End-line Survey Report

RISE component 3

Final Version

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1. **Introduction**

Uganda is the country with the most refugees in Africa. Over 1.4 million people live in the refugee settlements in the north and southwest of the country. 82 % of them are women and children under the age of 18. Among them are many unemployed youth and households headed by women, a large part of them is illiterate. There is only insufficient private development, hardly any formal employment and the investment climate is not favourable in the north. The main source of income is agriculture. The Ugandan refugee policy allows newly arrived refugees to pursue employment and establish businesses. A piece of land is made available to refugees but important prerequisites for its adequate use are missing (access to suitable seeds and seedlings, knowledge of modern production technology, marketing possibilities etc.). Furthermore, not all refugees can or want to engage in agricultural activities.

The **Overall Objective of the project RISE** - initially planned to last from June 2019 up to September 2022 and extended now up to September 2023 - is the strengthening of local authorities in delivering government services to all people in the refugee-hosting districts of Arua, Moyo/Obongi and Adjumani and to enable greater resilience and self-reliance among both refugee and host communities by creating economic opportunities. In 2020 the district of Arua has been divided into Arua City, Terego and Madi Okollo. The district of Madi Okollo has been included in February 2021 into the activities of the project.

The present mission is carried out within the framework of **Output 3 of RISE** which is formulated as it follows: "Refugees and hosting communities, especially single women, have increased their income by improving agricultural production."

The **objective of the mission** is to collect the information required for evaluating the achievements of component 3 through its **module indicator** and its **output indicators**. The end-line survey shall also contribute to identify critical success factors and reasons of failures of the interventions of RISE component 3 in view of formulating of lessons learned. Furthermore the analysis has to evaluate inclusiveness, relevancy, efficiency, effectiveness, and sustainability of the (economic) impact of the project interventions.

The end-line survey is based on the base-line which was carried out in 2019. Hence the most important **tasks to fulfil** within the framework of this mission consist in adapting the earlier used questionnaires, in training and accompanying the enumerators for pre-testing the questionnaires, in designing a template for the compilation of the data, in analysing the compiled data also in view of the learned lessons and evaluating inclusiveness, relevancy, efficiency, effectiveness, and sustainability of the (economic) impact of the project interventions. The detailed TORS of the mission and the used questionnaire are presented in annex.

2. <u>Indicators</u>

Altogether 7 different indicators had to be taken into consideration within the framework of the end-line mission, i. e. the **module indicator** of component 3 and the **6 output indicators** of the component. The formulation of these indicators has been slightly modified following a mission of a GIZ-expert. Their content, however, has not been modified; these indicators are presented hereunder.

Module indicator:

4000 refugees and persons from host communities, 2000 being women and 3000 being youths, who have participated in learning groups realized by the project, have increased their real income of 284 930 UGX from the sale of agricultural production by an average of 30%.

Output indicators:

OI.3.1: 3000 refugees and persons from the host communities, 2000 being single women or female headed households, have increased their real income by 30% from new agricultural production.

OI.3.2: 1750 refugees and 1750 host population that were engaged in farming before the measure, have increased their agricultural production of Y tons (2 368 169 UGX market annual value/head) by 30%.

OI.3.3: 3000 refugees and local people, including 2 000 single women, who had not previously been engaged in commercial agriculture, increased their real income of 478 848 UGX by 30% from newly started agriculture production

OI.3.4: Number of farmers trained in agricultural processing and market-oriented skills.

OI.3.5: Percentage of trained beneficiaries/farmers that have added a value-adding processing step

OI.3.6: Number of VSLA participants who can save for at least one complete saving cycle

3. <u>Methodology</u>

The end-line survey is based on the base-line survey carried out in 2019. Hence, as much as possible the different definitions which were used at that time for the operationalization and calculation of the values of the indicators have been adopted again. This concerns mainly youth, single women, refugees and members of host communities, real income and (commercial) agricultural production. In selecting the interviewed households different characteristics were explicitly taken into consideration, i. e. men / women, (not) involved in commercial agricultural activities and refugees or hosts.

However, it was also necessary to adapt the used methodology to certain modifications which have taken place since the survey of 2019. Initially 5000 households situated in the districts of Arua, Adjumani and Moyo should benefit from the activities of the project. In February 2021 the project activities were extended to the district of Madi Okollo. This new district created by the division of the district of Arua, however, has not been included in the end-line survey. On the one hand because it has not been considered in the base-line survey of 2019 and, furthermore, the activities of the project in Madi Okollo cover a quite shorter period as its activities in the other 4 districts. At present the project counts 6450 beneficiaries. The regions included in the end-line-survey are Arua/Terego, Moyo, Obongi and Adjumani.

The 5 000 household which should benefit initially from the project activities were already registered when the baseline survey took place in 2019. The households/ persons interviewed at that time were selected randomly at the base of the following characteristics: Man/woman, refugee/member of host communities and (not) involved in commercial agricultural production. This led to the distinction of 8 different categories of households presented in the table hereunder.

Table 1: **Categories of persons taken into consideration**

MHA	Man-host involved in commercial agricultural activities
MRA	Man-refugee involved in commercial agricultural activities
MHN	Man-host not involved in commercial agricultural activities
MRN	Man-refugee not involved in commercial agricultural activities
FHA	Female-host involved in commercial agricultural activities
FRA	Female-refugee involved in commercial agricultural activities
FHN	Female-host not involved in commercial agricultural activities
FRN	Female-refugee not involved in commercial agricultural activities

The end-line survey was planned as a tracer study. This means that the households interviewed in 2019 should be interviewed again in 2022 for getting information about in

their present situation and modifications having taken place in between. However – as to be expected – not all of the households could be traced again. Only 95 households were again available for an interview. Hence a methodology was required for selecting the missing households. It was decided that every household no more available for an interview should be replaced by another household of the same category. This means that when e. g. a FHA, a woman of the host community doing agriculture in 2019, was no longer available for an interview, another woman of the host community doing agriculture in 2019, has to be selected and to be interviewed at her place. The use of that method for replacing missing households influences certainly the obtained results. But it is hardly possible to formulate hypotheses regarding the introduced bias.

Youth: The characteristic of "Youth" was not explicitly taken into consideration in the selection of the participants of the survey of 2019. Within the African context "youth" generally concerns persons up to 35 years old.

Single women: The characteristic of "Single woman" has not been explicitly taken into consideration in selecting the interviewed persons within the framework of the survey in 2019. A young woman who is still not married lives generally in the household of her parents up to her marriage. Widowed women or women of a polygamist household may eventually live alone. Among refugees, however, the number of single women may be of greater importance. Women who indicate to be the head of household are considered as single women.

