



WFP EVALUATION

Thematic Evaluation of Supply Chain Outcomes in the Food System in Eastern Africa from 2016 to 2021



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Supplementary Report: South Sudan Country Case-Study

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1. Introduction

1. This South Sudan case study was intended to support the thematic evaluation of supply chain outcomes in the food system in Eastern Africa. This report is a supplementary publication to be read in conjunction with the regional Evaluation Report.
2. The primary objective of this evaluation was to identify and assess the nature and extent of the effects of supply chain activities on food systems and their components, to differentiate effects according to gender or other groups when appropriate, and thereby to achieve greater awareness of these effects that can inform the design of future interventions. To this end the evaluation focuses on clearly discernible outcomes that are well supported by available evidence. The evaluation spans the period from January 2016 to December 2020 and covers all nine country offices (COs) supported by WFP Regional Bureau in Eastern Africa (RBN), namely Burundi, Djibouti, Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Sudan and Uganda. It includes urban, peri-urban and rural areas where supply chain activities have been implemented. A broad regional-level assessment was complemented by three focal country case studies in Kenya, Somalia and South Sudan.
3. By conducting a deeper dive into selected thematic areas in South Sudan, it was expected that the underlying causes and key factors affecting the most common food system outcomes would be revealed in greater detail. This would lead to a better understanding of the ways in which supply chain interventions affect food systems across the whole region. The case study would also provide comparisons with results from other countries and thus highlight the extent to which outcomes might be affected by country context.

2. Overview of Country and WFP Context

4. South Sudan is a large and sparsely populated country of approximately 11.2 million people¹, of whom 41 percent are under the age of 15². More than 60 percent of the population is employed in the agriculture sector, whilst the oil sector is the primary driver of economic growth in the country. In the 2021 Human Development Index, South Sudan ranked 185th out of 189 countries;³ poverty remains rife in the country, with over 75 percent of the population living below the poverty line of USD 1.90 a day⁴. The political situation is not stable. Since the end of the last civil war in September 2018, the country has continued to experience sporadic subnational conflicts in different areas associated with hundreds of deaths per month. Natural disasters have also been common; the last four years have seen severe levels of flooding across large parts of the flood plain of the Nile in two years and a devastating invasion of locusts. In 2021, 8.3 million people in South Sudan were estimated to be in need of humanitarian assistance⁵. Less than 10 percent of government revenues, estimated in 2020 at USD 1.4 billion, are allotted to capital expenditure. As a result, investment in national infrastructure is minimal. The road network is incomplete, and many parts of the country are inaccessible during the rainy season.
5. WFP South Sudan launched an Interim Country Strategic Plan (ICSP 2018-2020) in 2018, which has since been extended to 31 December 2022 in order to align with the new national development strategic and the United Nations Sustainable Development Cooperation Framework (UNSDCF). The total budget for the ICSP 2018-2022 is USD 4.7 billion⁶. The ICSP assumes that South Sudan will continue to rely on WFP for food and nutrition assistance for much of its population over the period 2018-2022.

¹ Poverty data from 2016. <https://data.worldbank.org/indicator>

² UNFPA World Population Dashboard (accessed 2022). <https://www.unfpa.org/data/world-population/SS>

³ UNDP (2021) Human Development Index Ranking. Available at: <https://hdr.undp.org/en/content/latest-human-development-index-ranking>

⁴ Population data from 2020. <https://data.worldbank.org/indicator>

⁵ Humanitarian needs Overview South Sudan, 2021. Issued January 2021.

⁶ WFP South Sudan Budget Revision 07, Approved November 2021.

6. Food insecurity in South Sudan has been driven by widespread conflict as well as natural disasters. As a result, WFP operations extend throughout almost all regions of the country. There is no discrete supply chain unit in South Sudan. Instead, responsibilities are shared between various units. Including the Logistic Unit under Deputy Country Director (DCD) of Operations and Procurement Unit under DCD of Support Services. Infrastructure is managed by the Logistic Unit in coordination with the Engineering Unit, while Cash-Based Transfer (CBT) is implemented through the coordinated activities of the Innovation Unit, Logistic Unit and Procurement Unit (as well as data collection input from Vulnerability Assessment and Mapping (VAM)), which each provide input as circumstances require.

3. Process/Methodology/Limitations for Country Study

7. This case study was guided by the overarching evaluation methodology set out for the regional evaluation. A mixed methods approach was used, centred around open-ended enquiry in alignment with the learning perspective of the Terms of Reference. The evaluation is required to answer twelve Evaluation Questions, with associated sub-questions, as set out in the regional Evaluation Report. The evaluation uses the evaluation criteria of relevance/appropriateness, effectiveness, efficiency, impact (contribution) and sustainability.
8. The South Sudan case study combined remote scoping and data collection with in-country field work in Bor, Juba and Gorom. The South Sudan evaluation team worked with the WFP South Sudan country office to identify issues of relevance to the study and from those to select the ones which would eventually be evaluated. Three issues and associated changes were identified for the evaluation:
 - Transport
 - Procurement
 - Development of Infrastructure
 - Market Development
9. The evaluation team spent ten days conducting field level work in South Sudan. In total 62 participants were interviewed during the case-study data collection of 26 percent were female (see Annex 1). Key participants in Bor and Gorom included: retailers, traders, wholesalers, transporters, and financial service providers. In Gorom, a focus group discussion with refugees was conducted. WFP field staff were also interviewed and provided important, granular information and insights.
10. **Limitations:**
 - The field survey relied heavily upon interviews with WFP staff and reflects their perceptions of food system outcomes as much as it does those of any other stakeholders.
 - Security concerns limited the extent to which external interviews and focus groups could be held and it was not possible to interview the numbers of respondents that had originally been anticipated. Much of the information gathered is anecdotal and subjective. Although some triangulation was possible, the conclusions are tentative at best and based upon a limited number of perspectives.

4. Findings

Key Areas of Change

11. The findings in this section are structured under thematic areas and by outcomes. Four thematic areas were identified as follows:
 - Thematic area 1 – Transport
 - Thematic area 2 – Procurement
 - Thematic area 3 – Development of infrastructures

- Thematic area 4 – Market development

Thematic area 1: Transport

Outcome 1: increased investment in transport capacity; improved working practices; a competitive free market structure, and increased inclusivity.

