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Mid-Term Evaluation of Feeder Roads' Improvement and Maintenance Project (FRIMP) with financial support from the Royal Netherlands Embassy in South Sudan.

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Mid-Term Evaluation Report

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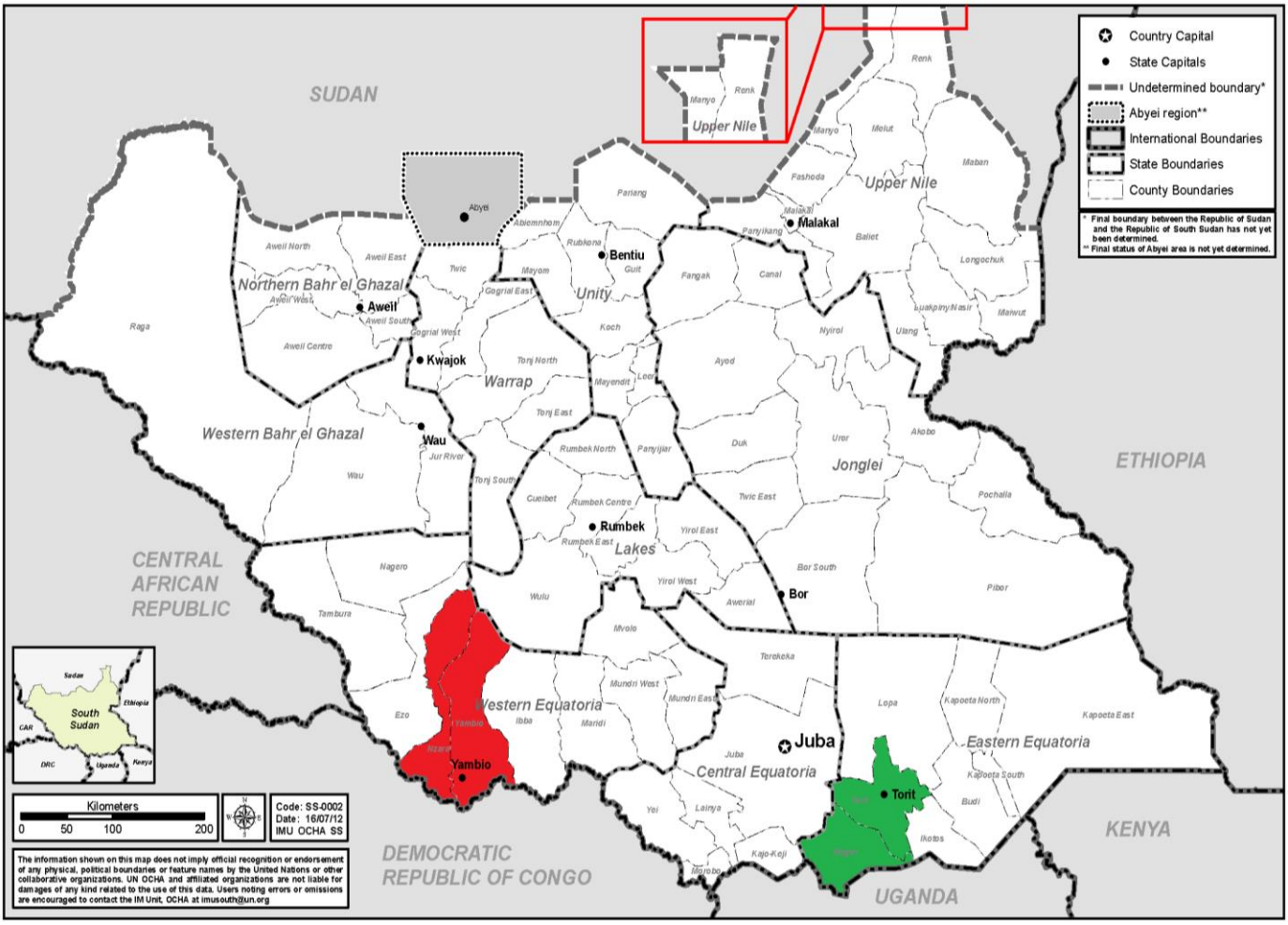
Figure 1: *Project Targeted Area*



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List of Acronyms and Abbreviations

AMD	Agribusiness Markets' Development
BLFCS	Borderline food consumption scores
CAADP	Comprehensive African Agricultural Development Project
CBOs	Community-based organisations
CO	Country Office
CSOs	Civil Society Organizations
CTG	Implementation Partner
CPA	Comprehensive Peace Agreement
DRP	Document Review Protocol [Guide]
EES	Eastern Equatoria State
EKN	Embassy of the Kingdom of the Netherlands
EPR	End of Project Review
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
FCS	Food consumption scores
FGD	Focus Group Discussions
FRP	Feeder Roads Project
FHHs	Female Headed Households
FRIMP	Feeder Road Improvement and Maintenance Project
FRSC	Feeder Road Steering Committee
GoRSS	Government of the Republic of South Sudan
GiZ	Deutsche Gesell schaftfurInternationale Zusammenarbeit
H F N S	Household food and nutrition security
HHs	Households
HHSQ	Household survey questionnaire
IDPs	Internally Displaced Persons
KIIs	Key Informants' Interviews
LGs	Local Governments
LR	Literature Review
MAC	Main Aggregate Centers
MHHs	Male Headed Household
M&E	Monitoring and Evaluation
MoAFS	Ministry of Agriculture and Food Security of South Sudan
MTE	Mid-Term Evaluation
NZLRS/SLRN	Nzara-Li Rangu-Saura or Saura-Li Rangu-Nzara feeder road
NGO	Non-Governmental Organization
OECD	Organizations of European Commission on Development
PDRT	Project document review template
PFCS	Poor food consumption scores
PO	Participant Observations
SO	Special Operations
SPLA	Sudan People's Liberation Army

SPLA/M-IO	Sudan People's Liberation Army/Movement – In Opposition
SPLM	Sudan People's Liberation Movement
SS	South Sudan
ToC	Theories of Change
ToR	Terms of Reference
TM/MT	Torit-Magwi or Magwi-Torit section
UN	United Nations
UNHCR	United Nations' High Commissioner for Refugees
UNDP	United Nations' Development Program
WES	Western Equatoria State
WFP	World Food Program

Executive Summary

Mid-term evaluation process

1. The Mid-term evaluation [MTE] of the Feeder Road Improvement and Maintenance Project [FRIMP] was commissioned in June 2021 by WFP's Country Office in South Sudan[1]. This is the second year of the FRIMP's implementation. The study began in late May 2021 with an Inception Phase, which elaborated the study methodology, developed a detailed research tools and, provided clear roadmap for the study. Due to COVID- 19 pandemic, data collection commenced on 24th June 2021. WFP provided administrative and human resource support for the field work. FRIMP was implemented in both Western and Eastern Equatoria States [W&EES]. Field work took 28 days, from 24th June to 6th August 2021 covering both the 28.06 km Nzara-Li Rangu-Saura [NLRS] section and the 48 km Torit-Magwi [TM] section in Western and Eastern Equatoria States respectively. The field work was followed by a rather protracted period of data analysis[2] and then later, of report writing. There was a lapse of 13 days after the completion of WES study caused by insecurity around Torit. Through these engaging processes, key success factors, challenges and lessons learned have been identified and documented. The MTE process was led virtually by the independent International Consultant and WFP South Sudan Country office through the Monitoring and Evaluation (M&E) Unit for provided all the administrative and technical support provided.

Background to the project

2. FRIMP is a 77.0 km feeder road Project designed and implemented by the WFP, South Sudan Country office. It was established through an Agreement with the Embassy of the Kingdom of the Netherlands [EKN] based in South Sudan. The Agreement was signed on 18th November 2018 with WFP as the implementer. FRIMP was designed by WFP as a four-year project from 2019 to 2023[3]. FRIMP aims to contribute towards improved household food security for an estimated 6,773 households[4], which corresponds to a population estimate of 47,411, located in 13 Bomas of Eastern and Western Equatoria. However, the Project's outreach covers 4 Counties with an estimate of 99,528 households (, the majority are farming households. This is equivalent to a population estimated as 696,696. A total population of 413,948 (54.5%) of the population are served by the Torit-Magwi section while an estimate of 282,749 people are served by the 28.06 km stretch - the Nzara-Li Rangu-Saura section. With the completion of the 77 km of a climate resilience feeder road, road users served by the feeder roads would easily be reached by service providers and be able to easily access local markets for both agricultural produce and inputs.

3. The scope of the Project is to rehabilitate and maintain 28.06 km of feeder roads, connecting Nzara-Li Rangu-Saura in Western Equatoria and another 48 km, connecting Torit and Magwi in the Eastern Equatoria State. For the first section, there are two sub-sections: Nzara-Li Rangu [13.2 km] and Saura-Li Rangu [14.8 km]. The Nzara-Li Rangu-Saura [NLRS] section was completed as planned, within a period of 12 months. The second section is a trunk road (49 km long), linking Magwi and Torit in the Eastern Equatoria. The entire scope of the road work, including maintenance for the second

[1] The study was commissioned by the donor and the Country Office [the Engineering Department and the M&E Units of the WFP South Sudan]

[2] There were delays in the data analysis caused by absence of technical staff in the M&E Unit.

[3] FRIMP Design documents

[4] At an estimated number of 7 persons per household, this corresponds an estimated population of 47,411

section, was completed within 20 months of the planned 24 months. By the time the MTE report was being written (September 2021), the entire scope of 77 km of road was completed. The road serves directly an estimated 6,773 (47,411) households located in 13 Bomas along the two sections of the feeder roads. However, the overall outreach of the 77 km feeder roads is 102,566 households (717,962), covering the 4 Counties in Eastern and Western Equatoria. The MTE was rescheduled from the original planned date of December 2020 to June 2021. COVID-19 pandemic coupled with subsequent lockdowns that followed were the two main limitations for the delays.

Purpose

4. The overall objective of the MTE is to produce practical and meaningful feedback on the implementation process and outcomes by:

1) providing guidance on the remaining period of implementation.
2) ensuring that data requirements for the end of project are obtainable.
3) providing institutional accountability and reporting requirements.
4) assessing the project performance using the Development Assistance Committee of the Organization for Economic Co-operation and Development (DAC/OECD) evaluation criteria of relevance, effectiveness, efficiency, and sustainability. Project performance assessment using outputs, outcomes and to some extent the effects of the Project[5] is included. Annex 5b. provides the performance measures during the baseline and the mid-term evaluation.

Relevance

5. The goal of the Project is to improve household food security by providing all-weather feeder roads. The construction of all-weather roads has been successful. From the assessment, the Project has successfully improved time of travel along the upgraded sections of the road. it has also reduced transport fares for both goods and passengers, reduced the number of road accidents normally attributed to poor road. Generally, the Project is fully aligned to the needs of South Sudanese and the government. Access to agricultural markets has improved significantly compared to the baseline benchmark. Access to social services has also improved because service providers can now speedily access the rural area and make several trips, which in the past was not possible. Gender mainstreaming was also implemented through(i) employment in the road maintenance, which highly favored female and youth, (ii) implementing gender sensitive/ responsive approaches in relation to all activities, which are physical activities. By targeting the Equatoria region, the Project sought to address one of the most pressing concerns of the greenbelt as an endowed area for agriculture. In a nutshell, the relevance of the design is rated as satisfactory (rating 5).[6]

Effectiveness

Project effectiveness in output delivery

6. Effectiveness in output and outcome delivery was examined against the Project's logical framework. Generally, the Project was effective in delivering the planned outputs. Noticeably, more kms of road was constructed than planned. In total, 77 km, [49 km instead of 48 kms along Torit-Magwi and 28 km instead of 26 km along the NLRS] were rehabilitated. In addition, 92 kms instead of 76 kms of the roads have been maintained through labour-based approach. This is 16 kms more than what was originally envisioned. The roads are of higher quality and standard. A total of 50 culverts of

[5] Refer to the specific objectives of the MTE in the ToR at Annex 1

[6] Annex 8 provides the details

various sizes and strengths were used. Traffic counts for both passengers and goods' vehicles have increased. For instance, in average, 48 vehicles and 23 boda boda bikes are now estimated to travel daily along the Magwi-Torit section. The Project employed male and female casual labourers in the camps, increasing employment opportunities for the communities. However, due to the nature of work available, the Project employed more male than female casual workers in the camps working on road construction. 20% (50) were female casual labourers along Torit-Magwi, and 15% (45) were female casual labourers along the NLRS.

Project effectiveness for outcomes and impacts

7. **Outcome** - the effectiveness of the Project in outcome delivery is determined by the extent to which the feeder roads have so far transformed the daily livelihoods of the community. Five indicators were used to report on the observed trends in these indicators. Generally, there is improvement in the trends, suggesting that the Project is effective, considering the contribution of other variables and establishment of all weather and climate resilience feeder roads. Results are based on observed links or relationships between improved feeder roads and five indicators selected to assess improvements realized. The indictors used are (a) changes observed in total land area used, (b) changes observed in service provision to smallholder farmers (focusing on provision of agro-services and tools), (c) extent to which the Project created employment for the community, (d) change in travel times, and (e) changes in the costs of travel.

8. The conclusion is that the feeder roads have been effective in improving access, the latter defined as benefits accrual from the roads upgrade to the different road users. The benefits include shorter travel time for passengers and goods between the different locations along the roads, reduced cost of travel along the roads for either boda boda motorcycles and/or by vehicles. There are more visits to farmers per given time by service providers when compared to the baseline data. More benefits arising from the completed roads are increased areas of lands brought under cultivation and permanent settlements since the project started one year ago. Due to improved road, more volume of agricultural produce is transported by farmers to different rural markets or aggregate centres than before. This development has improved farmers' chances of earning higher income for their produces compared to when they are bought from the farmers' gates. Six local road maintenance groups [LRMGs] were formed to work along the Torit Magwi feeder roads for 6 months. 85% of the workers were female. Along the NLRS section, only 1 group was formed and 41% of the members were female. While increased income was difficult to determine, travel time to different locations including markets along the upgraded roads were substantially reduced and this is further discussed in the report, with substantiated evidence.

9. **Effectiveness of the Project's effects.** The effectiveness of the Project in meeting the set goal of improved household food security is still illusive to assess after only one year of effective implementation. Nevertheless, the effectiveness was evaluated by reporting on observed changes in the trends of three selected indicators, namely: (a) reduction in the percentage of female and male-headed households with poor food consumption scores [PFCS] and borderline consumption scores [BLFCS]. These households constituted 67% of the sampled households found along the 77 km feeder

roads during the baseline. [7] (b). the second indicator is the reduction in the percent of male and female heads of households spending more than 65% of their monthly budget on food. In using this measure, we seek to determine the changing trends in the number of both female and male headed households that are categorized as high food expenditure group. From the baseline, overall, 58% of the entire households were categorized as high food expenditure group. 72.1% [64.6% FHHs and 79.6% MHHs] of them live along the Torit-Magwi section of the road and 44% [38% MHHs and 50 FHHs] of the households along the NLRS section. (c) the third indicator is the percent reduction in the consumption based coping strategy index [rCSI] [8]for both female and male headed households along the feeder roads. rCSI is used in this case, to monitor the effect of the feeder roads on household's consumption-based coping strategies.

10. By using both quantitative and qualitative tools, the results reveal some effects of the Project on the households. Arguably, the entire effects may not be attributed to the Project. The following observations were made:

- Regarding percent reduction in the number of households with poor and borderline food consumption, the findings reveal an overall and significant decrease of over 11.7% in the number of households living along the Magwi-Torit Road. Majority are the FHHs with a reduction from 81.4% to 69.4% between baseline and Mid-Term. This implies that, more households living along the Torit-Magwi feeder road have graduated from the poor and borderline consumption groups to the acceptable food consumption groups, with FHHs again taking a higher leap. The explanation for this change was not picked up during the KIIs and FGDs. The situation along the NLRS section was, however, different as further discussed in the main report. Notably, within a year of Project implementation, most households that were in the acceptable food consumption group at baseline and along the NLRS, dropped into the borderline consumption groups or further below.
- Regarding reduction in household expenditures on food, the study reveals that there was an overall increase in the number of households spending more than 65% of their budget on food items. Along the NLRS section, there was an overall increase in the percent of households with high food expenditure from 44% to 74.6%, between baseline and Mid-term representing 20% increase. Households headed by males have registered higher increase (40%) over that observed during the baseline. This is compared to 21% increase in the FHHs. Along the Torit-Magwi section, the increase was slightly lower reported at 5.8% overall with more households headed by males (9.3%) than households headed by females (2.1%).
- Results on rCSI for households along Torit-MAGWI section shows an increase from 13 to 16 between baselines and MTE, implying a worsening situation. Comparison by sex of households shows a worsening situation for households headed by females while for households headed by males remained the same. Households along NLRS section reported a reduction from 13 to 6 between baseline and MTE, implying an improved food security situation. Both male and female headed households had a similar trend.

11. Overall, the effectiveness for output and outcome are rated satisfactory. The effectiveness for effects [impact] is still moderate and perhaps too early to stress. However, there appears to be some impressive change along the Torit-Magwi section of the road with regards to reduction in the

[7] The Food Consumption Scores [FCS] represents household dietary diversity and nutrient intake. Characteristically, the PFCS is 0-28 while for the BLFCS is 28.5 to 42 score. The scores are determined by calculating the frequencies of consumption of different food groups consumed by the households during 7 days before the survey.

[8] rCSI, measures households' behavioural change in strategies used when they cannot access enough food or when they foresee a decrease in food security.

number households with poor food consumption. This will require some additional understanding from other sources.

Efficiency

12. EKN committed 8 million Euros for the Project. The construction of the 77 km feeder roads has been completed one year before the project completion time. Even with the COVID-19 surge, work on the construction continued uninterrupted. An assessment of the efficiency of the infrastructure considers the implementation efficiency in terms of unit costs for road construction, as well as the quality of the infrastructure. The unit cost would include the direct operational cost per kilometer. The average unit cost for the Project is US$ 73,255.14, which is below the usual South Sudan average unit cost. The report compares this to earlier costs in South Sudan and in Africa. The conclusion is that WFP has maintained a value for money relative to other actors in South Sudan. Unit costs vary with the landscapes and the availability of construction material, especially gravel. The rating of efficiency is considered satisfactory.

Sustainability

13. There are challenges in ensuring sustainability. Road maintenance has been a challenge in South Sudan. While it provides opportunity for rural employment, there is no commitment from both government and donors on how best road maintenance can be addressed. Travelers and other road users have demonstrated their willingness to contribute towards the maintenance. They have been paying youth who volunteer to fix potholes on roads. The population also gave away their farmland and valuable fruit trees for road construction. The challenge, however, has been at State and Local Government level management of O&M and prioritization of the road work. These issues have been discussed extensively in the report. The rating for sustainability is unsatisfactory (rating of 1).

Conclusions and Recommendations

14. The Project is successful in improving access and saving lives. Most indicators for progress have been rated satisfactory except on sustainability. WFP continued to demonstrate good technical skills and outreach in the sector. The unit cost per km and the strengthening of internal support to constructors have yielded good dividends.

15. Feeder Road maintenance is critical for its sustainability. Local communities are prepared to work and maintain the roads. This would be an expansion of rural employment opportunities for the youth, a creative venture that many partners are missing to grab. Since there is good appetite at local level, Government and its partners need to rethink about what needs to be done differently from what they have been bounded to. The viability of community-based approach as described In Appendix 12 and in the report, is the preferred option for South Sudan, going forward.

16. Monitoring of feeder roads in fragile situations need to be broadened beyond the visible and well-prepared outputs to outcome relationship. Rather, the systems should pay much attention to the processes of social change to report on some of the most impressive impacts of local interventions. In the case of the feeder roads, the interaction between the outsiders [the constructors] and the communities resulted in many inspiring social changes that do not necessarily relate to the outputs and planned outcomes of the Project.

18. Future interventions should attempt to understand and address the political economy of rural South Sudan. Trunk roads are as much in dire need for rehabilitation and there is sometimes a

problem talking about feeder roads. The design of feeder roads, need to bring on board the users' preferences, which from the Project, are tied to how the road can be a stimulant for growth. Having good feeder roads and low agricultural production because of poor support to the smallholder agriculture, is one example of such design errors. WFP has been able to demonstrate these possibilities by anchoring its feeder roads projects with other additional programs. This integration taps into existing programs, local knowledge, and culture to the extent possible and with clear success to be registered.

1. Introduction

1. This is a Mid-Term Evaluation [MTE] report for the Feeder Road Improvement and Maintenance Project [FRIMP]. FRIMP is a 77.0 km feeder road Project designed in 2018/19 by the WFP in South Sudan, to promote household food security through improved access to local markets. The road will directly serve 10 Payams with current estimated population of 47,397 or 6,773 households. As indicated in Table 2 below, 4 of the Payams are in Yambio and Nzara counties, where the 28.06 km Nzara-Li Rangu- Saura feeder road in Western Equatoria, and the other 6 Payams in Magwi and Torit counties in Eastern Equatoria, where the 48 km of Torit-Magwi section of the road is constructed[9]. Indirectly, the Project is envisioned to benefit an estimated population of 696,696 or 40,939 households currently registered in the 4 Counties where the roads are located.

2. FRIMP was established by an Agreement between the Embassy of the Kingdom of the Netherlands [EKN] in South Sudan and the World Food Program [WFP] South Sudan Country Office in 2018. It was designed as a four-year project, 2019 to 2023[10]. WFP's Country Office (CO) in South Sudan commissioned this MTE during the second year [2020] of implementation. However, this was delayed to June 2021 due to COVID-19 and the lockdown in the country. Fieldwork in South Sudan was entirely carried with support by WFP's M&E Unit[11]. The International Consultant provided technical support virtually from Uganda[12].

1.1. Overview of the Project

3. **Purpose.** The overall purpose of the Mid-Term Evaluation [MTE] was to provide an Opportunity for improvement during the final phase of the project, planned to close by end of 2023. Although the mid-term evaluation results were expected to provide guidance on the remaining period of implementation, it is not possible since most of the project activities except for the maintenance of the Magwi-Torit section of the feeder roads, were completed or about to be completed before the end of the MTE. Nevertheless, the MTE looked at future data needs and availability for the end of the project evaluation, which will be after 2023. The MTE also gave opportunity for WFP to review the current log frame [see Annex 5] with the view of ensuring that data requirements for the end of the project evaluation are obtainable. While the MTE aims to satisfy institutional accountability and reporting requirements of both the financier and the implementer, its primary intention however, is to assess the relevance and the performance (based on the evaluation criteria using output and outcome level results) of the Project[13].

4. **The scope of the review**. The Map in Figure 1, on page (i) shows the geographical location of the Project in Eastern and Western Equatoria. The geographical scope of the MTE was limited to a 5 km radius along the 77 km feeder roads. The satellite images of the research sections of the roads are provided at Annex 3. Table 1 summarizes population and

[9] The population numbers reached by the mid-term was not estimated because it was not part of the questionnaire. In addition, because of the population dynamics, the actual numbers of households reached by the feeder roads are difficult to estimate. Road users also travel from various part of South Sudan and other localities outside the county.

[10] Refer to the FRIMP Design documents

[11] Michael Olweny and Mikaya Ali were the two staff from M&E Unit of the WFP. The two also participated in the baseline study of the FRIMP in 2020.

[12] Dr. John JaraMogi Oloya was the consultant who led the baseline study of FRIMP in 2020. He was able to virtually support field work and later, produce this report from Uganda.

[13] Refer to the specific objectives of the MTE in the ToR at Annex 1

administrative coverage of the two feeder roads project. In total, the two-feeder road sections pass through thirteen Payams in the two areas, which are areas with mixed livelihood domains although potentially rich in agriculture.

5. The scope of the MTE has slightly changed because the timeline for the study was moved from the original date of December 2020 to June 2021. The reason for the change of the timeline was the surge in the COVID 19 pandemic. Government preventive measures included closure of international borders and restricting internal movement within the country. However, road construction work continued uninterrupted, and the road construction works covering the entire 77 km stretch and the related maintenance of the Nzara-Li Rangu-Saura section were all completed. The only exception was the road maintenance of the Magwi-Torit feeder section, which the MTE team reviewed. Table 1 below shows the original framework and the actual dates of completion of the roadwork. Accordingly, the scope of work for the 28 km NLRS was completed with 12 months as planned. The completion of the 48 km TM took 20 months out of the planned 24 months. Thus, the focus of the MTE after this realization, is restricted to generating lessons from what had been completed and assess sustainability.

Table 1 Project coverage

Planned Implementation	Distance in Km	Planned Timeline		Actual Timeline		# of Households
		Start	End	Start	End	
Saura-Li Rangu	13.26	May 2019	May 2020	May 2019	May 2020	44,872
Nzara –Li Rangu	14.80	Aug. 2019	July 2020	Aug. 2019	July 2020	
Torit-Magwi	48.00	Jan. 2020	Dec.2021	Jan.2020	Sept. 2021	57,694
Total Kms	*76.06*					102,566

Source: Project Reports, 2020

6. This Project aims at contributing towards improved household [HHs] food security. Households' food security status is determined by three indicators, namely: (**a) Food Consumption Scores [FCS]; (b) Per cent of household spending >65% of monthly budget on food items**, and lastly, (**c) households' livelihood coping strategies [rCSI]**. All these indicators measure change in trends from baseline. These three indicators are good proxies to report on and/or measure food access and availability through households' own production and market access.

7. A Theory of Change (ToC) for the feeder road activities in Annex 4 was developed during the baseline study. The Project logical framework in Annex 5 is being reviewed again during this MTE to allow trend analysis as a means of assessing project performance. The logical framework will be approved by both the donor and WFP.