Agricultural production: Calculating the value of the indicators makes necessary to define agricultural production. Within the framework of the investigation agricultural production includes cultivation of crops, vegetable and other eatable plants. Animal husbandry was also taken into consideration. The interviewed households were asked to indicate the crops (at most 5) which they have mainly grown during the last two seasons (November 21 to November 22). 7 different types of animals were taken into consideration during the interviews: Goats, sheep, cattle, poultry, bees, pigs, rabbits and others.

Real income: It has been distinguished between commercially active farmers, i. e. farmers oriented towards the market by selling a part of their production (MHA, MRA, FHA, FRA) and farmers producing only for their own needs (auto-consumption). The last group is hence not doing any commercial farming (MHN, MRN, FHN, FRN).

For estimating the "real income" of the households, the concept of "gross margin" has been used. "Real income" is hence defined as the market value of the sold product (turnover farm gate) from which the variable production costs (costs for seeds, fertilizer, pesticides, veterinary drugs etc.) have been deduced. These costs are diminishing the amount available for consumption of the households and their families. The questionnaire included therefore questions concerning the sold quantities of the different products, their farm gate prices and the purchase (quantity and price) of needed inputs.

The investigation has shown not all farmers buy in the market inputs for the considered crops and livestock. Partly seeds from the last season are used. Services for ploughing etc. and seeds are mainly bought in the market. Regarding livestock, the main expenses concern

veterinary drugs and veterinary services (vaccination); feeds and fodder are hardly bought for the livestock taken into consideration.

The following calculations are based on the hypothesis that a farmer who uses inputs bought from the market (seeds, services, veterinary drugs etc.) does not distinguish between the part of the crop / livestock for home-consumption and for commercialization. This means when e. g. he uses seeds bought in the market, he buys seeds for the whole crop. See annex A6. Costs for services (crops), A7. Costs for seeds (crops) and A9. Costs for veterinary services and drugs for more details.

Corresponding to the formulation of the indicators the following values have hence been calculated:

- Increase of real income of refugees and persons from host communities from the sale of agricultural production
- Increase of agricultural production of refugees and host population that were engaged in farming before the measure
- Increase of real income of refugees and local people, who had previously not been engaged in commercial agriculture
- Number of farmers trained in agricultural processing and market-oriented skills
- Percentage of trained beneficiaries/farmers that have added a value-adding processing step
- Number of VSLA participants who can save for at least one complete saving cycle

4. General socio-economic characteristics and framework conditions

The interviews were carried out during the period from 6th up to 19th November by 7 interviewers in the districts of Arua/Terego, Moyo Olongi and Adjumani. Altogether 180 persons have been interviewed, 88 being women and 92 have been men. 141 of the interviewed persons have been heads of household with 57 women. They can be considered as single women and correspond to 32% of the participants of the investigation. 73 of the interviewed households have done commercial agriculture already in 2019 when the baseline survey was carried out. 107 of the interviewed households are newly involved in commercial agriculture.

Involvement in agriculture: All the households not involved in agriculture in 2019 are now, in 2022, involved in agricultural activities with one exception. One person, a man from the host community, doing agriculture in 2019, is now working as bodaboda-driver. At the overall level non-agricultural activities seem to be important.

Non-agricultural activities: Besides agricultural activities different other possibilities exist for income generation. This are transformation and selling of agricultural products, non-agricultural activities and food/cash aid.

133 (74%) of the interviewed person were involved in **non-agricultural activities** (see Table A.2 General socio-economic information (Arua-Terego, Ajumani, Moyo) and Table A10. Types of non-agricultural activities carried out). However, the importance of that involvement differs widely from some hours up to being the main source of income of the household. Non-agricultural activities were the main source of income for 79 (43%) of the households. Corresponding to the formulation of the indictors, the income generated by non-agricultural activities has not been taken into consideration in the calculation of the values reached by the different indicators.

Table 2: **Households getting food aid or cash aid**

Number of men/women receiving			Total
Food aid	having done agric. in 2019	16	
	having NOT done agric. in 2019	23	39
Cash aid	having done agric. in 2019	17	
	having NOT done agric. in 2019	29	46
Total			**85**

Altogether 85 of the interviewed households are **getting food or cash aid**. Most of them get cash aid (46). Food aid/ person/ month consists of 4 kg of grains (maize, rice), 1 kg of beans, and 0.5 liter of cooking oil. Cash aid/person/ month is of 23 000 UGX. Food aid and cash aid are supposed to cover 60 % of the needs of the person.

Table 3: **General socio-economic characteristics of the interviewed persons**

	No. of inter-viewed persons	Head of household	No. of persons being 35 years old or younger	Average no. of children if refugee woman	Average size of accessed land (acres)	Rent paid per year and per acre* (UGX)	No. of persons renting land	No. of persons doing non-agricultural activities
MHN	1		1					1
MRN								
FHN								
FRN								
FHA	45	16	17		5.9	35 179	11	30
FRA	43	41	12	8	2.3	25 616	27	31
MHA	45	38	15		15.5	20 000	2	35
MRA	46	46	0		3.5	45 229	28	31
Total	**180**	**141**	**45**			**31 506**	**68**	**128**

*Average of rent paid by those who rent land

- The cultivated area has increased from 292 acres in 2019 to 1013 acres in 2022 (+ 247%)
- The number of households who have been interviewed and who have done commercial agriculture in 2019 was of 73
- The number of households who have been interviewed and who have not done commercial agriculture in 2019 was of 107

Weather conditions: The planting season of 2022 was characterized by a dry season setting in earlier than expected and the rainy season was shorter than usual. Finally, a large number of farmers made significant losses because of erratic rains, recurring floods and prolonged droughts, resulting from climate change. In many cases crop yields were considerably lowered. 2022 was the year when the East-African region suffered the worst drought in living memory. However, many small scale farmers in Uganda continue to use basic technology and to rely on rain.

Distribution of seeds and livestock free of cost: The project is situated at the interface of humanitarian aid and agricultural development. This explains that the project has distributed free of cost different items as livestock, control agent for ticks of goats, sheep, and cattle. Furthermore it has been involved in the construction of irrigation systems, the establishment of rice mills and demonstration plots influencing positively the production of the beneficiaries.

Seeds which are improved, certified and climate resistant, have also been distributed free of cost. The reasons for their distribution are various. A large number of the beneficiaries has not been involved earlier in agriculture related activities or it has still no experiences with the use of improved seeds. In this way the potential of improved seeds is shown to the beneficiaries. The seeds of rice and cassava can be used for producing the seeds of the next season. Hybrid seeds have been distributed only in the case of sun-flower. This type of seeds cannot be reproduced, but has to be bought in the market for the next season.

