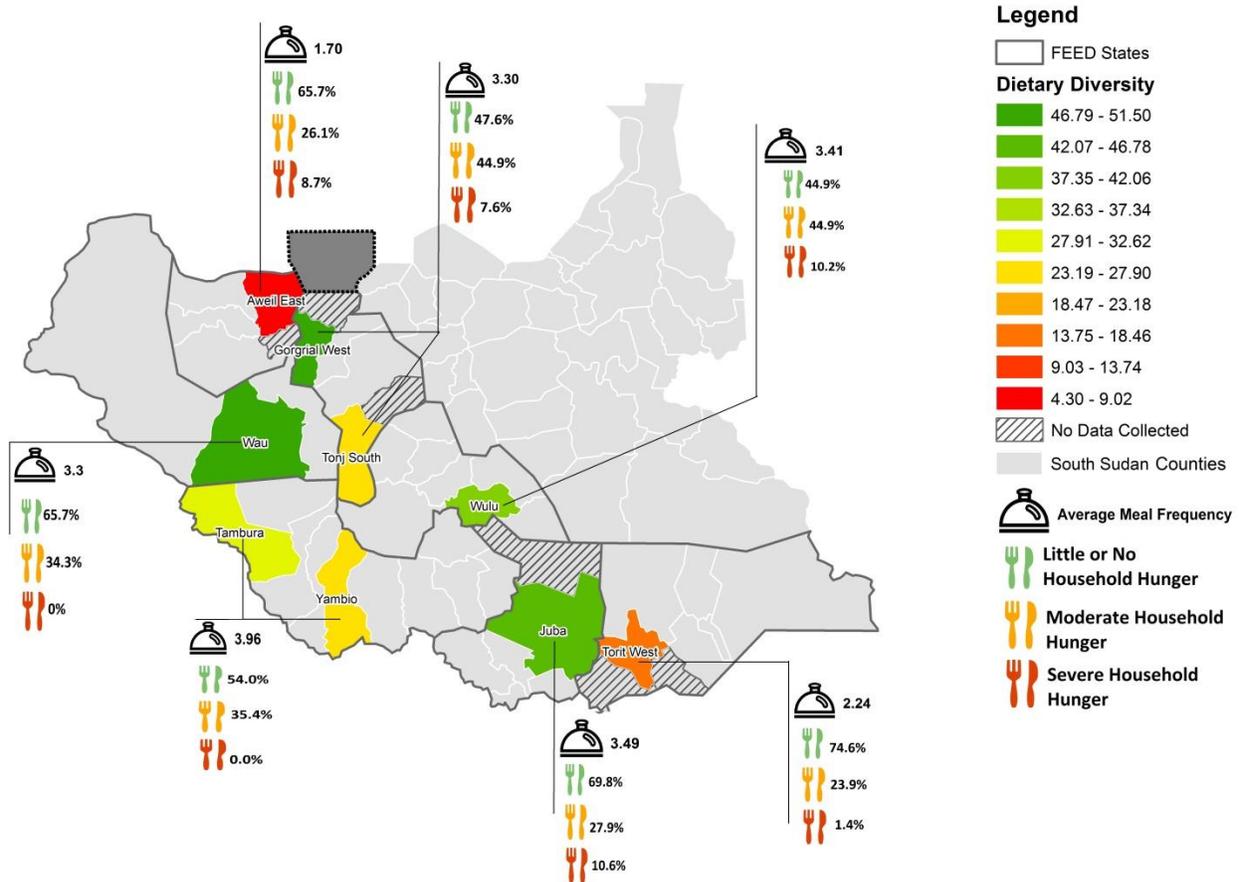
Household Dietary Diversity

Indicator	CEQ	EEQ	LS	NGB	WS	WBG	WEQ	Total
Less than 4 types of food	54.5%	85.0%	59.2%	95.7%	61.9%	54.0%	72.2%	68.7%
At least 4 types of food	45.5%	15.0%	40.8%	4.3%	38.1%	46.0%	27.8%	31.3%

Source: FEED Baseline Survey Data

⁷ n=804

FEED - South Sudan



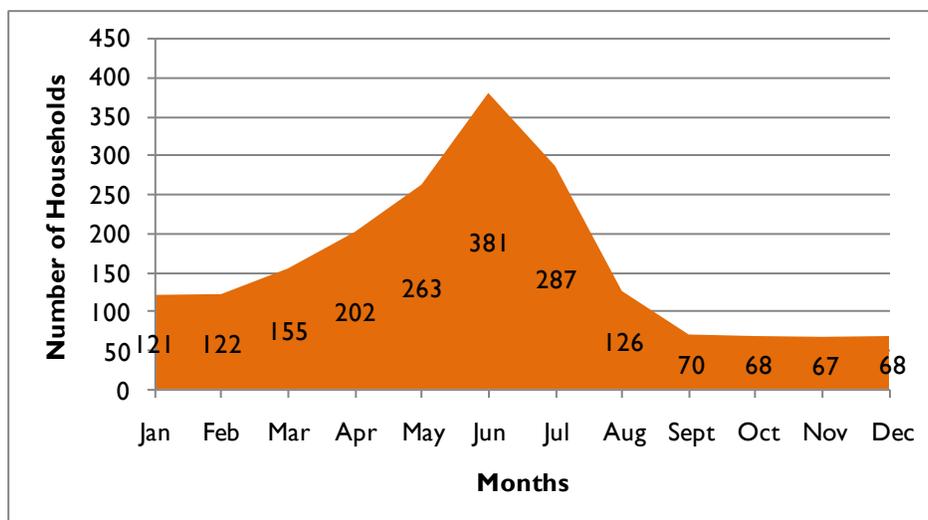
The map above illustrates the range of dietary diversity by county. Households were asked about the number of types of food consumed in the preceding 24 hour period. More than four types of food resulted in a positive score.

3.1.4 Hunger Period

The baseline survey captured data on months in the 12 month period preceding the survey in which households experienced a food shortage. Out of a valid sample of 811 households, 21.3% did not suffer a food shortage, while 78.7% did suffer from food shortage. Households that suffered from food shortage were asked to indicate the months in which they did not have enough food. A count was then performed to determine how many households suffered from food shortage in a given month and how many months each household had inadequate food. On average households suffered 3.03 months (median=2) of inadequate food supply. Comparatively, households in the World Vision areas suffered more hunger months (3.18 months) compared to those from Oxfam (2.98 months), and CARE areas (2.43 months). Warrap households suffered the highest number of months with limited food supply (4.07 months), followed by WBG (3.72 months), CEQ (2.74 months), NBG (2.61 months), Lakes State (2.51 months), WEQ (2.49 months) and Eastern Equatorial (2.43 months). Female-headed households suffered more hunger months (3.29 months) compared to their male-headed households (2.92 months). The distribution of households that had food shortage in different months is indicated in Figure 2. Overall, food shortage is at its peak around the month of June. Food shortage is lowest between the months of September to December. However, the number of households experiencing food shortages starts increasing from January and peaks in June. After June it reduces and is lowest in November. This

pattern is in line with farming and harvesting seasons in the project area. Severe food shortage takes place with the on-set of rains and planting but reduces once households start harvesting crops.

Figure 2: Distribution of Households that experienced food shortage by month



Source: FEED Baseline Survey Data

3.1.5 Household Hunger Scale

Findings show that 56% (MHH=58.0%; FHH=50.0%) of a valid sample of 604 households suffered little or no hunger while 36.8% (MHH=35.2%; FHH=40.1%) suffered from moderate hunger. Those who suffered from severe hunger were 7.3% (MHH=6.1%; FHH =9.9%)⁸. The CARE areas had the highest percentage of households reporting little or no household hunger (74.6%), followed by World Vision (53.5%) and Oxfam (53.2%). Findings show that 25.3% of households in CARE area, 46.8% in Oxfam area and 46.4% in World Vision area suffered from moderate or severe hunger. Across the states where the project is being implemented, WEQ had the highest (10.6%) while EEQ had lowest percentage (1.4%) of households suffering from severe hunger⁹. Detailed information on hunger scale analysis results are presented in the table below:

Table 3: Household Hunger Scale Results

Scale	CEQ (n=43)	EEQ (n=71)	Lakes (49)	NBG (=23)	Warrap (n=185)	WBG (n=35)	WEQ (n=198)	Total (n=604)
Little or no household hunger	69.8%	74.6%	44.9%	65.2%	47.6%	65.7%	54.0%	56.0%
Moderate household hunger	27.9%	23.9%	44.9%	26.1%	44.9%	34.3%	35.4%	36.8%
Severe household hunger	2.3%	1.4%	10.2%	8.7%	7.6%		10.6%	7.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: FEED Baseline Survey Data

⁸ Differences between male and female-headed households significant at p=0.071 (Chi-square=5.280)

⁹ Significant at p=0.002

3.2 Indicator #2 for Ultimate Outcome Proportion of vulnerable households as per the vulnerability index score

The survey generated data used to compute the vulnerability index score¹⁰. A vulnerability index measures household livelihood economic security and access to basic needs using a set of variables. The areas for the assessment included: household ability to provide food to members, main household income earner, main source of household income, having an alternative income source, land ownership and cultivation capabilities, access to medical treatment, ownership of livestock and household experience with adverse events. Each variable had different responses, with each having a vulnerability weight. Each variable's response was multiplied by a respective score to get a weighted score. Weighted scores were summed up to generate a household vulnerability score/index. The higher the index, the worse the economic livelihood situation was. Conversely, the lower the index score, the better the household's livelihood economic security and access to basic needs. The average vulnerability score was 32.67 (median=35). The vulnerability index for female-headed households (mean=34.97; median=37.00) was higher than that of their male counterparts (mean=31.76; median=23.00). This shows that female-headed households are more vulnerable compared to male-headed households.