8. The objective of the Project is to upgrade 76.06 km of the two feeder roads to full all-weather and climate resilient feeder roads and promote market access for an estimated 6,771 farming households living along the roads. The project, therefore, is aligned to WFP Strategic Outcome (SO) 3: *food-insecure smallholders and communities in non-conflict zones have enhanced livelihoods and resilience to seasonal climate shocks throughout the year*.

Table 5 shows the key activities and outputs of the project. Notably, while WFP was mandated to upgrade the said feeder roads, other important activities, like direct support to farmers, were presumed in the design to be provided by the other actors. These other activities include: the provision of appropriate agro-services and technologies, training of farmers, etc.

9. The Embassy of the Kingdom of the Netherlands in South Sudan, the Government of South Sudan at national and state levels through the Ministry of Roads and Bridges are the principal partners. Multilateral partner agencies supporting livelihoods and rural development that include the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP) and NGOs, like CORDAID, World Vision, Star Trust Organizations, are some of the many partners that are active in the areas and are benefiting from the upgraded roads.

10. Findings from this evaluation extends to other organizations working within the same Geographical areas/coverage. These include and not limited to NGOs, government departments and line ministries, Local Governments [LGs}, traders, smallholders, and communities – who are the categorized as users of the roads.

1.2. Context

11. The baseline study for the Project was carried out from March to June 2020. The result shows that local food markets[14] and households' own food production are the two major sources of food. 76% of the total households' food needs are provided by these two sources[15]. The remaining 24% comes from charcoal burning and beer brewing, to supplement sources of households' income. Understandably, households along the two feeder roads prioritized improved roads and the provision of agricultural inputs, technologies, and knowledge as their core needs. When road construction began, the rate at which agricultural support was provided to households did not respond in tandem with local prioritization[16].

12. However, Household Food and Nutrition Security [HFNS] in South Sudan and the entire livelihood systems are historically under severe attack. Since the 1950s, changes in household livelihood systems have been closely linked to the drastic and rather violent confrontations including climate change, civil wars, inter and intra-ethnic clashes[17]. When the Comprehensive Peace Agreement [CPA] was signed in 2005, South Sudan continued in war, some with the neighboring Sudan[18]. These wars have affected agricultural related livelihoods. Consequently, in February 2017, the cumulative effects of these wars led to government declaring a national famine. Man-made disasters like wars and nature, all have combined and triggered migrations, displacements, creating artificial inaccessibility to some of the most productive areas of the country. Arguably, insecurity has cordoned off prospects for self-sufficiency in food, especially through own production. Furthermore, the transport system in South Sudan is also characterized by dilapidated transport infrastructure, high transport costs in and out of the country, little or no access to markets and services and frequently little contact with the State. Road densities are among the lowest in Africa. Out of approx. 12,642

[14] According to baseline study, 29.7% of the male headed HH and 33.5% of female headed HHs depend on markets for food security.
[15] According to baseline study, 44.4% male headed HHs and 44.3% of female headed HHs produce their own food
[16] See FRIMP Baseline Study Report, 2020:20-23
[17] See studies by Tana Copenhagen commissioned by the East Africa Research Fund and completed in March 2021
[18] See World Bank Report, 2014

km of roads [of various types, including trunk and feeder roads] in South Sudan, only around 200 km or 1.6% are paved[19]. Less than a third of the vital feeder roads in the Eastern and Western Equatoria States are in good condition.

13. FRIMP has contributed 77 kms to the feeder roads in good condition with murram wearing course. Most of the feeder roads in South Sudan are gravel or earth roads and are in very bad condition - with no current maintenance program. Hence, during the rainy reason, which normally lasts up to half a year, most unpaved roads are impassable. Market access, based on this fact, is seasonal and yet it supplies 44% of food needs for most of the target population from the project area[20]. Undoubtedly, FRIMP was carefully designed to offset this bottleneck - as part of a wider and multi-stakeholder Agribusiness Markets' Development [AMD] intervention for the Equatoria Region. Some of the interventions within the region including the revitalization of smallholder agriculture production and productivity; the enhancement of private sector-driven agricultural input supplies; the improvement and provision of agricultural financial and advisory services; the strengthening of farmer organizations, and the establishment of rural agricultural market infrastructural development among others, are at various levels implemented by other actors.

14. In addition to the feeder road Project, WFP is also supporting the establishment of several Rural and Main Aggregation Centres [RACs and MACs] in Western Equatoria as innovations for agricultural markets. These RACs and MACs are currently run by local NGOs. In WES so far, 300 smallholder farmers are organized in cooperatives and are selling cereals to RACs and MACs. The long-term plan, however, is to have RACs and MACs governed by farmer organizations and/or private sector actors. To this end, FRIMP's core purpose is to provide the physical link to both the beneficiaries and the service providers

15. When FRIMP's rehabilitation meets the designed standard, it would bring close to 6,771 households to an all-weather road. The poor quality of the road network has been a great hindrance to trade and rural development. As most roads are not accessible by motor vehicle, the baseline study confirmed that over 95% of farmers rely on walking to the markets and to some extent, use other intermediate means of transport to bring their products to markets. Due to low outputs from the fields, most produce tends to be self-consumed instead of being sold. Poor connectivity in South Sudan also results in high prices for agriculture inputs, further constraining smallholder productivity. In this context, the GRoSS is engaged in an ambitious rural road improvement program, financed by several donor agencies including USAID, EU, the Netherlands, and the World Bank.

1.3. Methodology and Limitations

1.3.1. Methodology

16. The MTE implementation is guided by the ToR (Annex 1). Two sources of data – primary and secondary were used. Primary data collection used both the qualitative and quantitative data collection methods. The quantitative method was mainly through household survey while the qualitative component made use of the Key Informant Interviews (KIIs) and Focus Group Discussions (FGD). The Inception phase that provided all the details of

[19] KII with engineering department of WFP
[20] Refer to the baseline study [WFP, 2020:24 paragraph 66]

survey approaches and planning was completed in May 2021. However, data collection delayed due to security challenges in project areas and only began towards end of June 2021. In addition, data collection was managed remotely by the international consultant due to the COVID-19 pandemic. WFP M&E Unit provided all the administrative support with technical guidance from the consultant. In particularly, the team that supported with the Baseline Study conducted between March May in 2020, spearheaded the data collection phase with remote technical support from the consultant.

Sampling methods

17. **Quantitative methods:** Under the quantitative method, the household forms the unit of analysis[21] for the MTE household survey. Identification of sample households used individuals as entry point apart from directly sampling households in communities along the road. The survey targeted road users and households living within the 5km radius of the 77.06km feeder road. A multi-stage cluster sampling method utilizing both probability and non-probability sampling procedures, were used at the different cluster levels**.** Building on the baseline survey sampling methods, the MTE used counties, Payams, Bomas, villages and households as different cluster levels. Overall, the MTE was conducted in the same clusters used at baseline except at Village and household level where random and purposive approach was used. Payam[22] level was included to represent the different key livelihood systems - non-agricultural and agricultural and population diversities[23]. The purposive selection of households took into consideration livelihoods, sex of household head as well as accessibility to the households by the survey data collection team.

18. **Household Sample size:** A minimum sample size was calculated using a statistical formula, details provided in Annex 6. Overall, a household sample size of 422 households was determined comprising of 251 female-headed households (FHHs) and 186 male-headed households [MHHs]. The 422 households were sampled from 13 Bomas selected from the 4 Counties of E&WES shown in Table 2. This coverage represents a range of livelihood activities, including petty traders, salary earners - whether public and/or private, transporters like boda-boda and households who are dependent on petty jobs for their livelihoods. Most respondents, however, were farming households. The scope of the survey was limited to HHs living in areas located within the 5km radius along the upgraded feeder roads. The satellite images of the research area are presented in Annex 3.

[21] To capture household level results from different road users, like traders, transporters and pedestrians, individuals were sampled and used as entry points to the required household size.

[22] The Payams identified in WES included Nzara, Saure, Yambio, Li Rangu and Nambia. Due to scanty settlements in Nambia, it was left out. For EES, the Payams included Nyong, Imoruk and Magwi.

[23] The Project Document emphasized in page 11 a focus in areas where WFP and Cordaid are supporting the development of agricultural markets.

Table 2 Details on administrative centers through which the road passes

	WES	EES	Overall
1. No of counties	2	2	4
2. Total HHs in counties	44,872	57,694	102,566
3. Numbers of Payams	4	6	10
4. Numbers of Bomas	4	9	13
5. Total HHs within Payams	3,084	3,687	6,771
6. Sampled HHs for baseline	*152*	*270*	*422*
7. Of which female headed HHs	*70*	*129*	*199*
Source: FRIMP Baseline Study, March 2020			

19. **Qualitative methods:** Beneficiary respondents for KIIs and FGDs were purposefully selected. This was to ensure balances in both gender, livelihoods, and inclusion the road users generally. From the local context, youth are benefiting from the Project sufficiently. The average ages of both female and male headed households, according to the survey, is 37 and 38 respectively, which is below the 40 years marked for youth by culture.[24]

20. Annex 9 presents a disaggregated detail on Key Informant Interviews (KII)/ individual interviews and/or focus group discussions (FGDs). There were in total 26 [with 59 men and 30 women) KIIs and FGDs carried out in the same areas, covering representatives from Local Governments, community groups, local leaders, and CBOs and NGOs. The FGDs were administered in form of structured questionnaires. Participants in FGDs were members of diverse HHs found within the same villages and Bomas where the HHSQ was administered[25]. These respondents were beneficiaries of programs of the different actors operating in the area. Hence, beneficiaries of the other WFP support, other actors like Cordaid, FAO, who have knowledge of the feeder roads were targeted. On the other hand, KIIs were administered to Community Leaders (chiefs and development committees at Boma, Payam and County levels), Civil Servants as well as social and political leaders. The focus was to validate key socio-economic issues of the baseline. The criteria for their selection were hinged on prior knowledge of the Project and the community which are deemed vital.

[24] This position was stated by local leaders from both sections of the feeder roads.

[25] There were some youths from the location who had come to see the Boma chief in Iloro. They also joined in the interviews and provided their own perspectives of the situation.

Table 3 Key Informant Interviews (KII)

			TM	NLRS	Total
County			2	2	4
Payam			6	4	10
Boma			9	4	13
Individuals	Planned		270	152	422
	Actual	Male	184	67	251
		Female	100	86	186
KIIs	Planned		18	8	26
	Actuals		7	5	12
FGDs	Planned		7	8	15
	Actuals		7	5	12

Data collection

21. **Data collection tools**: Household survey questions were digitized using MODA and Data collection was done using tablets, all with technical support from WFP. Digitization of survey tools unsured minimized data correction errors while allowing timely data availability. The review of the questions was guided by MTE questions reflected in the TOR. KIIs and FGD were administered using checklists. Through the Inception report, these tools, were approved by WFP and the donor, Annex 7 provides the details. All questions (Qualitative and quantitative) have been grouped under the OECD-DAC evaluation criteria. Sub-questions were included, to focus the data collection methodology and sources. The core questions are summarized as per table 4 below.

Table 4 OECD – DAC Evaluation Criteria

Relevance	*The extent the Project is responding to local and national needs*
Coherence	The extent to which the design of the Project conforms to the OECD principles and the best practices for Fragile and Conflict Affected States
Effectivenes	The extent the Project is on track to achieve planned targets
Efficiency	The extent to which the Project is making best use of resources to achieve its desired results
Outcome/ Impact	The factors influencing the achievements of the expected results
Sustainability	The likeliness of the Project's activities and delivered Project outputs continuing beyond the project period.

22. A detailed Evaluation Matrix [Annex 8] was formed the guide for data gathering in the field. The matrix includes: i) added sub-questions; ii) measures and indicators; iii) likely sources of information; and iv) methodology of data collection. A set of guiding questions was developed to ensure that qualitative interviews covered all the key issues. Evidence was verified and corroborated through i) systematic triangulation between the four data sources; ii) regular discussions within the team; iii) information from WFP; iv) debriefing/validation sessions with WFP and stakeholders at the end of the field mission and v) feedback on the draft report. The evaluation team was careful to ensure that data collected was within the MTE reference period.

Data collection

23. Guided by the ToR in Annex 1, a basket of mixed methods were used in the data collection.Data collection started with the review of the Project documents for prepararion of the Inception Report. This was followed by 28 days (10 days from 27th June to 8th July) and 18 days (from 19th July to 7th August, 2021) of primary data collection along the Nzara-Li Rangu-Saura [NLRS] and later Torit-Magwi [T-M] sections of the roads respectively. Mixed data collection methods were preferred for triangulation, thereby ensuring completeness and credibility of MTE survey .[26] A household survey questionnaire [HHSQ] was the primary tool used for collection of **quantitative data**[27]**.** As shown in Table 3 above, a total of 437 households were interviewd, 57% of them were female headed households [FHHs]. Some of the other road users were captured by the other tools. In total, 184 FHHs and 100MHHs living along the Torit-Magwi section and 67 FHHs and 86 MHHs living along Nzara-LiRangu-Saura section of the roads were interviewed. This survey was complemented by three qualitative methods: 5 Participant Observations [POs], 13 Focus Group Discussions [FGDs] and 13 Key Informant Interviews [KIIs] disaggregated by locations as shown in Table 2.

24. **Survey team**: The data collection was led out by two WFP's staff[28] with 8 enumerators [50% female] hired through WFP Field Offices. While the overall leadership was provided by the Consultant virtually, the M&E Unit of the WFP supported with questionnaire programming, data collection and analysis. The Field Offices of Yambio and Torit supported through coordination of the area-based research work.

25. **Data processing, analysis and report writing.** WFP's M&E Unit administered the data cleaning, processing and analysis. The report writing process was carried out by the Lead Consultant.

1.3.2. Limitations

26. Due to lockdown because of COVID-19 pandemic, the consultant managed the MTE remotely. This posed great limitations in data collection including, rigorous reviews of the tools in use, adequate interactions with enumerators to ensure use of the right data collection tools for quality purposes. The choice of WFP's program staff from M&E Unit for data collection aimed at mitigating this challenge. Rain also interrupted data collection both in NLRS and T-M sections for a total of 3 days. However, the team in the field were able to work within the schedule although additional days were also provided to the team.

27. The daily rates for enumerators / data collectors that is set by the UN system have been a point of contestation. Other organizations have been paying different rates for same calibers of data collectors that have been hired from the fields. Data collection demands qualified and committed local enumerators. There are instances when some enumerators absconded and joined high paying organizations. This has implications which should not be taken for granted. It is advisable that in setting the fees, the field offices are consulted and allowed to lead in the negotiation.

[26] A detailed discussion of the methodology is contained in the Inception Report, which forms part of this report.

[27] The HHSQ used was modified from earlier templates used by WFP's feeder road surveys.

[28] The Yambio Team was led by Michael Olweny and included Mikaya ALI – who then took lead of the Torit-Magwi section. ld, both teams added 4 additional data collection clerks each.

28. Road users are many and diverse. The household surveys targeted many farming households. However, the team used the complementary tools like FGDs and KIIs to engage the other road users to collect their viewpoints as well. For instance, 48.6% of individuals who participated in KIIs and FGDs along the NLRS were general road users like boda boda riders, traders [17.5%], health workers, etc. Finally, the MTE found out that there was no increase in the number of households accessing markets along the NLRS section. While it is true that by March 2020 the NLRS section was already completed, one would expect some rapid change in market access a year later. This is an interesting phenomenon to further investigate.

2. Mid-term evaluation findings

29. The following section discusses the MTE evaluation findings against the DAC Evaluation questions and sub-questions asked in the matrix and found in Annex 8. The data presented below is taken from the household survey unless stated otherwise. The MTE logframe discussed in this section is attached at Annex 5(b)

2.1. Relevance

30. This sub-section examines the questions that were asked to investigate the relevance of the Project - *"To what extent has the Project so far responded to the needs and the priorities of different categories of road users at national and sub national levels?"* The sub-questions are listed from 1 to 4 to the right. The questions are examined both from retrospective and prospective perspectives.

1. What evidence exists to justify the choices of the activities selected during the Project's design?
2. How far has current implementation addressed the needs of the different road users identified in the proposal? How so?
3. Is the implementation favoring any categories of road users? If so, how so?
4. To what extent has the Project responded to the demands for agricultural markets in the region? What evidence exist of improved agricultural markets

31. Our assessment is that the Project's core activities identified at design and summarized in Table 5 below are fully aligned with national policies and priorities. Several references have been made to these activities by respondents. These activities include a "full-scale" rehabilitation of 77.06 km road in Eastern and Western Equatoria, and a total of 6 months period of defect liability and road maintenance. Road maintenance was apportioned a total of 6 months, including 3 months of defect liability period, and was designed to be implemented under the community's road maintenance groups, working alongside the contractors. The needs of the road users, who are diverse, have been met with smallholder farmers reporting increase in volume of sales to local markets. More new agricultural markets have emerged along the roadsides. Older ones, particularly those which fizzled out due to lack of access, have resurfaced in Li Rangu, Magwi and along Torit-Magwi Road. Below are the findings of the study:

Alignment with national policies and priorities

32. FRIMP's activities supported the policy drive under the Economic Pillar and the Comprehensive Africa Agricultural Development Project (CAADP). Because the Project targets market access, it is consistent with the policy statement of MoAFS that espouses South Sudan

Infrastructure Action Plan [SSIAP] as one of the many policies for transformation. Food security is viewed in terms of availability, access, affordability, and utilization. And FRIMP seeks to improve household food and nutrition security through improved market access. As such, the Project is fully aligned to the South Sudan's priority and targeted the agricultural areas of the Greater Equatorial with unique social and economic characteristics.

Alignment with beneficiary requirements

33. It was confirmed that the feeder roads are fully aligned to the needs of the local people. For instance, 71.1% of MHHs compared to 86.8% of FHHs consider agriculture as their main livelihood. Agriculture as a livelihood includes the production and sale of cereals, vegetables and rearing of livestock[29]. According to the baseline study, markets contribute 54% of the food source for the poor. Overall, over 62% of the people interviewed during the MTR sell and buy food from local open-air markets. Through MTE, 99% of FHHs and 100% of MHHs interviewed confirmed that the roads have benefited them. It has improved access to the open air-markets. At least 63% of households living along the Torit-Magwi section and 75% along the Nzara-Li Rangu-Saura section have reported improved access to basic services due because of road construction. Of these, 69% are MHHs while 63% are FHHs. Field visits by service providers to smallholder farmers have also improved with the T-M section improving from 28% in 2020 to 47% of households during the last season. Increase for NLRS was even more significant, from the baseline of 23% in 2020 to 83% of the households' interviews along the feeder road.

34. Walking by foot is still the dominant mode of movement by the people. 68% of MHHs and 63% of the FHHs interviewed reported that both travel time and cost of travel have reduced. For instance, between Imurok and Magwi town along the Magwi-Torit Road, travel cost fell from 10,000 SSP per trip before the road was paved to now 3,500 SSP, a 65% reduction in overall cost. From Imurok to Torit town, from 5,000 SSP to 3,000 SSP, a 40% reduction of charges. Along the Nzara-Li Rangu section, the story is similar. For instance, the Sasa Multipurpose Coop Society in Nzara County reported that transport cost for their agriculture produce along the Nzara-Li Rangu-Saura Road fell by SSP 500. Majority of the respondents contend that improved roads influenced the reduction in transport costs. Reduction in the cost of travel along these roads can also be attributed to other factors, which need to be verified. Nevertheless, FRIMP is rated as satisfactory and well aligned to the needs of the community.

Inclusiveness and gender considerations

35. It was confirmed that the design of the roads was not discriminatory. No group was specifically targeted since the purpose of the roads, as identified in the Project document, aims to facilitate market access. Additionally, all the designs of the feeder roads in South Sudan do not include consideration for special groups. Although the interview did not target special groups, 57.4% of the respondents were female-headed households. Where disabled and other special groups were found in the selected households, they were examined on the issues. Overall, 100% of the sampled households living along Nzara-Li Rangu-Saura and 99% living along the Torit-Magwi section reported that they have directly benefited from the road in many ways. Women are the main users of the new roads, which correlates with earlier findings during the baseline study. They walk routinely to the markets. In fact, for road maintenance work, 6 RMGs and 1 RMG were established for Torit-Magwi and Nzara-Li Rangu-

[29] 74% of the households are living around Torit-Magwi Road compared to 91.4% that live along the Saura-Li Rangu-Nzara section

Saura sections respectively. The record shows that 85% and 41% of the members employed for work respectively were women. The low numbers of women in the case of Saura-Li Rangu-Nzara section are attributed to culture.

36. The mean age for heads of households in the Project area is 39 years for those living along the Torit-Magwi section and 38 years for those along the Nzara-Li Rangu-Saura section. Hence, the benefits accruing to those categorized as youth in the circumstance, is unquestionable since all heads of households tend to fall in that category of youth, according to South Sudan's policy[30]. Similarly, both married and single members of the society that fulfilled the requirements for working for the Project were recruited. Consideration for employment was more influenced by one's ability to deliver on the tasks rather than other things.

Improved market access for beneficiaries

37. There is sufficient evidence to justify that the Project responded to the local demands for agricultural markets in the region. While overall only 36% of the households reported that they were using the feeder roads to access agricultural markets during the baseline study, MTE results shows an increased. Notably, 70% of households along the Torit and Magwi section and 42% living along the Saura-Li Rangu-Nzara section have reported improved access to market sale and purchase due to improved roads. Compared to the baseline, there has been a significant increase in market access in households along the Torit-Magwi section from 34% to 70.2%. Reasons for this significant increase in market access were note explored. However, the Payam Chief indicated that within a year, the population of 4 Bomas of Ifoho, Chufu, Isaloro and Central boma increased from 2,447 households in 2020 to 3,375 in 2021. Various people who were displaced are returning and settling in the area. From the KIIs and FGDs administered, NGOs' activities in the area have also increased because of improved access. For instance, Cordaid support to farmers increased from 5 farmer groups in 2019 and 2020 to now 11 farmer groups. Market access for households living along the Nzara-Li Rangu-Saura section remained the same at 42%. There is no explanations provided for the no change along the NLRS section.

> *We have increased production in 2020, from 52 sacks in 2019 to 84 bags. Our groups in Saura produced and sold 2.5 tonnage of cereal in 2019 and 25 tons in 2020 due increase in farm support. The transport costs charged by Star Trust for delivery to the aggregation center was slashed down from 500 SSP now to 300 SSP because of improved access route.*
>
> Saura Center & Sasa Multipurpose Cooperative Society, Nzara County, 2021

38. Two medium sized and four smaller new markets have also emerged following the completion of the roads. Two or more of the older markets that had fizzled out because of poor roads have also resurfaced. These were in Li Rangu and two along the Torit-Magwi sections. The study shows that households along Torit-Magwi section responded favorably to the road. Partly, Torit-Magwi section has a higher volume of trade and commerce compared

[30] While there is a growing pressure to align the age ranges for youth to the global standard of 18-35 years old, in South Sudan a youth would be from 15 to 45 years of age according to local authorities. See for instance <http//en.unesco.org/news>

to the NLRS. Additionally, most markets or open markets in South Sudan sell goods and commodities. Torit-Magwi section is known for supply of both goods and agricultural commodities. While many of the households are still walking to the market, the use of boda boda and big trucks have also increased. In Table 5 below, the number of boda boda and trucks plying these routes to the market increased because of ease of travel, lower costs, and increased demands for the mode of travels. On the part of farmers, more time is also gained while traveling to the markets since the roads are now easily passable.

39. Twenty six percent (26%) of MHHs and 27% of FHHs reported experiencing reduction in transport costs. This is mainly because most of the rural producers walk to the markets or have their products bought from farm gates. In addition, only 3% of households along Torit-Magwi section and 3% along the Nzara-Li Rangu-Saura reported that the upgrading of the road incentivized them to increase agricultural production 4% of these are FHHs while 3% MHHs. The likely reason for this anomaly is the availability of agro-services and tools. For, 92% MHHs compared to 86% of FHHs indicated that agro-services were their main needs. The shortage of these services was partly because of the lockdown due to COVID-19.

40. Nevertheless, the actual frequency of travel by HHs to the markets increased from 12 times a month (3 times a week) in 2019 to 25 times a month in 2021.[31] On average, there was an increase of 45% in the number of people accessing the local market to sell and buy agricultural products in 2021 compared to periods before that - an increase of 35% in the number of people accessing the markets to buy their requirements. From participants' observation, the majority of these were women and children selling small volumes of foodstuff, and buying household requirements like soap, salt, clothing, etc.[32] The factors influencing market access, beyond the effects of the completed roads are: improved security along the roads, ease of accessibility, etc. need to be investigated, if the contribution of the feeder roads extends to that.

Major users of the feeder roads

41. **Boda Boda and NGOs as main travelers**. It was also confirmed that in addition to ease walking by most farmers to the markets, the feeder roads have supported the crucial role of saving lives by the humanitarian actors. Table C-1 below shows the estimated increase in traffic because of better and accessible roads. Even without the detailed breakdown of traffic by types of vehicles, the Ministry of Trade and Industry in Torit gave 74 as the numbers of big and heavy trucks that offloaded goods in Torit market between March and June 2021. Admittedly, feeder roads have complemented but also substituted trunk roads by aiding local and regional trades.

> The construction of this road has improved accessibility for monitoring our activities both in Magwi and Torit Counties. We can now do day trips from Torit to Magwi in 45 minutes and come back easily. In the community management disaster risk project, our staff were able to create 5 awareness and sensitization workshops out of 7 that were planned. We have supported 10 VSLA groups out of 20 groups planned along this road section this year alone, even with the lock down situation...
>
> Cordaid Torit Office, July 2021

[31] It is felt that COVID 19 was not such a deterrence to the local communities, who continued to ply the routes to the market.