Table 4: **Number of men/women using herbicides, pesticides and improved seeds**

Concerned crop	Number of households having used inputs bought from outside or got planting material free of costs from the project			
	Pesti-cides	Herbi-cides	Other inputs	Planting material from the project (seeds)
1 Groundnut	1			65
2 Cassava		1	2	35
3 Beans		2		30
4 Sunflower				29
5 Onions	5		1	18
6 Soy beans	2	2		18
7 Rice		1		10
8 Maize	3			8
9 Sesame		1	1	3
10 Sorghum				3
Total	11	7	4	219

The owner of the oil mill, who is buying the sunflower seeds, has made the use of this type of seeds as a condition in view of buying the produced sunflower grains (higher content of oil). A large number of different donors and NGOs distribute seeds free of costs. The local market for seeds is hence hardly functioning. Only a small number of the farmers uses

pesticides, herbicides and other inputs bought from outside. Hence, neither these inputs nor the planting material distributed by the project have been included in the calculation of the indicators. This concerns also the distributed livestock. The effects of these distribution activities of the project are indirectly included as the number of animals kept and sold may be increased following these project activities. The calculated income may hence be slightly overestimated.

Table 5: **Number of men/women having got vaccination and breeding stock free of cost**

Concerned livestock	Number of household having got vaccination etc. free of cost by the project	Number of breeding stock distributed free of cost by the project
Goat	69	210
Poultry	16	214
Pig	2	36
Cattle	4	
Sheep	1	1
Total	**92**	

5. <u>Reached values of the indicators</u>

5.1 Selection of considered crops and livestock

Table 6: **Number of women/men producing the different crops**

Number of men/ women producing	FHA	FRA	MHA	MRA	Total
1. Maize	25	23	26	35	109
2. Groundnut	26	29	22	26	103
3. Cassava	33	16	32	14	95
4. Sesame	27	20	29	18	94
5. Sunflower	11	10	11	12	44
6. Beans	10	8	7	9	34
7. Sorghum	6	10	6	12	34
8. Soy beans	3	7	8	6	24
9. Rice	2	4	2	6	14
10. Onions	1	4	2	2	9

Within the framework of the questionnaires 10 different crops and 5 different animals have been mentioned. The interviewed person had to select between the crops the 5 the most important for him. Analysis of the data has shown that – in comparison to the investigation in 2019 – the farmers had considerably diversified their production, hence – taking also into consideration eventual effects of the drought (climate change) on production and income – it has been decided to include all the 10 different crops into the calculations (for more details see the tables in the annex)

Table 7: **Number of women/men keeping livestock**

Number of men/ women keeping	FHA	FRA	MHA	MRA	Total
1. Goats	40	42	42	41	165
2. Poultry	44	37	40	42	163
3. Cattle	19	8	32	17	76
4. Pigs	19	15	17	19	70
5. Sheep	0	2	1	0	3

5.2 Reached value of the module indicator

The **module indicator** is formulated as it follows:
<u>4000 refugees and persons from host communities, 2000 being women and 3000 being youths, who have participated in learning groups realized by the project, have increased</u>

<u>their real income of 284 930 UGX/year from the sale of agricultural production by an average of 30%.</u>

For facilitating its verification and the calculation of reached value, the following formulation is proposed:

At least 4000 refugees and persons from host communities (including at least 2000 women and 3000 youths), of the 6500 reached persons have increased their real income of 284 930 UGX/year from the sale of agricultural production by 30% whereby it is without importance if they have been involved in commercial agricultural activities or not before the measure.

This indicator concerns all the refugees and members of the host community, independently if they have been involved in commercial agricultural activities before the implementation of the project or not.

Hence information is required on the

- produced quantities of crops and livestock
- costs of the used inputs (fertilizer etc.)
- sold quantities and
- market prices of the sold products and livestock.

The income/head/year shall have increased by 30%; this means it should be of 370 409 UGX, corresponding to 1.3 x 284 930 UGX. However, of the 6500 reached persons, only the income of 4000 persons has to show such an increase. 4000 persons correspond to 62 % of 6500. The income the 2500 other persons, corresponding to 38% of the 6500 persons, can either stay unmodified or may have even decreased during the time of implementation of the of the project. It will be considered that the income of these 2500 persons will have been unmodified.

Correspondingly the average income/head/year to be reached can be calculated in the following way:

0.62 x (1.3 x 284 930 UGX) + (0.38 x 284 930 UGX) = 337 927 UGX

The project has reached at the date of the investigation altogether 6359 persons, 3248 refugees and 3111 members of the host community, including in total 4497 women, have been reached by the project. The requirements of the indicator, regarding the number of women, have hence been reached.

Youth: Referring to the module indicator 3000 (of the 6500 reached persons), i. e. 46%, who had an increase of their income of 30%, should be 35 years old or younger. As table A2. General socio-economic information (Arua-Terego, Adjumani, Moyo) shows the average age of the interviewed persons was of 38 years. 45 (24 %) of the interviewed persons were 35 years old or younger. Hence the planed value of the indicator has not been fully reached. This can partly be explained by the conception of the investigation as a tracer study. In 2019, 3 years earlier, when the base-line was carried out, the average age of the interviewed persons was of 32 years.

The collected data show that the number of households selling agricultural products or livestock has been increased. However, mainly the sold quantities are quite higher in

comparison to 2019. For more detailed information on the number of men and women selling the different crops and livestock and the problems met in selling see tables A3. Number of men/women selling the different crops and livestock and A4. Problems in selling agricultural products and livestock.

Table 8: **Number of women/men selling crops**

Number of men/ women selling	FHA	FRA	MHA	MRA	Total
Cassava	32	16	31	13	**92**
Sesame	25	19	27	17	**88**
Maize	21	17	23	25	**86**
Groundnut	22	20	19	20	**81**
Sunflower	11	10	11	12	**44**
Beans	10	8	7	9	**34**
Sorghum	4	10	6	11	**31**
Soy beans	3	7	8	3	**21**
Rice	2	4	2	6	**14**
Onions	1	4	2	2	**9**

In view of the problems met in selling agricultural products all the 10 crops have been mentioned by the participants of the investigation. 7 main problems could be identified, i.e. insufficient storage facilities, low prices, price fluctuation, low demand and high competition, missing marketing skills and information, problems and high costs in transportation and distant markets and bad roads. The problems the most often presented were price fluctuations, problems in transportation and high transportation costs, low prices and high competition.