12. Women's participation in the transport sector is limited. The offices of many transport companies are staffed mainly by women, but the companies themselves are owned predominantly by men, and the drivers and their assistants and mechanics are exclusively men. A company with 20 trucks might have a staff of 50 of whom perhaps 5 at most would be women. Women's presence amongst smaller transport companies and owner/driver operations appears to be similarly limited. One reported instance where women featured more significantly was in the operation of canoes for the "last mile" transport of food to remote communities in flooded areas, but this could not be considered to be an important element overall.
13. Women are particularly disadvantaged in this sector where the working conditions can be dangerous, and women might be especially vulnerable. It is difficult to see how this situation could be changed except in one key aspect. It is possible, albeit unusual for a woman to invest in and manage a transport company, but one key constraint to this is the restricted access to finance faced by women in South Sudan. Enhanced financial inclusivity that would allow women better access to finance might allow greater participation of women in the areas of the transport sector that are currently accessible to them.
14. From a long-term perspective, WFP transport contracts have enabled some transport companies to increase their capacity. It would appear that both large and small transport companies have been able to take advantage of WFP interventions. Larger companies have developed over the long term and smaller companies have responded to specific opportunities.
15. In the short term, the WFP shift in South Sudan from the use of a tariff-based system to contract transport to a non-tariff system was expected to stimulate ongoing investment by those companies that won tenders on an individual basis.
16. Interviews with two large companies suggested that they appreciated the long-term stability generated by repeated business with WFP as an opportunity to expand their businesses. Nevertheless, perceptions were not uniform. One regional company indicated that, due to the recent increase in fuel prices it did not expect to profit greatly from its current contract with WFP but was nevertheless hoping to establish a long-term working relationship with WFP that would allow it to expand its business. Another larger company was more diffident, indicating that although WFP was a significant client, it had the option of working outside the country where conditions were less onerous, and would do so if circumstances became too difficult in South Sudan. In this latter case it appeared that favourable business opportunities offered by WFP drew transport capacity into South Sudan from a larger regional pool, but it was not evident that national capacity was of itself increased.
17. WFP logistics staff also reported private sector investment in large barges (each having a capacity of 1,400 tons), contracted to carry food on the waterways that WFP had rehabilitated, as well as investment in the equipment required to maintain those waterways.
18. The general perception amongst WFP staff was that larger transport companies have generally benefited commercially from interactions with WFP. This was supported by the representative of one bank that reported the investment of at least USD 2 million for the purchase of trucks to meet WFP supply chain requirements.
19. It was noted that a few transporters had expanded their operations to include the buying of sorghum for sale to WFP. This might be a significant development that suggests the potential for increased efficiency through vertical integration, although there might also be the potential for market distortion through the development of local monopsonies. This aspect of market development is not yet well recorded but might become important in the future and warrants more detailed investigation.
20. In terms of the agencies that work with cooperating partners (CPs) to move smaller volumes to final distribution points, interviews indicated that there had been substantial interest and investment in smaller trucks (5-15 MT capacity) as well as in even smaller canoes required for "last mile" deliveries in flooded areas. These appeared to be opportunistic investments and it could not be determined whether these represented sustainable investments or not at this stage.

Outcome 2: A change to non-tariff procurement procedures had empowered some transporters, but reduced the availability of trucks in Bor.

21. The recently introduced non-tariff tender system was intended to provide successful companies with a clearly defined volume of work that might promote investment in additional capacity. This was a shift away from the previous arrangement under which transport companies were asked to participate in a consortium within which work was allocated amongst member companies based upon a single tariff established during a prior bidding process. This type of contracting mechanism has been used by WFP when no individual company could meet WFP requirements or when there might be a risk of market distortion. Such an arrangement might be considered to be most equitable in its accommodation of both large and smaller transport companies, but it had become evident that the tariff system did not provide any incentive to companies to strengthen their operations since although the overall contract might be large, the amount of work awarded to any one company was small and unpredictable.
22. Two types of response to the change away from the tariff system were observed: On the one hand, the companies who had won the competitive tenders on an individual basis were clear that the new arrangement provided them with the autonomy necessary to operate efficiently (one stating: "we have got our office back"), and in particular to plan for the development of their businesses. This positive development was in line with the expectations of WFP transport and logistics units. On the other hand, WFP staff in Bor noted that the smaller transporters who had previously stepped up as consortium members when larger players were engaged elsewhere, had now all moved back to Juba, and that it had become difficult to schedule transport to make deliveries beyond the major distribution points. At this stage it would appear that the full implications of the change in contracting mechanism have yet to be determined and it would be premature to assess the outcomes of this change. Nevertheless, it was evident that successful transport companies did feel more empowered by the new arrangement.
23. It would appear that in the past, WFP supply chain activities may have enhanced national transport capacity to a limited extent as far as larger capacity companies were concerned. Nevertheless, while some investment had undoubtedly occurred, increases in the availability of transport capacity may have been at least partly due to the redirection of regional transport assets into South Sudan, a process that may not have any real permanency. Amongst smaller trucks, barge operators and canoes, some investment has clearly occurred in response to WFP supply chain activities.
24. The sustainability of these and any future investments should be a function of demand for food, which could be met through commercial and/or humanitarian food systems. Under current circumstances however, consistent demand will be dependent upon humanitarian intervention and will remain so for the foreseeable future.

Thematic area 2: procurement

Outcome 1: Numbers of Traders and volumes of sorghum procured locally have increased since 2017.

25. WFP procures sorghum from within South Sudan through two initiatives. On the one hand, substantial volumes of grain are procured through commercial tender, while on the other, smaller volumes are sourced through the Smallholder Agricultural Markets Systems Project (see paragraphs 29 and 34 below).
26. Large scale procurement initiatives can potentially distort markets, in particular there are risks of elevating prices and of reducing competition by favouring a small number of wholesalers. Ideally, WFP interventions would not result in such outcomes but would instead help to promote broad-based competition between wholesalers, resulting in increased efficiencies, investment and a more resilient value-chain.
27. In the case of South Sudan, WFP has sourced most of its locally procured sorghum from Upper Nile region around Renk. This area has also been a source of grain for traders from Sudan and WFP procurement activities have had to compete with this export market. Producers in the region have tended to rely upon traders to finance the inputs required to grow sorghum and contract farming has been common. Those traders that have the capacity to finance production, ensure that the crop is offered to them and to pay for it when harvested have been able to dominate the market.
28. In practice the following outcomes were reported:

29. WFP local purchase activities have grown slowly, as local traders have increasingly entered into the contract farming arrangements that are necessary to ensure supplies to meet WFP tenders. The number of wholesalers responding to WFP tenders has increased from 13, supplying 5,000 tons of sorghum in 2017 to 23, supplying 24,000 tons of sorghum in 2021. The rate of increase might have been higher but for two constraints: First, WFP only pays wholesalers after the quality of sorghum received has been assured and there is no local laboratory capable of conducting the quality testing. This means that the supplier's payment is delayed until samples have been tested in Nairobi. Although the impact of the delay might be factored into the bid, this will undoubtedly reduce the attractiveness of WFP tenders, especially to those traders who might have limited access to finance. Second, both WFP staff and traders reported that once they had accumulated significant volumes of grain, they became liable to increased local government scrutiny leading to informal taxation. For this reason, they were reluctant to invest in storage capacity, preferring to rent the Agricultural Bank of South Sudan's existing capacity for both storage and re-bagging.

Outcome 2: Prices paid by WFP tended to be higher than local market prices.