Analysis by state indicated WBG and WEQ were the most vulnerable areas with average score of 37.55 (median=37) and 36.56 (median=38) respectively. The states of Warrap and NBG had lower vulnerability scores (27.14/27.43) indicating that household were relatively less vulnerable. Households in NBG and Warrap had access to, or cultivated, more land than their counterparts in other states. In addition, ownership of livestock was higher in Warrap and this significantly reduces household economic livelihood security. Although cattle are rarely slaughtered for domestic consumption, it is very strategic resource in situations of economic distress as it raised substantial amount of money.

The vulnerable index score was classified into three categories to gauge the level of welfare. These included; growing (0-19), struggling (20-39) and destitute (40+). Overall, 21.3% (MHH=21.6%; FHH=20.8%) of households were growing, 43.3% (MHH=46.2%; FHH=35.9%) were struggling and 35.4% (MHH=32.2%; FHH=43.3%) were destitute. Analysis by state indicated that WEQ had highest number of destitute households (44.5%), followed by WBG (41.2%) and CEQ (39.4%). Lakes had lowest percentage of destitute households (20.8%). Detailed information on vulnerability classification by state is presented in Table 4. The differences between states, consortium partner areas and the gender of head of household were all statistically significant at 0%, 0.8% and 2.5% respectively. This implies that vulnerability significantly varied across these factors. Overall, households in project area can be described as struggling since the average score falls within that category.

Table 4: Household Economic Vulnerability Classification

Level	CEQ (n=66)	EEQ (n=120)	Lakes (n=53)	NBG (n=23)	Warrap (n=215)	WBG (n=51)	WEQ (n=283)	Total (n=811)
Growing	19.7%	15.8%	26.4%	34.8%	39.5%	3.9%	11.3%	21.3%
Struggling	39.4%	48.3%	52.8%	39.1%	35.8%	54.9%	44.2%	43.3%
Destitute	40.9%	35.8%	20.8%	26.1%	24.7%	41.2%	44.5%	35.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: FEED Baseline Survey Data

Indicator: Proportion of vulnerable households as per the vulnerability index score =32.67 (FHH=34.97; MHH=31.76)

Numerator: Sum of weighted responses on nine vulnerability areas for all households

¹⁰ Adopted from Project for De-institutionalization of orphans and other vulnerable children project funded implemented by Child Fund International in Uganda. All aspects of the index relevant to FEED were adopted for computation of the index.

Denominator: Total number of households who returned valid responses

Intermediate Outcome I Enhanced adaptive capacity of individuals, households and communities for sustained gains in agricultural production and productivity

Immediate Outcome I.1 Increased awareness and knowledge among households and communities of sustainable agricultural practices and technologies

3.3 Indicator for Immediate Outcome I.1 Proportion of male and female households practicing improved agricultural technologies

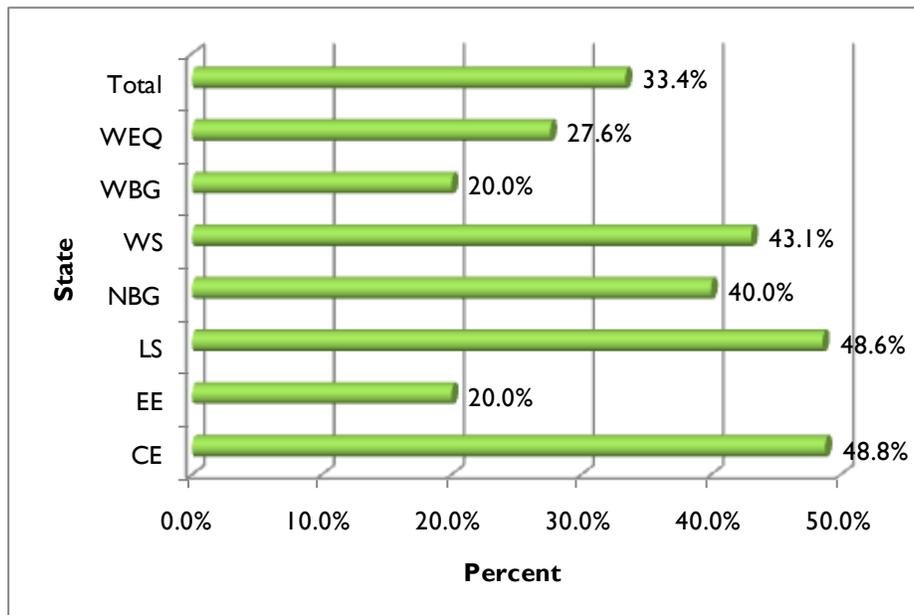
3.3.1 Improved Agricultural Technologies Practice

Of a valid sample of 809 sampled households, 71.7% (587 households) had grown crops while 21.1% (222 households) did not grow crops during the previous farming season (2014 season). Households that grew crops were requested to mention different improved agriculture technologies/practices they used during the previous season. The mentioned practices included: good land preparation (first and second tilling before planting); timely planting (planting on the onset of rain season); crop rotation; line planting; proper spacing; use of improved/drought resistant seeds (hybrids); use of fertilizers/manure; use of mulching/shading; livestock vaccination and livestock deworming. The most widely adopted improved farming practice was good land preparation (78.5%), followed by timely planting (67.6%) and crop rotation (42.4%). The three least adopted farming practices were de-worming of livestock (7.2%), use of mulching/shading (11.2%) and vaccination of livestock (1.9%). Detailed information on adoption of each farming practice is presented in Appendix 2 (Table C). A count of number of practices adopted by each farmer was performed to aid measurement of percentage of households who adopted at least four improved farming practices. On average, each farming household adopted 3.1 methods. Adoption was highest in Lakes State (3.9) and least in WBG (1.9). Adoption of improved farming practices was higher among FHH (3.1) compared to MHH (3.08).

The analysis shows that only 34.4% (MHH=32.8%; FHH=35.0%) of the households had adopted at least four improved farming practices (Figure 3). Adoption of at least three improved farming practices by consortium partner areas showed Oxfam areas having the highest percentage of households adopting at least four practices (40%)¹¹, followed by World Vision areas (34.9%) and CARE (20%). The adoption of improved farming practice is very inconsistent. For example, farmers reporting planting in lines were less than half those reporting good land preparation. The project should promote consistent adoption of improved farming practices in the entire farming cycle.

¹¹ Influenced by adoption in Lakes state (48.6%)

Figure 3: Percentage of Households that Adopted at Least Three Improved Farming Practices



Source: FEED Baseline Survey Data

Indicator: Proportion of male and female households practicing improved agricultural technologies 34.4% (MHH=32.8%; FHH=35.0%)

Numerator: Number of Households that planted at least one crop in the previous season that adopted at least four improved farming practices

Denominator: Number of Households that planted at least one crop in the previous season

3.3.2 Crop Production and Productivity

Of a valid sample of 809 households, 72.6% (MHH=73.6%; FHH=69.9%) planted crops during the previous (2014) season. The household percentage breakdown who planted crops (farmer households) in the previous season were 87.0% in NBG, 78.4% in WBG, 75% in EEQ, 74.8% in Warrap, 70.6% in WEQ and 62.1% in CEQ. Analysis by consortium partner area indicated that 75% of households in Oxfam and CARE areas each and 71.5% in WV areas planted some crops in the previous planting season. The most widely grown crop was groundnuts (82.2%), followed by sorghum (60.5%), maize (52.2%), cassava (32.1%), sesame (30.9%), sweet potatoes (17.2%) and cow peas (6.4%). On average, both male and female-headed farmer households planted two crops per season, suggesting limited crop diversity and high exposure to risks. Further analysis showed that 30% of the farmers grew two crops, 24.3% grew three, 24% grew one crop and 20.8% grew at least four different crops. Table 5 presents information on household crop production and commercialization of each crop (median)¹². Overall, household crop production is low and productivity is very low. The most commercialized crop was groundnuts with 70% of harvest sold. The least commercialized was sesame and sweet potatoes. The median crop harvest and productivity are not very different from another survey done in Gogrial West, Gogrial East, Tonj North and Twic Counties in Warrap State in January 2015. The survey indicated the average sorghum production as 240kg and yield or productivity at 125.8kgs (WVSS: March 2015). However, the commercialization levels are higher for this survey. The inconsistent adoption of improved

¹² Mean production levels had large variances due to extreme values. The median is a better and reliable measure in this respect.

farming practices and limited access to extension services contribute to low crop production and productivity.