Table 9: **Number of women/men selling livestock**

Number of men/women selling	FHA	FRA	MHA	MRA	Total
Goats	38	33	39	36	**146**
Poultry	42	32	34	32	**140**
Cattle	5	3	14	5	**27**
Pigs	11	12	11	13	**47**
Sheep	0	2	1	0	**3**

When considering selling of livestock and related products 7 main problems, too, could be identified, i. e. low price, price fluctuation, low demand, problems in transportation and high costs, no livestock market (with auction), outbreak of diseases and high fees demanded by local authorities. The problems the most often named have been outbreak of diseases, price fluctuations and problems in transportation.

Besides marketing of eggs, no other products of animal origin as milk, honey etc. are sold by the farmers. 160 trays of eggs have been sold. A tray has 30 eggs and is sold for 14 000

UGX. Regarding transformation of agricultural products only cassava is sold in larger quantities as cuttings and also as flour. This has hence been considered in the calculation of the value of the indicators. Other transformation products, as sesame paste, roasted groundnuts etc., have not been considered (see Table 17: Transformation and processing activities).

Table 10: **Selling of livestock products**

Number of sold trays of eggs	FHA	FRA	MHA	MRA	Total
	4	128	20	8	**160**

The calculation of the value reached by the module indicator is based in a first step on the calculation of the turnover considering the sold quantities and the corresponding market prices.

Table 11: **Turnover of crops and livestock produced and kept by refugees and hosts** (module indicator)

Type of crop	Quantity sold (kg)	Price/ kg	Turnover
Sesame	33 599	5 000	167 995 000
Maize	54 880	1 000	54 880 000
Groundnut	28 783	3 500	100 740 500
Cassava	185 131*	350	64 795 850
	93 316**	2 000	186 632 000
Onions	998	3 000	2 994 000
Rice	7 499	3 500	26 246 500
Sunflower	19 254	1 200	23 104 800
Soy beans	17 460	2 500	43 650 000
Beans	12 900	4 500	58 050 000
Sorghum	11 813	3 000	35 439 000
Total crops			764 527 650
Crops /head***			4 247 376

*Cassava chips   **Cassava flour   ***Based on the 180 participants of the survey

Type of livestock	Quantity sold (heads)	Price/ head	Turnover
Goats	663	130 000	86 190 000
Poultry	1 242	25 000	31 050 000
Pigs	186	300 000	55 800 000
Cattle	104	900 000	93 600 000
Sheep	13	130 000	1 690 000
Total livestock			268 330 000
Livestock /head***			1 490 722
Total crops + livestock			**1 032 857 650**
Crops/head*** + livestock/head***			**5 738 098**

***Based on the 180 participants of the survey

In a second step the costs related to inputs for producing the different quantities of crops which are sold as well as the sold livestock are taken into consideration.

Table 12: **Income of refugees and members of the host community**
(module indicator)

Type of crop	Turnover	Costs of seeds for the sold quantity	Costs of services for the sold quantity	Realized income (crops)
Sesame	167 995 000	907 173	8 097 359	
Maize	54 880 000	1 865 920	6 366 080	
Groundnut	100 740 500	4 029 620	6 850 354	
Cassava	64 795 850*	4 324 726	18 380 088	
	186 632 000**			
Onions	2 994 000	20 958	116 766	
Rice	26 246 500	622 417	1 432 309	
Sunflower	23 104 800	0	2 791 830	
Soy beans	43 650 000	1 449 180	2 845 980	
Beans	58 050 000	2 580 000	3 186 300	
Sorghum	35 439 000	118 130	147 625	
Total crops	764 527 650	15 918 124	50 214 691	**698 394 835**
Per head**	4 247 376	88 434	278 971	**3 879 971**

*Cassava chips **Cassava flour   ****Based on the 180 participants of the survey

*** It has been supposed that 3 kg of cassava chips are needed for the production of 1 kg of cassava flour

Type of livestock	Turnover	Costs of veterinary drugs for the sold livestock	Costs of services for the sold livestock	Realized income (livestock)
Goats	86 190 000	2 934 000	564 000	
Poultry	31 050 000	3 658 000	379 000	
Pigs	55 800 000	1 464 000	770 000	
Cattle	93 600 000	1 245 000	730 000	
Sheep	1 690 000	42 000	14 000	
Total livestock	268 330 000	9 343 000	2 457 000	**256 530 000**
Per head*	1 490 722			**1 425 167**
Total crops + livestock	**1 032 857 650**			**954 924 835**
Crops/head* + livestock/head*	**5 738 098**			**5 305 138**

* Based on the 180 participants of the survey

As in the table presented above the income realized/head /year is of 5 305 138 UGX. The planned value of 337 927 UGX has hence been largely exceeded.

Uganda has a posit inflation rate. The following values are communicated: 2020: 2.76%; 2021: 2.21% and 2022: 6.44%. When the reached value of the indicator is calculated in constant prices this gives hence 4 779 404 UGX (reached value : 1.11).

5.3 Reached value of Output indicator OI.3.1

The indicator OI.3.1 is formulated as it follows:
3000 refugees and persons from the host communities, 2000 being single women or female headed households, have increased their real income by 30% from new agricultural production.

Corresponding to the output indicators OI.3.1 and OI.3.3 at least 2000 women (from the 6500 reached households) should be single women or women headed households; this corresponds to 31%. The investigation included 57 women headed households; this corresponds to 32% of the covered households. The requirements of the indicator regarding single women hence been reached. This indicator concerns only the households, refugees and persons from the host community, who have been newly, after 2019, involved in commercial agricultural activities.

Hence information is required on the

- quantities of crops and livestock produced by refugees and persons from the host community newly, after 2019, involved in commercial agricultural activities
- the costs of the inputs (fertilizer etc.) used by them
- the quantities sold by them and
- market prices of the sold products and livestock.

The turnover of the marketing activities of the refugees and members of the host community newly involved in agricultural commercial production is presented in the table hereunder.