30. WFP staff noted that commercial procurement activities did tend to increase prices and prices paid by WFP were generally higher than those paid by other commercial buyers. This appeared to reflect the extra work and delays in payment associated with the need to ensure that grain met WFP standards. Whether this was in fact the case could not be determined. Staff also noted that some of the new wholesalers were companies who had previously provided transport services to WFP and had branched out into trading.
31. At a commercial level, the WFP procurement interventions provide a unique high-quality market at an elevated price. The increases in trader numbers and procurement volumes over the last five years suggest that these interventions are stimulating the development of a local wholesale sub-sector, although there has been little development of the physical capacity for storage, cleaning and re-bagging of grain amongst private investors. Since much of the production has been based upon contract farming, it is possible that WFP local procurement has led to an increase in finance flowing to producers, but there is no evidence to support this.
32. The sustainability of the nascent local wholesale sector is dependent upon consumer demand as a function of both purchasing power and accessibility. On the one hand, if WFP has the resources to purchase sorghum to compensate for poor beneficiaries' lack of purchasing power, the status quo will be maintained and the sector might see further growth. If beneficiaries develop the purchasing power to access sorghum (either through their own means or through CBT), then again, further growth is possible, but the quality standards required by WFP (as well as potential delays in payment) may well be foregone, resulting in a reduced price overall. If WFP resources to purchase sorghum are reduced without any increase in beneficiary purchasing power, then the wholesale sector might pivot to the export market, but there is no a priori reason to suggest that this would happen and it is quite probable that the observed development of this commercial supply sector would decline.
33. Trends in commercial market development can be assessed through WFP existing procurement data that shows the volumes and numbers of stakeholders engaged in the bidding process and supplying grain to WFP. It is important to recognize however that these trends do not necessarily indicate causality. It is possible that the sector has developed as a result of increased accessibility of finance, of improved physical access to production areas, or of enhanced security since the end of the last civil war. In order to demonstrate that the recent trends are indeed an outcome of WFP purchasing activities, it would be useful to put it in context.

Outcome 3: Numbers of smallholders supplying WFP have remained small.

34. WFP engagement with smallholders has been implemented through CPs. Initial contracts through cooperatives to provide white maize proved generally unsuccessful until the CPs intervened to strengthen those organizations. CP support included the introduction of financial service providers to provide credit to smallholders as well as traders to enhance management skills and provide consistent markets. Volumes purchased by WFP over the last three years have remained small (in 2020, 677 tons from 4350 farmers, in 2019, 499 tons from 3736 farmers, and in 2018, 405 tons from 1565 farmers). Nevertheless, both the volumes and numbers of producers, have risen over the last three years. Prices received by smallholders have been substantially higher than those paid to wholesale wholesalers.
35. Smallholder engagement interventions in South Sudan have required ongoing support to achieve the volumes that have been purchased to date. The exit strategy for this intervention is uncertain. It does not appear likely

that in the absence of the support of CPs, the smallholders and cooperatives would be able to compete with commercial wholesalers for WFP contracts, unless continued provision was made to subsidize the price offered to smallholders. In the absence of WFP contracts with, or without an element of subsidy, smallholder organizations have demonstrated limited capacity to be competitive in commercial markets. It is possible that WFP smallholder purchasing activities might create an opportunity for further development of smallholders and cooperatives by another Non-Governmental Organisation but that scenario is entirely speculative at present.

Thematic area 3: Development of infrastructure

Outcome 1: Development of roads has reduced food distribution costs substantially.

36. Much of the road network of South Sudan was disrupted during the course of the civil war. Similarly, waterways which had previously been navigable were allowed to become silted or overgrown with weeds. This dilapidation, combined with regular and extensive flooding across the Nile flood plain has meant that a significant proportion of the population is effectively isolated during and immediately after the rainy season. Distributing food to isolated populations is difficult and expensive, requiring either special equipment (such as Sherps) or planes to airdrop food. Both solutions are expensive (each Sherp holds only 1 ton and costs USD 110,000, while airdrop costs in South Sudan are of the order of USD 800 - USD 1,000 per ton delivered). Any reduction in the use of these modalities generates substantial savings to WFP.
37. The logistics and engineering units in WFP South Sudan have rehabilitated a number of roads, bridges, dykes and waterways to enhance access to isolated areas. These areas may still be isolated by flooding for considerable periods, but the increased access allows the prepositioning of much greater volumes of stocks. Thus, a reconditioned road may extend seasonal accessibility from two to four months, effectively doubling prepositioned volumes and substantially reducing the use of expensive Sherps and airdrops.
38. The process of road rehabilitation that has been developed by WFP South Sudan is based upon the identification and rehabilitation of choke points. Work does not conform to the strictest standards but creates a roadway that can be used for a four- to five-year period before it would require significant rehabilitation. By focusing on choke points a substantial cost reduction of the order of 80 percent can be achieved as compared with conventional complete road repair. This allows a substantial length of road to be rebuilt every year. In 2018, 2019 and 2020, 429 km, 1,000 km and 640 km of roads respectively were rehabilitated. This resulting in savings in distribution costs of USD 63 million in 2018 and USD 79 million in 2019. In 2020, excessive flooding resulted in an increase in the use of airdrops despite the road construction, but in 2021, approximately 284km were rehabilitated at a cost of USD 6 million resulting in a saving of over USD 50 million.
39. Waterway development has been similarly effective. Rehabilitation of waterways has allowed the use of 1,400 ton capacity barges to move food from Sudan into otherwise inaccessible areas at a substantially reduced cost. Volumes moved by barge have increased from 25,000 tons in 2018 to 90,000 tons in 2021.

Outcome 2: Improved access has resulted in returning populations, economic growth and market development.

40. Outcomes of the road and waterway rehabilitation programme have been significant. Quite apart from the savings in food distribution costs, the increased access has allowed people to move back into areas that had been previously vacated (e.g. Logistics staff reported that 16,000 people returned to the area around Kapoeta in 2021 following the rehabilitation of two access roads into the district in 2020). This has increased general economic activity in these areas and stimulated market development. Roads of sufficient quality to move large volumes of food aid have proved quite adequate for the purposes of most traders, so that the volumes and diversity of products available in hitherto isolated areas have increased significantly as trades have brought in goods hoping to capitalize on the expanding markets.
41. The increased economic activity has not been limited purely to large wholesalers but has instead been broad based and diversified. Retail sectors have developed as well and financial service providers have entered the areas. Competition within the diversified economy increased once the area became readily accessible and different traders entered the market. A similar effect was observed in both Kuajok and Bor. Once road access had been enhanced, trade flows in and out of these areas increased, wholesale and retail sectors developed, and banks established offices. External evaluation of feeder road development activities concluded that road

rehabilitation had reduced travel times and costs, increased service provision to farmers, cultivated areas and increased the volume of agricultural produce transported to rural markets⁷.

Outcome 3: In some cases, market development has been enough to allow CBT to be used instead of food distribution.