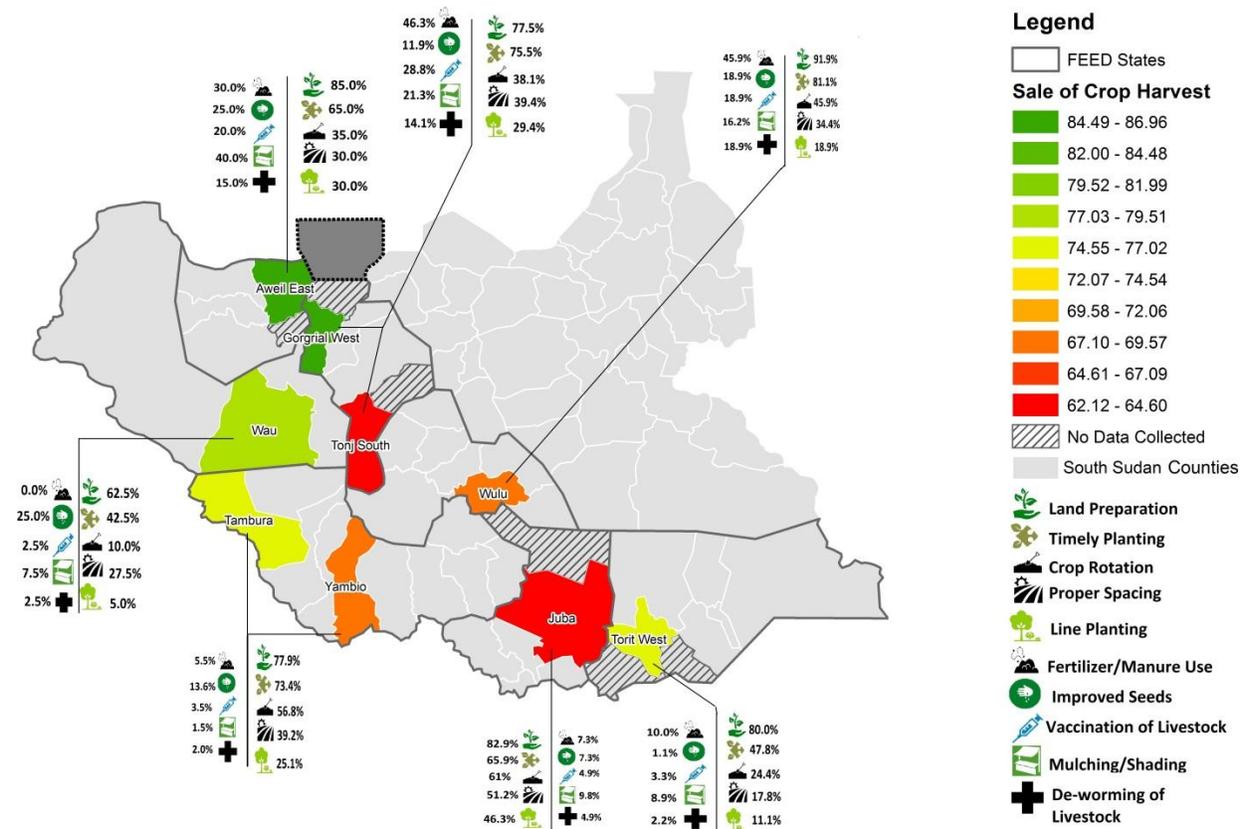
Table 5: Household Crop Production and Commercialization

Indicator/Crop	Sorghum	Ground nuts	Sesame	Maize	Cassava	Sweet Potatoes	Cowpeas
Households	326	427	148	254	143	69	25
Acreage (median)	2.00	3.000	2.50	2.0000	2.000	3.00	1.000
Harvest (50kg Bags)- median	5.0000	2.000	2.50	2.0000	0.00	3.00	1.000
Productivity (50kg bags) ¹³	2.500	0.67	1.00	1.00	0.00	1.00	1.00
Sold (Percent)	38.04	70.65	28.64	40.79	35.98	33.3	51.3

Source: FEED Baseline Survey Data

The following map illustrates the percentage of households that reported being involved in the sale of crops by county. It also depicts the adoption of farming practices that contribute to improved agricultural productivity.

FEED - South Sudan



¹³ Harvest divided by area planted or acreage

3.3.3 Access to Extension Services and Source of Inputs

Of the households who farmed crops in 2014, 25.6% accessed improved seeds. Those who accessed fertilisers and ox- ploughs were 13.6% and 13.3% respectively. Information on access to and source of inputs is indicated in Table 6. Improved seeds, fertilisers and ox ploughs were mainly procured by farmers. However, treadle -water pumps were provided by government. Government and NGOs were the main tractor providers. NGOs were also the main providers of trainings and extension services.

Analysis of extension services indicated that 31% (MHH=26.7%; FHH=42.5%) of the farmers were visited by agricultural extension workers. On average, these farmers were visited 2.48 times by agriculture extension workers compared to the standard of five visits during a farming season (for opening, planting, weeding, flowing and harvesting). Farmers in World Vision areas were visited 2.77 times compared to those of CARE (2.1 visits) and Oxfam areas (1.6 times). Farmers in WEQ were visited by extension workers most times (4.4 time) compared to their counterparts in other states. Farmers in WBG were least visited by extension workers (1.23 times). The average number of visits for CEQ, EEQ, LS, NBG and WS were 2.21, 2.1, 2.4, 1.25 and 1.43 respectively. Male headed-households received more extension visits (2.93 visits) than their female counterparts (1.72 visits). Further still, of households who were visited by extension workers, 33% were visited once, another 43.4% were visited twice or thrice while 12.6% were visited at least thrice during the farming season. From the information above, it can be deduced that access to extension services is very poor and women had better access compared to men in percentage terms. Government agricultural extension services are poorly resourced, explaining why their access by farmers is poor. In addition, NGOs worked mainly with women and this explains their better access to such services than men.

Table 6: Percentage of Households Accessing Different Farming Inputs

Input	Improved Seeds (n=136)	Treadle Pump (n=31)	Fertilizers (n=74)	Ox-plough (n=73)	Tractor (n=12)	Trainings (n=42)	Extension Services (n=24)
Recommended/certified Input dealer	19.9	22.6	21.6	16.4	8.3	9.5	12.5
Other input dealers	10.3	9.7	8.1	9.6	16.7	7.1	12.5
Government program/ projects	6.6	25.8	13.5	15.1	33.3	11.9	8.3
NGO program	9.6	16.1	9.5	9.6	33.3	45.2	33.3
Own produced varieties (Self)	32.4	16.1	32.4	45.2	8.3	11.9	25.0
Relatives, fellow farmers or associations	19.9	6.5	13.5	4.1	-	14.3	4.2
Other	1.5	3.2	1.4	-	-	-	4.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Access (n=587)	25.6%	5.6%	13.6%	13.3%	2.6%	7.7%	31.0%

Source: FEED Baseline Survey Data

3.3.4 Membership to Common Interest Groups

Findings show that 580 persons responded to the question on membership in common interest groups (CIGs). Of these respondents, 26.2% were aware while 73.8% were not aware of CIGs existing in their areas. CIGs include farmer groups/associations, cooperatives, market associations, horticultural groups, traders associations and local NGO and CBOs. Of the households whose respondents were aware of common interest groups, 89% (MHH=90.1%, FHH=87.7%) had members belonging to at least one CIG. Information on households with at least one member belonging to different CIGs is presented in Table 7. Membership to CIGs is very low if all households who farmed crops in 2014 are considered. It may point to existence of very few CIGs in the project area. The project strategy of supporting farmers to start different relevant CIGs is relevant in this respect. In this case, the project has to invest in all processes required to have fully functioning CIGs take off.

Table 7: Membership of Male and Female Members to Common Interest Groups

CIG	Male (n=427)	Female (n=160)
Farmer Group/organisation	24.4%	44.4%
Cooperatives,	10.8%	21.9%
Market associations	4.7%	8.8%
Horticultural groups	2.3%	6.9%
Traders Association	2.8%	3.8%
Local NGOs and CBOs	4.9%	11.3%

Source: FEED Baseline Survey Data

3.3.5 Access to Trainings as Member of Common Interest Groups

Generally, only 57.9% (MHH=57.7%; FHH=57.9%) of households with respondents who were aware of CIGs indicated that at least a male or female member had accessed some training. Access to the different forms of training by male and female members in the above households is presented in the table below. Overall, access to structured training is very low.