Table 13: **Turnover of refugees and members of the host community from new agricultural commercial production**
(indicator OI.3.1)

Type of crop	Price/ kg	Quantity sold by women/men newly involved in commercial agriculture (kg)	Turnover
Sesame	5000	18 044	90 220 000
Maize	1000	23 861	23 861 000
Groundnut	3500	12 072	42 252 000
Cassava	350	94 804*	33 181 400
	2000	33 784**	67 568 000
Onions	3000	0	0
Rice	3500	4 379	15 326 500
Sunflower	1200	11 769	14 122 800
Soy beans	2500	8 760	21 900 000
Beans	4500	6 800	30 600 000
Sorghum	3000	9 113	27 339 000
Total turnover crops			366 370 700
Turnover crops/ head*			3 424 025

Type of livestock	Quantities sold by men/ women newly involved in commercial agriculture (piece)	Price/piece	Turnover
Goats	373	130 000	48 490 000
Poultry	634	25 000	15 850 000
Pigs	119	300 000	35 700 000
Cattle	41	900 000	36 900 000
Sheep	0	130 000	0
Total turnover livestock			136 940 000
Turnover livestock/head***			1 279 813
Total Turnover crops + livestock			503 310 700
Turnover crops/head + livestock/head***			**4 703 838**

*Cassava chips **Cassava flour

***107 Households are newly involved in commercial agriculture

Taking into consideration the prices for the required inputs, the values presented in the table hereunder, are reached.

Table 14: **Income of men/women newly involved in commercial agriculture** (indicator OI.3.1)

Type of crop	Turnover	Costs for seeds for the sold quantity (UGX)	Costs for services for the sold quantity (UGX)	Realized income
Sesame	90 220 000	433 056	4 005 768	
Maize	23 861 000	930 579	2 720 154	
Groundnut	42 252 000	1 460 712	3 368 088	
	33 181 400	5 296 212	10 394 402	
Cassava	67 568 000			
Onions	0	0	0	
Rice	15 326 500	91 959	687 503	
Sunflower	14 122 800	0	1 824 195	
Soy beans	21 900 000	271 560	1 585 560	
Beans	30 600 000	918 000	1 618 400	
Sorghum	27 339 000	72 904	1 412 515	
Total crops	**366 370 700**	**9 474 982**	**27 616 585**	**329 279 133**
Crops /head*	**3 424 025**			**3 077 375**

Type of livestock	Turnover	Costs for veterinary drugs for sold livestock (UGX)	Costs for services for sold livestock (UGX)	Realized income
Goats	48 490 000	1 548 000	344 000	
Poultry	15 850 000	2 240 000	151 000	
Cattle	35 700 000	390 000	220 000	
Pigs	36 900 000	1 008 000	460 000	
Sheep	0	0	0	
Total livestock	136 940 000	5 186 000	1 175 000	130 579 000
Livestock/head*				1 220 365
Total crops + livestock				459 858 133
Crops/head* + livestock/head*				4 297 740

*107 Households are newly involved in commercial agriculture

The planned value of the indicator is of 622 502 UGX (nominal) and of 560 813 UGX when inflation is taken into consideration (see chapter 5.5 Reached value of Output indicator OI.3.3). The calculated value of the indicator is of 4 297 740 UGX (nominal) and 3 871 838 UGX when inflation is considered. Hence the planned value of the indicator has been reached and even largely exceeded.

5.4 Reached value of Output indicator OI.3.2

The **output indicator OI.3.2** is formulated as it follows:
1750 refugees and 1750 host population that were engaged in farming before the measure, have increased their agricultural production of Y tons (2,368,169 UGX market annual value/head) by 30%.

This indicator concerns only the refugees and members of the host community, who have already done commercial agriculture in 2019, when the baseline survey has been realized.

Hence information is required on the

- quantities of crops and livestock produced by the households having done commercial agriculture already in 2019 and the
- market prices of these products and livestock
- number of households involved in commercial agriculture before the project (72 households)

The indicator includes different types of products; hence, the market value of the agricultural production is calculated.

Table 15: **Crops produced and livestock kept by households having done commercial agriculture before the measure**

Type of crop	Quantity produced (kg)	Price/ kg (UGX)	Market value (UGX)
Sesame	19 071	5 000	95 355 000
Maize	43 459	1 000	43 459 000
Groundnut	22 854	3 500	79 989 000
Cassava (chips)	106 399	350	37 239 650
Onions	1 113	3 000	3 339 000
Rice	4 885	3 500	17 097 500
Sunflower	7 494	1 200	8 992 800
Soy beans	9 120	2 500	22 800 000
Beans	7 560	4 500	34 020 000
Sorghum	5 230	3 000	15 690 000
Total	227 185		
	Total market value crops		357 981 950

Type of livestock	Quantity kept (piece)	Price/piece (UGX)	Market value (UGX)
Goats	952	130 000	123 760 000
Poultry	1570	25 000	39 250 000
Pigs	157	300 000	47 100 000
Cattle	380	900 000	342 000 000
Sheep	21	130 000	2 730 000
Total	3080		
	Total market value livestock		554 840 000

Market value (UGX) crops	357 981 950
Market value (UGX) livestock	554 840 000
Total market value	912 821 950
Number of households being involved in commercial agriculture before the measure	73
Total market value /household/ year	12 504 410
Total market value /household/ month	1 042 034

When the baseline survey was carried out in 2019 the market value of crop production and livestock/household was of 2 368 169 Uganda shilling / household/year. It should now be increased by 30%, i. e. it should be of 3 078 620 UGX. The market value /household of crops and livestock identified at the end line survey is of 12 504 410 UGX. The planned value of 3 078 620 UGX has hence be reached.

Uganda has a posit inflation rate. When the value of the indicator reached in 2022 is calculated in constant prices (taking into consideration inflation) this gives 11 265 234 UGX market value/ household (12 504 410 : 1.11).

5.5 Reached value of Output indicator OI.3.3

The output indicator OI.3.3 is formulated as it follows:
3000 refugees and local people, including 2 000 single women, who had not previously been engaged in commercial agriculture, increased their real income of 478,848 UGX by 30% from newly started agriculture production.

This indicator is identical to OI.1.3.1; however it specifies the initial income of the considered group of households in contrast to indicator OI.1.3.1.

5.6 Reached value of Output indicator OI.3.4

The output indicator OI.3.4 is formulated as it follows:
Number of farmers trained in agricultural processing and market-oriented skills

Within the framework of the RISE-project a large number of different types of trainings are implemented. They cover topics related to agriculture, as good agricultural practices, climate smart agriculture and post-harvest handling. Furthermore the considered topics deal with farm management (farming as a business, financial literacy), marketing and forming of marketing committees. Establishment and management of cooperative societies are also covered. Most of the trainings are offered to all the members of the VSLN groups. Some of them, however, depending on the covered topic, are organized only for the members of the marketing committees of these groups. The marketing committee of a VSLN consists of 3 members elected by the group.