42. In some cases, the enhancement of trading capacity has meant that markets are sufficiently developed to support CBT instead of food distribution, allowing WFP to reduce costs still further. When appropriate, progress in market development is monitored by the Programme Unit which undertakes market analyses using the Market Functionality Index (MFI) to determine whether or not local markets have achieved adequate functionality to support CBT. Infrastructure development activities have thus become robust drivers of market development in those circumstances where they have resulted in a significant enhancement of access.
43. There is no discernible impact of this intervention in terms of inclusiveness. Women, youth and vulnerable groups are not benefitted specifically in any way. There is clear mitigation of climate change through reduced emissions of carbon dioxide, although this refers to WFP supply chain activities rather than South Sudan's food system itself.
44. There is anecdotal evidence that this intervention has significant effects in terms of competitiveness (reduced transaction costs), but data does not provide convincing support for this in that most food prices in newly accessible areas have continued to rise over the last three years. This is explained as having been due to a rapid shift in the exchange rate, followed by high rates of inflation which pushed up prices through 2019 and 2020, although there has been some stabilization in 2021.
45. The sustainability of this intervention and the outcomes that depend upon it is itself dependent upon the maintenance of the choke points that would otherwise limit traffic along each rehabilitated road. As indicated above, the cost of maintenance is not excessive and could potentially be within national or state capacity to meet. It will be necessary however to constitute an administrative body such as a Roads Board to assume responsibility for continued maintenance and WFP is actively engaged with Government to develop such an institution.
46. In the case of rehabilitated waterways, the main barge operator has had sufficient confidence in the sustainability of the increased business to invest in the special equipment necessary to maintain the waterways free of debris, thus contributing to the sustainability of the economic outcome.
47. Infrastructure development as practiced by WFP South Sudan has thus served a practical purpose for WFP, but also had significant positive outcomes in those areas where access has been enhanced. Nevertheless, there are two caveats to this development. First, it might be possible to develop roads that could facilitate conflict between antagonistic communities. For this reason, the potential impacts of any infrastructure development are considered by the access unit before any work is begun. Second, it is important to note that the outcomes of infrastructure development, while critical to local food systems are restricted to those areas to which access has been improved. They do not represent changes at the national food system level. Nevertheless, they do represent substantial, robust and systemic change across several large and entire communities and must therefore be considered to be significant outcomes of this supply chain intervention.

Thematic area 4: Market development

48. In order that WFP cash-based transfers should be effective, it is important that markets where cash is provided, either as "cash in envelope" or as vouchers, should be able to respond to the increased purchasing power. In South Sudan, market development is an integral part of the CBT intervention, combining the resources of the programme unit with those of logistics. The development of markets as an outcome thus reflects both programme interventions and the use of CBT itself.
49. The fundamental supply chain intervention is the provision of cash, either as cash itself or as vouchers that can be redeemed in exchange for a certain value or volume of goods. Value based vouchers can be redeemed for any selection of goods up to a fixed value (although the list of commodities is generally restricted). Volume based vouchers (referred to within WFP as "commodity vouchers") can be redeemed for volumes of specific

⁷ Oloya, J. (2021) Mid-Term Evaluation of Feeder Roads' Improvement and Maintenance Project (FRIMP). MEAL Unit, WFP South Sudan Country Office

goods up to predetermined maximum amounts in each case. Value based vouchers are considered to provide greater flexibility to beneficiaries. Provided that values can be easily updated to match fluctuations in actual market prices, value-based vouchers can be just as effective as commodity vouchers in meeting food security needs.

50. WFP voucher schemes in South Sudan provide beneficiaries with charge cards that can be remotely replenished to purchase goods through a mobile point of sale (MPOS) device operated by each participating retailer. It is therefore a relatively simple exercise to update the replenishment amounts to reflect the latest prices in each local market. Nevertheless, this does require that prices should remain stable and equal amongst all retailers participating in the CBT voucher scheme for the ensuing month, or until prices are reassessed. This has not always occurred, in one instance, retailers conferred and raised prices immediately after vouchers had been replenished using lower prices; as a result, beneficiaries' transfers were no longer adequate. To prevent this, participating retailers were asked to agree to a fixed set of prices that would be clearly displayed at each shop but this procedure was not always followed. This might reflect a culture that relies more upon negotiation to complete transactions than upon fixed prices.
51. Value-based voucher CBT systems are intended to prevent transfers from being used for goods other than predetermined commodities. In practice however, if beneficiaries possess any other cash resources, then the transfers are effectively fungible, so that voucher-based CBT can still result in increased expenditure on other non-essential items. The administration of voucher-based CBT requires the contracting of each retailer to provide goods for cash in the form of vouchers through the MPOS system and the establishment of an administrative system to reimburse retailers once the virtual vouchers collected each month have been submitted and validated. This limits the extent to which WFP can operate such systems. In 2020, Voucher based CBTs were provided to 21,400 beneficiaries, while 25,000 beneficiaries received cash in envelope. The numbers reflect WFP capacity to manage no more than about 300 retail outlets. Beyond that number, CBT is only practically feasible if cash in envelope is used since that system requires no retailer management by WFP.
52. The following outcomes were reported amongst third party stakeholders arising from voucher-based CBT:

Outcome 1: CBT has promoted economic development but the benefits are limited almost exclusively to retailers participating in the system and the wholesalers supplying them.

53. A general increase in economic activity that was largely confined to retailers participating in the scheme together with the wholesalers that supplied them. These retailers reported that their turnover had increased, generally resulting in increased profitability, although it was noted that larger premises were also often required. Nevertheless, retail outlets who had been excluded from the scheme observed that they would have liked to have been able to join, while those who had been contracted into the scheme noted how much more their businesses had grown as compared with those who had not joined.
54. Wholesalers reported that they had captured and responded to the demand created by voucher-based CBT and that their turnover and profits had been increased accordingly. It did not appear that new wholesalers had been drawn into the food system. In one instance this was clearly explained by the fact that the dominant wholesaler had extended credit to almost all the retailers in the community and had kept their identity cards as security. This had created a captive market of retailers who were effectively bound to that one wholesaler, creating a barrier to the entry of any competitor.
55. Retailers complained that they were made vulnerable to exploitation by wholesalers if the reimbursement of funds was delayed. They were able to obtain goods on credit at reasonable rates from wholesalers on the basis that loans would be repaid at the end of the month following disbursement by WFP. In the event of delayed reimbursement, retailers were obliged to seek an extension of credit for the goods they had borrowed, together with additional credit to restock and continue their business. The rates of the extended and additional credit were generally much higher than the original rates (a not unusual practice to discourage excessive borrowing from the wholesaler's own credit facility) which significantly eroded the retailers' profits to the point where one analysis suggested that retailers were scarcely covering their costs.
56. Amongst other stakeholders it was noted that rents for retail premises had increased as the increased economic activity both increased demand for larger premises and increased the number of actors at the retail level. Owners of market stalls were thus benefitting from their investment. Conversely, the youth who worked as porters pushing barrows for customers buying quantities of goods from the retail outlets had agitated for an increase in pay but had been denied. Finally, one bank had been contracted by WFP to pay retailers for the

vouchers redeemed at the end of each month and noted that this was a significant benefit for their business since it obliged each retailer to open an account with the bank (although many withdrew all funds immediately).

57. Participating retailers also noted that they had been trained by WFP in the use of the MPOS system as well as stock management, book keeping and general financial literacy.
58. These outcomes appear to be quite typical of short-term food system responses to CBT in that they demonstrate very limited capital investment on the part of either retailers or wholesalers. There was little evidence seen of new construction of warehouses or retail premises (although this was reported to have occurred in Warrap, or the purchase of additional transport capacity. Amongst retailers, there was little investment of own resources as additional working capital. Instead, additional stock was obtained on credit extended by wholesalers. This reflected the marked contrast between retailers' general lack of access to formal financial resources and wholesalers, who were able to access finance from formal and/or informal systems in Juba or outside the country. That disparity created a dynamic which favoured wholesalers and reduced the profits that might otherwise have accrued to retailers. Similarly, there appeared to be no excess profit that might otherwise have trickled down to the youth working as porters.
59. Retailers reported that their business management skills had improved as a result of WFP training, but it was difficult to detect any specific outcomes that might have resulted from those improved skills when set against the major impact of increased turnover due to CBT.