Table 8: Trainings attended by Members of Common Interest Groups

Training	Male (n=152)	Female (n=152)
Agriculture/Crop farming	42.8%	38.2%
Livestock/animal husbandry	20.4%	15.1%
Post-harvest techniques (handling and storage)	9.9%	5.3%
Business skills and savings	6.6%	4.6%
Value addition training and support	3.9%	4.6%
Sustainable natural resource management	5.9%	3.9%
Other	2.0%	2.0%

Source: FEED Baseline Survey Data

3.3.6 Existence of Farmer Field Schools and Use

Only 13.7% (FHH=13.2%; MHH=13.8%) of the 578 farmers had heard of a farmer field school (FFS). The percentage of households who had heard of FFS was highest in CARE /EEQ areas (23.9%) but lowest in Oxfam areas (5.6%). The same variable was at 13.3% for World Vision areas. EEQ had the highest value of the indicator (23.9%) and NBG had zero percent of households who had heard of FFS. Detailed information is presented in Appendix 2 (Table E). Of the household respondents who were aware of FFS, only 8.2% or 48 persons (F=10.0%; M=7.5%) were members of FFS. Of individuals who were members of FFS, 85.4% (F=93.8%; M=81.3%) had ever used these facilities to learn farming techniques. Of respondents who had ever used a FFS to learn farming techniques, 95.1% (F=100%; M=2.3%) adopted skills learnt. The different farming practices adopted are presented in Table 9. The top three practices learned were good land preparation (87.5%), timely planting (72.9%) and crop rotation/proper spacing (60.4%). On average, FFS members adopted about 5.30 farming practices (F=5.53; M=5.18).

Table 9: Farming Practices Adopted from FFS by Members

Practice	Frequency	Percent (=48)
Good Land Preparation	42	87.5%
Timely Planting	35	72.9%
Crop Rotation	29	60.4%

Proper Spacing	29	60.4%
Line Planting	26	54.2%
Inter Cropping	15	31.3%
Mulching/Shading	13	27.1%
Use Of Fertilizers/ Manure	12	25.0%
Use Of Improved Seeds (Hybrids)	11	22.9%
Vaccination of livestock;	10	20.8%
De-worming of livestock	6	12.5%

Source: FEED Baseline Survey Data

3.3.7 Knowledge and Awareness about Environment Destruction/Conservation

Approximately four in every ten households (43.5%) responded in the affirmative when asked if they had heard about environment destruction. Households mentioned the cutting down of trees as the leading cause of environmental destruction, mentioned by 38.9%, followed by charcoal burning which was mentioned by 36.7%, and poor farming methods mentioned by 26%.

Of those aware about environment degradation, 73.2% of the households mentioned planting of trees as the way to promote environment conservation, 69.5% mentioned discouraging of charcoal burning while 62.4% stated use of good farming practices as strategies for promoting environment conservation in their areas. The activities recommended by respondents to promote reduction in the destruction of the environment were: planting trees (37.3%), awareness on negative impacts (36.5%), controlling tree cutting for charcoal (15.1%), promoting good farming methods (10.6%).

Immediate Outcome 1.2 Improved incomes through increased access to financial services, market systems and information for vulnerable communities

3.4 Indicator #1 for Immediate Outcome 1.2 Percent of targeted beneficiaries who accessed financial services

3.4.1 Access to Financial Services

A total of 23 male household members (2.9%) reported to have access to a financial service from a self-selected village savings and loans groups or bank loans within the last 12 months. These were 3.4% in CARE areas, 1.7% in Oxfam areas and 3.0% in World Vision areas. A total 24 female household members (3%) reported to have accessed a financial service from a self-selected village savings and loans groups or bank loans within the last 12 months. These were 9.2% in CARE areas, 1.7% in Oxfam areas and 2.0% in World Vision areas. The financial services accessed include: savings services (21%), loan/credit services (29.8%), salary processing (10.6%), and business account services (4.3%) and money transfer services (2.1%). The distribution of household members who reported to have access a financial service from a self-selected village savings and loans groups or bank loans within the last 12 months by state is summarized in the table below.

Table 10: Household members accessing financial services by state

Gender	CEQ	EEQ	LS	NGB	WS	WBG	WEQ	Total
Male adults accessing financial services	4.6%	3.4%	3.8%	8.7%	2.4%	0.0%	2.5%	2.9%
Female adult accessing financial services	4.7%	9.2%	1.9%	8.7%	1.0%	0.0%	1.8%	3.0%

Source: FEED Baseline Survey Data

Indicator: Percentage of male and female accessing financial services male=2.9% and female=3.0%

Numerator: Households reporting to have accessed financial services

Denominator: Total number of households with a positive response on access to financial services

3.4.2 Saving by Households

Of the 35 respondents from households that were accessing financial services, 13 members equivalent to 1.6% of the sample size reported to be saving regularly. Two members were saving daily, four were saving weekly, five members were saving monthly and two were saving quarterly. Four members were saving with community savings group/VSLA/ SACCO, eight saved in personal savings/box and one person was saving with a bank. Monthly savings ranged from 10 SSP to 750 SSP, with an average monthly saving of 218.46 SSP.

3.5 Indicator #2 for Immediate Outcome 1.2 Percentage change in agricultural market sales for men and women

During the survey, respondents were asked whether they had sold any crop harvests for the previous season. The analysis revealed that out of a valid sample of 578 households, 30.6% (FHH=26.6%; MHH=32.1%) affirmed selling crop harvest. The percentage of households selling crop harvests was highest in NBG and WBG (50% each) but lowest in Warrap (16.2%) and Lakes (5.4%). Detailed information is presented in Appendix 2 (Table D). The differences in household disposal of crop harvests in markets between different states were significant ($p=0.000$). There were no significant differences between consortium partner areas on household selling crop harvests the previous season. Analysis shows that the main buyers of crop harvest were individual traders in the local market (97.2%), followed by mobile traders at home (76.8%), associations (16.9%) and formal buyers such as WFP/NGO/government (6.8%). Overall, of all households who sold crop harvest the previous season ($n=175$), 28% (FHH=23.8%; MHH=29.3%) said they got good or high prices (Table 11). Generally, the percentage of households participating in produce marketing is very low, implying that most of the crop harvests are for home consumption. The few households that sell their harvests get very low prices.

Table 11: Percentage of Household Reporting Receiving High or Low Produce Prices

Price Level	CEQ (n=20)	EEQ (n=32)	LS (n=2)	NBG (n=10)	WS (n=23)	WBG (n=20)	WEQ (n=68)	Total (n=175)
Low (No)	85.0%	31.3%	50.0%	70.0%	73.9%	95.0%	80.9%	72.0%
High (Yes)	15.0%	68.8%	50.0%	30.0%	26.1%	5.0%	19.1%	28.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: FEED Baseline Survey

Indicator: Percentage change in agricultural market sales for men and women=28% (FHH=23.8%; MHH=29.3%)

Numerator: Number of households who sold at least some crop harvest reporting receiving good or high prices

Denominator: Total number of households who sold at least some crop harvest from previous planting season.

3.6 Indicator #3 for Immediate Outcome 1.2 Percent of women and men operating viable income generating activity

3.6.1 Engagement in Viable Income Generating Activity

Across the project area, 7.3% of households had male or female members operating a profitable business as a result of training in the six month period preceding the survey. Findings on the same indicator for the different states were; 24.0% in NBG, 11.2% in EEQ, 9.4% in Lakes, 9.1% in CE, 6.0% in WS, 4.9% in WEQ and 3.9% in WBG. Male household members who reported to have initiated/run on or

off farm profitable businesses as a result of the training received from a project in the last 6 months were 5.8%. This 5.8% represented as 6.7% in CARE areas, 5.0% in Oxfam areas and 5.7% in World Vision areas. By state, households with male members running a viable income generating activity were 6.2% in CEQ, 6.7% in EEQ, 9.4% in LS, 21.7% in NGB, 5.3% in WS, 2.0% in WBG, 4.3% in WEQ.

Female household members who reported to have initiated/run on or off farm profitable businesses (fruit juice processing, poultry production, horticultural farming) as a result of the training received from a project in the last 6 months were 4.1%. These were 8.4% in CARE areas, 3.4% in Oxfam areas and 3.4% in World Vision areas. By state, households with female members running a viable income generating activity were 6.3% in CEQ, 8.4% in EEQ, 3.8% in LS, 17.4% in NGB, 2.9% in WS, 2.0% in WBG, 2.1% in WEQ.

Indicator: Percentage of male and female operating viable income generating activity Male=5.8% and Female=4.1%; average=7.3%

Numerator: Households reporting males and females operating a business/income generating activity as a result of training

Denominator: Total number of men and women who responded to question of whether they were running any on or off farm business as a result of training

3.6.2 Other Findings

a. Patterns of Earning and Average Income

Respondents who reported that one or more adults, over 18 years, in the household was earning a regular income to meet the needs of the household were 13.6%. These were 25.4% in CARE areas, 8.3% in Oxfam areas and 12.3% in World Vision areas. By state, those earning a regular income were 16.7% in CE, 25.4% in EEQ, 18.9% in LS, 39.1% in NGB, 10.2% in WS, 9.9% in WEQ and none in WBG.

The average monthly income (both male and female combined) was 508 SSP (median=308 SSP). The average monthly income for female and male-headed households was 569 SSP (median=300 SSP) and 487 SSP (median=350 SSP) respectively. While the average shows female-headed household earned higher incomes than male counterparts, in reality they are few and median income is low. This suggests that the average monthly female-headed household incomes are driven by a few female members earning higher incomes.

