

Interim Evaluation of the of the South Kivu FSP-Enyanya RFSA in the Democratic Republic of the Congo

Summary Brief



Photo Credit: Annette Fay, Tulane Consultant

INTRODUCTION

Overview

The South Kivu Food Security Project (FSP)-Enyanya Resilience Food Security Activity (RFSA) was launched in September 2016. FSP-Enyanya aims to “improve food and nutrition security and economic well-being of vulnerable households in South Kivu” through three primary purposes:

- Purpose 1 (P1): Agriculture: Household incomes are increased.
- Purpose 2 (P2): Health, nutrition, and WASH: Improved nutrition status in communities.
- Purpose 3 (P3): Governance: Socio-economic status is stable and inclusive.

Prepared by Tulane University School of Public Health and Tropical Medicine, this brief summarizes the results of the interim evaluation published in 2022.¹

Overall, the interim evaluation shows the FSP-Enyanya’s RFSA in the Democratic Republic of the Congo (DRC) in a positive light, identifying several promising areas where lower-level outcome indicators appear to be moving in the correct direction, and self-reported direct participation in RFSA activities is frequently associated with improvements. However, results at the population level do not consistently show the expected significant improvements.

Methodology

The interim evaluation used pre-/post-population-based survey (PBS) evaluation design, with surveys representative of the RFSA area of implementation. The design allows for the statistical detection of changes in indicators between survey rounds. However, it does not allow statements to be made about attribution or causation relating to activity impact.

Baseline Round 1 (R1) data was collected July–August 2017, with a sample of 1,300 households from 44 villages in the planned implementation area. Interim Round 2 (R2) data was collected July–August 2021, with a sample of 1,350 households from 50 villages. R2 re-sampled all 44 villages surveyed at baseline, as well as six additional villages randomly selected from areas of RFSA implementation added after R1.

¹ <https://www.fsnnetwork.org/resource/interim-evaluation-south-kivu-food-security-project-fsp-enyanya-resilience-food-security>

Data on the same lower-level outcome indicators were collected in both survey rounds, although the R2 questionnaire excluded the poverty module (due to time and cost considerations) and the anthropometry modules (due to concerns about COVID-19 transmission). The R2 questionnaire also added a module on self-reported household-level participation in various RFSA interventions.

The quantitative findings were triangulated with findings from the mid-term qualitative evaluation,² activity annual reports, activity direct participant monitoring data, and other secondary data sources.

KEY FINDINGS

Intervention Exposure and Participation

The RFSA achieved moderate levels of self-reported household participation in some of their interventions, though none were as high as indicated by the RFSA program data. Despite most of the interventions being implemented in all (or most) villages sampled in the survey, direct participation (as reported in the R2 survey) was generally low. Interventions with the highest coverage of direct participants included WASH trainings/events (24% of households), agricultural training (22% of households), and agricultural inputs (20%). All other interventions surveyed fell below 20%.

Program data from 2020 indicate that the RFSA reached 52,000 unique direct participant households or about 70% of the coverage area. The R2 survey yielded a somewhat lower estimate, with 54% of households that reported direct participation in one or more of the surveyed RFSA interventions.³

One example of a potential high-quality/impact intervention with low coverage is safe space groups. This intervention was positively described by the 2019 mid-term evaluation as best practice and likely to impact participant nutrition and the knowledge, attitudes, and practices of sexual health behaviors. However, in the R2 survey, only 4% of households reported direct participation, despite 81% of households in the interim survey living in villages where safe space groups were implemented. This reflects the mid-term findings that the FSP-Enyanya RFSA was reaching about 3,500 adolescents via Safe Spaces in 2019, with plans to double that by the end of the activity. This is a very small percentage of the adolescent population, unable to have any meaningful impact at the population level.

Considering these often-low coverage rates (numbers of direct participants) of the interventions, impacts are likely diluted at the population level. Furthermore, any

ABOUT FSP-ENYANYA

Primary Focus Areas: Agriculture to increase household incomes. Health, nutrition, and WASH to improve nutrition status in communities. Governance to ensure the socio-economic status is stable and inclusive.

Implementing Organizations: Mercy Corps (Prime), World Vision, Harvest Plus, Université Evangélique de l’Afrique, Action pour la Paix et la Concorde.