Outcome 2: Overall, wholesalers appeared to be the major beneficiaries of CBT, which also reinforced their dominant position in the food system.

60. The overall response of the food system to CBT appeared to have been the reinforcement of a dynamic between stakeholders that was fundamentally based upon access to assets such in the form of finance or property. Those parties with access were able to negotiate a greater proportion of the cash that had been injected into the food system through CBT than those who lacked finance or property and were obliged to seek credit or to rent. In the long term, it might be argued that the inequitable dynamic might shift as a result of the entry of additional wholesalers into the market, or construction of additional shops, but that presupposes a willingness to risk significant amounts of fixed capital in an uncertain market and there is little evidence of that in South Sudan's CBT market development areas at present.
61. Outcomes of CBT using "cash in envelope" appear to be similar to those described for voucher-based CBT, but apply across all commodity retailers rather than only those participating in the voucher scheme.
62. The outcomes of CBT do not show any increase in inclusiveness. While women are represented amongst retailers, and there is a nominal preference for female applicants in the selection process, the socio-economic context is such that whatever economic benefits do accrue to retailers are available to men and women equally. Observations suggest that in South Sudan, there are few women engaged as wholesalers, which is the stakeholder group that appears to benefit most from CBT. Similarly, although male youth are active in some aspects of the retail sector (working as porters and "boda-boda" taxi drivers), they do not appear to benefit any more than any other group from the increase in turnover that CBT inevitably brings. There are no aspects of the CBT intervention that would specifically empower either women or youth.
63. In terms of competitiveness and reduced transaction costs between producer and consumer there appears to be no clear impact. For voucher-based CBT prices are notionally fixed by agreement with WFP and although agreed prices are intended to reflect actual market prices, the removal of any element of competition between retailers probably results in a slight increase in average prices paid by the consumer. For pure CBT, competition between retailers is possible, but the increased availability of cash may well exert an upward pressure on prices immediately after disbursement.
64. For those stakeholders that were interviewed, the sustainability of the observed outcomes appeared to be limited and largely dependent upon the continued injection of cash into the local economy. There was no evidence that accumulated wealth had been invested in assets that might sustain future business operations. Increased business activities meant that empty properties were being reoccupied, but not rebuilt. Instead, profits had been reinvested in stock that could be readily liquidated or possibly invested elsewhere, where potential returns might be greater. (An erstwhile CBT-supported market could hardly be considered an attractive investment opportunity unless some alternative driver of economic development were to be clearly

identified. Other markets, beyond the sphere of humanitarian response are generally more vibrant and attractive).

65. Nevertheless, while the CBT-supported market was in operation, it showed increased resilience as compared with its former state. Increased numbers of retailers carrying a wider range of goods generated a degree of resilience, even though that might disappear if CBT were to be withdrawn.
66. The market development activities stimulated by CBT and reinforced by programme unit supports have clearly resulted in some increase in retailer numbers as well as increased incomes amongst retailers and to a greater extent amongst wholesalers. The interventions have tended to reinforce the pre-existing dynamic of wholesalers' commercial dominance over retailers but have not otherwise significantly enhanced food system development in a sustainable way. The overall increase in economic activity is still primarily driven by CBT rather than any reinvestment of CBT-induced profits in alternative income generating activities.

Assessment of Processes within WFP

Knowledge sharing and collaboration

67. There is considerable collaboration between all units in most of the operations conducted by WFP South Sudan. Some of this is a result of the nature of interventions, which can involve different units, especially the cooperation between logistics and programme staff in market development, and between programme and procurement staff in direct procurement from smallholders. Data collected in key areas including road surveys, retailer performance monitoring and evaluation, food security outcomes, and modality preferences are shared amongst technical units and field officers. Cash working group meetings are also used as a platform to share findings. It is evident that some activities do not require strong collaboration (such as the procurement of transport), in which case units operate more in isolation.
68. Nevertheless, this evaluation observed that collaboration in WFP South Sudan is enhanced by informal collaboration between individuals. This is due partly to the small number of the core staff, and to a strong ethos of partnership and commitment to shared purpose within the CO. There is no doubt that the shared difficulties of working in a disrupted environment also contributes to this ethos. As a result, communication between CO staff members is open and effective and this strengthens collaboration.

Data collection and analysis

69. WFP Monitoring and Evaluation (M&E) staff collect a substantial range of data on an ongoing basis. Staff in both programme and supply chain units also generate a variety of reports covering diverse subjects including:
 - Food security, nutrition and diversity of foods
 - Livelihoods, income and expenditure
 - Road surveys
 - Markets and household food access
 - Macroeconomic crisis implications on food security
 - Humanitarian assistance received.
70. The information collected in each of these areas is both detailed and extensive, covering large areas of the country in some cases down to the county level. Each report provides a rich source of information covering a wide range of different aspects. Nevertheless, the reports are entirely descriptive and do not include any reference to the outcomes of interventions, or linkages between interventions and measured statistics (such as consumption scores, or production levels). It is not possible to use the data that is collected to assess the efficiency of interventions on an objective basis since there is no differentiation between populations that have benefited from WFP interventions and those that have not. This constraint applies not only to the direct impacts of interventions on beneficiaries, but even more so to the indirect impacts of interventions on third party stakeholders (such as traders and transporters). In this latter case, there is relatively little data that collected by VAM that is relevant, although some, such as prices, provides useful context.
71. Some data that does reflect changes in the capacity of third-party stakeholders is collected for monitoring purposes by the M&E unit, including monthly process monitoring of warehouses, delivery losses and delivery

performance, beneficiary preferences, and ad hoc market assessments to determine the extent of monetization. Other information on contracts, and stakeholder capacities is collected by the procurement unit within logistics.

72. Overall, WFP data collection exercises cover almost every aspect of the food systems that WFP affects directly, but there are three key limitations to these data collection processes from a food systems development perspective:
- 1) Much of the information is collected to facilitate the auditing of supply chain performance. This is critical to ensure efficient operation but does not enhance knowledge of the food system in which the supply chain is operating. The information does not cover third parties who are not immediately affected by WFP such as wholesalers, supplying CBT retailers, financial service providers, producers supplying commercial traders, and in particular does not reflect levels of investment in food systems by any of these stakeholders.
 - 2) The data that is collected by each system (VAM, M&E and procurement) is not aligned in terms of frequency, geographical area or exact type of indicator, so that comparisons between different areas or periods require assumptions to be made about the interactions between various factors. For example, the road building interventions have reduced the amounts spent on food air drops over time, but the changes have not been consistent. Amounts spent on air drops temporarily increased one year ago. That increase was almost certainly due to the extensive flooding that had occurred at the time, but it would be almost impossible to determine the actual impact of flooding and how much that could have offset the beneficial outcome of roadbuilding. Intuitively the trend is quite clear, but objectively it is hard to assess but this simplistic example demonstrates the difficulties that inherent in determining the extent to which CBT might affect the growth of retail outlets against a backdrop of inflation, exchange rate fluctuations, and conflict. It is effectively impossible to account for these factors objectively.
 - 3) In order to obtain an objective assessment of outcomes it is necessary to be able to compare observations of “treatment” areas where WFP interventions have taken place and “control” areas where they have not. Control areas should be as similar as possible to treatment areas, which is not easily achieved. WFP does not collect data using this type of sampling frame and it is difficult to determine the existence of outcomes objectively as a result of this, still less to assess their extent or causal factors.