When taking into consideration the indicator, the trainings in the field of agricultural processing concerned rice, groundnuts, cassava, onions, tomatoes and cabbage. Trainings conveying market oriented skills dealt with the topics of record keeping related to marketing of agricultural products, financial literacy, collective marketing and formation and training of marketing committees. Furthermore exposure visits to off-takers and processors (rice and sunflower) have been organized. A separate training has been offered to the members of the marketing committees of the groups. It dealt with the topic "Farming as a business." Furthermore, every 3 month the members of the market committees are supported in elaborating a market survey. The number of the farmers who participated in these different training sessions is presented in the table here-under.

The VSLA groups have altogether 6359 members. Altogether 13 336 persons participated in the training activities in the field of agricultural processing and market-oriented skills. This means that every beneficiary of the project participated on average in around two different trainings.

Table 16: **Number of farmers trained in agricultural processing and market-oriented skills**

Topic of training	Number of trained farmers in the districts of			
	Terego	Moyo/ Obongi	Madi Okollo	Adjumani
Processing of field crops (rice, groundnuts and cassava)	1423	378	0	655
Processing of vegetables (onions, tomato, cabbage)	183	189	0	0
Processing of Honey	25	50	0	75
Record keeping related to marketing of agricultural products (type of product, quantity and price)	1149	1312	0	90
Financial literacy	348	1363	139	130
Collective marketing	1418	1489	0	1368
Exposure visits to off-takers and processors (rice and sunflower)	24	0	0	0
Formation and training of marketing committees	192	256	120	320
Farming as a business (for members of the marketing committees only)	192	256	180	132
Support of marketing committees in market surveys (every 3 months)	0	0	0	0
Total	**4954**	**5293**	**319**	**2770**

5.7 Reached value of Output indicator OI.3.5

Output indicator OI.3.5 is defined as it follows:
Percentage of trained beneficiaries/farmers that have added a value-adding processing step

This indicator concerns all the refugees and members of the host communities. As the collected data show transformation of agricultural products concerns only 5 of the considered products. But 59% of the participating households (107) are now involved in such activities. The planned value of the indicator of 22% of farmers involved in transformation and processing activities has hence been reached. At the moment of the base-line survey only 12 cases of transformation had been identified (when brewing is considered as non-agricultural activity and hence not included).This corresponded to 7% of the considered households.

The problems in transforming the different products mentioned by the interviewed persons are partly found at the level of the individual farm households, partly in their business environment. Considering the farm level, the small quantities which are produced and do not allow transformation for selling, the missing equipment and the required skills for transformation are presented as reasons for the limited transformation activities. Obstacles to transformation in the environment of the farmers are the great distance to processing facilities (mill etc.) and missing demand of costumers for the processed product. Hence

mainly skill training, establishment/access to the required transformation equipment and the formation of cooperatives for increasing the quantities available for transformation are presented as solutions in view of increasing transformation activities.

Table 17: **Transformation and processing activities**

Crop/livestock concerned	Transformation activity	No. of farmers involved
Cassava	Grinding of chips into flour	41
Groundnut	Production of groundnut paste	24
	Roasting of groundnuts	7
Rice	Hulling	18
Maize	Milling of maize into flour	10
	Pan cakes	1
Sesame	Production of sesame paste	6
Total		**107** (59%)

5.8 Reached value of Output indicator OI.3.6

The output indicator OI.3.6 is formulated as it follows:
Number of VSLA participants who can save for at least one complete saving cycle

Essential information on the existing VSLA-groups is presented in the table below. The VSLN groups are the base of the project and its activities. Somebody who is not doing agriculture – can also be a member of a VSLA group. The groups are approached by the project in view of the implementation of trainings corresponding to the specific needs of their members. In view of the saving activities the members of the groups receive training dealing with the following topics: Formation of VSLN-groups and the general assembly, the concept of VSLN-groups, leadership, management, election procedure and record keeping. Altogether 253 VSLA groups exist having in total 6359 members. 3111 of them belong to the host population and 3248 are refugees. The majority of the saving groups (152) are in their 3rd saving cycle. 100 of the groups are in cycle 2 and 2 groups are in their 1st saving cycle. Every VSLA-group has around 25 members. Hence around 3800 VSLA participants are in their 3rd saving cycle and 2500 of the VSLA participants are in the 2nd saving cycle. 99% of the VSLA participants have hence completed at least one complete saving cycle.

Most of the saving groups have been established within the framework of the implementation of the RISE project. The participation in a VSLA group is voluntary. However, some very limited fluctuation among the members of the group can be stated. Some of the refugees may return to their home countries or go to other parts of Uganda.

The VSLN group meets every week. Corresponding to the decision taken at the beginning of the year/cycle every member of the VSLA group puts weekly at least 1000 UGX in the savings box of the group. Mostly 2000 UGX/person are saved per week. However, if a member has the required additional funds he/she can put up to 10 times the initially fixed amount to be saved per week. Each member can take a credit up to 3 times the amount he/

she has saved and put in the saving box of the group. The interest rate to be payed is of 10% p.a. As soon as he/ she has paid back the loan, he/she can take a new credit. All loans have to be paid back in a period of 4 months.

At the end of the year/ cycle every member gets back the amount he/she has put into the saving box of the group during the past year/cycle plus a part of the interests generated by the group. The amount of the interests distributed to each member is depending on the amount he/she has saved during the year/cycle. The income from interests of the members of the VSLA-groups, however, is not taken into consideration in the indicators presented above. Not all beneficiaries are members of the VSLA-Groups. Around 100 beneficiaries are not members.

The majority of the credits are used for purposes related to the (agricultural) activities of the borrowers. 10% of the deposits of the members of the groups, however, are earmarked for social purposes, as death/ funerals, illness etc. There is no maximum amount fixed for this type of credits; no interests have to be paid in this case. However these credits have to be paid back after 2 weeks.

Table 18**: The "Village Saving and Loan Groups" (VSLA)** (30/8/2022)

District	No. of groups	Categories of group members*				Total no. of mem-bers	No. of groups by cycle	Amount of money saved and shared in cycle	
		H	R	M	F			1	2
Terego	64	796	815	528	1083	1611	C1: 0 C2: 1 C3: 63	442 648 200	581 309 600
Moyo/ Obongi	66	832	767	445	1154	1599	C1: 2 C2: 40 C3: 24	442 619 900	227 632 500
Madi Okollo	59	800	703	450	1053	1503	C1: 0 C2: 59 C3: 0	538 410 700	
Adjumani	64	683	963	439	1207	1646	C1: 0 C2: 0 C3: 64	391 172 700	621 260 850
Total	**253**	**3111**	**3248**	**1862**	**4497**	**6359**	C1: **2** C2: **100** C3: **151**	**1 814 851 500**	**1 430 202 950**

H: Host; R: Refugee; M: Men; F: Women
*Data of 20/5/2022

6. Results of the investigation

6.1 Verification of the indicators

The reached values of the indicators are presented in the table below. In comparison to the planed values, they are all considerably higher. This means the objective of the project activities has been reached.