For those earning some regular income, the average monthly income earned by male members was 291 SSP (CI=448, Oxfam=235 and WV=232). By state, the average monthly income for males were 368 in CEQ, 448 in EEQ, 235 in LS, 120 in NGB, 211 in WS, 236 in WEQ and none in WBG. The average monthly income earned for female members was 167 SSP (CI=335, Oxfam=35 and World Vision=114). By state, the average monthly income for females were 98 in CEQ, 335 in EEQ, 35 in LS, 98 in NGB, 68 in WS, 161 in WEQ and none in WBG. The average total household income was 452 SSP (CI=783, Oxfam=271 and World Vision=339). By state, the total average monthly income for both male and females were 423 in CEQ, 783 in EEQ, 271 in LS, 217 in NGB, 279 in WS, 391 in WEQ and none in WBG.

Indicator	CEQ	EEQ	LS	NGB	WS	WEG	WBQ
Male Average Monthly Income in SSP	368	448	235	120	211	236	0
Female Average Monthly Income in SSP	98	335	35	98	68	161	0
Average Total Male and Female Monthly Income	423	783	271	217	279	391	0

b. Ownership and Sale of Domestic Animals

Respondents who reported that their household was rearing domestic animals totalled 37.4%. The percentages per organizational areas were 29.4% in CARE areas, 42.9% in Oxfam areas and 38.0% in World Vision areas.

Table 12: Household Owning Selected Domestic Animals

Indicator	CEQ	EEQ	LS	NGB	WS	WBG	WEQ	Total
HHs owning/ rearing domestic animals	40.9%	29.4%	62.3%	47.8%	57.9%	12.0%	23.4%	37.4%
HHs owning cattle	5.9%	18.5%	23.3%	100.0%	88.7%	.0%	.0%	47.0%
HHs owning goats	96.0%	64.5%	90.6%	88.9%	86.2%	66.7%	54.5%	77.5%
HHs owning sheep	17.6%	26.9%	51.6%	50.0%	68.8%	.0%	.0%	40.7%
HHs own chicken	70.0%	80.0%	83.9%	16.7%	86.1%	83.3%	78.7%	80.7%

Source: FEED Baseline Survey Data

Immediate Outcome 1.3 Improved knowledge and skills among community members and civil society to mitigate and respond to conflict and natural disasters

3.7 Indicator for Immediate Outcome 1.3 Proportion of households who employ appropriate coping strategy(s) in time of conflict, natural disasters/emergencies/other shocks.

3.7.1 Disaster Management

Households who had ever faced any disaster in the 12 months prior to the survey were 46.9% (MHH=47.7%; FHH=45.2%). By state, these were 46.0% in CEQ, 47.9% in EEQ, 30.2% in LS, 60.9% in NGB, 68.9% in WS, 15.7% in WBG and 38.0% in WEQ. The types of disasters experienced were hydro-meteorological in nature, specifically flood and drought episodes. They also faced human generated disaster in the form of conflict.

Of these who had faced disasters, 23.9% reported to have been able to employ an effective disaster-risk reduction or positive coping strategy to avoid disaster at the household level. By consortium partner, those able to employ an effective disaster-risk reduction strategy were 25.5% in CARE areas, 26.5% in Oxfam areas and 23.3% in WV areas. By state, these were 10.3% in CEQ, 25.5% in EEQ, 43.8% in LS, 71.4% in NGB, 31.9% in WS, 25.0% in WBG and 6.6% in WEQ.

Households who had heard about a disaster management committee were 12.3% of the whole sample, and only 6% reported that their community had a disaster management committee. Of the households who said their community had a disaster management committee, 83.3% (MHH=84.0%; FHH=82.6%) said the committee was functional.

Indicator: Percent of households who faced a disaster in the past 12 months and were able to employ an effective disaster-risk reduction or positive coping strategy to avoid disaster at the household level were 23.9%.

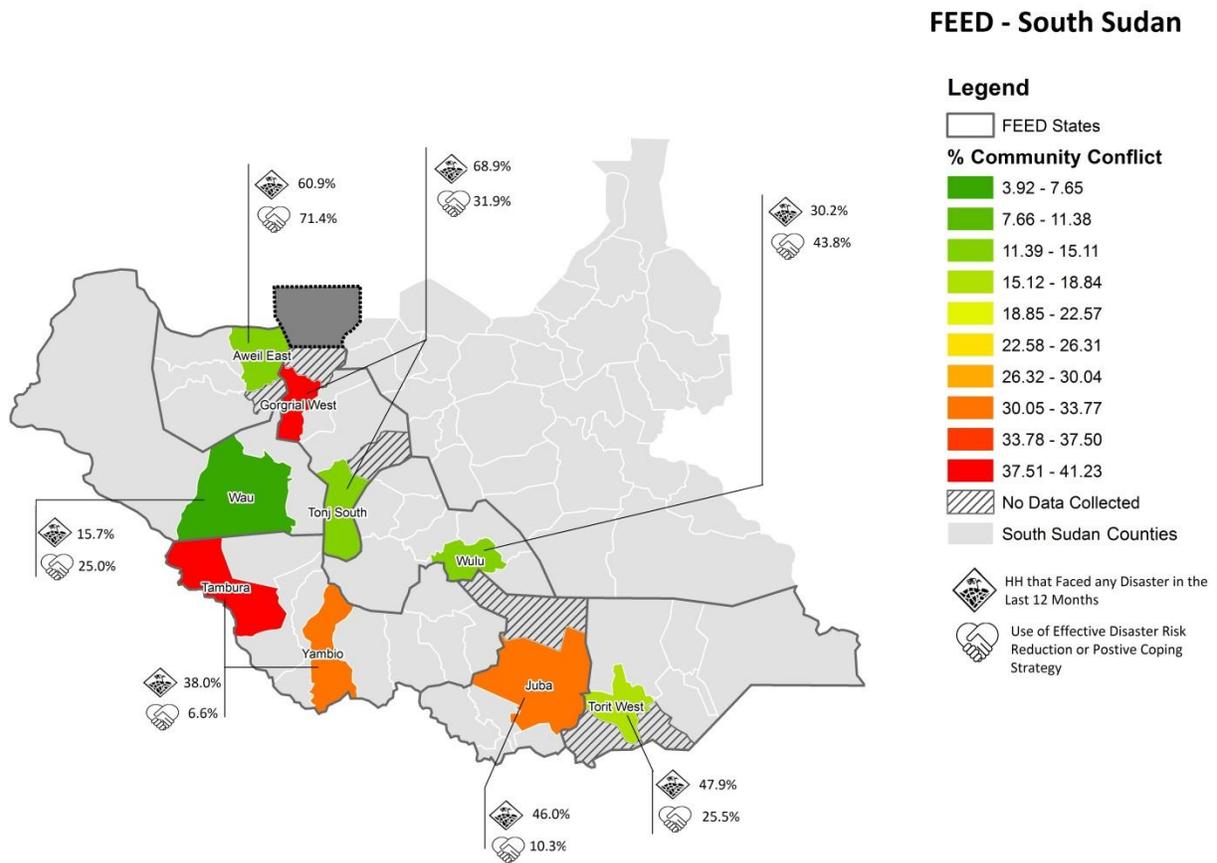
Numerator: HHs that faced a disaster and were able to employ an effective disaster-risk reduction strategy

Denominator: Household who ever faced any disaster in the past 12 months

3.7.2 Conflict Assessment and Natural Disaster Management

Households who reported to be having some conflicts within their community were 26.3% (MHH=26.9% and FHH=24.9%) and 15.1% of all the households reported to be directly affected by

above conflicts. The types of conflict within the community include: land conflicts (8.7%), water resource conflict (4.8%), grazing land/pasture conflict (2.2%), clan conflicts (1.0%), family conflicts (5.1%), and inter-tribal conflicts (2.7). Community conflicts were 31.7% in CEQ, 18.1% in EEQ, 11.3% in LS, 13.0% in NBG, 26.3% in WS, 3.9% in WBG and 36.6% in WEQ. Prevalence of conflicts was 18.1% in the CARE areas, 10.8% in the Oxfam areas and 31.4% in the World Vision areas. The table below illustrates the prevalence of community conflict by county.



3.7.3. Agriculture Disaster Management Practices

Table 13 shows the different climate change adaptation measures used by farmers. Farmers mainly used early planting as a key strategy and planting short term growth/early maturing plants. A count of number of climate change adaptation measures revealed that 16.7% of the sampled households never while 83.3% adopted at least one adaptation measure. On average, households adopted 1.8 adaptation measures (median=2). Female households adopted slightly more adaptation measures (1.86) compared to their male counterparts (1.81 measures). Households in Oxfam area adopted higher adaptation measures (2.4 measures) compared to those from WV (1.84 measures) and CARE areas (1.4 measures). Across states, the highest number of adaptation measures was reported in Lakes State (3.27 measures), followed by Warrap (2.47 measures), NBG (1.85 measures), CEQ (1.81), WBG (1.75 measures), EEQ (1.4 measures) and WEQ (1.34 measures). The average number of adaptation measures adopted is very low compared to the climate change effects in South Sudan. It is important to note that EEQ and WE households have adopted the least measures.