5. Discussion and Conclusions

73. The table below provides an overview of the 12 Evaluation Questions (EQ) and the evaluation team’s assessment against each.

Table 1 Assessment against evaluation questions

EQ	Summary and conclusion
1. To what extent are supply chain interventions informed by programmatic nutrition priorities, market assessments, climate change risks and gender analyses?	<p>Nutritional priorities are not evident in either the commercial or the small-scale procurement procedures, or in the procurement of transport, or the development of infrastructure. Nevertheless, they definitely inform CBT interventions as they determine the commodities for which vouchers can be exchanged.</p> <p>Market assessments are important to determine the point at which CBT interventions might be introduced instead of food aid, and to revalue vouchers on a monthly basis according to changes in prices. Market analyses are also used to assess the feasibility and impacts of procurement.</p> <p>Climate change risk does not appear to be considered under any of the thematic areas.</p> <p>Gender analyses are evident in smallholder and retailer support activities but have little impact on the processes involved.</p>
2. To what extent are supply chain	<p>The main supply chain interventions all appear to be largely relevant to the local food systems in that they are achieving their primary goals without disrupting or</p>

EQ	Summary and conclusion
<p>interventions relevant and appropriate to local food systems across the different country contexts?</p>	<p>degrading existing capacities or efficiencies, which in some cases are actually being enhanced. In particular, the development of infrastructure (roads and waterways) is very relevant to the conditions in South Sudan and the rapid benefits to the local economies affected by improved access are clear testament of that relevance.</p> <p>The extent to which activities might be inappropriate is subjective. It might be considered inappropriate to reinforce the dominance of wholesalers over retailers, as occurred in at least one CBT intervention, but that assumes a particular perspective. In general, the design of interventions and the technologies applied were observed to be appropriate to the stakeholders and circumstances.</p>
<p>3. What are the most significant outcomes of supply chain activities?</p>	<p>The most significant outcomes have been reported on under the findings section and include:</p> <ul style="list-style-type: none"> • Enhanced access to otherwise remote areas as a result of road and waterway development has resulted in increased market activity and more efficient food systems in those areas. • CBT and market development activities have increased turnover amongst retailers and wholesalers but have not yet resulted in sustained change. • WFP engagement with transporters has increased transport capacity in some areas (especially around secondary distribution points), but results are not consistent. • WFP local purchase activities have resulted in an increase in the numbers of participating traders, but the extent of WFP contribution to that increase is uncertain. <p>Results may appear to be limited and perhaps disappointing, but conditions within South Sudan over the last 20 years have not been such as to instil any confidence in potential investors. It is only the most adventurous entrepreneurs who are currently willing to invest in projects that cannot be readily liquidated should circumstances deteriorate as a result of conflict, economic disruption or other disaster.</p>
<p>4. To what extent do outcomes demonstrate inclusion and representation of women, youth, and vulnerable actors across the supply chain?</p>	<p>Women are not strongly represented in business activities in South Sudan. WFP interventions in commercial procurement and transport do not involve women or youth to any great extent. This is one area where greater involvement of programme staff might result in more inclusive development. In contrast, WFP interventions amongst smallholders and retailers do affect greater numbers of women, although even here representation is predominantly male. There are isolated examples of women's involvement (e.g., within smallholder cooperatives or small-scale transport) and opportunities for youth as porters, but these are generally opportunistic rather than planned developments. Overall, inclusion and representation of disadvantaged groups has not been a strong aspect of supply chain interventions.</p>
<p>5. What routine data or other evidence may help strengthen and inform supply chain activities moving forward towards greater effectiveness, impact, inclusion, and sustainability?</p>	<p>WFP does have some data that can be used to track changes in food systems, but in general datasets do not allow for the influence of external factors. Neither do they allow for controlled comparisons that might provide any evidence of contribution or attribution. As a result, it is difficult to determine whether data actually reflect a real change (outcome) in food systems, let alone determine the extent of that change or the reason why it may have occurred.</p> <p>In order to make these determinations, panel data amongst different stakeholder groups (especially smallholders, retailers and wholesalers and even transporters) should be collected on a regular basis. Contextual data (such as market prices as currently collected by VAM) should be coordinated with supply chain data, and sampling frames should be developed that allow for controlled comparisons, on a matched pairs basis if possible.</p>
<p>6. To what extent is there collaboration</p>	<p>There is considerable collaboration between all units in most of the operations conducted by WFP South Sudan. Some of this is a result of the nature of</p>

EQ	Summary and conclusion
<p>between supply chain, engineering, and programme units?</p>	<p>interventions, which involve different units, especially the cooperation between logistics and programme staff in market development, and between programme and procurement staff in direct procurement from smallholders. It is evident that some activities do not require strong collaboration (such as the procurement of transport), in which case units operate more in isolation.</p> <p>Nevertheless, this evaluation observed that collaboration in WFP South Sudan is enhanced by informal collaboration between individuals, as a result of a strong ethos within the CO, which appears to place greater emphasis on the achievement of broader WFP goals than upon meeting individual targets. There is no doubt that the somewhat "besieged" nature of the CO and the shared difficulties of working in a disrupted environment contributes to this ethos.</p>
<p>7. Are supply chain capacities and capabilities effectively leveraged to achieve desired outcomes and contribute to wider systems level change? What, if any, efficiency gains have been realized through WFP supply chain interventions? How or why?</p>	<p>WFP logistical and engineering capacities have been strongly leveraged to promote positive food system outcomes through improving access to otherwise isolated areas. Currently this applies to local economies in specific areas but there is considerable potential for this work to be expanded to have wider impacts and eventually contribute to systems level change.</p> <p>In areas that have become accessible as a result of infrastructural development, food systems have become increasingly efficient as a result mainly of reduced transport costs and increased competition between stakeholders.</p> <p>Procurement capacities both for food and for transport are not leveraged to any great extent and although there have been outcomes caused by WFP interventions in these areas they have been localized and limited in extent.</p>
<p>8. To what extent have supply chain activities and identified outcomes contributed to wider food system impacts (including intended and unintended effects on local economies, upon resilience and inclusiveness of food systems, and upon access and availability of affordable nutritious foods)?</p>	<p>Within those areas that have become accessible as a result of infrastructural development there have been significant food system outcomes and local economies have experienced increases in both the competitiveness and resilience of food systems. Access to foods has been improved and prices have declined (as a result of reduced transport costs) so that affordability has also improved. These are robust changes that are sustainable for as long as enhanced access can be maintained.</p> <p>Interventions to support the local procurement of food from smallholders have resulted in increased productivity and potentially increased the local availability of food. Actual procurement of food from smallholders does not appear to have had any such impacts. Neither does commercial procurement of larger volumes, although this may have contributed to increased production, but there is no direct evidence of this.</p> <p>CBT and associated market development interventions have resulted in increased volumes of food being brought into areas where CBT has been implemented, and to that extent, the availability of food is increased. Nevertheless, the amounts of food imported into CBT areas generally match the purchasing capacity generated by CBT itself so that overall availability per capita is not changed. Although there are clear increases in economic activity in CBT areas, these represent a direct response to the injection of capital rather than innate incremental growth.</p>
<p>9. How do the outcomes of supply chain interventions vary with the scope and scale of the interventions?</p>	<p>Amongst smallholder producers, the broad scope of interventions by CPs (Star Trust and Caritas) has increased the probability of successful outcomes (i.e., increased productivity, and profitability), but the impact on overall food systems is limited. At a commercial level, operating with narrow scope but large scale, individual outcomes may have a greater influence on wider food systems. The same considerations also apply to market development activities that focus on smallholder development. These are quite broad in scope and achieve some degree of success in terms of</p>