Intervention Period: Sept. 2016 – Sept. 2023 (5 years, plus 2-year extension)

Funding: United States Agency for International Development (USAID), Bureau of Humanitarian Assistance (BHA), life of award budget of approximately \$62 million.

Intervention Areas: 474 villages located in three rural health zones (Miabi, Cilundu, and Kasansa) in the Kasai Oriental province.

Targeting: 80% of the population living in its zone of influence or 36,000 households, with particular attention on women, youth, and children under two.

² <https://www.fsnnetwork.org/resource/mid-term-evaluation-enyanya-development-food-security-activity-drc>

³ The evaluation survey data is not meant to call the project data into question.

spillover of the impacts from the RFSa interventions to indirect participants may be less than hoped. More programmatic intensity and focus may be required to positively impact the lower-level outcome indicators and ultimately improve food security and resilience at the population level.

It is important for BHA and Mercy Corps to consider, in general, the cost of implementation of an activity and its interventions relative to the saturation that the activity may be expected to reach to determine if it is worth running an intervention that is “a mile wide and an inch deep.” The package of RFSa interventions may need to be streamlined (and/or consolidated) to ensure only sustainable, efficient, and impactful interventions are used. This study only begins to scratch at the surface of these issues.

Food Security and Resilience

Food security, as measured by the Household Dietary Diversity Score (HDDS) and the Food Insecurity Experience Scale (FIES), showed no meaningful change between survey rounds. The prevalence of moderate and severe food insecurity (as measured by the FIES) was very high at baseline (95%) and the interim (96%). The FSP-Enyanya monitoring data also shows little change in the HDDS and the FIES. Stable food security measures could be interpreted as a positive outcome, considering the volatile food security in the DRC compounded by COVID-19 the year before the survey.

All three resilience capacity indices (absorptive, adaptive, and transformative) increased significantly between survey rounds. However, changes in the indices were largely driven by only one (or a few) of their component indicators.

A large improvement of the absorptive index was driven primarily by the reported increased presence of humanitarian assistance (one of the index components). This may be due to assistance provided through FSP-Enyanya reported as being “humanitarian” by the respondents (though this cannot be confirmed by available data). Cash savings and informal safety nets also contributed to the increase in the absorptive index. The small improvement in the adaptive capacity index was driven mainly by increased social safety nets and, to a lesser degree, increased productive asset ownership. The improvements were offset by significant declines in education and training, livelihood diversity (mainly from a reduction in households reporting remittances and gifts), and improved agricultural practices. The modest improvement in the transformative capacity index was driven mainly by improvements reported in formal safety nets and was offset by small decreases in some of the other component indicators.

There is a positive correlation between the HDDS and higher absorptive and adaptive capacity indices. However, this does not hold true for the transformative capacity index, which is defined mainly by community-level indicators rather than household level.

Water, Sanitation, and Hygiene

Improvements in access to safe drinking water were observed across the surveyed areas, particularly in the time required to access these sources. The percentage of households that could obtain drinking water in less than 30 minutes (round trip) increased significantly (from 39% to 75%). Data was not collected in the interim evaluation on water point rehabilitation. However, the mid-term evaluation indicated that the FSP-Enyanya RFSa functional water points had increased water access in some areas, with a recommendation to work to increase coverage. As each water point constructed may benefit an entire community, even modest increases in coverage of related interventions may result in important improvements in these indicators.

The use of basic (improved) sanitation facilities remained low (3%), with no significant change. Open defecation remained very low (3%) in the R2 survey. FSP participant monitoring data showed a higher

prevalence of improved sanitation in its surveys but also showed little change over time (2019 to 2021). However, contrary to these findings, Mercy Corps reports the construction of more than 20,000 pit latrines, covering well over 3% of households in the coverage area. Additionally, the interim survey data indicates that 18% of households report participating in toilet-building activities. The predicted improvement in basic (improved) sanitation facilities may be clouded by the survey definition of basic (improved) sanitation facilities. Pit latrines without slabs (considered unimproved by the survey methodology) were the common type of toilet reported in the interim survey (85% of households).

Agriculture

There was a significant increase in farmers' use of financial services between the survey rounds (32% to 50%), and the use of improved storage practices (40% to 53%). The FSP-Enyanya recurrent monitoring data show similar directions of change in these indicators. The 2019 mid-term evaluation (MTE) reported that the producers' organization interventions were either weak, behind schedule, or non-existent. However, the 2020 annual report indicates that progress had been made following the MTE in implementing these activities.