[32] See also baseline survey in 2016 by GIZ that gives similar viewpoints.

42. However, through the various FGDs and KIIs, it can be concluded that Boda Boda riders – many of them are the youth, carrying travelers to markets and services. While data on traffic numbers on the NLRS section was not collected, from observations, more boda boda riders ply the route. The other key users are the NGOs who confirmed that their visits to farmers have significantly increased. It is argued that the Torit-Magwi section has been largely used by businessmen and women and traders. This position was also validated by Cordaid in Torit.

43. **Constraints to using improved roads.** The only public vehicles plying these roads are public servants' vehicles. Public transports do not exist on or ply these routes. Perhaps, the most pressing concern is that 39% of the households interviewed contend that it is lack of disposable income that constrains use of other modes of transport by households. They rank transport consideration as less important and an opportunity cost to the other basic services. This confirms that travel is still a luxury to most people living along these roads. Besides, there are limited modes of travel along these roads. Walking by foot has remained the most dominant means of movement. This is confirmed by the fact that around 69% of the households interviewed are categorized as households with low diet deficiency or the poor and borderline food consumption groups.

Internal logic or theory of change

44. The Project's internal logic or the theory of change [ToC] provided in Annex 4, gives a better understanding of the relevance of the feeder roads. It also explains possible shortcomings in the design. While there are no direct relationships between improved access to road and agricultural development[33], the experience of WFP in South Sudan over the years has shown that feeder road improvement and their maintenance do affect both the demand for and supply sides of agricultural production[34]. The provision of climate resilient rural roads, WFP envisions quicker, cheaper, and more convenient transport systems will develop and respond positively to household food and nutrition security. Hence, the ToC has demonstrated that accessible roads help farmers to access better and more competitive markets and agricultural services. It also facilitates the supply side for both public and private sectors and contributes to speedy improvement in service provision.

45. The ToC makes the assumptions that household food security is attainable when all desirable and reinforcing / complementary activities required by the producers are well coordinated and multiple actors use the feeder roads as a stimulus to bring about social change. Unfortunately, these assumptions are not being monitored in the current M&E framework. From both historical and the most recent experience, direct support to the smallholder farmers and enforcement of road maintenance have not been well thought through. Coordination of differentiated efforts much as it exists at the local levels, their enforcement by government, have not been forthcoming. Notably, responsive investments in supporting household's livelihoods, taking advantage of the improved roads, have not been monitored by the M&E. For instance, the study reveals that 89% of households along the Torit-Magwi section and 91% along the Nzara-Li Rangu-Saura section need tools and agricultural

[33] This is because feeder roads are not direct inputs for agricultural production activities

[34] Under its Strategic Objectives 2 and 3, WFP South Sudan started to implement the Feeder Road Special Operation [FRSO] in 2011 through the Protracted Recovery Operations instead of the traditional General Food Distribution mechanism. This shifted its operations to areas without violence and with relatively stable context.

inputs. Generally, smallholder farmers are not receiving comprehensive support in agronomic practices, knowledge, and practice in agricultural production and value chain. Secondly, using community-based approach for routine feeder road maintenance is not supported by government policy. Thirdly, there is lack of clear commitments from both government and partners in moving this strategy forward. Hence, to improve household food security, there is need for better coordination of agriculture-related activities and to strengthen integration with other WFP activities, and those of the other actors working in the agricultural sector. Streamlining agriculture activities within the project would also be an asset worth consideration as this would likely maximize the impact by leveraging on the improved road infrastructure.

Adequacy of changes in the design

46. There were some changes in the design that are now discussed below. Interestingly, the Project's design and methodology will use trend analysis to assess changes. This is by comparing results at baseline and at any point in time along the project implementation timeline. To this end, all indicators that stated otherwise have been changed.

47. **Changing the impact indicator.** The indicator - ***"% reduction in the proportion of Household expenditures on cereals as a share of household food expenditure***" was identified to report on and/or to measure the change in trends in how households access food through the markets. This indicator is being changed to ***"reduction in the % of households spending more than 65% of monthly budget on food"***. WFP uses this indicator for food security outcome results measurement. Harmonizing these measures across WFP's activities will help the validation of studies across the board. Importantly, this Project intends to report and/or measure the trends in the changing numbers of households that are categorised as "borderline" and "poor consumption groups". According to MTE analysis, they account for 67% of the overall households along the roads. These are categorized as food insecure households. The proposed indicator adequately captures the policy intentions of the previous indicators. Lowering the share of cereals in households' spending on food is important and the proposed indicator – reducing % of households spending more than 65% of their monthly budget on food, can be used to deal with the said policy interests in as much as in understanding the general food household food security and not only cereals specifically.

48. Designs of feeder roads. FRIMP was designed in line with the national guidelines, local realities, and the desires of the stakeholders.[35] Over the years, WFP South Sudan has adopted the national standard in the design of feeder roads, which demands sustainable maintenance strategy after completion. So, by widening the carriageway to introduce high standards of road work, and by providing numerous road drainage structures, culverts, and in some instances bridges, WFP has significantly shifted ground in its emergency road specifications. This move however, is faced with some challenges. First, is the absence of implementation and road maintenance capacity at Local Government and State level. Secondly, absence of budget line in the Project document estimated for road maintenance from at project design, which was in response to the needs for the same as articulated in many of the evaluation reports[36]. Third, the absence of reliable trunk roads to which the feeder roads link to. As

[35] As discussed earlier, the three primary stakeholders of the Project, namely: WFP, the state and national government and EKN are guided by national framework that has been changing based on local realities.

[36] The average cost of the routine maintenance was estimated at $1,000/km/year (based on 150 person-days/km/year and additional costs of tools, safety equipment, etc.). The total cost over 2-year period averaged $500,000. Regarding emergency repairs that would be required because of the poor road standards

observed in many instances, these feeder roads become the substitutes for the trunk roads, and they carry heavy trucks beyond their standards. Essentially, in South Sudan, roads need to be developed to serve the purposes and the interests of the locals.

49. **Local involvement**: In the design of FRIMP, local involvement was included to promote local ownership. For instance, locally available skills for road work and local materials like marram, have been an integral part of the road construction. The Project uses community-based routine maintenance approach. During construction periods, road maintenance groups [RMGs] were recruited by local leaders and they were supervised by the private contractors. On the completion of the contract, the completed road is handed over to government. Local Authorities [LAs] and the communities at the Bomas and Payams level are according to design, will take over the routine maintenance of the roads. However, the experience of routine road maintenance in South Sudan over the years has been disappointing. Government has not been able to mobilize funds for operation and maintenance [O&M]. Government also lacks sustainable technical capacity for the tasks at the demanded levels. Lessons on O&M from earlier projects suggest that sustainability of feeder road maintenance needs to be given a fresh start. For years, the thinking has been that the government is mandated and is responsible for O&M whose delivery failed. Conversely, the government can still play a huge role in O&M but with a more defined and leading roles of the communities and the private sectors going forward.

50. **Use of *turrabay* for road maintenance:** FRIMP did not plan for routine maintenance beyond what has already been completed. This omission is a recurring trend in the design of all the feeder road work in South Sudan. No attention is being paid to the community-based maintenance groups that existed in the past, and, reported to have performed[37]. The *turabay* were groups of youth, mainly boys or *bele bele*. They were organized as "road gangs", managed and supervised by the Bomas' administrators. They provided communal and public unskilled labour for road maintenance. The *turabay* were a community social capital. Unsurprisingly, already in several locations along the roads, local leaders have begun to revive "road gangsters" - a commitment to deal with the pressing concern about road maintenance. In response, partners need to trigger discussion on the policy related to this and to begin to: (i) work with Boma chiefs and construct road camps along the roadsides, (ii) to provide the required training on routine road maintenance to the youth, (iii) to retool them, and (iv) to procure vital road maintenance equipment in the camps.

51. **Unintended outcomes**: Improved access led to some of these unintended outcomes: a) increase in charcoal trade by vendors. For instance, in Khormus, in Torit County, there has been increased in the flow of charcoal placed in sacks to the urban areas, transported by boda boda and/or trucks. Understandably, a 50kg size of a sack is sold at 3,500 SSP in Torit or Magwi. Yet, along this road a 50 kg bag cost ranges from 1,600 – 2,000 SSP; b) There are also claims from other road users that the elevated road surface designed to ease drainage of rainwater and the narrowness of the constructed feeder road, are causing a lot of accident especially for boda boda riders; c) Thirdly, providing unskilled labour in the construction of

and the limited improvements carried out under this project, the average cost of the emergency maintenance was estimated at $500/km/year or $250,000 for an average duration of 2 years. The total estimated cost of this output then comes to $750,000.

[37] Reference to FGDs and KIIs with Payams and Bomas Development Committees and County Commissioners of the Counties visited during the mission.

the roads became the opportunity costs of working on the farm. This affected seasonal household farm labour demands for households as some young men sought employment with MBF and Anisa Trading Company for unskilled work. There was no report of COVID-19 infections in the camps arising from this work; d] Fourthly, while from the design phase, it was evident that WFP and GoSS would engage on some key policies around the issues of road maintenance arising from earlier reports, this did not happen. As a consequence, the involvements of the State and County technical staff were limited to the construction work.

	GREEN: Overall, relevance of the Project design is rated 4 [satisfactory] as it met most of the indicators for the mid-term evaluation criteria with few improvements discussed above.

2.2. Effectiveness

52. This section reviews the extent to which the Project outputs are linked to the outcome during the design. It answers the key question: *"To what extent is the Project's on track in achieving its targets [impact, outcome, and outputs]?"* Four sub-questions have been used to guide the analysis and they are found in Annex 7 and 8. To this end, rating the Project's effectiveness is entirely based on the extent to which it was possible to meet set targets. The rating of effectiveness does not include in any ways, the sustainability aspect as further discussed below.

Programme effectiveness for output delivery

53. Effectiveness in the delivery of the Project's outputs and outcomes is examined against the Project's logical framework. The Project's outputs are derived from the planned activities and are summarized in Table 6 below. In total, WFP has delivered seven outputs. The measure of effectiveness in the Project's outputs is the extent to which the processes and the quality of deliverables conformed to the **agreed period, budget and quality standard set in the design**. It is also measured by the flexibility that was applied in responding to unexpected circumstances during the construction.

Table 5 Description of activities and outputs planned and achieved by MTE

Description of activities	Description of outputs	Achievements by locations
1. Identify, survey and construction/rehabilitation of feeder roads	1.1 Full-scale rehabilitation of 77.06 km of the two sections of the Magwi-Torit and Nzara-Li Rangu-Saura roads	49.0 km Torit-Magwi section
		28.06 km of Nzara-Li Rangu-Saura section
	1.2 Numbers of daily traffic disaggregated by types of vehicles and locations	48 vehicles and 23 boda boda on Magwi-Torit section
	1.3 Culverts installed as part of rehabilitation disaggregated by location	38 culverts on Torit-Magwi Road
		12 culverts and a metallic bridge measuring 5mX4m on Nzara-Li Rangu-Saura section
2. Capacity for routine maintenance of the completed 77.06 km of the feeder road	2.1 Total of 77 km full scale constructed feeder roads fully maintained by the contractors within the contract periods, disaggregated by location	53.4 km of Torit-Magwi section and within Magwi
		38.6 km of Nzara-Li Rangu-Saura section and within Yambio
	2.2 Local Road Maintenance Groups established after training	6 LRMGs [85% female] along Torit- Magwi
		1 LRMG [41% female] along NLRS
	2.3 Number of people employed by the Project	50 [40 MHHs and 10 FHHs] along Magwi-Torit section
		45 [38 male and 7 female] for NLRS section
3. Monitoring and evaluation	3.1 Number of new markets established	4 roadside markets on Torit-Magwi section
		2 new markets and 1 revived for NLRS section

Source: FRIMP, 2021

54. Broadly, it is felt that the Project has demonstrated effectiveness in delivering outputs as indicated in Table 6 below. First, WFP deployed the contractors on time. From available information, the Project was completed in within the planned time. FRIMP is a four-year Project. It was completed within a period of three years. The Agreement was signed on 18th November 2018. The construction and maintenance of selected feeder roads was completed by mid-September 2021. The Anisa Traders and Contractors Ltd, which handled the NLRS section completed its scope of work on time, spending 6 months each, for rehabilitation work and routine maintenance. The MBF Contractors Company Ltd, on the other hand, in total took 20 months out of the 24 months planned for the contract. Notably, all the outputs – summarized in Table 5 above - have been delivered on time and in good quality.

55. **Rehabilitation of feeder roads**: Table 6 below, shows that in total 77.06 km of "full-scale rehabilitation" was achieved. This is more than the 76.06 km planned. The bonus of 1 km was realized through accurate measurement by the WFP and State engineers. The provision of quality and all-weather roads is the key output of the Project. From the observation and interviews carried out, both contractors have now completed the scope of work. In terms of costs, the costs incurred for the two sections includes US$ 3.95 million for the Torit-Magwi section and $ 1.83 million for NLRS section.

56. Accordingly, WFP seems quite up to the tasks. Unlike in the past, WFP used in-house engineers to supervise the contractors instead of hiring private supervising engineers. They placed resident engineers hired under CTG contract to work with the contractors. Regular oversight was, however, provided by the Juba based WFP engineers. This ensured that the road construction techniques and the different stages of operation were appropriately adhered to. Consequently, there was increase in the numbers of culverts. For instance, along the Saura-Li Rangu-Nzara section, a metallic bridge was erected, to improve drainage. Such efforts protect the roads. Notably, timely supervision and opportunity for technical interactions with the contractors were not hampered by the COVID-19 pandemic. Supervision also ensured that all-natural materials used on the roads are those that have technically passed the requirements and specifications of the contracts. Nevertheless, there were isolated concerns that were raised by road users regarding the overall standards of the construction. For instance, the boda boda riders in Nzara reckon that the marram used in Yabongo are of poor quality because the road surface gets muddy when it rained. They also complained that the road is narrow and slopping towards the sides. The dome shaping of the road has caused considerable motorcycle accidents. The effectiveness of rehabilitation efforts is rated as satisfactory [level 4].

Table 6 Selected and significant inputs for feeder road rehabilitation

Description of inputs and the measures	Planned 2019			Actual 2021		
	Magwi-Torit	N-LR-S*	**Total**	Torit-Magwi	N-LR-S	**Total**
1. Total kms identified for full rehabilitation by WFP/GoSS/States in W/EES	48.0	27.6	**75.6**	49.0	28.06	**77.06**
2. Time taken in months by WFP to hire Contractors	3.0	3.0	**3.0**	3.0	3.0	**3.0**
3. Time taken by Contractors to complete the roads in months**	24.0	12.0	**36.0**	20.0	12.0	**32.0**
4. Total kms of feeder roads constructed	48.0	27.6	**75.6**	49.0	28.06	**77.06**
5. Total number and types of culverts provided	28.0	10	**38.0**	38.0	12.0	**50.0**
6. Total km of feeder roads maintained by Contractors	48.0	27.6	**75.6**	53.4	38.9	**92.3**
7. Actual total cost in US$ for feeder road construction	3,950,927.50	1,667,427.16	**5,618,354.66**	3,949,997.84	1,833,858.57	**5,783,856.41**
8. Unit cost [row 7 /row 4]						**75,056.53**

*N-LR-S is Nzara-Li Rangu-Saura section.

** The time taken from signing contract to completion

Source: FRIMP, 2021

57. **Road maintenance:** In the contracts, a total of 6 months was provided to cover for 3 months of defect liability and 6 months of routine road maintenance through communitybased approach. Three outputs and seven indicators were designated and presented in Table C-1 above. Notably, a total of 53.0 kms not 49.0 kms was maintained along the Torit-Magwi section. The additional 4.0 km covered roads in the vicinity of Magwi, which had bad potholes on the road. Covering additional roads in bad shape using the LRMGs was aimed to provide more benefits to the local communities while understanding that the requirements for maintenance of newly / recently built 49 kms of Torit-Magwi Road would be minimum and will not provide required expertise / capacity building to the local communities. Along the Magwi-Torit route, a total 50 members of the LRMGs [85% female] were deployed. Similarly, 38.9 km of the NLRS section was also maintained by LRMGs. The additional 11.9 km was added on the same principle and covered bad road conditions identified. These were extensions towards Yambio. One LRMG was established and trained. The group comprised of 20 members [41% female] were involved.

58. Unlike in the previous feeder road projects implemented by WFP, there has been no provision for training of local government and State employees. The effectiveness of routine maintenance rest on the availability of strong supervisory capacity and implementation capacity by the local governments and the States. There is a view that UNOPS has trained some of these staff, however not confirmed. Nevertheless, the protracted civil war caused most of the staff that were trained at the States to leave for more rewarding and safer employments. There is need to verify with UNOPS if at all efforts are being made towards training both public and communities in the maintenance of roads. The effectiveness of road maintenance is moderately successful (rating 3).

Programme effectiveness for outcomes and impacts

59. At impact level, the Project aims at "improving household food security". Three indicators as proxies for "food access" through markets, "food utilization" and "food availability" were used to measure effects of the feeder roads on households' food security. However, at outcome level, the project aims at "Providing of 77.06 km of all-weather feeder roads". A total of five indicators were used to report on achievements of the objective. Below are the discussions of the findings and the evaluation of the Project's effectiveness for effects and outcome respectively.

Improved household food security along the constructed feeder roads

60. Normally, household food security status is determined by a) households' food consumption patterns [FCS]; b) households' access to food - which is conditioned on their capabilities, including availability of land for own production, price instability, and food availability; and c) households' coping strategies [rCSI] – a measure of household behaviour in response to the presence or threat of food shortages. The Project adopted these three indicators to assess project effectiveness, namely: (a) **incremental reduction in numbers of female and male-headed households categorised as poor FCS [PFCS] and Borderline FCS [BLFCS,** (b) **incremental reduction in percent of heads of households spending more than 65% of monthly budget on food, and (c) incremental reduction in the consumption based coping strategy index [rCSI].** All these indicators measure or report on changing trends in the stated variables. The findings related to these indicators are discussed herein below:

61. **Percent change in number of households with poor and borderline food consumption group, disaggregated by location and sex of headed households**: Overall, there was considerable reduction in the number of households within poor and borderline food consumption groups along the T-M section, comparing the baseline and midline. On the other hand, households with poor and borderline consumption along the NLRS section increased between baseline and mid-line. However, more households categorised as poor food consumption groups both along the T-M and NLRS, have shifted into the borderline group. The survey revealed that along the Torit-Magwi section, 68% [43% borderline and 26% poor] of households and 68% [64% borderline and 4% poor] along the NLRS are insecure. Understandably, the effects of the road will take a while to be felt.

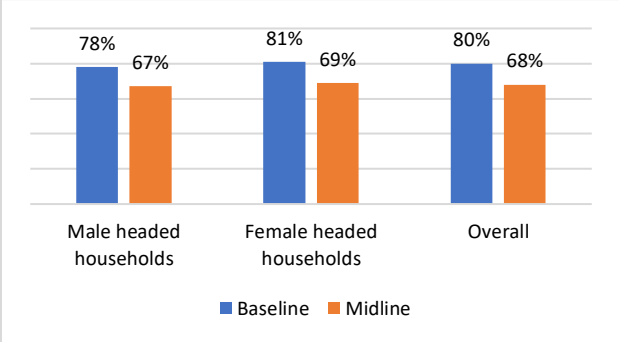

Figure 1. Percentage of households with poor and borderline food consumption by sext of household head - T-M section

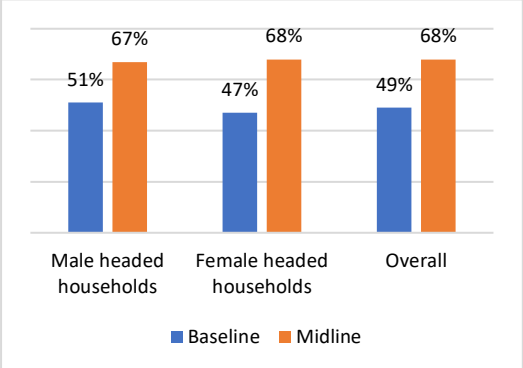

Figure 2 Percentage of households with poor and borderline food consumption by sext of household head - NLRS section

62. The data, however, reveals that generally, there has been a significant percentage reduction in the number of FHHs categorised as poor food consumption groups [67% to 19% along T-M; 18.5% to 6.5% along NLRS]. Consequentially, more female headed households have gained access into the borderline consumption group [62.9% from 29.6% along the NLRS and 52% from 27.3% along the T-M section] and possibly higher. The increase in the number of FHHs in the borderline food consumption groups sadly, was also a result of many FHHs previously categorised as "acceptable food consumption groups" failing to sustain their status. For instance, FHHs along NLRS in the said category dropped from the original 51.9% of the households during baseline to 30.6% during the MTE. The FHHs along the T-M, to the contrary, increased to 29% during the MTE, from 6% during the baseline study. As illustrated in Figures 2 and 3, these dynamisms are commendable. Worth to note is the need of ensuring that complementary activities through agriculture support is of important as alluded in the TOC.

63. Conclusively, the data reveals more positive change along the Torit-Magwi section of the road. It points out that along Magwi-Torit section, 33% of MHHs compared to 31% of the FHHs fall within the acceptable food consumption group. There is no significant difference in percentage increase between the MHH and FHH. This is not the same in the case of the NLRS situation. The increase in percentage of households with poor and borderline consumption groups between baseline and midline, from 51% to 67% among MHHs and from 47% to 68% among the FHHs, implies a decline in household food security status. Households with poor consumption consume an equivalent of cereals daily plus vegetables five times a week and oil three times a week, which is a bare minimum. Along Torit and Magwi section, there has been some noticeable change that confirms the enthusiasm of leaders and the communities living along that route.

63. **Percentage of households spending more than 65% of monthly budget on food**: Generally, this indicator shows that the percentage of households with high food expenditure from their monthly budgets, increased across the Project area. The increase in the number of households were higher along NLRS compared to TM section. The focus is on percentage reduction in the numbers of households spending more than 65% of their monthly budget on food between baseline and midline. Households with high food expenditure were reported

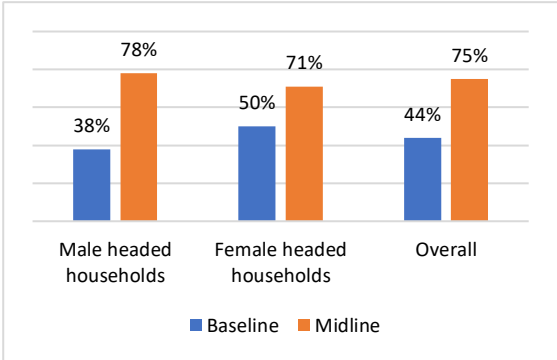

Figure 3 Percentage of households spending more than 65% of monthly budget on food - NLRS section

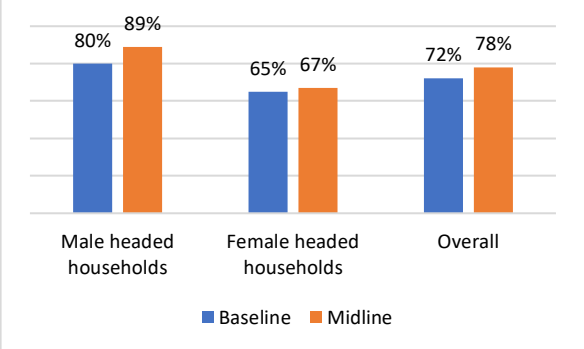

Figure 4 Figure 4 Percentage of households spending more than 65% of monthly budget on food - T-M section

at 16% in March 2020[38]. This indicator is a substitute of "share of expenditure on cereals as a percentage of the share of household's expenditure on food items". It is used as a proxy for measuring household economic vulnerability. A reduction implies that households are less economically vulnerable hence vis a vis improved food security. Reduced allocation of household income on food, implies that households can invest. This certainly, is a long-term realization.

64. The analysis shows that along the Magwi-Torit section, there was a modest increase in percentage of both FHHs and MHHs that are economically vulnerable groups as compared to NLRS section – refer to figure 3 and 4 for details. This implies that households along the M-T sections are less economically vulnerable than households along NLRS. The increase in economic activities along M -T section contributes toward the results amidst the national economic challenges.

65. **Per cent reduction in the consumption based coping strategy index [rCSI]**:
There was substantial reduction in the rCSI for all households along NLRS by over 50% (see Figure 6). While MHHs living along the T-M section gained 0.6% reduction. FHHs on the contrary, had an increase of 6.9% instead. In the Project, the effectiveness of the Project's activities on food security is evaluated by the extent to which **rCSI has been reduced between baseline and midline.** The reduction in rCSI among households living along the NLRS is rated significant. **rCSI** is a measure of households' behaviours following threats of food shortages. rCSI is used in this case as a rapid and an early method of measuring the effects of feeder roads in responding to households' food security. As such, it is used along several assumptions that view the construction of the roads as important in de-clogging access to households. rCSI is seasonal in nature. It was used at different times and food calendar compared to the baseline period.