EQ	Summary and conclusion
	<p>increased capacities and efficiencies, but the extent to which they can be scaled up tends to be limited.</p> <p>A similar effect is evident in the procurement of transport. There may be significant outcomes as far as the procurement of small-scale transport is concerned (often by CPs rather than WFP itself) but the overall significance of these changes is limited to specific areas where food distribution takes place. On a larger scale, WFP procurement activities may affect national transport capacity, but the effects are less consistent.</p> <p>Infrastructure development is an activity that is narrow in scope and limited in scale but has tended to generate the most robust outcomes.</p>
<p>10. How have the dynamics between different stakeholders within food systems been affected by WFP supply chain activities? Any differential effects for women and youth supply chain actors?</p>	<p>Food system dynamics have not been dramatically altered by WFP local purchase activities. The dynamics of smallholder production and sales has been altered to allow smallholders to capture a larger share of the value chain by developing their own marketing networks (cooperatives), in which women are represented more actively than in conventional marketing systems. Nevertheless, the extent to which this has occurred (amongst 4,300 producers) is small and unlikely to affect the dynamics of the broader food system. At a commercial level, procurement may have reinforced the position of wholesalers as contractors of local production, but the real extent of this effect is not known.</p> <p>Procurement of transport would not normally be expected to alter the dynamics between stakeholders, but in this instance, the shift by WFP South Sudan from a tariff to non-tariff procurement system appears to have altered the dynamics of transport supply. Larger operators, who are more likely to be successful in bidding for contracts may be more incentivized to invest in additional capacity than they were under the old tariff system. Smaller operators who no longer participate in the transport pools at fixed tariff rates (as the tariff system required) are already withdrawing from rural transport markets to operate out of Juba instead. The number of women traders working with WFP is small (2 out of 26), but there appears to be no differential impact on any one group.</p> <p>Infrastructure developments that increase access have had multiple impacts on food system dynamics, the most important being the increase in numbers of retailers and wholesalers which has increased competition between them, reduced prices, and increased product diversity. There is no obvious effect on disadvantaged groups in this instance.</p> <p>Market development activities, especially CBT appear to have resulted in a greater increase in profits amongst wholesalers than amongst retailers, thereby enhancing the dominance of wholesalers in the local food systems. In general, the proportion of women amongst retailers is much higher than that amongst wholesalers so that the overall effect is detrimental for women as a group.</p>
<p>11. To what extent are results from supply chain interventions sustainable?</p>	<p>WFP procurement activities have generated outcomes amongst smallholders that are unlikely to be sustained unless a similar level of support (including payment at prices above market prices) can be provided by some other agency. At a commercial level, traders who have developed their businesses based upon WFP as a market may have alternative markets across the border in Sudan (although this market is also supported by WFP). Nevertheless, even here, the limited development of physical assets means that there is only limited pressure upon wholesalers to continue operations in the face of declining prices that they would probably face if WFP withdrew from the market. If business development has not resulted in commitment to a particular type of operation in the form of investment in specific physical assets (such as warehouses and cleaning equipment) then it is relatively easy to repurpose any financial assets that might have accrued into more profitable</p>

EQ	Summary and conclusion
	<p>operations. From this perspective, outcomes to date are only sustainable under optimal commercial circumstances.</p> <p>Some parts of South Sudan’s commercial transport fleet have increased capacity as a result of WFP procurement and distribution activities. This capacity increase is inherently more sustainable than that in the trading sector even though it might be underutilized. In the case of transport companies with regional scope sustainability is still more likely as other work might be found elsewhere.</p> <p>Developments amongst retailers and wholesalers as a result of CBT activities appear to be largely transient, in that they have resulted in increased profits, but little increased investment in fixed assets. Some retailers have their own inherent capacity increased by WFP training activities, but this does not of itself affect food system outcomes.</p> <p>WFP Infrastructure development activities have resulted in potentially sustainable outcomes in terms of increased business activity, larger numbers of retailers and wholesalers, lower prices and more diversity in food markets. These results can be expected to continue for as long as road or water access is maintained. In the absence of WFP repeated input, this will require the development of government capacity (See EQ 12).</p>
<p>12. In what ways are WFP interventions strengthening capacity of key government institutions and supply chain actors as reported by stakeholders?</p>	<p>Government capacity within South Sudan is somewhat limited at present. Many institutions are non-functional or do not exist. This provides limited scope for WFP to develop that capacity. Nevertheless, within the scope of supply chain interventions, WFP work on road and waterway development has provoked considerable Government interest in expanding that operation, or in developing the same capacity within Government itself. There have been discussions to that end, together with discussions around the creation of a functional Roads Board and appropriate funding mechanism so that rehabilitation process can be sustainable. At this stage however, progress has been limited.</p> <p>WFP is currently working to introduce laboratory testing facilities into South Sudan. This would reduce the delay in payment for locally procured sorghum and would ultimately enhance national capacity for food quality assurance.</p>