Participation in Village Savings and Loan Associations (VSLAs), as well as participation in farmers' groups and/or natural resource management (NRM) activities, were strongly associated with farmers' access to financial services. However, the interim evaluation found no association between participation in farmers' groups or NRM programs and improved value chain activities or storage practices.

The prevalence of farmers reporting using four or more sustainable crop practices or technologies (out of nine promoted by the activity) decreased significantly between survey rounds. There was no change in the prevalence of farmers using at least one sustainable crop practice (89% in both rounds). However, in the R1 survey, farmers were recorded as practicing a greater number of sustainable crop practices on average than in the R2 survey. FSP-Enyanya monitoring data showed higher prevalence of farmers using four or more sustainable crop practices in their 2019, 2020, and 2021 surveys. However, the percentage point differences between years (+/- 15 percentage points) were similar to those seen between the R1 and R2 surveys. It is challenging to assess whether these differences between rounds are impacted by methodology and data collection issues.

Among livestock practices, the RFSA focused primarily on breeding and keeping rabbits. However, this only increased from 2.5% to 3.1% of households between survey rounds. The MTE found that comprehension by rabbit recipients of how to raise, manage, and breed the animals was limited and varied. The 2020 annual report data indicated improvements, but the intervention remained small and had low coverage, so this very small population-level change is not surprising.

Women's Health and Nutrition

Changes in women's consumption patterns showed slightly negative changes. The prevalence of women consuming a diet of minimum diversity fell (weakly significant), and the prevalence of women consuming targeted nutrient-rich commodities also dropped, though this change was only significant when looking at the re-sampled villages. FSP-Enyanya participant monitoring data also showed no large variation in women's consumption of a diet of minimum diversity or in the consumption of nutrient-rich commodities (among direct participants). However, participation in nutrition training was significantly associated with higher levels of women consuming a diet of at least the minimum dietary diversity.

Contraceptive use (both modern and traditional) remained unchanged between survey rounds. FSP-Enyanya participant monitoring data also showed little change between 2019 and 2021. However, the interim survey showed that women participating in mothers' groups were significantly associated with a higher prevalence of contraception than those who did not.

Child Health and Nutrition

Diarrhea prevalence in children under 5 significantly decreased (34% to 20%) between survey rounds. Similar prevalences were observed in FSP-Enyanya participant monitoring surveys. Treatment of under-5 diarrhea with oral rehydration therapy (ORT) showed little change (though the sample size was small). Mercy Corps' 2021 activity monitoring data indicate that, among participant households, 71% of children with diarrhea are treated with ORT. Low intervention coverage among the R2 survey households does not allow for a similar level of analysis, and changes measured at the population level may be too diluted to show any overall change.

Exclusive breastfeeding of children under 6 months old did not change significantly between rounds, though the sample was small. FSP-Enyanya monitoring data showed a decline in exclusive breastfeeding of children under 6 months from direct participant households in their 2021 estimates (57%), compared to monitoring data estimates from 2019 and 2020 (over 80%).

The prevalence of children 6–23 months consuming targeted nutrient-rich foods improved significantly (particularly among girls). However, children 6–23 months consumption of a minimum acceptable diet remained largely unchanged. The improvement in consumption of nutrient-rich foods was driven primarily by increased consumption of bio-fortified foods (a value-chain commodity) and orange-fleshed sweet potatoes.

Although mothers' groups, nutrition trainings, and home health visits were implemented in all communities in the R2 survey, participation rates were low (16% of children under 5 lived in households reporting participation in mothers' groups, 17% in nutrition training/meetings, and 20% in home health visits). Furthermore, there are no associations between participation in these interventions and improvements in child MAD, breastfeeding practices, or under-5 diarrhea.

Gender

Little change was noted across the gender indicators, except for a marginally significant improvement in the knowledge of maternal and child health and nutrition (MCHN) practices. FSP-Enyanya monitoring data showed similar evidence of minimal change over time, highlighting that gender attitudes and norms are deeply entrenched and may take years or even decades to change.

Methodological Challenges

This evaluation had some methodological challenges related to the limitations of the pre-/post-PBS design, as well as challenges with certain outcome indicators that may not adequately perform in the context. These challenges should be considered in future evaluations.