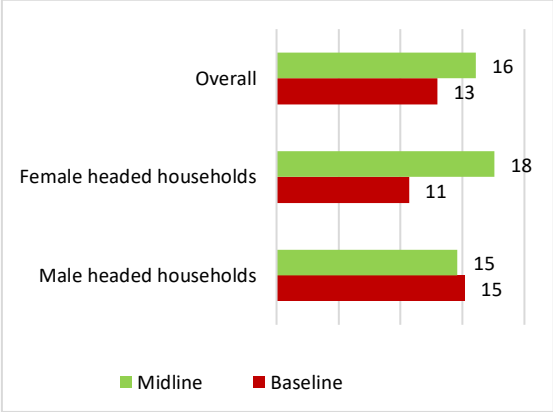

Figure 5 Reduced Coping Strategy Index (rCSI) by sex of household - T-M section

[38] The baseline data shows that the poor consumption group along the TM was 14% for MHHs and 20.4% for FHHs. Along the NLRS was lower - 7.7% for MHHs and 10% for FHHs. The borderline groups were 3.8% for MHHs and 10% for FHHs along the NLRS and 24.5% for MHHs and 19.5% FHHs along TM section

66. The results explain that households along the NLRS did not engage in more coping strategies and frequently because of food shortages. Availability of different livelihood options helps households reduce in adopting negative coping mechanisms. While, this cannot be fully attributed to the presence of the feeder roads, feedback from the road users suggest so. The lean period extends from the months of April to July every year. The baseline data collection was from March to May 2020. The MTE data was collected from the end of June to August 2021. From this, seasons affected the measures of the rCSI for both sections of the road. Nevertheless, from the analysis, it can be deduced that the heads of households in the target groups categorised as **low household diet diversity groups along the TM section** are in a much similar stress condition like it was established in March 2020.

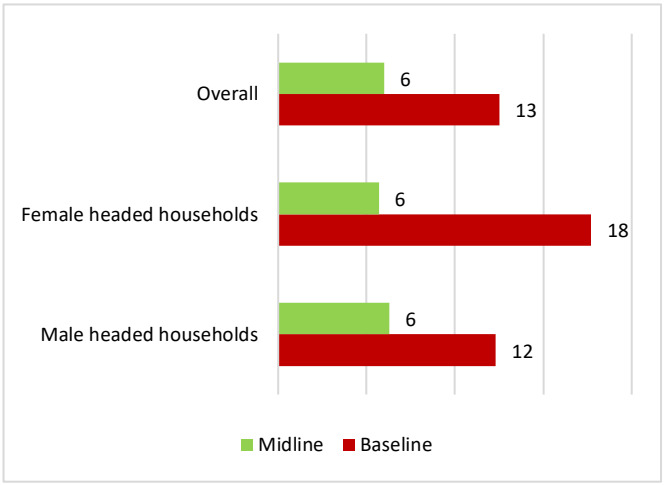

Figure 6 Reduced Coping Strategy Index (rCSI) by sex of household - NLRS Section

67. In conclusion, the analysis has shown that the causes of food insecurity among households in the two areas are not necessarily the same. The effectiveness of the new road on food security is a medium to long-term consideration. However, some of the changes in the categories of households realised particularly along the Torit-Magwi section of the road are notable and impressive. Of great significance is the overall reduction in the percentage of households, particularly FHHs, categorised as poor consumption groups.

Provision of all year-round access roads to agricultural markets in the Project area

68. Provision of all-year weather road to agricultural markets is the outcome statement developed for the Project. The effectiveness of a climate resilience feeder road is determined by the extent to which the feeder roads transformed the daily livelihoods of the community. Five interrelated and reinforcing indicators are used: (a) Percentage increase in land area brought under cultivation within the 5 km radius alongside the roads disaggregated by location, (b) Proportion of households living along the 77.06 km feeder roads visited by service providers, disaggregated by sex of HHs, types of services and locations, (c) Percentage increase in the average annual daily traffic counts (passengers and freights) on the roads, (d) Changes in the share of HH expenditures on transport service disaggregated by gender and road section, and (e) Number of RMGs established and operational disaggregated by age and location. The data for percent increase in the average daily traffic counts and the changes in the share of household expenditures on transport service were scanty. However, through KIIs and FGDs, presentations for some findings have been made. Hence, the analysis focuses on the link between improved feeder roads and land use, service provision and community employment.

69. **Percentage changes in land use:** Satellite images were used to collect data on land

use (settlement and cultivation) along the 77.06 km feeder roads. This information was complemented by use of KIIs and FGDs. It was concluded that the Project was effective in influencing land use along the feeder roads. The satellite images taken for Magwi-Torit section in 2019 and Nzara-Li Rangu-Saura in 2018 respectively shows that land under cultivation was 5,330 and 3,100 hectares respectively. The satellite images taken in 2020 when the rehabilitation of the roads was completed along the NLRS and progressing along the TM, shows that cultivated area along Magwi-Torit Road increased by 7% to 5,700 hectares while the one for Nzara-Li Rangu-Saura remained the same at 3,100 hectares. The no change report for the Nzara-Li Rangu-Saura is highly disputable. This is because settlement has increased within the 5 km radius of the road, from 400 hectares before to now 460 hectares by December 2020. The FGDs and KIIs equally report that more cultivation was carried out along the road since improvement of the road. It is not certain whether increased in areas brought under cultivation were because of new households returning from the camps or rather the expansion of land by already existing households in the area. From the satellite map in Annex 5, new settlement areas seem to show expansion in areas from the original settlements.

Table 7 Land use before and after project

	Baseline based on 2019 images		MTE based on 2020 images		Per cent change	
	T-M	NLRS	T-M	NLRS	T-M	NLRS
Increase in land area under farming within the 5 km radius alongside the roads disaggregated by location in hectares	5,330	3,100	5,700	3,100	6.9	0.0
Increase in land area under settlement within the 5km radius in hectares	2.200	400	2,600	460	18.0	22.5

Source: FRIMP, 2021

70. There is a positive correlation between increased settlements/cultivation and improved road infrastructure[39]. For instance, a report by RNE in 2016 observed that the completion of the Pageri-Ame-Magwi road by WFP led to increased private sector investment along the road and urban centres in the County. This experience is not unique to South Sudan. From 1986 to 2007, when Northern Uganda was consumed by Lord's Resistance Army (LRA) violence, many people were displaced: pushed into urban areas and in what was referred to as "protected camps". Over the years, urban areas such as Gulu, Kitgum and Lira expanded in both population settlements and investments.

71. **Provision of services to farmers**. It can be stated that provision of services increased and high demands for agricultural inputs are being reported. For instance, 89% of households along the Torit-Magwi section and 91% of those along the NLRS consider supply of tools and agricultural inputs as their priority. Effectiveness in service delivery is measured by the extent to which road facilitated and enabled collaboration and additional efforts of the other agricultural actors in providing tools and agro services to farmers. It is reported that changes have been observed in increased or improved interactions between service providers and farmers.

72. **Table 8,** Shows the extent to which the new roads propelled increase in the delivery of

[39] See report by the Embassy of the Netherlands

agro-services and tools. There was a significant increase reported along the Nzara-Li Rangu-Saura section compared to Magwi-Torit section of the road. Overall, 24% of male and 26% of female headed households witnessed increase in agro-services in the project area. This improvement translates into savings of SSD9,061 and 9,254 by male and female headed households respectively. Specifically, 49% and 31% of male and female headed households living along TM section reported improvements in delivery of inputs. This is compared to 34% and 43% of male and female headed households respectively living along Nzara-Li Rangu-Saura section.

Table 8 Agro-service providers before and after the project

	T-M	**NLRS**	**T-M**	**NLRS**
Proportion of households visited by service providers, disaggregated by sex of HHs, types of services and locations	27.3%	47.0%	30.6%	83.2%

Source: FRIMP, 2021

73. **Numbers of LRMGs established**. It can be concluded that local road maintenance groups [LRMGs] formed were trained and were employed by the Project for a period of up to six months. The total number of LRMGs established and made operational, disaggregated by age and location helps assess Project's contribution to rural employment opportunities for the youth and the women. Currently, only 2% of the households living along the feeder roads are salaried workers. Only 3% of the unskilled households along the feeder roads are employed in other rural activities. Among the poor food consumption groups, 0% of both F&MHHs living along the TM section and 0% of male and 5% of FHHs along the NLRS are reported as salaried workers. Among the borderline food consumption groups, 0.1% and 2% are M&FHHs respectively living along the TM. However, this is 0% and 3% of M&FHHs respectively along the NLRS. It can be concluded that rural employment is still a big challenge. Even with 5% of FHHs along the TM section, they are categorised as poor consumption groups.

74. The effectiveness of this indicator is determined by the actual numbers of youth and women employed and participating in the maintenance of the 77.06 km feeder roads. The number demonstrates the effectiveness and willingness of local leaders in taking advantage of the opportunity. Through FGDs and KIIs, it was reported that in several cases both along the Torit-Magwi and the Nzara-Li Rangu-Saura sections, leaders from Payams and Bomas mobilised youth and women to work with contractors. For NLRS, the group was constituted by 20 youth and 41% of them were female. In the case of Torit-Magwi, 50 youth were involved and 82% of them were female.

Table 9 LRMGs established by location and gender

	M-T	NLRS	M-T	NLRS
Number of RMGs established and operational disaggregated by age and location	0	1	6 [82% female]	1 [41% female]

Source: FRIMP, 2021

75. **Share of household expenditure on transport service.** According to the baseline, every nine out of ten households living along Torit-Magwi section walk to the markets – which on average, was estimated to be about 9.15kms. This is compared to every seven out of ten households along the Saura-Li Rangu-Nzara section. As further illustrated in in Figure 7, some

households (25% of HHs along Saura-Li Rangu-Nzara section) also complemented walking by using bicycles to go to the markets. The average distance to the market is 6.23km from their homesteads. The situation has not changed.

Table 10 Average annual daily traffic count before and after the start of the project

	Baseline 2020		MTE, 2021	
	TM	NLRS	TM	NLRS
Percent increase in the average annual daily traffic counts (passengers and freights) on the roads[40]	NA	NA	Mean 50 per day	Mean 10 per day

Source: FRIMP, 2021

76. The effectiveness is based on observed change in time spent on travel because of improved roads. First, the MTE observed that walking remained the most dominant. It accounts for 94%, followed by bicycle 4%. Motorcycle is only 2% and vehicle accounts for 0.1%. Figure 7 provides the details. Arguably, low income accruing to farming households is a known barrier to change in transport mode.

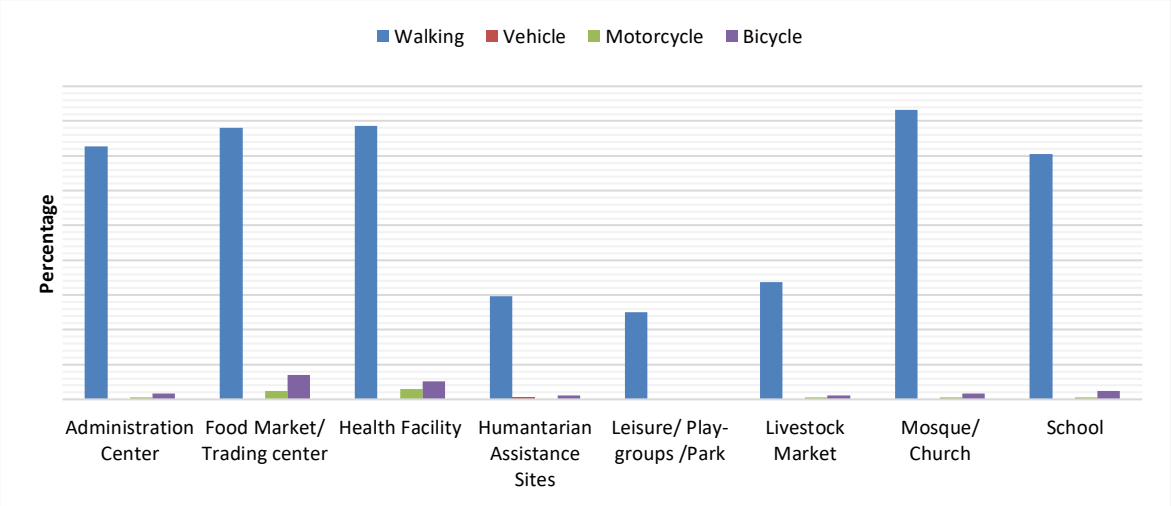

Figure 7 Mode of transport use along NLRS feeder road, 2021

77. **Percent increase in the average annual daily traffic counts**. Generally, there was increase in the average annual daily traffic counts along the two roads because of upgraded roads. The Project intended to measure percent change in the average daily traffic counts for both passengers and freights on the two sections of the road. The assumption was that rehabilitated roads would cause increase in traffic if poor roads was the reason for low traffic volume. Because the Ministry concerned have no records of traffic counts, the MTE team and the contractors registered some evidence of use of road. The State Civil Engineer for Torit reported that they conducted traffic counts from July to November, which is a total of 5 months. In total, 7,157 motor vehicles and 3,951 motor bikes were counted. This is an average of about 1,431.4 vehicles and 790 boda boda per month or approximately 50 vehicles and 30 boda boda per day. This period coincides with the raining season. The state civil engineer asserted that there are higher daily traffic movement along the Torit-Magwi Road compared to before the road was constructed. However, there was no baseline data on traffic

[40] The ministry of roads and bridges does not record data regarding traffic counts.

movements. Nevertheless, on a normal day, traffic counts go up to 100 trucks. Most of these heavy vehicles are business trucks carrying consumable and non-consumable goods to Torit or on transit to Kapoeta. Lighter vehicles traveling on this road originate from Torit, Juba, Magwi and Nimule.

Innovation

78. **Partnerships for the goal**: The WFP field offices are engaged in partnerships to ensure synergies in the implementation of programmes and projects. This Project has reactivated cooperation among rural actors - NGOs, private sectors, and governments at all levels. 82% of the agro-services along the 77 km stretch are supported by NGOs. Their presence is higher along the Torit-Magwi section compared to NLRS. Private sector provides only for 4% of the household needs and 60% of these are along the Torit-Magwi section. From KIIs and FGDs, improved access has promoted synergies across the board in support of local communities. For instance, NGOs target remote and difficult areas. They collaborate with governments, using their staff to deliver services. The road has enabled NGOs to increase their presence in areas along the roads as was discussed earlier on. 12.5% are the others, which include Coops and producers' organisations. They too tend to exploit the presence of LG structures and workers, to impart on their members.

Service providers	M-T	NLRS	Overall
NGOs	66%	34%	82.1%
Private sector	60%	40%	3.7%
Government	71.4%	28.6%	1.7%
Others	49.0%	51.0%	12.5%

Green: [Rated 4 or 5] Project meets all or most of the indicators for the evaluation criterion. Very few or no improvements are needed.

2.3. Efficiency

Project outreach at midline

As explained in paragraph 1, the total population of Magwi and Torit Counties in EES and those of Nzara and Yambio in WES are estimated at 969,696 or 40,393 HHs. These are population indirectly targeted by the road. However, the population of South Sudan is quite dynamic due to improvement in security. There are traders and the outsiders or travelers who by nature of their activities, are directly targeted by the feeder roads. This population includes the entire population of the 10 Payams through which the feeder roads passed and are considered the target of the Project.

The MTE did not capture the numbers of road users by that time. The feeder roads have, nevertheless, facilitated diverse services and groups of users. From the sampled population living along the 77 km stretch, 100% of the HHs living along the NLRS compared to 99% along the TM section indicated that they were using the roads by the MTE and were benefiting from the same. Because most HHs are living within 5 km radius of the feeder roads, it is likely that the entire population of the 10 Payams, numbering some 47,397 [and more], have used the feeder roads. This assertion has been reinforced by local leaders during KIIs.

The MTE team notes that the estimated population that is directly targeted, including those from the 10 Payams is dynamic set of people. The KIIs carried in Imurok Payam, in Torit County, the Payam Chief confirmed that within 12 months, settlements within the Payam increased by 34%, from 68,625 in 2020 to now 104,030 in 2021. The dramatic increase was caused by improvement in security. Most of the returnees came from Kakuma Refugee Camps in Kenya. This trend in return is now new. For instance, OCHA confirmed that in 2020 alone, Magwi had received by January a total of 68,971 returnees from both internally displaced camps and from exiles.

Project costs and financing

79. This Project's total budget is 8.0 million Euros, all funded by the Royal Netherland Embassy in South Sudan. As part of the Arrangement signed on 16th November 2018, WFP allocated 6.5% of the summary of the operational and direct support costs, amounting to Euro. 488,263, as an indirect support cost [ISC]. The ISC covers the institutional overhead costs for administration incurred at WFP headquarters. The balance from this was used for Operational and Direct Support Cost [DOC], earmarked for the construction and maintenance of feeder roads in South Sudan. Table below shows the disbursement received annually.

Table 11 Total commitment and annual disbursement in US$

Road Section	*Km*	*2019*	*2020*	*2021*	*Total Commitment*
Saura-Li Rangu sub-section	13.2	853,055.50	13,104.00	0.00	866,159.50
Nzara-Li Rangu sub-section	14.8	833,163.82	134,535.22	0.00	967,699.04
Nzara-Li Rangu-Saura section	28.0	1,686,219.32	147,639.22	0.00	1,833,858.54
Torit-Magwi section	49.0	0.00	2,760,912.12	1,190,015.38	3,950,927.50
Grand total	79.0	1,686,219.32	2,908,551.34	1,190,051.38	5,784,786.04
% of commitment spent annually		29.1	50.3	20.6	100

80. Most notably, 29.1% of the disbursement happened in 2019. By 2020, which was the second year of implementation, 79.4% of the total commitment was already utilised. The MTE was previously slated for end of December 2020 when 20.6% of the activities were still under implementation.

Project risks and quality of Project management

81. WFP management of the Project is rated satisfactory. The Engineering Unit managed the technical engineering aspects of the contract while finance, procurement and, to some extent, M&E contributed by undertaking their specialised aspects to the Project. The management of the Project was subjected to an international management standard. The resident site engineers were dedicated to work with their counterparts in the states. The Juba-based WFP engineers continued to conduct regular site visits to oversee quality and the road construction and maintenance activities implemented by the contractors. The M&E Unit based in Juba and their field-based staff in Yambio, and Torit supported the Project.

82. WFP was able to manage and/or overcome the key risks that were identified during the design. These risks included a] the likelihood of insecurity erupting during construction and interrupt completion, b]. securing adequate funding to cover road maintenance that would be enough for the entire Project period of 4 years, c]. likelihood of escalation in costs of local materials required for road's work, and d]. the usual likely of construction work by seasonal variation in climate. The risks associated with insecurity was mitigated by the choices of the locations and this choice was reinforced by the government. Through good planning, regular feed backs and monitoring schedules, the risks associated with costs of local materials, seasonal disruption of work were mitigated.

83. However, the funding for the O&M to cover the project period was not met. This was worsened by the fact that both the GoSS and the States are not able to pick up these costs when the roads are handed over to them. The Project only provided six months for road maintenance, mainly in conformity to the 3 months of defect liability period. In retrospect, there are risks that can undermine the achievements of the impact and outcome of the Project. These include:

- Persisting low farm production in the targeted areas that would deny the social change envisioned and improve their current food consumption patterns. WFP should then get interested to support production
- Lack of reliable and relevant service providers in the agriculture and rural development sector, to take advantage of the new feeder roads for the farmers

- Uncontrolled use of the feeder roads by commercial trucks that are designated to ply trunk roads
- Continuing absence of funding from partners and government towards the O&M in the coming year that will cause deterioration in the road
- Absence of sustainable capacity in the LRMUs and motivations, to support the LRMGs.

84. The total share of local materials used as a share of overall material costs was not determined by the MTE.

M&E system and baseline or follow-up studies

85. The M&E plan and the log frame for the Project was last revised in March 2020 as part of the requirement for the baseline study. The log frame is further reviewed at MTE. This aims at streamlining data required for the end of the Project evaluation. Accordingly, the Key Performance Indicators [KPIs] developed and approved by ENK and WFP after the March 2020 mission have been retained except for one change in the outcome indicator. A revised M&E plan and framework has been developed, which would support the reporting on the effects, outcome, and outputs in the final evaluation.

86. Ideally, the M&E system should allow reporting on the effects [shocks or positive reinforcements] of the Project on the entire system; the extent to which feeder roads have reinforced and contributed to local capacities especially in the smallholder agriculture production and market access and lastly, although more implicitly, how it has contributed to the wellbeing of the HHs. However, reporting on outcomes for road infrastructure are combined with other measures of social change. For instance, changes in land use, and changes in food consumption behaviours of household members are equally important. These are measures of households' adaptive and transformative capacities under the South Sudan's chronic lack of access. In the long run, these measures ideally link to the well-being of the individual members of the HHs and inform our understanding of how the Project has supported systems development in the humanitarian space in response to the context of the country.

87. From available data in the Project area, evidence of social change are extrapolated based on the adopted KPIs. For example, measures of changes in market access by HHs and other behavioural changes in HHs could be exploited from the data generated from interviews and surveys. Unfortunately, data on the feeder roads gathered through the current M&E reports are not adequately capturing the different contexts, including the assumptions in the ToC and that of the project risks.

Quality of supervision and implementation support

88. The supervision of civil works was carried out by the resident site engineer hired under CTG contract. The project work sites were regularly visited by Juba-based WFP engineers, who provided regular oversight of the implementation. The details of these regular oversight visits by Juba-based WFP engineers to the Project sites were validated by the MTE consultant. The completed civil work in our view is satisfactory - suggesting that implementation support was based on knowledge of the tasks. WFP has a recognised presence in South Sudan. This enables it to keep on top of its opera placements of a resident site engineer, hired on CTG contract, was commendable. The site engineer supervised the road construction and maintenance

activities daily. This position replaced the traditional approach where WFP would recruit private engineers to stay on site with the construction firms.

89. **Infrastructure Efficiency:** An assessment of the efficiency of the infrastructure considers the implementation efficiency in terms of unit cost for road construction as well as the quality of the infrastructure. In calculating efficiency, unit cost includes the direct operational costs per kilometre. In the Project, the average unit cost for construction is US$ 75,068.59, which is below the South Sudan average unit cost. There has been no major construction of bridges along the roads. Earlier analyses of unit cost for road construction in South Sudan suggests that it varies with the nature of the terrain and the availability of construction material, especially gravel. A continental perspective was provided in the Policy Research by the World Bank African Region. It concludes that unit construction cost per kilometre for gravel road is about US$152,140 per km in Ethiopia, US$ 89,800 in DRC. As shown in the Table 10 below, South Sudan's experience has varied with WFP competing very favourably. WFP used its own experts to undertake surveys and develop bills of costing. It also provided the oversight required for quality work. In the two situations, there were readily available materials. Nonetheless, the two roads are easily comparable given the uniqueness of each.

Table 12 Comparative unit cost per km in US$ of feeder roads in South Sudan

Road section	**Km length**	**Actual contract value***			
Torit-Magwi	49.0	3,950,927.50			
SLR	13.26	866,159.50			
NRL	14.8	967,699.04	UNOPS / EU feeder road 2018[41]	WFP / EU feeder road in 2018[42]	WFP / EKN feeder road 2018[43]
Total	77.06	5,784,786.04	46,557,694.15	25,217,391	18,557,405.00
Unit Costs/Km		75,068.59	305,697	264,588	128,505

Key : NLR= Nzara-Li Rangu sub-section ; SLR=Saura-Li Rangu sub-section

Source : FRIMP Report, 2021

	Green: [Rated 4 or 5] Project meets all or most of the indicators for the evaluation criterion. Very few or no improvements are needed.

41 EU financed infrastructures component that was implemented by UNOPS and WFP final report produced in 2018

42 The unit costs for this project included construction of a bridge. Without the bridge it would have been US$199,680/Km

43 End of project evaluation of the Feeder Road Special Operation, South Sudan construction of the Pageri-Ame-Magwi section and the Mundri-Bangolo section in 2018

2.4. Sustainability

90. The guiding question for this subsection is: *"To what extent do the net benefits of the project continue or are likely to continue in view of the capacities of the systems (community and government) required to sustain benefits over time?"* The sub-questions are presented in box below. It can be confirmed that creation of long-term processes, structures, norms, and institutions for road maintenance has been mainly in discussions. The government must come up with policies that build on the willingness of the stakeholders. The beneficiaries are willing to participate and to contribute financially towards a routine maintenance fund, preferably managed by NGOs.

91. Sustainability of feeder roads in
our assessment, is unlikely to succeed, considering the current approach and outlook of how it must be done. Accordingly, GoRSS and the States are both ill prepared to finance O&M. Hence, in responding to the on-going concerns of sustainability of the feeder road in South Sudan, this assessment decided to look at prospects rather than existing roles. It also explored sustainability largely from the uses and users of feeder roads rather than from mandates for feeder roads – which is seemingly pivotal in understanding this subject from a practical way. Communities have been promoting use rights of the roads during the construction and road repairs over the years.[44]

92. **Ownership of process and outcomes:** Based findings from the baseline study, the main users of the roads are the local people. While over 35% of the use is for market access, many are for access to other basic services. Throughout KIIs and FGDs, community groups and local leaders have acknowledged the importance of the feeder roads. They have admitted that they have benefitted from the improvement of the roads. South Sudan has been unable to finance road works from their own resources. It's responsibilities, notwithstanding, there are more stakes with local communities and private sectors when the roads are impassable. Currently, the government has no policy and institutional arrangements that blend both the social and political approach to resolving the impasse. While communities and businesspeople are willing to contribute to O&M, the absence of government policies allowing operation of a road fund under this arrangement is conspicuously missing.

1 To what extent have steps been taken to create long term processes, structures, norms, and institutions for road maintenance in South Sudan?

2 What are the activities of the beneficiaries that will evidently support the continued work on the feeder roads?

93. **Structures for road maintenance.** In 2018, WFP developed a concept of "Community-Based Road Maintenance Approach", which this Project has adopted but not in full. The establishment of LRMGs, owned and managed by the Local Authorities is part of the plan. In the arrangement, which is highly popularised by Local Authority, the Boma Chiefs would lead

[44]Local ownership in this context looks at the entire country system which includes the national, state, county and the community levels.

the action, mobilise youth, and solicit skills of the youth from the State and/or the partners. Camps where tools and equipment would be stored would be established, and manned by LRMGs, who would work alongside private contractors or government technical people in enforcing the routine road maintenance. This arrangement is not new in South Sudan and is currently in use by Local Authorities and NGOs in some areas already. The missing link, it seems, are the policies and laws, and, the commitment of partners and the States, to develop a reward system that gives incentives to the participating youth as they work on the roads. Leaders have proposed use of assets for work as one mechanism for rewards. The full recognition and implementation of this mechanism still lack policies and laws.