Annex 1. Fieldwork overview

Table 2 List of people interviewed, South Sudan

Name (sex)	Position
1. Mohammed Adil (M)	Security Officer, WFP South Sudan
2. Hien Adjemian (M)	Logistics officer (Operations), WFP South Sudan
3. Obhang Obang Agwa (M)	Refugee, Gorom Camp
4. Ashfaq Ahmed (M)	Logistics Officer CST, WFP South Sudan
5. Deborah Ajah (F)	Assistant, WFP South Sudan
6. Margaret Akoth (F)	Head of Programme, Bor FO, WFP South Sudan
7. Teresa Akuac (F)	Retailer, Marol Market, Bor
8. Ahmad Alassad (M)	Logistics Officer, WFP South Sudan
9. Basem Awawdeh (M)	Logistics Officer, WFP South Sudan
10. John Gai Ayuel (M)	Retailer, Marol Market, Bor
11. Awor Agada Buyi (F)	Refugee, Gorom Camp
12. Barbara Obang Cham (F)	Refugee, Gorom Camp
13. Benjamin Dacula (M)	Logistics officer CST, WFP South Sudan
14. Hassan Shidan Dhinbil (M)	Trader, Garissa Ltd
15. John Dingley (M)	Security Officer, WFP South Sudan
16. Abdiaziz Mohamed Dohir (M)	Manager, Garissa Ltd
17. Mohamed Elhousseini (M)	Logistics officer, Cluster, WFP South Sudan
18. Katrina Fensl (F)	Market Development Consultant, WFP South Sudan
19. Mohamed Abdi Fidas (M)	Transporter, Damey Transport
20. Michael Fisher (M)	Logistics Officer, CBT, WFP South Sudan
21. Puoch Oman Gilo (M)	Refugee, Gorom Camp
22. Elizabeth Githaiga (F)	Director Of Business Development, Alpha Commercial Bank, Juba
23. Nenad Grkovic (M)	Head of logistics, WFP South Sudan
24. Abas Mohamed Guhad (M)	Wholesaler, Bor
25. Mohamed Hassan (M)	Transporter, Damey Transport
26. Farah Abdi Hussein (M)	Wholesaler, Bor
27. Hamze Mohmound Ibrahim (M)	Trader, Garissa Ltd
28. Abdelaziz Saleh Idris (M)	Refugee, Gorom Camp
29. Kurukanya Jadalaha (M)	Civil Engineer, WFP South Sudan
30. Marial Nyok Kiir (M)	Retailer, Marol Market, Bor
31. Fiona Lithgow (F)	Head of logistics Cluster, WFP South Sudan
32. Owar Oniit Luach (M)	Refugee, Gorom Camp
33. Irene Maingi (F)	Head of Finance, WFP South Sudan
34. Grace Makhallira (F)	M&E officer, WFP South Sudan
35. John Mbeli Mbeli (M)	Refugee, Gorom Camp
36. William Nall (M)	Programme Officer, Head of VAM, WFP South Sudan
37. Gabriel Nyamu (M)	Branch Manager, Kush Bank, Bor
38. Andrew Nyok (M)	Business Support - Logistics, WFP South Sudan
39. Liam Obang (M)	Refugee, Gorom Camp
40. Ojullu Ochan Ochan (M)	Refugee, Gorom Camp
41. Angelo Omot Ogala (M)	Refugee, Gorom Camp
42. Jay Oman Ogud (M)	Refugee, Gorom Camp
43. Thuol Nyigwo Okak (M)	Refugee, Gorom Camp
44. Hanna Ogud Okwier (F)	Refugee, Gorom Camp
45. Medi Johnson Oman (F)	Refugee, Gorom Camp
46. Abang Dhok Omot (F)	Refugee, Gorom Camp
47. Omot Ubur Opodhi (M)	Refugee, Gorom Camp

Name (sex)	Position
48. Okach Othow Othou (M)	Refugee, Gorom Camp
49. Sujin Pak (F)	Monitoring and evaluation officer, WFP South Sudan
50. Koma Richard (M)	Logistics officer, WFP South Sudan
51. Dulama Saeb (M)	Logistics CST, WFP South Sudan
52. Kebede Seifu (M)	Logistics officer, WFP South Sudan
53. Ahmed Takoy (M)	CEO, Kush Bank, Juba
54. David Thomas (M)	Programme, Head of CBT, WFP South Sudan
55. Aimad Ullah (M)	Logistics Officer, WFP South Sudan
56. Sergio Vatalaro (M)	Head of procurement, WFP South Sudan
57. Phidelia Wekesa (F)	Procurement officer, WFP South Sudan
58. Abdullah Zaman (M)	Logistics Officer, WFP South Sudan
59. Juliet (F)	Lucky Q Ltd General Trading
60. Jackson (M)	Lucky Q Ltd General Trading
61. Mombasa (M)	Transporter
62. Blackkey (M)	Transporter

Table 3 South Sudan fieldwork agenda

Date	Activities	Stakeholders Interviewed	Evaluation Team Members Responsible ⁸
South Sudan			
Sunday 6 th February	International consultants travel to Juba		GG
Monday 7 th February	Juba Fieldwork	<ul style="list-style-type: none"> • Introductory meetings with WFP Staff • Security briefing by WFP Security officer • Meeting with WFP Supply Chain Logistics • Meeting with WFP MEAL unit • Meeting with WFP CBT market development experts • Meeting with WFP Supply Chain Unit transport 	GG, TA
Tuesday 8 th February	Juba Fieldwork	<ul style="list-style-type: none"> • Meeting with WFP Supply Chain intervention designers and M&E Unit • Meetings with 2 traders supplying WFP • Meeting with 2 large transport companies 	GG, TA
Wednesday 9 th February	Travel to Bor; Bor Fieldwork	<ul style="list-style-type: none"> • Meeting with WFP staff in Bor – Program • Meeting with WFP staff in Bor - Logistics • Meetings with local Traders (2 separate interviews) • Meetings with Kush Bank - Commercial Bank credit managers (2 separate meetings) • Meetings with brokers (2) 	GG, TA

⁸ South Sudan team members: GG – George Gray (case study lead); Tong Anei (South Sudan consultant)

Date	Activities	Stakeholders Interviewed	Evaluation Team Members Responsible ⁸
Thursday 10 th February	Bor Fieldwork	<ul style="list-style-type: none"> • Meetings with retailers (2 FGDs 1 woman, 1 man) • Meeting with non-beneficiaries (2 FGDs - 1 woman, 1 man) • Meeting with WFP supply chain transport experts • Meetings with 2 local Transporters • Meeting with Wholesalers (two separate meetings) 	GG, TA
Friday 11 th February	Bor Fieldwork; Travel to Juba	<ul style="list-style-type: none"> • Debrief with WFP Staff in Bor 	GG, TA
Saturday 12 th February	Team meetings and consolidation of field evidence		GG, TA
Sunday 13 th February	Team meetings and consolidation of field evidence		GG, TA
Monday 14 th February	Juba Fieldwork	<ul style="list-style-type: none"> • Meeting with WFP staff involved in Gorom Supply Chain and market development activities • Meeting with WFP Procurements team • Meeting with 2 brokers • Meeting with cereal retailers in Juba (Konyokonyo market) (2 shops and 2 stalls) 	GG, TA
Tuesday 15 th February	Travel to Gorom; Gorom Fieldwork	<ul style="list-style-type: none"> • Meetings with local retailers • Meetings with Community members FDG (mixed beneficiaries and non-beneficiaries) • Meeting with millers (2 separate interviews) 	GG, TA
Wednesday 16 th February	Juba Fieldwork; International Consultant's Travel Home	<ul style="list-style-type: none"> • Meeting with Finance providers in Juba (2 commercial Banks) • Meeting with WFP VAM officer • Debriefing meeting with WFP Supply chain 	GG, TA

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Acronyms

CBT	Cash Based Transfers
CO	Country Office
CP	Cooperating Partner
DCD	Deputy Country Director
EQ	Evaluation Question
iCSP	Interim CSP
M&E	Monitoring and Evaluation
MFI	Market Functionality Index
MPOS	Mobile Point of Sale
MT	Metric Tonnes
RBN	Regional Bureau for the East and Central Africa region, Nairobi
TOR	Terms of Reference
UNSDCF	United Nations Sustainable Development Cooperation Framework
USD	United States Dollar
VAM	Vulnerability Assessment and Mapping
WFP	World Food Programme