Table 19**: Summary of the reached values of the different indicators**

Indicators	2019	2022 planned	2022 achieved
Module indicator: 4000 refugees and persons from host communities, 2000 being women and 3000 being youths, who have participated in learning groups realized by the project, have increased their real income of 284 930 UGX from the sale of agricultural production by an average of 30%.	**284 930 UGX**** (per year) **23 744 UGX**** (per month)	**370 409 UGX** (per year) **30 867 UGX** (per month)	**5 305 138 UGX** (per year) **442 095 UGX** (per month) **4 779 404*UGX** (per year)
Indicator OI.3.1: 3000 refugees and persons from the host communities, 2000 being single women or female headed households, have increased their real income by 30% from new agricultural production.	**478 848 UGX**** (per year) **39 904 UGX**** (per month)	**622 500 UGX** (per year) **51 875 UGX** (per month)	**4 297 740 UGX** (per year) **358 145 UGX** (per month) **3 871 838*UGX** (per year)
Indicator OI.3.2: 1750 refugees and 1750 host population that were engaged in farming before the measure, have increased their agricultural production of Y tons (2,368,169 UGX annual market value/head) by 30%.	**0.477 to** (per year) **12 heads of livestock** (per year) **2 368 169 UGX** market value (per year) **197 347 UGX** market value (per month)	**0.620 to** (per year) **16 heads of livestock** (per year) **3 078 620 UGX** market value (per year) **256 551 UGX** market value (per month)	**3.155 to** (per year) **43 heads of livestock** (per year) **12 678 089 UGX** market value (per year) **11 421 702* UGX** market value (per year) **1 056 507 UGX** market value (per month)

Indicator OI.3.3: 3000 refugees and local people, including 2 000 single women, who had not previously been engaged in commercial agriculture, increased their real income of 478,848 UGX by 30% from newly started agriculture production	See Indicator OI.3.1		
Indicator OI.3.4: Number of farmers trained in agricultural processing and market-oriented skills.			13 336 13 017****
Indicator OI.3.5: Percentage of trained beneficiaries/ farmers that have added a value-adding processing step	12%	22%	59%***
Indicator OI.3.6: Number of VSLA participants who can save for at least one complete saving cycle			6 300 (99% of the VSLA participants)

* Taking into consideration the following inflation rates: The following values are communicated 2020: 2.76%; 2021: 2.21% and 2022: 6.44%.

** Per person/ household

*** The farmers are trained in groups by the project; application of the new skills and know-how, however, takes place at the level of the individual farmer; the reached value of 59 % considers brewing as a non-agricultural activity, not as an transformation activity.

**** Without consideration of Madi/Okollo:

6.2. Conclusions and lessons learnt

Comments on the results of the investigation: As the above presented values of the indicators show they have been considerably higher as the planned values and the local situation has undergone considerable modifications. Agricultural activities and economic activities, too, have been considerably intensified. In 2019, when the baseline was carried out, 4 agricultural crops (sesame, maize, cassava, groundnuts) were cultivated by a considerable number of farmers (from 23 up to 51). The 5th crop (onions) which had been taken into consideration has been cultivated by only 5 farmers. Now, in 2023, all the 10 crops which have been presented by the famers have been considered by the calculations. The overall production activities have considerably changed. Even the crop cultivated by the smallest number of farmers (onions) is still cultivated by 9 farmers. Maize is cultivated by the highest numbers of farmers (109). With one exception, all the households which have not been involved in agricultural activities in 2019, are now involved.

At the overall level economic activities, too, have increased and intensified. Now, in opposition to 2019 when the corresponding value was of 65, now 133 farmers (74%) are involved in non-agricultural activities; for 79 of the interviewed households, these activities are the main source of income. This development is accompanied by an increase of marketing of agricultural products. Not only the quantities which have been sold of the individual products have increased, but also the number of households involved in marketing of such products has increased. This intensification of the activities is also reflected in the reached value of the indicators. This situation can mainly be explained by the reasons presented in the following. 17 of the interviewed households showed exceptional high values regarding production of cassava, selling of cattle and goats. This alone, however, does not

explain the differences observed between the indicators of the baseline and the indicators of the end-line.

Now, in the end-line the number of considered crops has increased from 5 to 10. Among them are crops which have been newly introduced within the framework of the activities of the project activities (sunflower, rice, soya); furthermore, the overall cultivated area has increased from 292 acres in 2019 to 1013 acres in 2022 (+ 247%). The farmers who have been involved in the project activities have got for at least 1 acre improved and certified seeds which are adapted to the effects of climate change and improved animals for breeding. This has allowed increasing considerably the yields of the concerned crops, to extend the cultivated area and to sell a higher number of livestock. This does not only concern the additionally born ones, but partly also the livestock which has been distributed by the project (mainly in the case of goats).

On the other hand the results of the baseline showed very low results. A large part of the farmers who were interviewed at that time were involved in subsistence agriculture and used seeds of low quality, had no improved breeding stock, and low level of know-how and information on good agricultural practices. This concerns mainly the refugees. In 2019 the interviewers were new in the region and had only limited experience in working with the target group. The interviewed persons could hence decrease their level of production etc. in view of getting access to the support by the project. In 2022, however, the interviewers well knew very well the farmers and their groups and they were informed who had sold what, when and how much. Hence the interviewers could ask more focused questions. Thus, it seems that the information collected in 2022 is better and more complete compared to the results of the investigation of 2019. However, regarding the crops of sesame and maize the activities carried out within the framework of the project have been at a very low level.

Feedback of beneficiaries: For completing the results of investigation interviews have been carried out with 3 focus groups composed by beneficiaries of the project. Within the framework of community briefing/inception meeting the criteria for selecting beneficiaries have been clearly explained and, based on these criteria, the groups have been formed by council members. Training on farming as a business (FaaB), the support though the provision of inputs and the activities of the village savings and loan groups were considered as the most important and interesting subjects by the participants. As presented by the members of the focus groups in this way they got access to information and know-how on good agriculture practices, farming skills, financial literacy, management skills and conflict resolution skills. This however, did not only allow increasing income from agriculture production, yields, livestock population and savings, but it also allowed to improve the relationship between refugees and hosting communities. Different problems came up in the groups as loan defaulting, late input delivery and stray goats. The groups solved these problems generally on their own. The participants plan to continue to work as a group also after the end of the project and to continue activities as VLSA, and commercial farming. Regarding the improvement of the activities of the project it was mainly suggested to deliver the different inputs more in time, to focus input support more on livestock, mainly goats, and to hire land for refugees.