94. Now as the roads have been completed and handed over, the local management of the roads are at high risk. Currently, there is no formal agreement within the governing hierarchies - The State Ministry, County and the Payams and Bomas located where these roads pass. Whereas the use of government departments will ensure that functions carried out by the departments continue beyond the project lifespan, the benefits accruing from use of these structures are clearly built in the exit strategy, something that has not been obvious. Are there State officials that are trained in the management of contracts based on the rules of the modern state? How able and willing are they to replicate and share this knowledge with leaders of the LRMGs? What has stopped this from happening since the thinking started? The Project is moderately satisfactory (rating 3) for sustainability.

Operation and maintenance for sustainability

95. One of the major constraints affecting sustainable road maintenance scheme management is O&M[45]. These constraints could partly be addressed by the Department of Physical Infrastructure at the county levels through establishing rules for road use especially during rainy seasons as well as collecting fees from road users for present and future O&M. Community-based maintenance can also be supported by humanitarian agencies using the other humanitarian tools such as food for assets [FFA], cash for work [C4W], etc. C4W would be the most ideal mechanisms for youth in supporting road maintenance[46]. In 2016 when the IFAD funded agricultural project review, it was commented that there was no national law in place that would allow collection of money by unregistered organisations, including communities. If this situation persists, South Sudan should borrow leaf from Uganda and allow communities to gain legal status and formally mobilise money to support O&M. Since 2016, reports have shown that communities and businesspeople are willing to contribute to road maintenance fund[47]. This opportunity gives precedence to advance the laws to empower LG or community groups, to support the implementation of O&M.

		Amber - YELLOW: [Rated 3] Project meets some of the indicators for sustainability. Some improvements are needed.

[45] Operation and Maintenance Costs often accrue to State and LGs. The generation of this cost has continued to be difficult

[46] From KIIs and FGDs held with leaders from Nzara and Yambio, Boma chiefs are prepared to mobilise the youth to participate in routine maintenance. However, this would require the intervention of partners, to finance community work.

[47] This information can be found in the South Sudan Livelihood and Development Project Completion Report, 2016 and in the WFP's Feeder Road Support Project's end of project report of 2018.

3. Conclusions and Recommendations

96. In this subsection, lessons for future programming are proposed based on the analysis of the operation and are suggested within the context of agricultural production and productivity that have been the focus of the support.

Types of agricultural services received by households

94. The survey did not capture the kind of economic activities that have come with the new road and how these are disaggregated by location and gender. It did not also report on the types of agricultural services that the different categories of households are accessing, and additional services introduced in the area. This is because the design did not focus on these aspects because agricultural services were part of what the other actors are providing. In the Project Document, the types of service providers like NGO, private sector, government, etc. were highlighted, to document the key partners that were involved in supporting the emerging market development in the region. Overall, the more shift in market-driven services to the private sector will signal changes that would be interesting to explore.

Recommendation

95. It is recommended that this information be captured either through the regular monitoring or end of Project evaluation. Documentation of different types of agricultural services received by households and providers themselves will help WFP and Government to evolve policy in supporting agriculture as well as in similar future project designs.

Increase of cultivatable areas due to feeder roads construction

96. It is difficult to justify whether increase in areas under cultivations in 2021 were a result of feeder roads. In the case of NLRS section, while an additional 60 ha of settlement was reported at midline, data shows that no more land was brought under cultivation from the baseline figure of 3,120 ha.

Recommendation

97. Again, for the Project, the desired link is the additional increase in land caused by the improvement of the feeder roads. At end of project evaluation, it will be desirable that WFP confirms whether increase in areas brought under cultivation is attributed to the feeder roads or to some other salient factors, like return of security.

Fit-for-purpose roads

98. Due to lack of concrete evidence or data at mid-term, the users of feeder roads, especially the heavy commercial trucks could not easily be determined. Curious observations and Participant Observations used by the MTE team, reinforced by KIIs confirmed that many heavy commercial vehicles ply the feeder roads, which ideally is not sustainable. The structural

designs of feeder roads are limited to carrying only certain tonnage. Frequent damages on feeder roads have been reliably reported by authorities who attribute them to use by heavy commercial trucks, suggesting that more attention be given to building synergies between the types of roads.

Recommendations

As part of capacity building of the Local Road Maintenance Units, systems, including weight bridges may have to be installed, to vet road uses and enforce standards of uses required for sustainability.

Monitoring & Evaluation of the Project

97. The M&E system for the Project was very dependent on surveys to record social change. However, surveys have proven to be time demanding and expensive. In addition, its orientation in the current state is not so inclined to generate information for the road projects. The format for data collection and analysis do adequately give room for verification. The continued involvement of the M&E Unit in the design and implementation the of the study is an important inclusion. Engineers do need to get themselves involved in monitoring process.

Recommendations

98. Future interventions need to: (i) ensure that M&E plans are not entirely outcome-oriented through focusing on measuring the outputs and social changes that these outputs produce. Instead, M&E systems need to (a) monitor the realization of the key assumptions stipulated in the TOC and included in the Monitoring plan, and (b) incorporate strong elements of qualitative components, including monitoring the processes, in order to better understand social change from a wider parameter, (ii) invest in learning, building and ensuring a common understanding of M&E as a management tool, (iii) develop a participatory and result-based M&E system with the communities in mind, to facilitate learning by identifying both success stories and critical gaps for early correction measures, and strengthen the feedback system. Lastly, (iv), to ensure an appropriate ex-ante Project impact evaluation, the baseline data should be appropriately designed.

Sustainability

During the MTE, we assessed some of the practices in use and make comments that can permit the assessments of how the Project is navigating its path to ensure sustainability to be assessed at the end of the Project. For instance, practices like use of public labour in the road maintenance is a good practice but, not sustainable and effective.

Recommendation

99. The securing of additional fund should partly pilot a model for sustainability of the feeder road. To this end, WFP needs to develop a comprehensive strategy for sustainability that incorporate the best practices and set to roll it out as a pilot.

Investing in smallholder agriculture

100. Since the scope of the Project did not include direct support to agriculture, it was noted from the report that many smallholder farmers did not receive the desired investment packages from the other actors working in the agriculture sector. This particularly was evident along NLRS section where more acceptable food consumption groups fell in rankings. The main assumption was that other partners would support households with agricultural

investments. Along the Torit-Magwi section, the effects of the road were noticeable because more actors targeted households along the feeder roads.

Recommendation

101. Leveraging on WFP capacity through the existing project, especially the Food For Asset Project, this project has potential of being impactful in addition to the road construction. In addition, WFP may have to use its existing mechanisms in support of households living along the constructed roads so that they can benefit and get the full benefits of the improved roads. There should have been deliberate engagement by the Government and WFP with the actors in agriculture to target farmers along the feeder roads. There exists the food security groups that meet regularly at the county and state levels. WFP and Government should have used the forum, to encourage investments to benefit from the road.

Hidden costs for sustainability of the feeder roads

102. The efficiency of the road infrastructure calculated at the MTE does not account for the lifespan of the feeder roads. This is because the design of the feeder road considered only 6 months of feeder road maintenance periods. Some hidden costs for full maintenance of the project lifecycle is required and used for calculation of efficiency.

Recommendation

103. WFP's department of engineering should design strategies for full scale road maintenance approach that can be piloted through additional funding. The strategy should be all inclusive, including both public works and equipment supported road maintenance. It should include addressing absence of policies to operationalise the "road gangs" as one of the strategies.

4. Annexes

Annex 1: Terms of Reference

WFP World Food Programme wfp.org

TERMS OF REFERENCE FOR SHORT-TERM/CONSULTANCY CONTRACTS

JOB TITLE:	Lead Evaluation Consultant
TYPE OF CONTRACT:	When Actually Employed Consultancy (WAE CST)
DUTY STATION (City, Country):	Juba, South Sudan/Home
DURATION:	25 days (Over the period of four months, from March 20 to July 21, 2021)

BACKGROUND AND PURPOSE OF THE ASSIGNMENT:

On 22 November 2018 the Kingdom of the Netherlands (KoN) Embassy in South Sudan signed an Agreement with the World Food Programme (WFP) providing Euro 8 million towards implementation of the Feeder Roads Improvement and Maintenance Project (FRIMP) aiming at linking the local aggregation centres and the agribusiness markets to enhance food security in the Equatoria region.

Based on the road rehabilitation requirements outlined by the Equatoria state authorities, the WFP South Sudan engineers conducted a detailed assessment of approx. 140 km of roads in Western Equatoria state and 243 km of roads in Eastern Equatoria state. Upon review of the road assessment results and conflict sensitivity analysis of the associated project areas, it was decided that rehabilitation and maintenance under the FRIMP will cover the following road sections:

Western Equatoria

- Saurah to Li Rangu road – 13 km
- Nzara to Li Rangu road – 14 km

Eastern Equatoria

- Torit to Magwi road – 48 km

The construction and maintenance of the roads in Western Equatoria were completed by the end of July 2020. The construction of Torit-Magwi road in Eastern Equatoria commenced in late January 2020 and is scheduled to be completed by the end of February 2021. The construction phase will then be followed by six (6) month road maintenance program that will be implemented through community-based approach.

During the road rehabilitation and maintenance of the roads, WFP South Sudan Engineering deployed engineers to monitor the progress of road improvement and maintenance works. Data on project progress and achievements in terms of road construction and maintenance are/will be collected on a monthly basis by the civil engineers in the field offices involved in works supervision.

In February 2020, WFP hired an International Consultant to carry out a baseline study for the feeder roads under the project in Western Equatoria (Saura to Li Rangu and Nzara to Li Rangu), and in Eastern Equatoria (Torit to Magwi). The baseline study defined output/outcome/impact level indicators to be measured, monitored and reported over the life of the project.

WFP seeks to contract an international Lead Evaluation Consultant to conduct a Mid-Term Evaluation (MTE) of the selected road construction project areas in Western and Eastern Equatoria states. The Consultant will lead and implement the Mid-Term Evaluation with support from Engineering Unit, MEAL Unit, and Field Offices. The overall objectives of the MTE are to assess:

1. The relevance of the roads' rehabilitation and maintenance.

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2. Effectiveness in meeting project objectives and targets for output/outcome/impact indicators set out in the 2020 FRIMP Baseline Study Report .
3. Benefits (outcomes and impact) attributed to roads' rehabilitation and maintenance works.
4. Sustainability of the project including level of ownership and participation by the community, local authorities and the government.

ACCOUNTABILITIES/RESPONSIBILITIES:

The Consultant shall work under direct supervision of the WFP SSCO Head of Engineering. The Consultant's responsibilities will include, but are not limited to, the following:

1. Using 2020 FRIMP Baseline Study Report as a reference, design the Mid-Term Evaluation, defining qualitative and quantitative data collection methods to be used to generate data to measure output, outcome and impact level logframe indicators.
2. Review indicators in use and where necessary propose adjustment, to capture results of the project
3. Prepare a sampling plan for the household survey, Focused Group Discussions, Key Informant Interviews.
4. Develop and pre-test data collection tools/questionnaires.
5. Train enumerators on data collection tools and methods before deployment for field work.
6. Supervise and coordinate data collection to ensure compliance with WFP data collection and evaluation standards.
7. Develop a data analysis plan to show how collected data will be used to measure outcome/impact level logframe indicators.
8. Prepare a draft mid-term evaluation report for review and inputs by WFP's MEAL and Engineering Units and the donor of the project.
9. Prepare a final mid-term evaluation report incorporating review comments from WFP and the donor of the project.
10. Any other duties as required.

The Consultant shall complete the assignment within a maximum accumulated total of twenty five (25) working days over a period not exceeding three (3) calendar months. To implement the assignment and produce the specified deliverables, the Consultant is expected to spend 90% of his/her time working from the WFP country and field offices in South Sudan and 10% of the time working remotely from home.

DELIVERABLES AT THE END OF THE CONTRACT:

The Consultant shall produce/submit the following deliverables in accordance with agreed timelines/work schedules:

1. An Inception Report – Evaluation questions, workplan, sampling plan, questionnaires, data analysis plan.
2. Draft Mid-Term Evaluation Report.
3. Final Mid-Term Evaluation Report.
4. Presentation of the MTE findings to WFP and the donor.
5. An updated project logframe with mid-term values for all indicators.

All the above deliverables are subject to review and approval by the WFP Country Office and KoN Embassy in South Sudan.

WFP World Food Programme wfp.org

TERMS OF REFERENCE FOR SHORT-TERM/CONSULTANCY CONTRACTS

QUALIFICATIONS & EXPERIENCE REQUIRED:

Education:	M.Sc. Agricultural/Rural Economic
Experience:	Minimum ten (10) years of relevant experience in capacity of Senior Evaluator/Team Leader responsible for monitoring and evaluation of rural (transport) infrastructure rehabilitation and development projects and integration of cross-cutting themes. Extensive work experience in East Africa Region and particularly in South Sudan.
Knowledge & Skills:	Professional knowledge of design and implementation of evaluations of rural infrastructure development projects, from the projects inception to completion, with focus on socio-economic and agriculture aspects. Excellent report writing skills.
Languages:	Fluency in English language. Knowledge of Arab and/or local languages spoken in Eastern & Western Equatoria states of South Sudan is an advantage.

Certified by Hiring Manager (name/title) & signature):

Rustam Makhmudov, Lead Engineer ..... **Date:** 3 March 2021

Accepted by Short-term/Consultancy contract holder (name & signature):

..... **Date:** .....

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Annex 2a: MTE Plan and schedules

Study plan

The anticipated completion time frame for this mandate is 25 days including inception period. The consultant will produce the following deliverables based on the following timelines:

Table 11: Proposed workplan

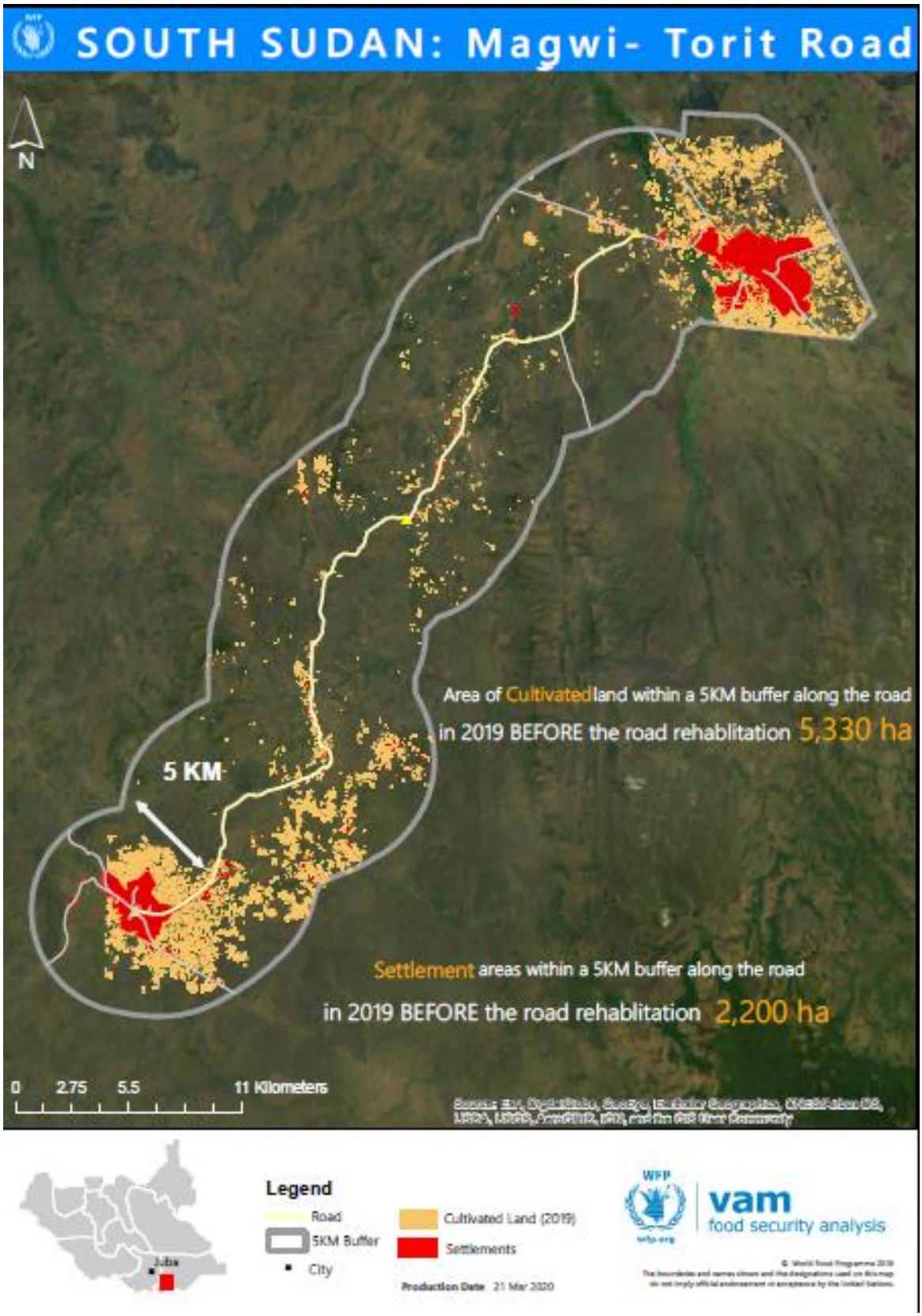
Activities & Deliverables	Responsible	04/05 to 21/05	22/05 to 11/06	12/06 to 24/06	25/06 to July 2021	4/09 to 10th October 2021	Comments
Administrative issues	JJ						Finalise contract with WFP
Phase 1: Inception phase							Ensure virtual meetings with WFP and EKN are held, and IR drafted and discussed and agreements inserted in the final IR. Ensure that data collection tools are finalised and WFP's staff trained and all preparations for field trips are completed and implemented. This includes the revision of existing contract forms and ToRs for field enumerators, selection of respondents for FGD and KIIs.
1. Receipt and review of	WF						
2. First meeting with FRIMP's Team	WF						
3. Strategic virtual interactions with selected stakeholders in the	JJ						
3. Draft Inception Report for WFP	JJ						
4. Virtual reviews of data collection tools with WFP	JJ/ Gra						
5. Virtual approval of tools and research approaches by WFP	WF P						
6. Preparation and sign contracts with WFP's field enumerators	JJ						
7. Virtual courtesy meetings WFP	WF						
8. Virtual courtesy meeting with EKN to get their expectations on	WF P						
9. Virtual training of 4 WFP							
10. Survey teams travel to fields							14/06/2021 and return 05/07/2021 [WES] 08/07/21 [EES]
Phase 2 Field trips to WES and							
11. Field planning meetings with the two teams and Programme Officers in the FOs							15/06 in WES and 16/05 in EES
12. Two days of virtual training of 8 additional enumerators selected in the fields and testing of tools							18-19/06/2021. Training by the team from Juba
Continuous virtual interactions with the Field Offices and FRIMP's	JJ/F T						Plan to hold daily virtual discussions with team leaders from W&EES
Virtual KIIs with State and Counties leaders	JJ						
Virtual meeting with lead NGOs and Organisations in the field	JJ						22-25/06/2021
Administering HHSQs/KKIs/FGDs	FT						

Activities & Deliverables	Responsible	04/05 to 21/05	22/05 to 11/06	12/06 to 24/06	25/06 to July 2021	4/09 to 10th October 2021	Comments
Data analysis and revisions	M&E						Fieldwork starts from WES on 24th July ends on 7th August 2012 in EES. Data analysis, discussion, and revisions to
Technical report (draft)	JJ						2021
Debriefing/discussion	JJ						10th October 2021
Technical report (final)	JJ						15th October 2021
Final approval of Report	WF						25th October 2021
Synthesis report (final)							30th October 2021

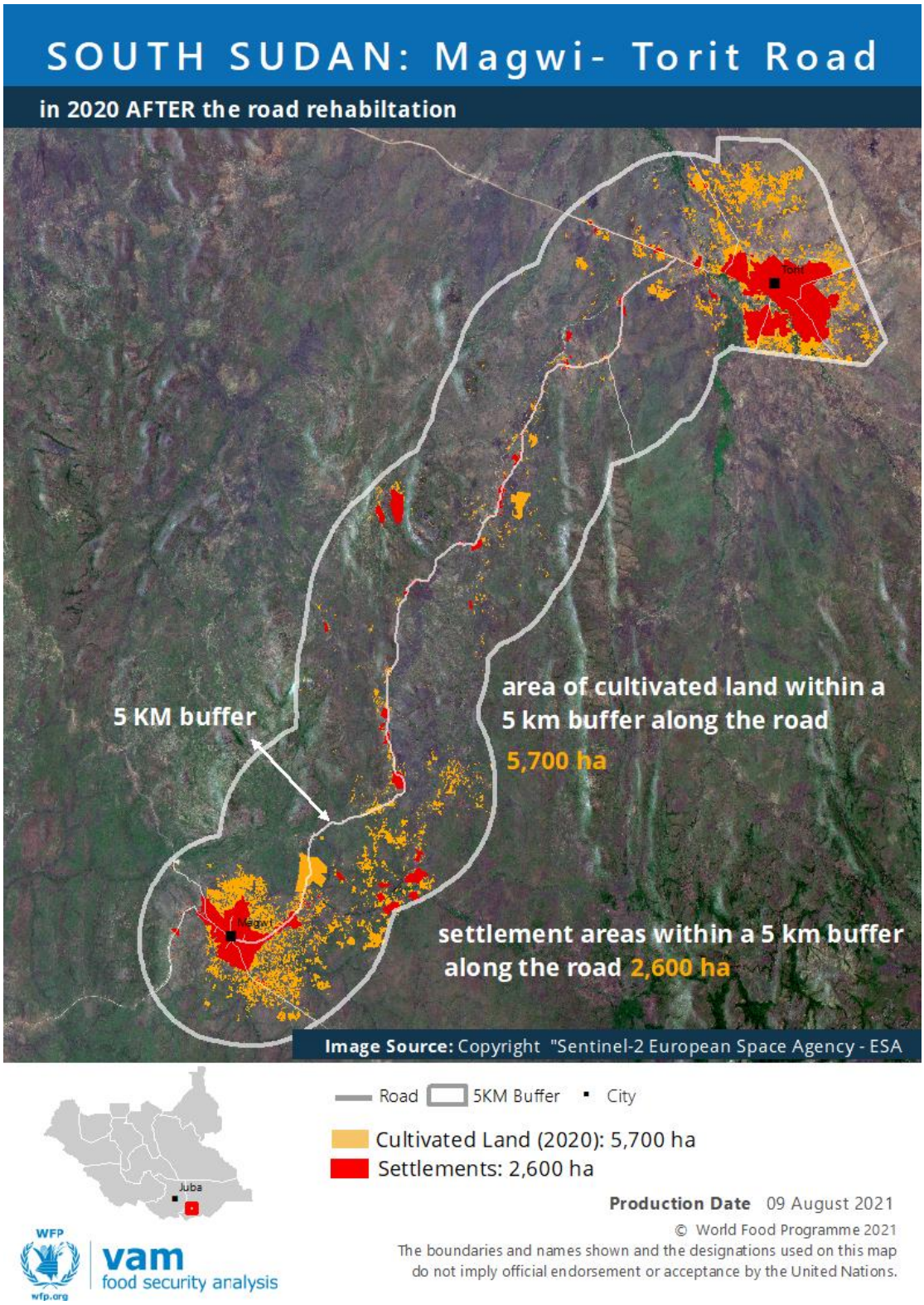
Annex 2b: Timeline for delivery

Deliverables	Timeline as per ToRs
Inception report approved and enumerators trained	**04/05 to 21/05/2021** – a]. Submission of draft IR slated for **13/05/2021** for the reviews and comments by WFP. Final IR to be completed by **01/06/21** and shared with EKN and cleared by **11/06/21.** b]. Training of WFP enumerators based in Juba and finalising the data collection tools will be completed by **09/06/21**.
Field trip for data collection by WFP enumerators	**24/06** –Teams travel to both WES and **19th July** EES for data collection. **08/07/2021** – Teams travel back to Juba from WES and **07/08** from EES.
Virtual de-briefings by Team to both field and Juba offices	**Continuous through out the research by use of watsup and Microsoft Team**
Analysis of data and gap's filling in data	**08/08 to 30/10/2021:** Analysis of data by M&E Unit completed and corrections and reviews of data analysed thereafter.
Draft report	**22/11/2021** - The consultant submits draft report for consultation and validation, and this will take the form of virtual presentation, when required. **29/11/2021** – Comments by WFP/KN submitted to consultant
Presentation of MTR findings to WFP and the	**25/10/2021** – Virtual presentation and discussions of findings with WFP/EKN.
Final report	**22/11/2021** - Upon submission of the final report that incorporates the comments from WFP and KoN, and updated logframe with MT values for all indicators, the consultant will hand over the report.