Table 13: Climate Change Adaptation Measures used by Farmers

Practice	Frequency	Percent (n=587)
Early planting	414	70.5%
Planting short term growth/early maturing plants	221	37.6%
Planting drought/heat resistant varieties	151	25.7%
Mulching	143	24.4%
Planting sweet potato and recession sorghum right after the flood	89	15.2%
Use of shade to protect plants	73	12.4%

Source: FEED Baseline Survey Data

3.7.4 Food Security Coping Strategies

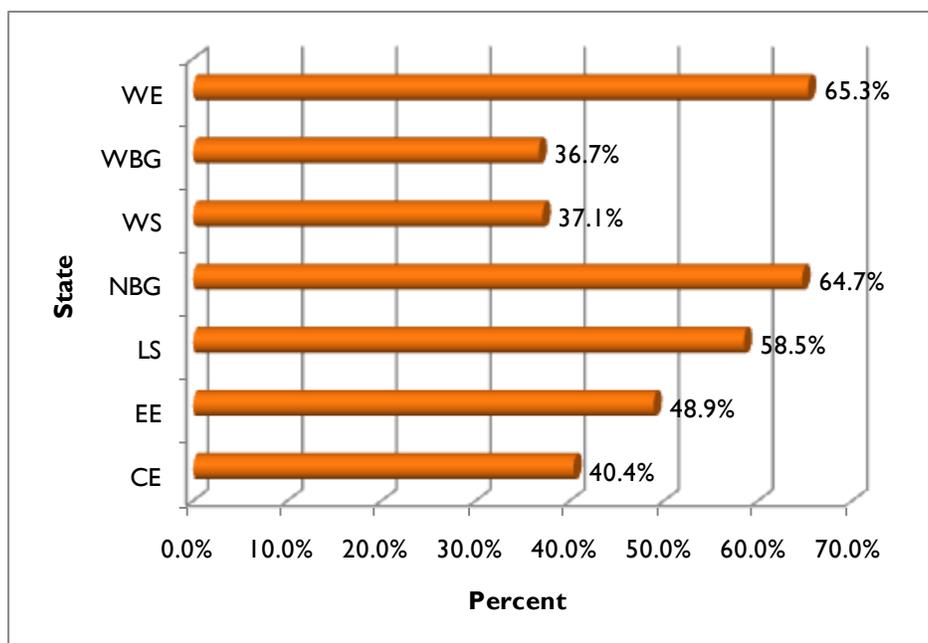
The survey generated information on different food security coping strategies used by households. Information was generated on 15 positive and negative coping strategies. Of these strategies, nine were negative and six were positive. Negative food security coping strategies compromised food consumption and household economic capacity while the positive ones would increase food consumption without diminishing their productive capacity. The positive strategies included: borrowing food or relying on help from a friend or relative; relying on less expensive or less preferred foods; purchasing food on credit, or taking a loan to purchase food; use of food from the granary or store; gathering or hunting unusual types/amounts of wild foods, and relying on casual labour for food (See Appendix 1.1, qn 2.5 for both positive and negative strategies). Findings revealed that there is wide spread use of food security coping strategies in the project area. Up to 91.1% of all sampled households used at least one positive or negative coping strategy. Those who used positive and negative food security coping strategies were 85% and 85.3% respectively (See Appendix 2, Table F on use of negative coping strategies). The analysis further reveals that of the households that were using some coping strategy, 80.7% used both negative and positive, 13.0% used only negative and 6.3% exclusively used positive food security coping strategies. On average, a household used six positive/negative coping strategies (three positive and three negative coping strategies). This would imply that households use a mix of negative and positive food coping strategies to respond to any food shortages they face.

Of the households who used at least one coping strategy, 51.2% used at least three, 38.5% used one or two and 13% used no positive food security coping strategy. Use of at least three food security coping strategies was highest in World Vision project areas (52.5%), followed by CARE (48.9%) and Oxfam (47.0%). The difference between operational areas was significant at 0.3% (Pearson Chi-square=16.311).

Furthermore, analysis by state indicated that WEQ had the highest number of households using at least three coping strategies (65.3%), and lowest in WBG/WS (36.7%/37.1%). Detailed information is presented in Figure 4. The differences between states were very significant ($p=0.000$), implying that the food security situation in the different states varies significantly. Detailed information is presented in Appendix 2 (Table A). Overall, the differences between states point to realities on the ground. WEQ produces more food compared to Warrap or WBG. Households in WEQ have access to diverse coping strategies compared to those in Warrap or WBG.

Additionally, the percentage of female-headed households (44%) using at least three positive coping strategies was lower than that of their male counterparts (54.0%). The difference was significant ($p=0.003$), suggesting female-headed households have a limited array of positive coping strategies being used.

Figure 4: Percentage of Households Using at Least Three Food Security Coping Strategies



Source: FEED Baseline Survey Data

Intermediate Outcome 2: Improved equitable and inclusive agriculture and protection policies, services and structure, particularly for women and marginalized populations

Immediate Outcome 2.1: Increased knowledge and skills of civil society to influence and participate in the planning, implementation and evaluation of relevant policies

3.8 Indicator for Immediate Outcome 2. 1 Level of awareness and participation of CSO in planning, implementation and evaluation of relevant policies

Findings show that 24.2% or 36 households of a valid sample of 149 households indicated that their community group engaged government on different issues. Issues of engagement were extension services (20 households), access to inputs (18 households) and marketing of produce (18 persons). The number of households engaging government on the above issues at state level is extremely low (not exceeding 10 households). This shows that engagement of government on agriculture service delivery is almost unheard of in the project area.

Indicator: Level of awareness and participation of CSO in planning, implementation and evaluation of relevant policies=24.2% (MHH=23.1%; FHH=26.8%)

Numerator: Number of households reporting that at least one common interest group to which they belong engaged government on different issues

Denominator: Total number of Farmer households reporting to be members of common interest groups

Immediate Outcome 2.2 Improved knowledge and skills to empower women and girls to claim their productive assets and protection rights

3.9 Indicator for Immediate Outcome 2. 2 Proportion of women and girls who are willing to report incidences of sexual violence

3.9.1 Willingness to Report Incidences of Sexual Violence

The United Nations Declaration on the Elimination of Violence against Women (1993) defines violence against women as "any act of gender-based violence that results in, or is likely to result in; physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life (UN General Assembly Resolution; 1993).

This study investigated whether household members had ever experienced any form of gender-based violence. About 32.2% had experienced acts of domestic violence and majority, at 34.8% were from World Vision areas of operation.

Women and local leaders whom we interacted with in this survey acknowledged violence against women to be common in the community but especially in the homes. In one of the FGDs conducted in Rumyo, two women showed scars on their heads as a result of violence, as we quote, "see in my head, this scar came as a result of my husband over hitting me with a stick because I had gone to the market without his permission".

According to the analysis, the incidences averaged 4.78 occurrences in the last six months. Findings also show that 45.8% of the respondents had ever heard of a community member experience gender-based violence acts in their community. Most of this is not formally reported anywhere and it is part of women's lives. Young girls who intend to get married are aware of this situation too.

The majority 77.7% (MHH=77.8%; FHH=77.5%) of the sampled respondents was willing to report and a significant 22.3% were not willing to report such incidents of domestic and child abuse practices.

Across states, 79.9% in Western Equatoria , 79.3% in Warrap, 79.2% in Lakes, 77% Eastern Equatoria, 74.5% Western Bahr el Ghazal, 71.4% in Central Equatoria and 60.9% in Northern Bahr el Ghazal were willing to report any suspected child or domestic violence incidents. The majority of those willing to report prefer taking the matter to the village elder/chief (33.1%) and to the police (23.6%). In FGDs, participants were asked why they would prefer not to report these incidences, responses included: increased occurrence of torture, risk of divorce and lack of consequence to the perpetrator.

Table 14: Willingness to report incidents of child abuse (physically or sexually)

		willingness to report such an incident of child abuse		
		No	Yes	
State	Central Equatoria	Count	18	45
		% within State	28.6%	71.4%
	Eastern Equatoria	Count	28	94
		% within State	23.0%	77.0%
	Lakes	Count	11	42
		% within State	20.8%	79.2%
	Northern Bahr el Ghazal	Count	9	14
		% within State	39.1%	60.9%
	Warrap	Count	44	169
		% within State	20.7%	79.3%
	Western Bahr el Ghazal	Count	13	38
		% within State	25.5%	74.5%
	Western Equatoria	Count	57	226
		% within State	20.1%	79.9%

Total	Count	180	628
	% within State	22.3%	77.7%

Source: FEED Baseline Survey Data

Indicator: Proportion of women and girls who are willing to report incidences of sexual violence=77.5%

Numerator: Number of female respondents participating in the survey reporting that they are willing to report an incident involving suspected girl child or women physical or sexual abuse

Denominator: Total number of female number of female respondents participating the survey reporting that they are willing to report an incident involving suspected girl child or women physical or sexual abuse

3.9.2 Trend in the Prevalence of Gender-Based Violence

Respondents were asked about the general trend in the prevalence of Gender Based Violence. Results indicated an almost equal number reporting a decrease (33.1%) and an increase (32.9%) in the general trend of violence. A cross tabulation by state indicated WEQ with a higher percentage of those reporting an increase, at 40.9% in the prevalence of violence. Warrap had 32.1% increase and WBG with 30% increase. The prevalence declined in CEQ and EEQ at 39.4% and 43.1% respectively. The majority in Lakes reported the trend as being constant at (57.1%).