Modifying the geographic area of implementation is common across RFSAs, and often takes place after the baseline PBS is conducted. Therefore, the pre-/post-PBS methodology may not be well suited to adapt to changes in where activities are implemented.

Sampling frame data in DRC often has large inaccuracies. This results in highly variable probability and population weights and a loss of statistical power. Alternative PBS sampling strategies should be considered to reduce the loss of statistical power with similar sample sizes and budgets.

There is a desire to have evaluation data that can show the impact of interventions on the various outcomes. However, PBSs do not readily allow this level of analysis. Population-level changes in many of the low-level indicators have a low likelihood of occurring with the given intensity of certain interventions.

The utility of certain food security indicators (such as the FIES) should be re-evaluated, including an assessment of their functionality in specific locations/contexts. The prevalence of moderate and severe food insecurity (as measured by the FIES) was very high at baseline (95%) and the interim (96%). This homogeneity of the food security status as measured by this indicator renders a more detailed analysis less useful in assessing change. The FIES has other statistical limitations in the populations surveyed. It may not adequately describe the food security situation in the populations surveyed.

The resilience capacity indices are less useful as composite indicators. The sub-components of the indices tend to reveal more useful information. For example, three of the adaptive capacity component indicators are related to agriculture, so households that did not engage in agriculture tend to have lower scores on this index even if they are highly resilient. This indicates that the adaptive capacity index in the aggregate may be of limited use for households not engaged in agriculture. It may benefit from adaptation to reflect adaptability as a function of livelihood.

SCORECARD

The table below outlines the lower-level outcome indicators collected in both rounds, and highlights where there are significant changes. The indicator values, sample sizes, full names, and other information can be found in Annex E of Volume II of the evaluation report.⁴

⁴ https://www.fsnnetwork.org/sites/default/files/2022-05/FSP_Enyanya_DRC%20Evaluation%20Report%20Vol%20II%20Final.pdf

FSP-Enyanya Indicator Scorecard

Significantly worse > 10 percentage points	Significantly worse < 10 percentage points	No significant change	Significant improvement < 10 percentage points	Significant Improvement > 10 percentage points
Food Security, Resilience				
		1. Household Dietary Diversity Score 2. Food Insecurity Experiential Scale	40. Shock exposure index 41. Severity weighted shock exposure index 43. Adaptive capacity index 44. Transformative capacity index	42. Absorptive capacity index
Water, Sanitation, and Hygiene				
	11. Hand washing	6. Improved drinking water source 7. Correct use of water treatment 9. Basic sanitation facility 10. Open defecation	46. Disposal of child feces	8. Water access in < 30 min
Agriculture				
14. Farmers using ≥ 3 sust. ag. technologies 15. Farmers using ≥ 3 sust. crop technologies		13. Farmers practicing value chain activities 16. Farmers using ≥ 3 sust. livestock technologies 17. Farmers using ≥ 3 sust. NRM practices/tech		12. Farmers using financial services 18. Improved storage
Women's Health and Nutrition				
	20. Minimum dietary diversity (women)	21. Contraception prevalence rate 23. Consumption of nutrient rich foods (women)		
Child Health and Nutrition				
		28. Diarrhea treated with ORT (< 5 years) 29. Exclusive breastfeeding (< 6 months) 30. Minimum acceptable diet (6–23 months)		27. Prevalence of diarrhea (< 5 years) 31. Cons. of nutrient rich foods (6–23 months)

Significantly worse > 10 percentage points	Significantly worse < 10 percentage points	No significant change	Significant improvement < 10 percentage points	Significant Improvement > 10 percentage points
Gender				
		32a. Earned cash in past year (men) 32b. Earned cash in past year (women) 33a. Cash decisions- alone (men) 34a. Cash decisions- jointly (men) 34b. Cash decisions- jointly (women) 35a. Knowledge of MCHN (men) 36a. MHN decisions- alone (men) 36b. MHN decisions- alone (women) 37a. MHN decisions- jointly (men) 37b. MHN decisions- jointly (women) 38a. CHN decisions- alone (men) 38b. CHN decisions- alone (women) 39a. CHN decisions- jointly (men) 47a. OK to batter wife (men) 47b. OK to batter wife (women) 48. Women in comm. decision making bodies	35b. Knowledge of MCHN (women)	



This brief is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the Implementer-Led Evaluation & Learning (IMPEL) award and do not necessarily reflect the views of USAID or the United States Government.