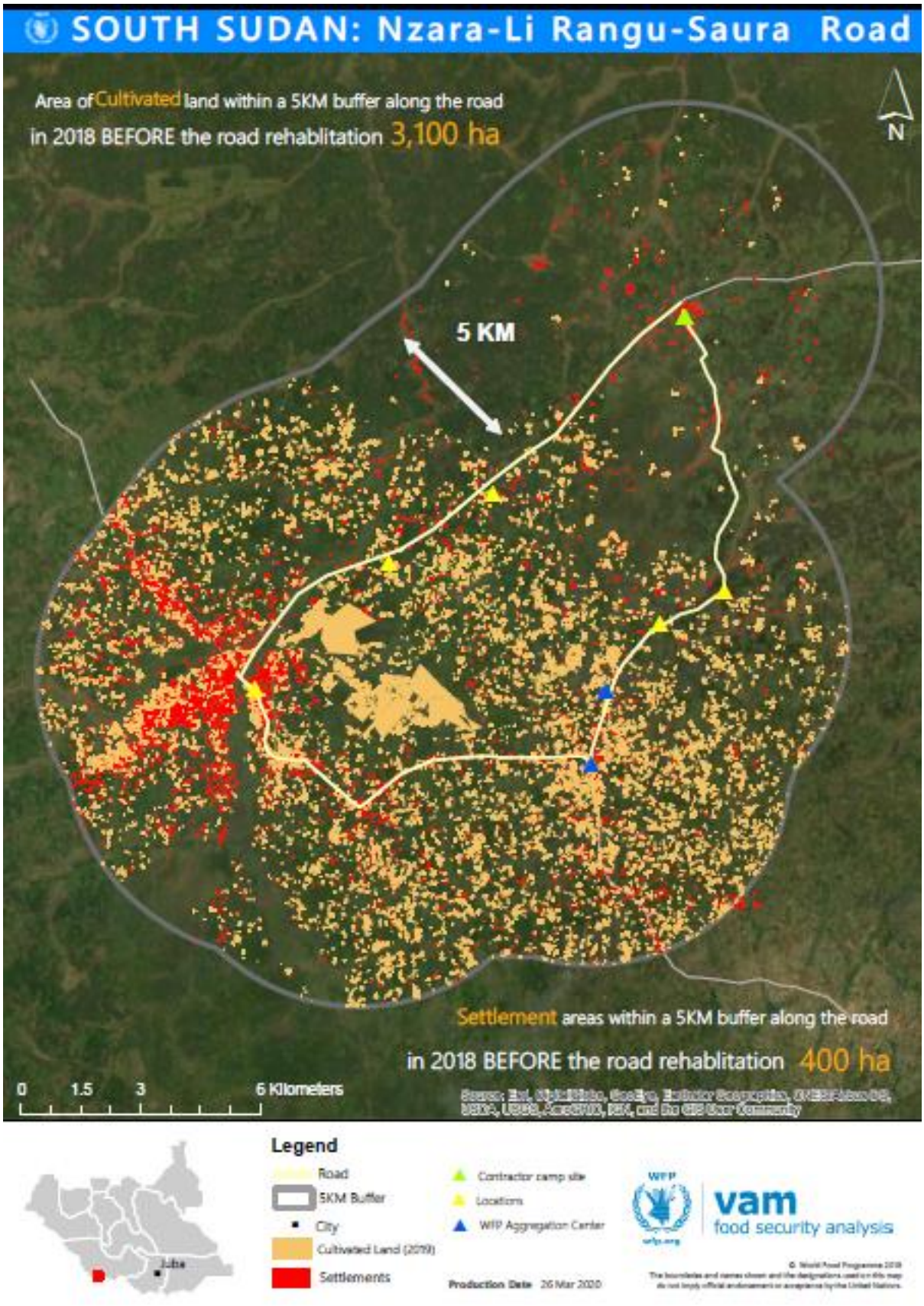
Annex 3a: Satellite images for Torit-Magwi Road section – baseline



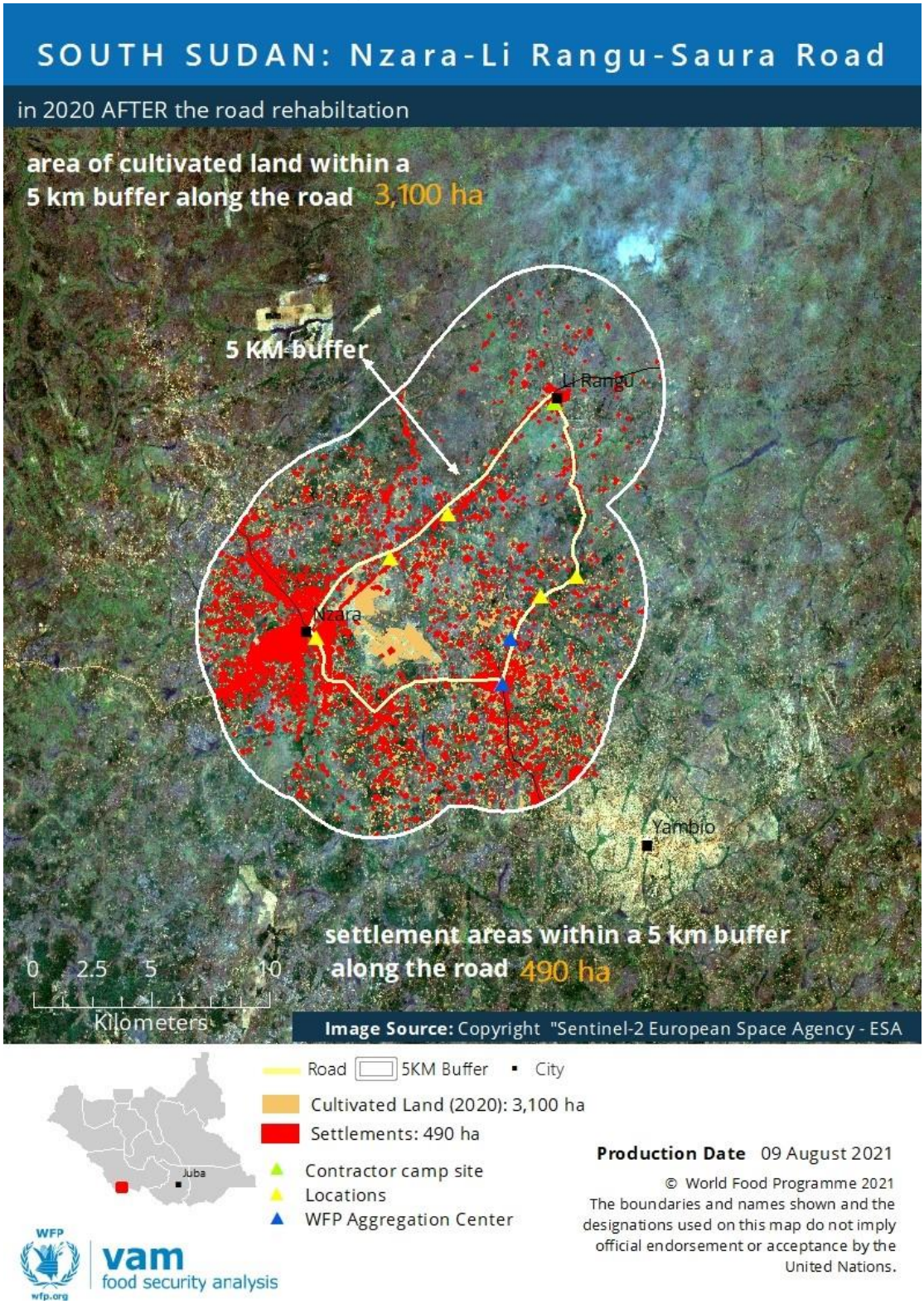
Annex 3b. Satellite image for Torit-Magwi feeder road after [MTE]



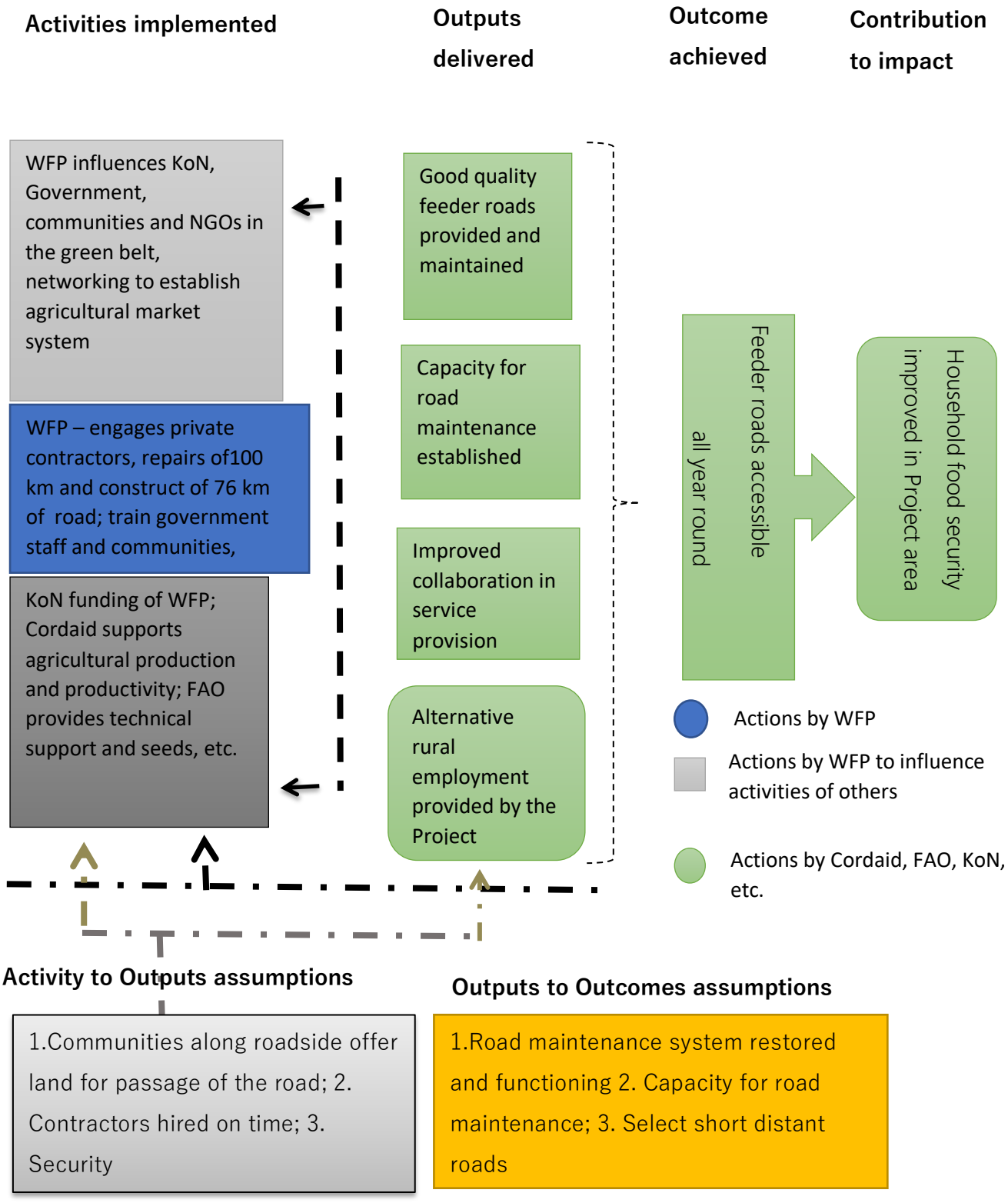
Annex 3.c: Satellite images for NLRS Road section – baseline



Annex 3 d. Satellite image after [MTE] for NLRS



Annex 4: Theory of Change for FRIMP



Annex 4.b: Theory of change

The theory of change is based on the fundamental logic that: **all-weather and climate resilience roads** can facilitate on one hand, farmers access to service providers - to improve household production and productivity, and, on the other hand, households' access to agricultural and inputs' markets that would lead to improved household food security in the Project area.

FRIMP would also aid the return of displaced families and their resettlements[48], enable government to enforce the newly founded security, and all these actions in turn, can lead to **improved household food security** as households can increase own farm production but also access food from markets. In addition, **all-weather and climate resilience roads** can also improve physical access to basic services, and as such, they are a necessary condition and incentives for return and resettlement of the displaced and the refugees, although not a sufficient condition for improved outcomes of social services.

As illustrated in the ToC Flow Chart at Annex 4 the key assumptions in the **ToC** are:

a] WFP will be able to influence the actions of the other partners, including the GoRSS /EKN, to continue supporting both on-farm and off-farm production, promote resilience in the households, invest in rural market infrastructure - like the aggregate centers, and increase availability of agricultural inputs, finance and knowledge - all of which lead to increase in use of improved agricultural technologies and practices and increased production.

b] Improved access to agricultural markets and market infrastructure following a renewed marketing approach of agricultural products and improved linkages between buyers and sellers, will lead to improved transaction efficiencies and increased access to markets to sell agricultural products), and;

c] EKN will finance the scope of work, which includes full-scale rehabilitation and 6 months of follow-up road maintenance.

The relationship between **improved access and agricultural development** is not a direct one. This is because feeder roads are not direct inputs for agricultural production activities. Rather, based on WFP's experience in South Sudan[49], feeder roads improvement and their maintenance do affect both the demand for and supply of agricultural inputs and products. Provision of all weather and climate resilience rural roads can facilitate quicker, cheaper, and more convenient transportation. Furthermore, better roads help farmers to access better and more competitive markets. Dercon *et al* [2009] for instance, have shown that improved roads drastically reduce the cost of agricultural inputs and extension services. Finally, better feeder roads connecting the rural productive areas with the main roads, like in the case of the FRIMP, help link small farmers with urban markets.

[48] According to the baseline study, more HHs in WES are returning to their homesteads from both displacement camps and exiles, to resettle and start production. This similar experience was observed in 2018 with the Mundri-Bangolo [WES] and Magwi-Ame and Magwi-Pageri [EES] feeder roads by WFP.

[49] See end of project evaluation report for the Mundri-Bangolo and Pageri-Ame-Magwi feeder roads completed in 2019

Annex 5: Revised Logframe

Impact Level Indicators	Road Sections	Units	Baseline Original Project Start 2019/ 2020	Cumulative Target Values					Frequency	Date Source/ Methodology	Responsibility for Data Collection	Comments
				2020 Planned	2021 Projected	2022 Projected	End of project	Original target (if applicable)				
% change in the number of beneficiaries HHs with a] poor FCS and b] Borderline FCS disaggregate by sex of the head of the HH and location	WES	%	Poor 15.1	13.5	10.0	7	7	N/A	Annually	2022/ Reports/ Survey/KIIs/ FGDs	WFP/ FAO/ Cordaid	Both poor and borderline FCS constitute 67.3% of the sample HHs. FCS will be used annually to monitor quantitative improvement in the **consumption patterns** of HHs. It is used as a proxy for **food utilization** and thus reports how project enhances the widespread distribution of positive change in dietary diversity resulting from improved access
			BL: 30.3	25.0	20.0	15	15	N/A				
	EES		Poor: 41.1	36.0	30.0	25	25	N/A				
			BL: 38.5	35.0	30.0	18.0	TBD	N/A				

Impact Level Indicators	Road Sections	Units	Baseline Original Project Start 2019/ 2020	Cumulative Target Values					Frequency	Date Source/ Methodology	Responsibility for Data Collection	Comments
				2020 Planned	2021 Projected	2022 Projected	End of project	Original target (if applicable)				
												to food baskets through markets.
% Change in the share of households spending >65% of monthly budget on food items disaggregated by head of HHs and road sections	WES	%	Male 13%	10%	6%	4%	4%	N/A	Annually/Seasonally	2022/ Reports/ Survey/KIIs/ FGDs	ditto	This indicator is used to monitored annual / seasonal quantitative reduction in the shares of HH expenditure on cereals. Overall, the mean share of expenditure is 33%. This is a proxy for "access to food through markets". Reduction in the share of cereal will be attributed to increase in own cereal production, living resources for other pressing
			Female 11%	9.5%	6%	3%	3%	N/A				
	EES		Male 48%	40%	30%	20%	20%	N/A				
			Female 40%	40%	27%	14%	14%	N/A				

Impact Level Indicators	Road Sections	Units	Baseline Original Project Start 2019/ 2020	Cumulative Target Values					Frequency	Date Source/ Methodology	Responsibility for Data Collection	Comments
				2020 Planned	2021 Projected	2022 Projected	End of project	Original target (if applicable)				
												NFI and FIs. It also enables us to assess changes in unit price for cereal in the market.
Reduction in consumption based coping strategy index [rCSI] disaggregated by gender and locations	WES	#	Male 13.70	12.00	11.50	10.00	10.00	N/A	Annually /Seasonally	2022 / Survey/ Kiis/FGDs	ditto	rCSI will be used annually to monitor change in HH's consumption-based coping strategies in response to improved **food availability** in the HHs. Food availability is from own food production and
			Female 14.50	13.50	11.00	9.80	9.80	N/A				
	EES		Male 15.01	14.00	13.20	11.50	11.50	N/A				

Impact Level Indicators	Road Sections	Units	Baseline Original Project Start 2019/ 2020	Cumulative Target Values					Frequency	Date Source/ Methodology	Responsibility for Data Collection	Comments
				2020 Planned	2021 Projected	2022 Projected	End of project	Original target (if applicable)				
			Female 11.26	10.00	9.00	8.60	8.60	N/A				markets – improved income to HHs from labour-based work and reduced # of deaths. Food also through food assistance. Assumption is that with good roads small holders will be supported to increase production and access markets. This in turn will rCSI of both male and female HHs

Outcome Level Indicators	Road Section	Unit	Baseline Original Project Start 2020	Cumulative Target Values					Frequency	Data Sources/ Methodologies	Responsibility for Data Collection	Comments
				2020 projected	2021 Projected	2022 Projected	End of project	Original target (values)				
Increased land area under **farming** within the 5 km radius alongside the roads disaggregated by location	WES	ha	3,100	3,120	4,500	5,000	5,000	N/A	Annually / Seasonally	2021/2022/Satellite image reports / Project Report	WFP	Increased area **in hectare** brought under cultivation will be used annually to monitor increase in production of crops. It is a proxy for increase in **food availability** for consumption
	EES		5,330	5,400	6,000	6,200	6,200	N/A				

Outcome Level Indicators	Road Section	Unit	Baseline Original Project Start 2020	Cumulative Target Values					Frequency	Data Sources/ Methodologies	Responsibility for Data Collection	Comments
				2020 projected	2021 Projected	2022 Projected	End of project	Original target (values				
												and for sale through own production. It can also be used to report on security situation in the area through increase in settlements and investments. Assumption is improved investments in social

Outcome Level Indicators	Road Section	Unit	Baseline Original Project Start 2020	Cumulative Target Values					Frequency	Data Sources/ Methodologies	Responsibility for Data Collection	Comments
				2020 projected	2021 Projected	2022 Projected	End of project	Original target (...)				
												services to encourage return to land by displaced people.
Proportion of HHs living along the 76.06 km feeder roads visited by service providers, disaggregated by sex of HHs, types of	WES	%	22.6%	35%	40%	45%	45%	N/A	Monthly/			This indicator will report on both the cumulative numbers and qualitative impact of the feeder road on service providers and to HHs living along
	EES	%	27.3%	38%	42%	50%	50%	N/A				

Outcome Level Indicators	Road Section	Unit	Baseline Original Project Start 2020	Cumulative Target Values					Frequency	Data Sources/ Methodologies	Responsibility for Data Collection	Comments
				2020 projected	2021 Projected	2022 Projected	End of project	Original target				
services and locations									Annually	Monthly Report /Survey /KIIs / FGDs	WFP / Contractors / NGOs	the feeder roads. It will enable the project to justify improved performance at HHs after the road was constructed, based on evidence of increased technical services provided to them.

Outcome Level Indicators	Road Section	Unit	Baseline Original Project Start 2020	Cumulative Target Values					Frequency	Data Sources/ Methodologies	Responsibility for Data Collection	Comments
				2020 projected	2021 Projected	2022 Projected	End of project	Original target (where				
Percent increase in the average annual daily traffic counts (passengers and freights) on the roads	WES	%	N/A	TBD	tbd	tbd	TBD	N/A	Monthly/ Annually	ditto	Contractor /Police /Traders Associations	Anecdotal information on traffic counts [passengers and freights] and contractors to begin collecting them for analysis of types of vehicles and passagers vehicles
	EES	%	N/A	TBD	tbd	tbd	TBD	N/A				

Outcome Level Indicators	Road Section	Unit	Baseline Original Project Start 2020	Cumulative Target Values					Frequency	Data Sources/ Methodologies	Responsibility for Data Collection	Comments
				2020 projected	2021 Projected	2022 Projected	End of project	Original target (...)				
Changes in the share of HH expenditures on transport service disaggregated by gender and road section	WES	%	9%	10%	10%	25%	25%	N/A	Monthly/ Annually	Reports/ Survey/FGDs and KIIs	Traders / State Depts/ Service providers	This indicator will report on observed changes in modes of transport in response to accessibility and increased production at farm levels. It is a proxy of increased income and organisations by HHs as a
	EES		4%	5%	10%	15%	15%	N/A				

Outcome Level Indicators	Road Section	Unit	Baseline Original Project Start 2020	Cumulative Target Values					Frequency	Data Sources/ Methodologies	Responsibility for Data Collection	Comments
				2020 projected	2021 Projected	2022 Projected	End of project	Original target (values				
												result of improved and all the year-round feeder roads.

Output Indicators	Road Sections	Unit	Baseline Original Project Start 2020	Cumulative Target Values					Frequency	Date Source/ Methodologies	Responsibility for Data Collection	Comments
				2020 Planned	2021 Projected	2022 Projected	End of project	Original target				
Total kilometres of feeder roads fully rehabilitated, disaggregated by locations	WES	#	0	28.06	28.06	28.06	28.06	28.06	Monthly	Project Report	Constructors / WFP	Measures fulfilment of physical infrastructure as planned by the project
	EES		0	24.00	48.00	48.00	48.00	48.0				
Culverts installed as part of rehabilitation	WES	#	0	15	15	15	15	N/A	Monthly	Project Report	Constructors / WFP	Physical infrastructure developed to ensure all year-round usage of the road.
	EES		0	30	30	30	30	N/A				
Road maintenance	WES	#	0	2	4	4	4	10	Monthly	Report	ditto	Y= Youth and F= Female.

Output Indicators	Road Sections	Unit	Baseline Original Project Start 2020	Cumulative Target Values					Frequency	Date Source/ Methodologies	Responsibility for Data Collection	Comments
				2020 Planned	2021 Projected	2022 Projected	End of project	Original target				
groups trained on basic road maintenance techniques and disaggregated by gender and age			0	2	4	6	6					Figure provides cumulative numbers per year. 20 RMGs target was set for the entire project mainly women according to project document. The Local Road Maintenance Units in the States will support and
	EES		10 Y	3	4	4	4	10				
			2 F	4	6	6	6					

Output Indicators	Road Sections	Unit	Baseline Original Project Start 2020	Cumulative Target Values					Frequency	Date Source/ Methodologies	Responsibility for Data Collection	Comments
				2020 Planned	2021 Projected	2022 Projected	End of project	Original target				
												contract them.
Youth and women employed by the road project disaggregated by gender and locations	WES	#	38 Y	38 Y	tbd	Tbd		N/A	ditto	ditto	ditto	Monitoring report to focus on nationals give disaggregated data by road sections
			7 F	7 F	tbd	Tbd						
	EES		10 Y	10 Y	tbd	Tbd		N/A				
			2 F	2 F								
Total km of the constructed feeder roads fully maintained by the contractors within the	WES	km	0.0	28.06	28.06	28.06	28.06	N/A	ditto	ditto	ditto	A total of 20 LRMUs was planned in the project but for this project, 2 units might be considered. It
	EES		0.0	Tbd	tbd	48.0	48.0	N/A				
	EES		tbd	tbd	tbd	tbd	tbd	N/A				

Output Indicators	Road Sections	Unit	Baseline Original Project Start 2020	Cumulative Target Values					Frequency	Date Source/ Methodologies	Responsibility for Data Collection	Comments
				2020 Planned	2021 Projected	2022 Projected	End of project	Original target				
contract periods, disaggregated by location												comprises light and supportive equipment for facilitating community work

Annex 5.b: Logframe performance during MTE

Impact Statement	Improved HHs food security in the Project Area	Torit-Magwi		Nzara-Li Rang-Saura	
		Baseline	Current	Baseline	Current
Impact indicators	1. Per cent **reduction in the number of female and male-headed households** categorised as poor FCS [PFCS] and Borderline FCS [BLFCS], disaggregate by locations. A] For the Nzara-Li Rangu-Saura section, reduce the number of the PFCS and BLFCS from the current **17.3% [FHHs = 18.1% and MHHs =16.5%]** and **28.3% [FHHs=29% and MHH=27.5%]** respectively to **18.8% [FHHs=19.5% and MHHs=18%] and 13.4% [FHHs=12.7% and MHHs=14.1%]** respectively by 2022. B.] For Torit-Magwi section a reduction in PFCS and BLFCS from the current **41.1% [MHHs=40.4% and FHHs=41.9%] and 38.5% [37.6%=MHHs and 39.5=FHHs**] respectively **to 29.8% [FHHs=31% and MHHs=28.6%] PCFS and 28.3% [28.8% and MHHs=27.8%**] BLFCS by 2022	PFCGs=66,7%% [66.7% FHHs +66.7% MHHs] and BLFCGs=38.5% [22.2% MHHs + 27.3% FHHs]	PFCGs= 26.3% [33.3%m and 19%f]; BLCGs= 42.9% [33.3%m and 52.4%f]	**PFCGs=17.3% [FHHs = 18.1% and MHHs =16.5%]** and BLFCGs= **28.3% [FHHs=29% and MHH=27.5%]**	PFCGs= 3,8% [1.1m +6.5%f] and BLFCGs= 64.2% [65.5%m + 62.9%]
	2. Per cent reduction in **the numbers of households with more than 65% monthly spending on food items, 2022 disaggregated by sex of the head of household and locations.** A.] For the Nzara-Li Rangu-Saura section, is from **the current 29.5% [FHHs=14.5% and**	72.1% [64.6% FHHs and 79.6% MHHs]	77.8% [66.7% FHHs and 88.9% MHHs]	44.0% [38% MHHs + 50% FHHs]	74.6% [78.2% MHHs + 71.0% FHHs]

	MHHs=13.7%] to a new target by 2022 **of 12.8% [FHHs=13.5% and MHHs=12%**]. B.] For Torit-Magwi section, from the current **13.5% [FHHs=11.3% and MHHs=15%]** to a new level of **12% [FHHs=10% and MHHs=14%]** in 2022.				
	3. Per cent reduction in consumption based coping strategy index [rCSI] disaggregated by sex of the head of household and locations. A.] For WES from the current mean average **of 12.5% [FMMs=12.7% and MHHs=12.3%] to 10.8% [11.5% and MHHs=10.2%]** B.] For EES, from the current mean average of **13.0% [FHHs=10.7% and MHHs=15.2%] to 11.6% [FHHs=9.5% and MHHs=13.8]**	15.2% MHHs and 10.7% FHHS female	14.6% MHHs and 17.6% FHHs	6.3% MHHs and 5.6% FHHs %%female	12.3% MHHs and 12.7% FHHs FHHsfemale
Outcome Statement	**Provision of all year-round access roads to agricultural markets in the Project area**				
Outcome indicators	1. Per cent increase in land area under **farming** within the 5 km radius alongside the roads disaggregated by location -	5,330 ha	6.9% [5,700ha]	3,100 ha	0% [3,100ha]
	2. Proportion of households living along the 77.06 km feeder roads visited by service providers, disaggregated by sex of HHs, types of services and locations	27.3%	47.0%	22.6%	83.2%
	3. Percent increase in the average annual daily traffic counts (passengers and freights) on the roads[50]	NA	Mean 50 per day	NA	Mean 10 per day

[50] The ministry of roads and bridges does not record data regarding traffic counts.