3.9.3 Forms of gender-based violence experienced in the community

Results in the table below indicate that the different forms of violence women are subjected to. The majority of women are subjected to physical violence (61%), followed by psychological violence (36%), economic violence (34%), and sexual violence (30%). At state level, Central Equatoria has the highest physical violence incidents (70%), followed by Western Equatoria (68%) as indicated by Table 15. All these forms of violence negatively impact on women and girls' lives. It is important to note that most women are denied ownership of property yet they are assigned multiple roles and responsibilities at the household and community level. The main perpetrators of this violence are mainly fathers/husbands/men (66.4%), mothers/wives (47.1%), community members (34.4%) and relatives (27.7%).

Table 15: Form of gender-based violence experienced or seen happen in the community

State		Physical violence	Sexual violence	Economic violence	Psychological violence
Central Equatoria	Number	44	31	20	21
	Percentage	70%	58%	39%	42%
Eastern Equatoria	Number	61	24	26	24
	Percentage	55%	24%	26%	25%
Lakes	Number	25	13	15	15
	Percentage	47%	25%	28%	28%
Northern Bahr el Ghazal	Number	9	4	3	6
	Percentage	41%	33%	21%	46%
Warrap	Number	119	47	68	38
	Percentage	56%	23%	35%	19%
Western Bahr el Ghazal	Number	31	8	7	23
	Percentage	.6	17%	16%	49%
Western Equatoria	Number	188	96	107	136
	Percentage	68%	36%	40%	50%

Total	Number	477	223	246	263
	Percentage	61%	30%	34%	36%

Source: FEED Baseline Survey Data

3.9.4 Gender Attitudes and Perception

Under this section, respondents were asked a number of gender statements and indicate whether it is true, false or they did not know about it. Respondents were asked about gender sensitivity in their own households and community, taking into account the differences between women and men's needs, roles, responsibilities and constraints.

The majority of the respondents, 48.8% (MHH=46.3%; FHH=54.5%) said it was false to say that women have access to land in their community and 58% (MHH=56.4%; FHH=62.3%) stressed that it was also false to say that women have control over land in their community. 55.5% (MHH=57.1%; FHH=51.3%) agreed with the statement that women have control over agricultural produce and proceeds.

Concerning decision making about farming activities for their households, public speaking and policy making, 45.5% (MHH=49.2; FHH=35.7%) agreed. On development activities, 57.2% (MHH=56.6%; FHH=50.7%) agreed that both men and women are equally targeted.

When asked if boys and girls were equally valued by the community, 75.7% (M=78.4; F=73.6%) agreed while 21% didn't. Findings show that 79.1% (M=81.8%; F=76.6%) of respondents agreed that boys and girls were given equal opportunity to attend school and 83.7% ((M=86.1%; F=81.8%)) said true to boys and girls being given equal protection in families. Women and men's duty in families is well known in these community stressed by 76.1% (M=76.6; F=75.7%) who agreed with that statement. Most respondents appreciated the different gender roles in the community 67.1% (M=68.8; F=65.6%).

More MHH (62.8%) than FHH (50.5%) agreed that local leaders are aware of the different needs for women and men. Additionally, 57.6% (MHH=58.3%; FHH=56.0%) agreed with the statement that men and women are given equal opportunities to develop their skills and that women participate freely in community events represented by 53.7% (MHH=57.1%; FHH=44.6%).

According to the information collected, women and men's needs, roles and constraints are well known among communities. The perception that women shouldn't own and control land and other productive assets is very high, requiring attention to be gradually changed.

3.9.5 Access, Ownership and Control of Resources

Overall, findings indicate 57% of the respondent having ownership of any productive assets such as land, houses and livestock and 43% have no ownership of such productive assets. A cross tabulation by gender indicated more men (67.2%) than women (48.6%) having ownership over productive assets. A total of 57.5% have ownership of land, 13.1% houses, 14.8% livestock and 13.9% own other small livestock such as goats, chicken among others. In these communities women have access but have no ownership over land. Even inheritance over land is by men according to the information gathered from FGDs conducted.

The majority of women in the sampled area have no control over any productive/livelihood assets (51.5%) yet the majority (69.6% men) reported having control over such assets.

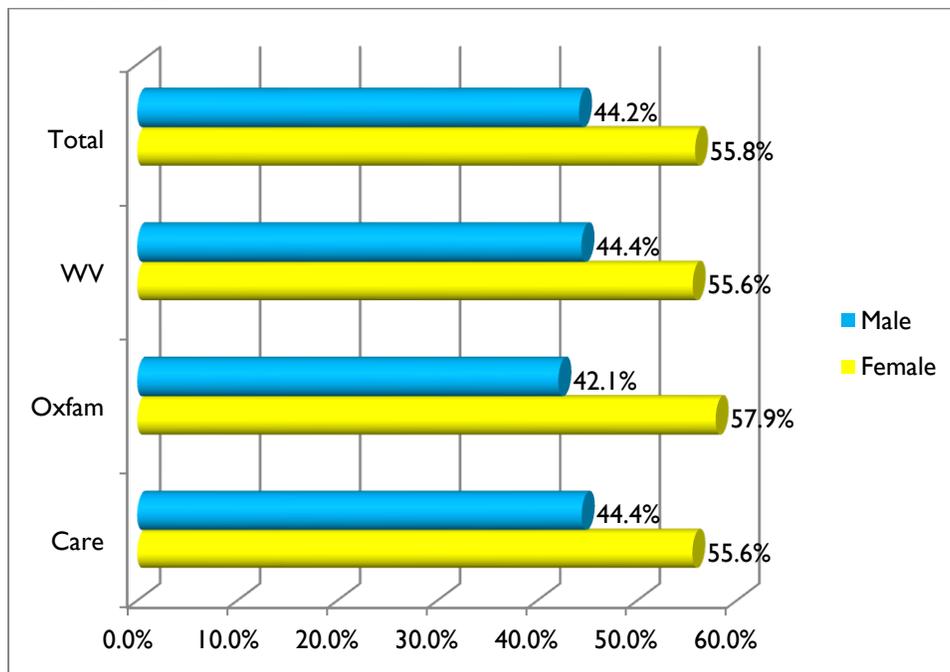
Immediate Outcome 2.3 Increased opportunities for women, men, girls and boys to reduce prevalence of Gender-based Violence in their respective countries

3.10 Indicator #1 for Immediate Outcome 2.3 Proportion of women in positions of leadership in community structures or groups.

The baseline survey sought to generate information on the proportion of women in positions of leadership in community structures or groups. Overall, 14.9% (MHH=17%; FHH=10%) of households had respondents who were in positions of leadership in community structures and groups. The difference between male and female-headed households was statistically significant at 1.3%. This implies that persons in male-headed household had higher chances of being in leadership position than those in female-headed households. Indeed 90.8% of persons in leadership positions were from male-headed household compared to 9.2% in female-headed households. Analysis by sex of respondents indicated that more female respondents (19.7%) than male respondents (11.1%) were in positions of leadership in the community structures or groups. This shows that women were more likely to be in positions of leadership in community structures than men. Examining the gender composition of women on different group or community leadership structures revealed additional information. The analysis indicated more women in leadership positions at 55.8% compared to men at 44.2% across states. Analysis across the consortium also indicated more women in leadership positions with the highest in the Oxfam area at 57.9% while World Vision and CARE each with 55.6%. This may mean that there are more women groups in the community where women find it easier to freely participate as leaders in these small organizations or structures.

However, findings from FGD further indicate that women’s participation in the mainstream local leadership and political parties is limited yet these are key avenues of decision-making on issues that directly affect their lives. One lady in an FGD said “you go and visit any of those big offices and see whether there are women leaders, I have never seen a chief who is a woman”.

Figure 5: Proportion of women in leadership position in community structures/group across the consortium



Source: FEED Baseline Survey Data

Indicator: Proportion of women in positions of leadership in community structures or groups=55.6%
Numerator: Sum of female representatives on community structures and in group leadership

Denominator: Sum of both men and women in leadership positions in community structures and groups

3.11 Indicator #2 for Immediate Outcome 2.3 Perception of men and women regarding ability of women to take a roles in decision making

Findings show that 54.5% (MHH=50.0%; MHH=59.0%) of the women participated in decision making. Across states, Northern Bahr el Ghazal had 78.6%, Eastern Equatoria 67.1% Western Bahr el Ghazal 60.9% and Lakes 64.5%. Western Equatoria, Warrap and CEQ had 54.9%, 42.2% and 50% respectively. The analysis shows that women in female-headed households were more involved in decision making than their counter parts in male-headed households. This could be due to the fact such households are led by women but it could also point to another factor of female household heads using collective decision making approach than their male counterparts.

Areas in which women participated in decision making include which crops to grow (24.8%), what and when to sale (crops and livestock) 12.6%, and how to use the proceeds from the sale of crops and livestock (10.6%).