	4. Changes in the share of HH expenditures on transport service disaggregated by gender and road section	0.12% MHHs and 0.02% FHHs	Reduction in costs by 30.6% [34.7% FHHs and 25,9% MHHs]	0.01% MHHs and 0.02% FHHs	Reduction in costs by 17.6% [15.2% FHHs and 20.0% MHHs
	5. Numbers of RMGs established and operational disaggregated by age and location	0	6	2 [22 youth]	1[41% women]
Output 1	**Good quality roads constructed and repaired**				
Output 1 indicators	1. Total kilometres of feeder roads fully rehabilitated, disaggregated by locations	48	49.0		27.9
	2. Culverts installed as part of rehabilitation disaggregated by location	24	38		
	3. Total km of the constructed feeder roads fully maintained by the contractors within the contract periods, disaggregated by location	2	53.4	28	38.9
	4. Numbers of daily traffic disaggregated by types of vehicles and locations	Available	1,431		
Output 2	**Capacity for road maintenance established at community and government levels**				
Output 2 Indicators	1. Numbers employed by the road project disaggregated by gender, age and locations	NA	50	NA	45
	2. Local Road Maintenance Groups [LRMGs] trained on basic road maintenance techniques and disaggregated by location		6 [85% female]		1 [42% female]
	4. Numbers of new markets established disaggregated by locations		4		2

Annex 6: Study approach and methodology

6.1 Evaluation approach

This is a formative evaluation, using a ToC-based approach. It is developed to use mixed methods of data collection that will allow synthesis of different types of data. The formative nature of the evaluation is informed by what has been implemented so far as almost completed. Only the road maintenance of the Torit-Magwi section is pending. The MTE will limit itself to assessing the implementation progress. There will be no or very limited discussions on changing or restructuring of the Project at this point. In addition, this MTE will ideally provide the basis for the final evaluation.

The ToC-based approach adopted allows exploration of change and the evidence thereof, to probe further why and how they have occurred while considering that NOT all change will follow logical sequencing due to the nature of supports provided. However, by using an approach that tests the Project theory, the evaluation produces findings that:

- **Ensures accountability** by providing evidence of the degree to which FRIMP has achieved its objectives according to the result chain and ToC.
- **Helps inform strategy** by looking at the difference between theory and reality, identifying areas of programme strategy adaptation; and
- **Strengthens delivery** by providing data that shows how and why change is happening. This evaluation goes beyond looking at what change is taking place [***retrospective questions****].* It also looks at how it is actually happening; what is either working or not working [***prospective questions***] and for whom and in what particular context[51].

6.2 Details on the data collection methods

A basket of mixed methods for data collection will be used[52]. However, household survey questionnaires [HHSQ] will be the primary tool for the collection of **quantitative data**[53]**.** The Consultant will begin with the reviews of the documents with the help of **Document Review Protocols [DRPs**]. This process will continue throughout the study period as indicated in the work plan Chart in Table: 12. In total, 18 to 21 days will be spent in the field for primary data collection[54]. However, 3 more additional days will be required for Eastern Equatoria, to cover for the high number of respondents and the travel time. The HHSQ will be complemented by three **qualitative methods**: Participants Observations [POs], Focus Group Discussions [FGDs] and Key Informant Interviews [KIIs], as further explained below.

Document review [DR]

[51] The baseline study report indicates marked differences between beneficiaries from the two Project areas in terms of historical and political realities.

[52] Use of mixed data collection methods is justified in data triangulation, to ensure completeness and credibility study findings

[53] The HHSQ used was modified from earlier templates used by WFP's feeder road surveys.

[54] Since this is the raining season, we expect to have more interruptions. In EES, the team will recruit enumerators both in Magwi and Torit and train them. Our experience is thus, that we have longer days in EES compared to WES.

DR will be the most important data collection tool used throughout the period of the study. It will, among other things, provide external analysis of the local and national context; provide figures and other secondary data relating to the key conditions and numbers of the population or HHs targeted, e.g., women and youth, ethnicity, etc. Its rationale is that WFP, like the other partners[55] who are active in the feeder roads and food security sectors, do document most of their experiences in form of reports, which can be used. And in line with their internal processes, guidelines, and requirements, they will share some of these documents with the Consultant when requested for. A DRP will be used to collect data and a template is prepared and attached at Annex 3A.

Household survey questionnaire [HHSQ].

The HHSQ will be the primary tool for collecting quantitative but also qualitative data directly from the beneficiaries. The template used during baseline survey in March 2020 will be used after some modifications, to suit the purpose of the MTE. The tool will focus on measuring change and/or reporting on specific questions and information regarding the characteristics of HHs, r**elevance, effectiveness and sustainability** of the Project required for the MTE. The survey tool is designed to generate insights covering four main areas:

> **Evaluation Question 1:** To what extent do project objectives and designs respond to the needs, priorities of the communities, local/regional and national institutions?
>
> **Evaluation Question 4:** To what extent is the Project making best use of available knowledge, human, technical, technological, and geographical inputs to achieve its desired results?
>
> **Evaluation Question 6:** To what extent has the project generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects?
>
> **Evaluation Question 7:** How likely is it for the Project's activities and the use of the Project outputs to continue even after the end of the Project?
>
> Hence, the HHSQ has in total 10 parts, including **a new section that analyses the provision of services to HHs**, covering these questions. We also plan to cover same numbers of HHs [a total of 580 HHs] from the 5 counties in Eastern and Western Equatoria.

Focus group discussions [FGD]

6. FGD, on the other hand, will be conducted with producer groups, service providers like traders, boda boda riders and transporters that will be recommended by Field Offices. FGD will be used to collect, validate, and inform our analysis. It will be limited to discussion of two or three key issues, depending on who the targets of the interviews are. The interview will focus on questions of effectiveness, sustainability, and impact of the Project. Focus Group Discussion as indicated in the Annex 5 C, will be used to respond to issues in questions 1, 3, 4,5,6 and 7.

[55] WFP, EU and UNOPS have been involved in feeder road work in South Sudan for a long time and has numerous information on the sector

Key informant interview [KIIs].

KIIs will provide additional insight - to validating the acceptability of the Project (relevance and coherence), the condition and effects of feeder roads (effectiveness), and the quality of construction work (efficiency) and its adherence to the standard and the design. Key informants will also provide case study information based on individual experience - like how the benefits of the feeder road can be retained over time (sustainability).

6.3 Sampling

The MTE will target same villages where the baseline study was carried out in March 2020. Two sampling approaches will be applied as further explained below. These are purposeful – where the intension is to target areas within the May, 2021 effects of the Project; and randomly.

Household survey's sampling approach and determining sample size

The study will use multi-stage cluster sampling procedure – utilising both probability and non-probability sampling procedures at the different stages[56]. The Counties, Payams, Bomas and Villages used are the "new" administrative centers named after the 2018 peace talk. The actual population size living within the 5 km radius of the 77.06 km stretch is unknown. During the Baseline Study, the Team involved the NGOs, the States and Local Governments [LGs] in the selection of the sites and they are statistically valid. During the Baseline Study, we determined a sample size by using the formula shown below, to compute the minimum sample size required for accuracy in estimating proportions by considering the standard normal deviation set at 95% confidence level (1.96), percentage picking a choice or response (50% = 0.5) and the confidence interval (0.05 = ±5). The purpose is to collect the current socio-economic characteristics of these road users within 5 km radius of the roads.

$$n = \frac{z^2 (p)(1-p)}{c^2}$$

Where:

z = standard normal deviation set at 95% confidence level

p = percentage picking a choice or response

c = confidence interval

n = (Z-score) ^{2} * p*(1-p) / (margin of error)^2

n = (1.96)^2 * 0.5*(1-0.5) / (0.05)^2

[56]From the 4 Counties identified, we will purposefully select Bomas situated within 5 km radius of the feeder roads, to ensure that key factors like experiences in displacement, agricultural productivity, proximity to roads, historical events that influence, etc. that categorize the different areas along the road side are captured. Literature reviews reveal that in WES, the LRA insurgency [2008 to 2013] and the subsequent insurgency [2013 to-date] had had different impact on Payams in terms of displacement and violence. The selections of Bomas/ Villages will be purposive and influenced by on-going activities – which might have been in relation to presence of partners working particularly in agriculture and other services and influencing production, experiences of displacement and violence, etc. For this, we will need to engage with the field offices, Cordaid and FAO as advised in the ToR.

n = 3.8416 * 0,25 / 0.0025

n= 384.16

(Z-score is 1.96 for a 95% confidence level)

A slightly similar sample size to the baseline study of 422 households [48% female headed HHs] will again be interviewed[57]. This is determined through an analysis of cost of operation, allotted timeframe given and the geographic coverage, to ensure that sufficient numbers of both female and male-headed households will be consulted to achieve statistical significance. The sample size in the specific Bomas and or Villages along the 5 km radius is calculated as a proportion of their total populations estimated. The Bomas, however, were selected purposively, to ensure that households socio-economic characteristics selected for the interviews is inclusive of the diversities that can be found along the 77.06 km stretch of feeder road. The households within these Villages, however, will be randomly selected. The sample size of 422 households includes a 10% addition, to cater for non-responses.

Sample size and distributions for the catchment area

	Western Equatoria State	Eastern Equatoria State	**Total**
Total Households	**152**	**270**	**422**
Female headed	70	129	**199**
Male headed	82	141	**223**

Sampling approach for FGDs

Respondents for FGD will be active beneficiaries of the constructed roads found within the survey area. Their selections are determined by both their current and previous working knowledge and experience of the different road sections. Members of farmer's groups visited during the baseline survey, in addition to other new farming groups, traders, input suppliers, etc. that use the feeder roads have been selected[58]. The sample sizes for FGD are 5-10. The Teams will interview women and youth groups who participated in the baseline study. Nevertheless, since this is planting season, their availability, accessibility, and the available time will determine who to include. The sampling strategies is purposive and from same villages where survey has been implemented.

FGDs for FRIMP in Western and Eastern Equatoria States

Categories	Total	Nzara-Li Rangu-Saura section	Torit-Magwi section
Producers' Association supported by WFP and others	5	Women and Youth Associations	Women and Youth's Associations
Selected organisations	6	1 County, 1 Payam and 1 Boma development committees	1 County, 1 Payam and 1 Boma development committees

[57] This includes 10% of the calculated sample of 384.16. We shall use the same sample size with the baseline study, which includes a 10% additional sample, to cover for absentees

[58] Since this is planting season, it is likely that many members of farming groups will be difficult to mobilise. However, the team will rely mainly on NGOs to guide them to functional groups within the areas

providing services to producers			
Development Committees at the Payam and County levels	4	2 County and 2 Payam's Committees	2 County and 2 Payam's Committees
Private Sector Road Users	4	1 Boda-boda; 1 Processors, transport, and input supply representatives	1 Boda-boda; 1 Processors, transport and input supply representatives
Community Leaders		Boma's and Village Chiefs	Boma and Chiefs

Source: FRIMP's MTE study, 2021

Sampling approach for key informants and beneficiaries

Table 9 shows the categories and numbers of KII proposed. The primary sample frame is purposeful, that is, road-users [communities and their leaders as road users and service providers] within the Project area, e.g., partners like NGOs, community leaders, Coops and farmers groups. Key Informants may not necessarily be within the villages where HHSQ will be implemented. We will target people with case studies to share those with the most knowledge about the Project and other WFP supported feeder roads. The choices of Key Informants will be influenced also by their availability, roles in the management of roads - either as a participant or independent observer. However, knowledge of the villages where the HHSQ will be carried out is equally important. The total number of KIIs per location will depend on information required and time available.

Proposed participants in key informant interviews for FRIMP

Categories	Total	Nzara-Li Rangu-Saura section	Torit-Magwi section	Juba
Donors/actors	3	FAO and WFP	FAO and WFP	ENK
NGOs and service providers	4	Cordaid, NGOs working with farmers supplying WFP established Aggregate Centers	Cordaid, NGOs working with farmers supplying WFP established Aggregate Centers	
State and County Authorities	6	Department of Trade and Commerce; Department of Agriculture and Food Security; Department of Roads and Bridges	Department of Trade and Commerce; Department of Agriculture and Food Security; Department of Roads and Bridges	
Road Constructors	4	1 State Engineer and 1 WFP Engineer working on the road	1 State Engineer and 1 WFP Engineer working on the road	
Chamber of Commerce	2	Chairperson, Chamber of Commerce	Chairperson, Chamber of Commerce	

Source: MTE data, 2021

6.4 Ethical Consideration

Ethical considerations will be based on the following principles: do no harm the participants, informed consent – preferably verbal, protection of privacy, and avoidance of deception.

***Do no harm principle**:* Under this principle, the Consultant will ensure the survey does not result in physical harm to participants, affecting participants' development, loss of self-esteem, stress and inducing participants to perform acts that are reprehensible. Records that come in possession of the Consultant will be stripped of their identity.

***Informed consent principle**:* COVID 19 special operating standards notwithstanding, participants consent to participate in the evaluation will not only be sought from the group leadership but will also be sought from individuals within the groups that will be responsible for responding to the survey questions. Given that the study population is largely rural, consent will be verbally sought, as formal signing of consent may be counterproductive in terms of raising suspicions or expectations.

***Protection of privacy of participants' principle**:* The Consultant will carry out no covert actions. Participants will have the right not to answer any questions that they do not deem appropriate, terminate the interview where they feel uncomfortable, and seek clarification on any questions that they consider may cast their groups in bad light and have the right to get a response from the Consultant. Publications or scientific presentations of study findings will be done without the identities of individual participants.

***Avoidance of deception**:* To avoid deception, the team will ensure that respondents understand that the evaluation is strictly for purposes of accountability and quality of future programming and not to promote individuals or their groups.

***Use of data for its purpose**:* The Consultant will ensure that data are strictly used for the purpose for which they are collected. All the documents that will come into possession of the Consultant will be returned to AII or project partners depending on the source. In addition, any information that will come into possession of the team that is considered sensitive will be stripped of its identity.

6.5 Data analysis

The M&E Unit will undertake the quantitative data analysis. All KIIs and FGDs will be recorded in notebooks in form of shorthand notes by the enumerators. The enumerators will then proceed to transcribe the notes in verbatim. After validating the transcription, the typed narratives will then be verified for accuracy in a joint meeting. Analysis of qualitative data will include several iterative steps among the team. Using content analyses technique, the transcripts will be reviewed, and a set of codes will be developed to describe groups of words or categories with similar meanings. Transcripts will then be coded and managed manually. The grouped categories will be refined and used to generate themes emerging from the data. Direct quotations from key informants will be presented in italics to reinforce key findings.

Annex 7: MTE evaluation questions

Version from ToR	Revised Version by Consultant
RELEVANCE	
1.0 To what extent do project objectives and design respond to the needs, priorities of the communities, local/regional and national institutions?	1.0 *To what extent has the Project so far responded to the needs and the priorities of different categories of road users at national and sub national levels?*
COHERENCE	
2.0 To what extent is the project compatible with other projects within WFP, and or other projects implemented by national government and local authorities	2.0 *To what extent is the design of the Project in conformity with the OECD principles and the best practices for Fragile and Conflict Affected States?*
EFFECTIVENESS	
3.0 To what extent has the project achieved, or is expected to achieve, its objectives, and its results?	3.0 *To what extent is the Project on track to achieve targets [impact, outcome, outputs]?*
EFFICIENCY	
4.0 To what extent is the project delivering, or is likely to deliver, results in an economic and timely way?	4.0 *To what extent is the Project making best use of available knowledge, human, technical, technological inputs to achieve its desired results?*
OUTCOME and IMPACT	
5.0 To what extent has the project generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects?	*5.0 What factors have influenced the achievements of the expected results?*
	6.0 To what extent has the project generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects?
SUSTAINABILITY	
7.0 To what extent do the net benefits of the project continue or are likely to continue in view of the capacities of the systems (community and government) required to sustain benefits over time?	7.0 *How likely is it for the Project activities and use of the delivered Project outputs to continue even after the end of the Project?*

Annex 7.b: Revised Evaluation Questions and Introduction of Sub-Questions

These questions in the Table below have been worded to facilitate data collection at the mid-term of the Project. From the ToR, WFP seeks to not only assess progress made at Mid-Term but also learn from the experience of its work. The assessment of performance (retrospective questions) address largely accountability and to some extent, learning. The learning issues (prospective questions), especially the sub-questions try to address concerns relating to "new knowledge" for WFP and other key actors, in supporting the on-going support to revitalization of the agricultural sector. WFP did not set out the evaluation questions. However, on the request of EKN, the consultant worded, prioritized and organized the sets of questions in order to provide a more logical and focused evaluation.

MAIN EVALUATION QUESTIONS	SUB-QUESTIONS
RELEVANCE / APPROPRIATES	
Description - *The extent to which the project objectives are consistent with the needs of the most vulnerable groups, the needs of the country, organisational priorities and partners' policies and practices*	
1.0. *To what extent has the Project so far responded to the needs and the priorities of different categories of road users*?	1.1 What evidence exists to justify the choices of the activities selected during the Project's design? 1.2 How far has current implementation addressed the needs of the different road users identified in the proposal? How so? 1.3 Is the implementation favouring any particular categories of road users? If so, how so? 1.4 To what extent has the Project responded to the demands for agricultural markets in the region? What evidence exist of improved agricultural markets
COHERENCE	
Description - *The extent to which the project is aligned to other activities in the area*	
2.0. To what extent is the design of the Project in conformity with the OECD principles and best practices for Fragile and Conflict Affected States?	2.1 To what extent is the Project collaborating with, complementing and facilitating the other activities of WFP and other stakeholders in the region? How so?
EFFECTIVENESS	
Description - *The extent to which the project objectives as defined in the WFP project proposal are achieved, and the extent to which outputs have led to expected outcomes as planned.*	
3. To what extent is the Project's on track in achieving its targets [impact, outcome, outputs]?	3.1 To what extent is the Project's implementation plan on course as per design? How so? 3.2 To what extent have the linkages with partners supporting agricultural production and productivity been successful? How so? What are the short to medium-term effects [outputs and outcomes] of the interventions in addressing themes like gender equity, safe programming and accountability through the Project activities? Have the consequences been intended or unintended? 3.3 To what extent has the implementation modalities, including cost comparison for South Sudan been reasonable? How so? 3.4 How has the Project dealt with youth and gender risks identified in the design?
EFFICIENCY	
Description - *Efficiency - Measures the outputs – qualitative and quantitative – in relation to inputs – funds, expertise, time etc. This generally requires comparing alternative approaches to achieving the same outputs*	

MAIN EVALUATION QUESTIONS	SUB-QUESTIONS
4. To what extent is the Project making best use of available knowledge, human, technical, technological and geographical inputs to achieve its desired results?	4.1 How do you rate the Project's outreach / effects of the achieved activities at mid-term? 4.2 To what extent has the design of the Project and the implementation progress utilized local and available resources in delivering standard products? How so? 4.3 To what extent is the time allocated for implementation support efficiently delivering results? How so? 4.4. Are there evidence of timely and corrective actions taken to resolve any identified problems or to modify the course of investments?
OUTCOME/IMPACT	
Description – *Outcomes/ Impact reports on benefits attributed to roads' rehabilitation and maintenance works*	
5.0 What factors have influenced the implementation of the Project to-date?	5.1 What were the key risks of the Projects at design? How have they been mitigated 5.2 Are there lessons learned on dialogue, collaboration, training and coordination among partners identified and incorporated into decision-making processes?
6.0 To what extent has the project generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects?	1.1 To what extent has the food insecure HHs experienced changes in their livelihoods due to the road? What is some of the preliminary evidence of the benefits to the different categories of road users? 1.2 Any evidence that increased access to markets is imparting on HHs' income? Any identified and/or documented intended and /or unintended outcomes [positive or negative] reported? 1.3 Give examples of successful policy dialogue and efforts resulting from the implementation, including establishment of feeder road funds for O&M, establishments of road maintenance groups [RMGs], etc.?
SUSTAINABILITY	
Description -	
7.0 How likely is it for the Project activities and use of the delivered Project outputs to continue even after the end of the Project?	7.1 To what extent have steps been taken to create long term processes, structures, norms and institutions for road maintenance in South Sudan? 7.2 What are some of the activities of the different road users that will evidently support the continued work on the feeder roads?

Annex 8: Sub-questions and Indicators and Tools for Data Collection

Sub- Questions	Indicators of Progress	PDRT	HHSQ	KIIs	FGDs	PO
1.1 What evidence exists to justify the choices of the activities selected by WFP during the Project's design?	- # of reference made by respondents about Project's activities	- X		X	- X	X
	- # of references made about supporting existing activities in the previous WFP's project reports	- X	-	- X	-	-
	- Perspectives of actors involved in supporting similar activities disaggregated by gender and age	- X	-	- X	-	-
1.2 Is current implementation addressing the needs of the different road users identified in the proposal? How so?	- Correlation and gaps between project and wider framework of identified needs of the different categories of the road users.	X		X		
	-Perspectives of participating households disaggregated by gender and locations	X	X	X	X	
	- % of disaggregated road users who say their needs are being met or have been met	X	X	X	X	X
1.3 Is the implementation favouring any particular categories of road users? How so?	- % of road users reporting increased uses of production inputs arising from implementation		X		X	
	- Disaggregation of impacts by gender and types of HHs		X		X	
1.4 To what extent has the Project responded to the demands for agricultural markets in the region? What evidence exist of improved agricultural markets	% Increase in # of participating HHs using agricultural markets	X		X	X	
	# of new markets emerging and old ones reopening up					
COHERENCE						

Sub- Questions	Indicators of Progress	PDRT	HHSQ	KIIs	FGDs	PO
2.1 To what extend is the Project collaborating with, complementing, and facilitating the other activities of WFP and other stakeholders in the region? How so?	- # of organizations reporting using the road and are willing to support its sustenance. - % of road users who feel that the feeder roads have improved their livelihoods	X	X	X		
	- # of linkages and collaborations in the field and Juba			X		
EFFECTIVE						
3.1 To what extent is the Project's implementation plan on course as per design? How so?	- % of completed FRIMP's activities by MTE			X	X	X
3.2 To what extent have linkages with partners supporting agricultural production and productivity been successful? How so? What are the short to medium-term effects (outputs and outcomes) of the interventions in addressing themes like gender equality, safe programming and accountability through the project activities? Were the consequences, intended or unintended?	- # of linkages with partners and evidence disaggregated by gender and locations - % of respondents disaggregated by gender who say that services respond to their individual and HHs needs (by group) - % of beneficiaries disaggregated by gender and locations with perceptions in support of the Project's intents.	X	X X	X	X X	
3.3 To what extent has the implementation modalities, including cost comparison for South Sudan been reasonable? How so?	- Independent reports on the arrangement and its effectiveness	X				
3.4. How has the Project dealt with youth and gender risks identified in the design?	- Perceptions of beneficiaries and leaders - % of completed activities and responsive to youth and women	X	x X		X	
EFFICIENCY						
4.1 How do you rate the Project's outreach / effects of the achieved activities at mid-term?	-% Of beneficiaries reached by the road at this point - Perceptions of local authorities in the area	X		X	X	

Sub- Questions	Indicators of Progress	PDRT	HHSQ	KIIs	FGDs	PO
4.2 To what extent has the design of the Project and the implementation progress utilized local and available resources in delivering standard products? How so?	- # of local community members employed and disaggregated by sex, age and location - Shares of total material used in road construction obtained locally in the Project areas	X		X X	X	
4.3 To what extent is the time allocated for implementation support efficiently delivering results? How so?	- Evidence of progress made thus far in the implementation - Evidence of constraints in the implementation of the Project	X		X	X	X
4.4. Are there evidence of timely and corrective actions taken to resolve any identified problems or to modify the course of investments?	- Evidence of timely notifications - Evidence of timely corrective action by the Project -% of respondents with the view that corrective measures were timely.	X		X	X	
IMPACT / OUTCOME						
5.1 What were the key risks of the Projects at design? How have they been mitigated?	- # of references in documents to particular types of risks in the project - # of mitigation measures reported by implementers of project	X		X	X	
5.2 Are there lessons learned on dialogue, collaboration, training and coordination among partners identified and incorporated into decision-making processes?	# of references by both beneficiaries and implementers to joined decisions making	X		X		
6.1 To what extent has the food insecure HHs experienced changes in their livelihoods due to the road? What are some of the preliminary evidences of the benefits to the different categories of road users?	-% of food insecure HHs reporting improvements in livelihoods - Disaggregated impacts by gender, age and location. - % of food insecure HHs reporting progress in HH's food security	X X	X X		X X	
6.2 Any evidence that increased access to markets is imparting on HHs' income? Any identified and/or documented intended and /or unintended outcomes [positive or negative] reported?	-% of HHs reporting increase access to markets -# of documented or reported incidence of unintended outcomes	X	X		X	
6.3. Give examples of successful policy dialogue and efforts resulting from the implementation, including establishment of feeder road funds for O&M, establishments of road maintenance groups [RMGs], etc.?	- Evidence of policy discussions and meetings at both GoRSS and State levels - # of measures for O&M developed and implemented	X X		X X		
SUSTAINABILITY						

Sub- Questions	Indicators of Progress	PDRT	HHSQ	KIIs	FGDs	PO
7.1 To what extent have steps been taken to create long term processes, structures, norms and institutions for road maintenance in South Sudan?	-Evidence of policy guidance in support of the project -Evidence of established and supported RMGs	X X		X X		
7.2 What are the activities of the beneficiaries that will evidently support the continued work on the feeder roads?	- % of beneficiaries with specific activities that benefit from feeder roads - # of references made by stakeholders to funding maintenance - # of references made by respondents about supporting feeder roads		X X	X X	X X	

Annex 9: Rated Criteria for measurements

The rating scale below was used to rate each of the four evaluation criteria. The Consultant used criteria including strengths, weaknesses, opportunities and threats.