However, information from FGDs indicated that most women's decisions are limited to their small groups where they belong; like the farmer groups, churches, and other small groups. Most of the major decisions are made by men/husbands. Men believe that after paying a lot of cows as bride price women/wives are supposed to be their property and so were wondering how a "property" could make major decisions. Men take their belief to another level by claiming that a property cannot own a property.

Women were Quoted saying "*even the money we make from our small businesses like sale of tea is given to the husband and he can decide whether to give you some or not*". Therefore, decision making by women is still a very big challenge.

Indicator: Perception of men and women regarding ability of women to take roles in decision making=54.5% (MHH=50.0%; MHH=59.0%)

Numerator: Number of female respondents in the survey who report to be participating in decision making at household

Denominator: Total number of female participants in the survey

CHAPTER 4: CONCLUSIONS, RECOMMENDATIONS AND LESSONS LEARNED

4.1 Food Security and Vulnerability

Households in the project area are classified as “struggling” meaning that many are struggling to provide for basic needs for their own members. Women are more vulnerable than men. Generally, there is wide spread food insecurity in the project area. This is characterised by widespread use of food security coping strategies, limited number of meals consumed by adults and children and low dietary diversity and sufficiency. The average number of meals and types of food consumed falls below the recommended three meals and four food types per day. Generally, female-headed households are more food insecure than their male-headed counterparts. Households in WS and WBG suffered more food insecurity than their counterparts in other states. Additionally, households in EEQ consumed more meals, but these meals were very limited in diversity.

Recommendation

The project approach of increasing household food production and consumption is appropriate. In addition, to increasing food production, emphasis should be put on promoting food diversity to guarantee access to food with required nutrients. Information on consuming balanced meals will be valuable in this regard. The project should also build household capacity to use positive coping strategies in the event that they experience food insecurity.

4.2 Agricultural Production

The adoption of improved farming technologies and practices is low. It is therefore not surprising that agricultural productivity is low. Household participation in agriculture produce as suppliers is very low. Very few farmers actually sold their produce, implying that what is produced is generally for domestic consumption. The few who venture to sell their crop harvests, experience poor pricing, partly due to selling to traders and absence of organised farmer-led marketing association. In this respect value chain studies for different crops will be appropriate to support commercialisation and increase in getting returns on sold produce.

Within project areas, awareness and existence of different common interest groups is low in communities. Local group engagement with government is almost non-existent. Very few household members are aware of the Farmer Field School methodology or of any existing schools. It is, therefore not surprising that very few households are members of these facilities. However, those who are members of Farmer Field Schools use them well. The adoption of skills learnt from Farmer Field Schools is very high, though women adopted more skills than men. This suggests that the methodology is a very good channel through which good farming practices can be promoted. Additionally, adoption of climate change mitigation measures is very low. There seems to be a tendency of farmers WEQ and EEQ to think that all is well with the climate. Such tendencies may promote practices which even contribute to climate change.

4.3 Access to Financial Service:

Access to financial services varies across all states with only 3 in every 100 adults accessing any form of financial resources. The level of saving and borrowing to finance local development is curtailed as there are limited formal financial institutions and low levels of organisations for local community based saving groups. The absence of mechanisms to mobilise local savings to finance local development is impacting the ability of households to buffer against social and economic shocks or to finance local economic activities, such as the purchase of agricultural inputs.

Recommendations

- 1) Start by sensitization of the community on financial literacy and local resource mobilization to finance local economic development initiatives. This is because the mindset of most community members is oriented towards receiving humanitarian style handouts as opposed to long term investments in local resources that add value and create local opportunities to improve household welfare.
- 2) Facilitate formation and organization of community-based saving groups within supported farmer groups that are engaged in production. Incentives schemes ought to be inbuilt within the supported groups that promote savings. For example, farmers who are beneficiaries of input distribution should be targeted to be members of a saving group. This would also promote integration of the project components.
- 3) The project should support and train more community members in enterprise development including farming as a business and micro business enterprises management. This would facilitate community members to capitalize on locally available business opportunities, as well as promoting community members to save and borrow for investment in value adding processes to improve household welfare.

4.4 Gender Equity

The level of gender-based violence is very high in the project areas and male and female respondents indicated a high willingness to report incidents. However, whether men and women actually report when such practices take place remains to be known. Preliminary results from a gender assessment indicate that there are low levels of reporting and that incidents are reported to headman, rather than health facilities. It was not confirmed that reported cases were managed well. Women's participation in leadership positions is higher than that of men's across all project areas. This could be due to the fact that most small organisation, such as farmer groups, are dominated by women. While there is good representation of women in local structures and organisations, their influence does not transcend boundaries of such organisations and structures to challenge injustice against women.

Furthermore, more men than women have ownership over productive assets. In these communities women have access but have no ownership over land. The majority of women in the sampled area have no control over any productive/livelihood assets.

Recommendations

There is therefore need for interventions to raise community awareness on violence against women as well engage them in dialogue on strategies that can be effective in eliminating the different forms of violence. National and state level governments need to enforce the existing laws against violence against women and children. In particular, the Domestic Violence Acts that criminalize violence in a domestic setting and the Penal Code provisions on defilement of girls.

Sensitize women and the entire community on women's economic rights including controlling their household income.

The consortium should continue to use existing women organisations as entry points for mobilizing and sensitizing women on their human rights, including representation and participation in leadership. Women should also be supported to use the existing organization for training on women in leadership, for exposure visits and building self-esteem.

4.5 Comments on Indicators

Information has been generated on all indicators. Indicator definitions will have to be updated to reflect the practical elements of computing variables and aiding comparison across different partners. One of the indicators is about household ability to manage shocks. However, considering that this project is on economic diversification, getting households to manage food security related shocks should be emphasized while including increasing capacity on natural resource management and adaptation. The vulnerability index indicator definitions have clear thresholds for proper measurement. The project should work towards ensuring that more households move out of destitute and struggling status or increase the percentage of households that are growing on the vulnerability index scale.

4.6 Lessons Learned from the Baseline Survey

In light of challenges faced and good practices observed, the following lessons were deduced and can inform execution future studies and may be project implementation:

a. For Improving Future Surveys

- If ODK is to be effectively used, it is better to finalise questionnaire development early, have it programmed and tested before commencing field work.
- All data collection devices ought to be set-up and tested on different functionality features before procurement and or field work. It may be appropriate for field testing of such tools takes place in the location where they are to be used.
- There is a need to remove unnecessary applications currently installed on the data collection tablets because several apps especially games and internet based attract enumerators to play with the tablet without knowing that they are reducing the battery life. Leave only apps that are relevant for data collection.
- The process of contracting enumerators should be completed before commencement of data collection. This should include timeframe within which payment is to be made.
- World Vision should review the quality of logistical and administration support to programmes for improvement purposes.
- Knowledge of dominant dialect or language and familiarity of staff with data collection areas should be key requirement in recruiting enumerators.
- In some cases, it might be better to translate difficult terminologies used in the questionnaire into dominant local language and include these into the final questionnaires in brackets. This will enhance quality of data collected.
- Within the current security context of South Sudan, nothing should be taken for granted. Authorities should be notified and formal approval or clearance of field activities cleared in advance to avoid unnecessary delays occasioned by multiple accountability and power centres.
- The GPS record location aspect of the survey should always be the second last aspect of the questionnaire before it is saved as finalised form. This will enable enumerators to conduct interviews without any lull, which might affect the rapport with the respondent.

b. For improving implementation of the project

- Although this may not apply to the baseline now, partners should avoid as much as possible to select areas which are politically insecure or those under political contestation.
- There will be need to properly introduce the project to authorities at state, county, payam, boma and village level. The introduction should be comprehensive enough to create understanding of the project and roles of different stakeholders. This will create awareness among stakeholders on the project. Having a clear understanding is a key success factor for implementing activities with minimal or without interruption.
- Subject to existing accountability mechanism between the donor and consortium partners and even between partners, it might be worth considering agreeing on prices/unit costs for certain

activities/services. Harmonising rates for major activities will promote good practice in hiring services and accountability within (just in case extreme variations are a problem).

- In our technical proposal we proposed to contribute to capacity building of consortium partner staff. However, this was very limited to very few staff who directly participated in the survey. If these assignments are to contribute to capacity building of partner staff, there will be need to strategically identify and allocate staff to such monitoring and evaluation assignments for their own capacity building. Such staff will have to be tasked to document how their participation in such exercises has contributed to enhancing their knowledge and skills of doing similar activities.

References

1. United Nations Declaration on the Elimination of Violence against Women (1993)
2. WVSS (March 2015), FEED Project Proposal and compendium of documents (logic model, indicator performance framework)
3. WVSS (March 2015) Baseline Survey for Improving Food Security and Nutrition for Vulnerable Groups in Warrap State Project
4. WVSS Country Strategy

APPENDICES

APPENDIX 1: DATA COLLECTION TOOLS

Appendix 1.1: Household Survey Questionnaire



Baseline Survey
Questionnaire_Final v

Appendix 1.2: Qualitative Data Collection Tools



Baseline Survey
Qualitative Tools.doc

APPENDIX 2: SUPPLEMENTARY INFORMATION



Appendix_Suppleme
ntary Information.do