	Green: Program meets all or most of the indicators for the evaluation criterion. Very few or no improvements are needed.
	Amber - Green: Program meets most of the indicators for the evaluation criterion. Some improvements are needed.
	Amber - Red: Program meets some of the indicators for the evaluation criterion. Significant improvements are needed.
	Red: Program meets only a few of the indicators for the evaluation criterion. Immediate and significant changes are required.

Annex 11: List of documents reviewed

Author	Document name	Themes	Publications
WFP	Feeder Road Improvement and maintenance Project [FRIMP]	Project Document	WFP
WFP	FRSO Final Report, 2019	End of project report	WFP
WFP	Feeder Roads' Implementation and Maintenance Project: Saura-Li Rangu-Nzara Section in Western Equatoria and Torit-Magwi Section in Eastern Equatoria, South Sudan	Baseline Report	
Cordaid	Food Security Through Agribusiness in South Sudan: South Sudan Agribusiness Development Programme II	Final Baseline Report	
World Bank	*Community participation in rural road maintenance* (1992)	Report, 1992	
	Finnish experience and lessons for Sub-Saharan Africa	Report, 1994	
	Rural Roads in Sub-Saharan Africa – lessons from World Bank Experience;	Study report, NA	
	Why road maintenance is important and how to get it done (2005).	Study report, 2005	
Asian Development Bank [2011]	*Community-based routine maintenance of roads by women's groups (*n.p, 2011*);* World Bank, *Rural Road Maintenance and Improvement, best practice;*	Study report, 2011	
Beza Consulting Engineers, PLC	UN WFP Feeder Road Special Operations in South Sudan Mundri-Bangolo Road Project	Contract completion report	
Impact Initiatives	Baseline Survey for impact Evaluation of GIZ's Food Security and Development of Agricultural Markets' (FSDAM) programme in the Greenbelt, South Sudan.	Baseline report, 2016	
WFP, 2014	Feeder Road Construction in support of WFP operations in Southern Sudan	**Special project, 200379**	
Valters, C. et al., 2016	Putting learning at the centre: adaptive development programming in practice, Overseas Development Institute	Project M&E	ODI
LiaPozzi, 2014			
Gingerich, T.R and Cohen, M.J {2015)	Turning the humanitarian system on its head		
World Bank, 2012	Agricultural potential, rural roads and farm competitiveness in South Sudan	Analytical sector work	
Xinshen, D ; Liangzhi, Y; Vida,	Assessing agricultural potential in South Sudan: A spatial analysis method	Analytical sector work	

Author	Document name	Themes	Publications
A; Renato, F (2012)			
Impact Initiative (2016),	Baseline Survey for an Impact Evaluation of GIZ's Food Security and Development of Agricultural Markets (FSDAM) programme in the Greenbelt	Baseline study of the Greater Equatoria	
http://www.ids.ac.uk/publication/Assessing-and-learning-for-social-change-a-discussion-paper	Assessing and learning for social change: a discussion paper	Discussion of measurement of resilience	

Annex 12: List of people met

Organization	Name	Position	Sex
WFP	Russom HABTEGABRIEL	Head, Yambio Field Office	Male
	Maduot Akot	Head of programme, Torit Field Office	Male
	Wilson KAIKAI	Head Monitoring & Evaluation - WFP, Juba	Male
	Grace MAKHALIRA	Deputy Head Monitoring & Evaluation – WFP, Juba	Female
	Nancy KARA	Programme Policy Officer(M&E) - Juba	Female
	Taban ABINA	Programme Associate – Yambio Field Office	Male
	Rose EJURU	Programme Officer, Yambio FO	Female
	Olweny MICHAEL	Programme Assistant, M&E Juba	Male
	Mikaya ALI	Programme Assistant, M&E Juba	Male
	MARGRET Aling	Monitoring Assistant, Torit	Female
	Jojo Stephen	Driver - Juba	Male
	Kalala Charles	Driver - Juba	Male
	Malish Juma	Driver - Juba	Male
	Peter Garang Bol	Driver - Juba	Male
Partners - Yambio	Beyo Simon	State FFA Coordinator – World Vision South Sudan	Male
	Simon Khamis	State Coordinator - CORDAID	Male
Nzara Boda Boda Association	Saima Sworo	Project Officer - CORDAID	Male
	Neyko Victor	Project Coordinator - STO	Male
	Badinga Benjamin	Project Officer - STO	Male
Partner (CORDAID)-Torit			Male
	Dr. Jerry Martine	Doctor- CORDAID- Torit	Male
	Marko Odongo	Field Office Coordinator CORDAID - Torit	
Nzara County	Simon Abyida	Payam administrator – Nzara Payam	Male
FAO, Torit	Samuel	County RRC Coordinator	Male
Trade Union	Richard Zizi	Commissioner – Nzara County	Male
Ministry of Commerce and Industry, Torit	John	Deputy Executive director – Nzara County	Male
Nzara – Community Leaders.	Justine undo	Executive Chief-Nzara County	Male
	Elia John Boss	Deputy Executive chief – Nzara county	Male
Women Development Organisation, Nzara	Mathew Baruga	Deputy Headmen – Hai matara village	Male
	Joseph Sebit Sedani	Secretary – Executive chief Nzara county	Male
	Ezekia	Sub chief – Yabua village	Male
	Wiiliam paul	Sub chief – Hai matara	Male
	John Muburuk	Headmen – Nzara	Male

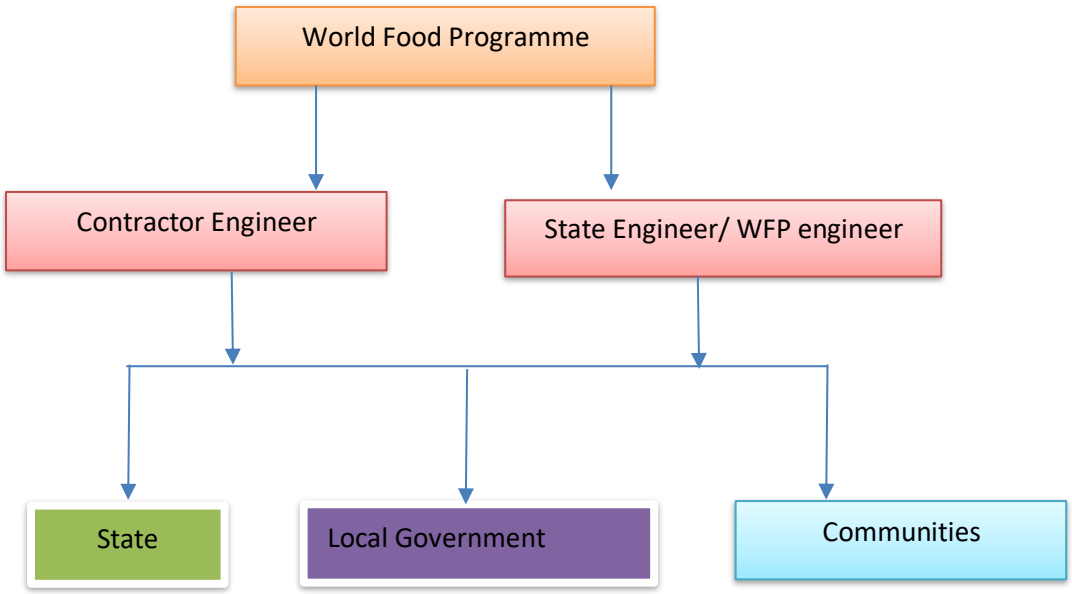
Torit Boda Boda Association	John Uboyo	Headmen – Yabua village	Male
	John Abubaker	Headmen – Hai Matara village	Male
	Luize Anji	Community Police	Male
CORDAID, Torit	Civilian Uko	Community Police	Male
Saure Payam Development Committee	Alex Edward	Community Police	Male
	Luka John	Community police	Male
	Justine Cuidan	Headmen – Hai Matara Village	Male
Star Trust Organisation, Yambio	Alison Ontonyere	Headmen – Yabua Village	Male
	Khamis	youth leaders	Male
Magwi County	Wilson Weko	Headmen – Hai matara Village	Male
	Emmanuel Basala	Headmen – Yabua Village	Male
Nzara Development Committee **Saura Boma Community leader– Yambio** **Saura Boma Community leader– Yambio**	Barbara Kendi	Headmen – Hai gabat	Male
	John Kombodi	Headmen - saura	Male
	Yesto Ruka	Headmen - Saura	Male
	Samuel Diko	Sub Chief – saura Boma	Male

Appendix 13: Concept Note – Feeder road maintenance in South Sudan[59]

This concept note outlines a more sustainable modality for feeder road management in South Sudan. It builds on an ongoing conversation within WFP staff in the Engineering Unit and consultants and it seeks to address the key issue of "sustainable and community-driven road maintenance" as an approach that is appropriate for South Sudan. Its core intention is to establish mechanisms for road maintenance that involves multiple stakeholders and to ensure they are owned by local communities. This idea is built on South Sudan experience of O&M and WFP's recent experience with the 144-km feeder road rehabilitated in the Greater Equatoria region of South Sudan. Keeping roads passable throughout the year is the ideal interests of all stakeholders. However, this requires combined efforts of users and development partners. Different efforts are envisioned by different actors throughout the calendar year.

Historising WFP Experiences in South Sudan

Historically, WFP uses two kinds of private contractors to implement its main repair works or small-scale repairs and reconstruction. These are road contractors and road supervising engineers. These are often selected on a competitive basis. WFP also uses its Food and Cash Assets programmes or Food for Work, to engage local communities, who provide non-skilled labourers in return. In the recent mission to evaluate the FRSO Greater Equatoria Project, communities noted that the focus on non-skilled labour is also discriminatory as they often too, have skilled labourers amidst them. WFP's partners like NGOs have been engaged as conduit of the WFP, working directly with communities and their local leaders. The road contractors are supervised by the supervising engineering firm. It is these two private sector actors: the Contractors and the Supervising firms that interact frequently with the local communities and the local leaders. The integrated nature of the arrangement aims at combining public and private sector modalities subject to the type of works being implemented.



[59] This concept was partly developed together with Thomas EMILJESEN for WFP in August 2018

From a perspective of sustainability and ownership, the current approach that has been rolled out in the past, including during this Project is less convincing. In the existing model, feeder road maintenance is by law the responsibility of the State and Local Government. To enforce this thinking, WFP has over the years, invested in training staff of the State Ministry of Physical Infrastructure, to take that responsibility. Not much has resulted from the investment. One major factor that negatively affected their operations are the lack Operation and Maintenance[O&M] funds. The absence of O&M, coupled by insecurity – that affected the abilities of the State to retain State engineers, have not been very helpful for the sector. Some of the staff decided to change jobs, other have migrated to safer areas in search of security. In this model, sustainability is pegged to legally inserted responsibilities rather than to interests or capabilities. Additional experience under the IFAD supported agricultural project in South Sudan confirms that States and LGs have not been able to raise and manage O&M for feeder roads.

During the recent interviews with local communities, traders, and other road users in Mundri West and Magwi Counties, it was confirmed that people are already contributing towards routine road maintenance in most part of South Sudan. In our discussions with youth in Mundri and *boda boda* riders in Magwi, we learned that youth have contributed cash to those involved in filling potholes on the roads. Prior to the construction of the Mundri-Bangolo road, the community of Mundri West organised and cleared the road, to enable service providers to reach them. In some instances, NGOs facilitated the process by providing food for work or cash for work. Additionally, there is a general view supported by the interviews that road users are willing to maintain the feeder roads through cash or in-kind contributions. However, the pressing concern we heard is how the fund would be managed. Local communities intimated those local authorities are less trusted with funds. However, they are good allies in mobilisation and legitimising the process. In some of the interviews and FGDs, people unanimously felt that Local or International NGOs can be entrusted with the task.

SUGGESTIONS: Unpacking the components needed to achieve sustainability

The integrated approach for rural road management brings into play community-based dimension with several key components [see Table below], which are interrelated and requires careful coordination, to maximise impact over the annual calendar, specific skills set of the different parties, understanding of the local conditions including seasonal calendars and strong oversight. Their focus is to improve feeder roads accessibility throughout the year. Although the road maintenance is appreciated, no structural works are put in place to address the glaring absence of follow-up as seen in Magwi and Mundri West. With timely and decentralised planning and acknowledging the complementarity of available capacity and additional investment are needed to deal with more complex road sections, a win – win situation can be achieved.

The objective of new view is to place user interests above legal responsibilities – maintain feeder roads throughout the years and improve accessibility and its lifetime. The priority in this progression is to ensure feeder roads remain open and passable throughout the year. In the Table below, we present some of the major activities required and how it can be implemented

Road repair – need for heavy machinery – trucking of marram	• Construction of culverts, small bridges, etc. • Reconstruction of selected road sections
Routine maintenance – no hard skills nor materials needed	• Clearing vegetation • Shoulder management and culvert clearing • Reporting on damage to the road and structures (bridges, culverts etc.)
Routine repair – more hard skills and materials needed	• Fixing of potholes & patching • Culvert and bridge minor concrete works (crack repair and sealing) • Drainage protection including stone pitching and repair of small retaining walls
Routine road quality supervision – hard technical knowledge needed	• Analyses of road base • Removal of corrugation / wash boarding

Traffic control - authority and legitimacy needed	• At peak of rainy seasons heavy trucks may be limited / stopped for certain periods • Axle load limits to be monitored (ultimately by installation of mobile weighbridges)

Contractors on site

Professional construction firms have been hired to construct feeder roads and to provide at most 12 months of maintenance including periods of defects liability [DLP] after completion of the construction work. The DLP is normally from three to six months, during which the contractors are liable to rectify defects under the warranty provisions. WFP has used the presence of these professionals to train local staffs of the relevant ministries at the state levels, to develop skills for road maintenance.

Contractors throughout the year – (private) Contractors will be responsible for what is generally referred to as emergency road repairs.[60] Government and local authorities do not have resources and capacity to take over the responsibility for road maintenance after the end of DLP. In the case of Mundri and Magwi feeder roads, they have failed to halt back the rapid deterioration of the newly completed roads particularly in the wet season. The new modality seeks to commit contractors to work and remain on site throughout the year performing different activities instead of the government – from serious construction to maintenance and, at the peak of the rainy season, assist transporters to recover their vehicles when stuck [see Table above].

Contractors as trainers – the Contractors will also train unskilled labour on the job. This training will allow the local labour to become valuable workers to be attached to local Community Road Maintenance Units (CRMU) under the overall technical supervision of the contractor.

Community engagement to secure availability of marram

Marram is a critical resource for road repair maintenance. Some parts of the country, marram needs to be transported over long distances adding significant costs to the works budget. In many instances, local communities have been unwilling or reluctant to allow contractors to open new borrow pits. The active engagement of local leaderships coupled with direct benefits (e.g. employment, accessibility), is expected to facilitate its release if well explained. The proposed integrated approach will particularly incorporate methods and procedures to liaise with communities – building on the WFP experience has gained over the years in the design and implementation of community projects (Food for Work, Cash for Assets). For example, borrow pits for marram could be linked to provision of water for cattle and gardens in the dry season and to generation of immediate benefits beyond the road.

Unpacking "community"

Good practice indicates that the agency that implements the road construction or rehabilitation be responsible for subsequent routine and periodic maintenance.[61] For example in India, the national highways (about 65,000 km) are the responsibility of the Ministry of Roads and Highways, while state highways (about 124,300 km) are the responsibility of the states. *De jure* such division of labour also exists in South Sudan where the State (Ministry of Roads and Bridges) is responsible for trunk roads and the counties are responsible for feeder roads. De facto, however, neither the state nor the county can carry out that responsibility as of now. Through the smart identification and development of the CRMUs ownership can be established, recognising the local community structures through payams and bomas, which have lasting interests in the roads and are therefore the best-suited level of governance to involve in a more sustainable road management model.

Historical precedents

[60] According to the World Bank, regular maintenance that requires equipment to undertake technical repairs is categorised as emergency support. Its objective is to retain the road passage and restore the original form

Calvo Malmberg Calvo, Options for Managing & Financing Rural Transport Infrastructure. *World Bank Technical Paper No. 411* (World Bank, Washington, D.C.,1998)

Historically, Community Road Maintenance Units (CRMUs) existed in South Sudan during the colonial days. Road gangs (*turabay*), composed of youth or *bele bele* conscripted and managed by boma chiefs, provided dependable community routine road maintenance (bele bele) as public work for counties. The road gangs were assigned sections of the roads passing through their local administrative boundaries, normally about 5 km per group. The counties, with the help of the payams and bomas, established road-side camps every 16 km on the road where basic tools, such as spades, hand hoes and wheelbarrows, were stored. Roadside camps were local government assets, provided with local security guards, employees of the local government. Stakeholders consulted by WFP (communities, local authorities, NGOs, traders and transporters) confirmed that routine road maintenance by community is feasible and that payment for these services can be part of the model if the quality of services are indeed tangible. There are two or more generations of people who still recall this model and believe that it was effective.

Unpacking "Community engagement"

In close collaboration with local authorities, communities and contractors, an approach will be agreed on how the workers for the road maintenance units will be selected, trained and oversight be provided. Different options can be considered and its suitability will be determined after a local assessment. Overall options are:

Community-based road maintenance, Mundri West

In January 2012, local community leaders in the three Payams of Mundri, Kotobi and Bangolo in Mundri West County in the present Amadi State revived the "turabay" communal practice where local authorities mobilise youth for communal work

The initiative was spurred by local demands for improved access to address difficulties experienced on one hand by communities in accessing markets and on the other hand by commercial traders, transporters and workers in accessing agriculturally productive areas in Bangolo. In total, 6,500 persons were involved and within weeks, 100 km of road connecting Mundri to Tore Wedi were made passable.

The three payams agreed to establish a road maintenance working group constituted by the chiefs and other community leaders. This would adopt the colonial model where road maintenance were responsibilities of the local authority at the county's level but delegated for implementations at the payam and the boma levels. Unfortunately, due to prevailing insecurity on the road these groups have never been operational.

The Mundri-Bangolo Feeder Road (67.5 km) rehabilitated by WFP in 2013/2014 with funds provided by the Dutch government is a section of road initially covered in the 2012 Mudri-Kotobi-Bangaolo community initiative.

One of the leading Local NGO in Mundri and in South Sudan, Mundri Rehabilitation and Development Association (MRDP) was

LOCAL GOVERNMENT IMPLEMENTED APPROACH

Through the county authorities, the chiefs at the payam levels working with the boma chiefs, mobilise youth and with the help of NGOs or State Ministry responsible, retool the youth to implement routine road works as part of their contributions to public activities. The youth will be required to implement this work alongside the contractors as part of their services to their community and government and under quality supervision of the contractor.

LOCAL NGO IMPLEMENTED APPROACH

Local NGO will be contracted by WFP Engineering Unit in close collaboration with State and Local Authorities, to implement road repair and maintenance work using existing WFP mechanisms like Food for Assets or Cash for Assets approach. However, the emergency road repairs envisioned at the end of rainy seasons, which will require higher mechanisation and technical labour, will be contracted out by WFP and the contractors are supervised by LNGOs with technical support of the State Engineers and WFP. Thus, road maintenance, both for routine and emergency will become a new portfolio of LNGOs. The core function of the LNGO is to manage the road maintenance tasks on behalf of WFP and the government. On one hand, it will mobilise and train local leaders to select "road gangs" in a gender and conflict sensitive manner based on clear criteria set out by the LNGO. It will prepare the selected youth, train them with the help of road contractors and the State, in road maintenance and monitoring. It will jointly over with local leaders, monitor the implementation of maintenance with the contractor focusing on the engineering aspect and the NGO on managing the community component.

MICROENTERPRISE IMPLEMENTED APPROACH

The above-mentioned approaches are more applicable to rural feeder roads given their scale and intensive community engagement. With regards to works required on trunk roads with their larger scale and higher level of engineering complexity, a third option will be pursued by establishing micro community enterprises which will be responsible for the workers recruitment, training and supervision in close consultation with the local leadership. Work force are the unemployed youth, which are at risk of engaging in high risk activities that

can jeopardise peace efforts. Apart from ensuring better maintenance, this approach also leads to income and employment generation, which contributes to poverty alleviation and general development of the rural areas, with the workforce spending their incomes into the local economy, creating indirect business opportunities.

The above approaches build on what has previously worked in South Sudan. Supporting local communities and their leaders combined with the professional capacity of private contractors whose scope of work will be beyond only construction and endorsed by national and local authorities. Local ownership and youth employment will contribute to the peace dividend.

In conclusion, the establishment of Community Road Maintenance Units under the overall technical management of a professional contractor and supervision by WFP and relevant Government Authorities will deliver a sustainable and integrated management model.[62] Its role will differ over the seasonal calendar of activities and the nature of the works to be done. The experience of the Juba – Rumbek road project has proven that targeted interventions and permanent presence along the road to provide real time information on the road condition, is effective.

To deliver on the integrated approach, an alliance of stakeholders need to be brought on board to contribute to the overall objective to make roads passable throughout the year, not only to enable timely delivery of humanitarian cargo but also to facilitate the flow of commercial goods and persons. The pressing issue of continuous conflict need obviously to be addressed but it is the expectation that incentivising local communities and their leadership to own road infrastructure, will have a positive impact on the management of the road checkpoints.

[62] Asian Development Bank [2011] *Community-based routine maintenance of roads by women's groups (*n.p, 2011)*;* World Bank, *Rural Road Maintenance and Improvement, best practice;* World Bank, *Community participation in rural road maintenance* (1992);*Finnish experience and lessons for Sub-Saharan Africa* (1994); World Bank (N/A) *Rural Roads in Sub-Saharan Africa – lessons from World Bank Experience*; World Ban, *Why road maintenance is important and how to get it done* (2005).

Existing and future roles of stakeholders

Stakeholders	**Central Government** (Ministry of Roads and Bridges)	**State / County Government**	**Community leadership**	**Community members**	**Private Contractors**	**Local NGOs**	**UNMISS**	**WFP**
Existing roles	Broad formal powers but no delivery *De jure* Trunk Road overseer	De jure feeder road overseer Offers "access to operate"	Providers of labour for construction and thereby students for management Offers "access to operate" Supports and enforces culture of collaboration among groups [bomas] within their territories	Underemployed Unskilled in road management With little road ownership Ad hoc road engagement	Technical road builders contracted for a few months per year	Engaging communities (the social) and the state (political) on non-road issues	Improving roads during dry season as needed to keep UNMISS troops supplied.	Engaged in emergency repair and pilots to keep key stretches passable to better fulfil its mandate.
Future additional roles	Delivery / delegation of authority on traffic control Supervision of delegated authority on roads Mobilises resources and technical support for road work	Responsible for co-funding of road going through their territory (trunk and feeder) Guarantor of access to local materials for construction (esp. marram) from involved communities	Business partner bound by contract to provide continuous labour for Community Road Maintenance Units. Guarantor of land for camps Guarantor of the raw materials such as marram	Co-finance Road maintenance Partners to contractors in feeder road maintenance Employees on road (cash or in kind) maintainer Advocates for "road literacy"	Hired by LNGO on behalf of WFP Responsible for technical quality of feeder roads Year-round responsibilities, with training and overseeing of Community Road Maintenance Units as new key task	Coordinates with the political, social and the contractors on behalf of WFP Social contractors liaising with the political and the technical on the agreed scope of recruitment of labour and work for the Community Road Maintenance Units Manages road fund on behalf of government Advocates of "road-literacy" and the value of roads as a common good.	Improving roads in coordination with other partners to achieve synergies	Brokers of relationships among involved stakeholders Mobilises resources for road work Providers of engineering capacity Overseer of qualities and enforcers of contracts.