Corresponding to the TORs of the mission the following (DAC) evaluation criteria shall also be taken into consideration.

Inclusiveness: The implementation of the project shows high level of inclusiveness. Based on the local situation, the project is situated at the interface of humanitarian intervention (refugees) and agricultural development. This explains the type of activities which are carried out. Not only know-how related to methods and technologies for increasing agricultural production, transformation and marketing of crops and livestock are taught and disseminated, but different inputs as seeds, vaccination for livestock, breeding are also distributed free of cost. This leads to a high level of inclusiveness regarding as well refugees as well women. Hence, with one exception, all the participants of the baseline in 2019 who were not involved in commercial agricultural activities (refugees and members of the host community) at that time, are now involved in commercial agricultural activities.

Relevancy: The end-line survey has shown that the different type of activities of the project, as trainings and advice, were of high relevancy for the target group. All the refugees and members of the host community have which have been involved in commercial agricultural activities in 2019, are still involved in such activities in 2022. All the members of the target group who were not involved in commercial agricultural activities are now – with 1 exception - involved in such activities. Another indication of the relevancy of the activities of the project are the village loan and savings associations (VLSA) which are very well functioning. By the specific method of organization and functioning of these groups, the beneficiaries are highly interested in participating and to increase hence considerably their scope of action. Most of the members (99%) of the VLSA groups save already for more than one full cycle.

Efficiency: The budget of the project is initially of 4 084 000 € for the implementation period of April 2029 to September 2023. 1 000 000 € have been used for "procurement", this means that amount has been distributed „in kind"(seeds, livestock and breeding stock as goats and ducks a. s. o.). Furthermore the local infrastructure has been improved e. g. by construction of irrigation systems, two rise hullers and demonstration plots. Trees (fruits, fodder for goats) have also been planted. However, they have not been directly considered as source of income generation, as no information is available on their surviving. Furthermore, some time is required so that the trees can bear fruits. The VSLA groups have altogether 6359 members. They benefit not only from the opportunity to take credits, but also from the interests generated at the level of the groups by the deposits of their members. Through the project activities the available infrastructure and the provided services have been considerably increased (construction of 2 rise hullers, establishment of demonstration plots). The spent amount per person directly reached is of 632 €/ beneficiary which can be considered as an efficient use of the available funds compared to the reached results.

Effectiveness: Analysing effectiveness also means to consider the extent the beneficiaries will apply the transferred know-how and methods and use the built infrastructure once the project will be terminated. It is thus related to the concept of relevancy. As the results of the end-line survey has already shown, nearly all the interviewed households initially not involved in commercial agriculture, are involved now, after 3 years of activity of the project.

It can hence be supposed that the beneficiaries are interested and able to apply the introduced technologies and innovations in the long run.

<u>Sustainability of the (economic) impact of the project interventions:</u> As the indicators have shown the planned growth of income of 30% has been by far surpassed. Sustainability of these effects will depend on different factors. Continued application of the innovations and improved technologies introduced by the project are only some of the factors. Other important aspects are development of weather conditions and inflation, factors out of the reach of the project and hardly to be influenced by the farmers and their groups

ANNEX

A1. Considered crops and livestock

Number of men/ women producing		FHA	FRA	MHA	MRA	Sub-Total	Total
Sesame	Having done agr. in 2019	15	10	13	7	**45**	**94**
	Having NOT done agr. in 2019	12	10	16	11	**49**	
Maize	Having done agr. in 2019	13	9	10	11	**43**	**109**
	Having NOT done agr. in 2019	12	14	16	24	**66**	
Ground-nut	Having done agr. in 2019	11	14	10	10	**45**	**103**
	Having NOT done agr. in 2019	15	15	12	16	**58**	
Cassava	Having done agr. in 2019	14	7	13	6	**40**	**95**
	Having NOT done agr. in 2019	19	9	19	8	**55**	
Onions	Having done agr. in 2019	1	4	2	2	**9**	**9**
	Having NOT done agr. in 2019	0	0	0	0	**0**	
Rice	Having done agr. in 2019	1	2	1	3	**4**	**14**
	Having NOT done agr. in 2019	1	2	1	3	**10**	
Sun-flower	Having done agr. in 2019	3	5	2	3	**13**	**44**
	Having NOT done agr. in 2019	8	5	9	9	**31**	
Soy beans	Having done agr. in 2019	1	3	2	3	**9**	**24**
	Having NOT done agr. in 2019	2	4	6	3	**15**	
Beans	Having done agr. in 2019	3	4	1	4	**12**	**34**
	Having NOT done agr. in 2019	7	4	6	5	**22**	
Sorghum	Having done agr. in 2019	1	3	0	4	**8**	**34**
	Having NOT done agr. in 2019	5	7	6	8	**26**	

Number of women/men keeping		FHA	FRA	MHA	MRA	Sub-Total	Total
Goats	having done agr. in 2019	16	18	18	16	**68**	**165**
	having NOT done agr. in 2019	24	24	24	25	**97**	
Poultry	having done agr. in 2019	17	16	18	16	**67**	**163**
	having NOT done agr. in 2019	27	21	22	26	**96**	
Cattle	having done agr. in 2019	9	5	12	6	**32**	**76**
	having NOT done agr. in 2019	10	3	20	11	**44**	
Pigs	having done agr. in 2019	7	5	8	5	**25**	**70**
	having NOT done agr. in 2019	12	10	9	14	**45**	
Sheep	having done agr. in 2019	0	2	1	0	**3**	**3**
	having NOT done agr. in 2019	0	0	0	0	**0**	

A2. General socio-economic information (Arua-Terego, Adjumani, Moyo)

ARUA TEREGO	No. of inter-viewed persons	Head of household	Average age	Average no. of children if refugee woman	Average size of accessed land (acres)	Rent paid per year and per acre* (UGX)	No. of persons renting land	No. of persons doing non-agricultural activities
Households doing agriculture in 2019								
MHN								
MRN								
FHN								
FRN								
FHA	6	0	37		7.2	40 000	1	3
FRA	6	6	33	10	1.7	39 500	5	4
MHA	7	7	40		15.9	0	0	5
MRA	6	6	36		4.2	29 600	6	3
Total	**25**		**37**				**12**	**15**

*Average of rent paid by those who rent land

ARUA TEREGO	No. of inter-viewed persons	Head of household	Average age	Average no. of children if refugee woman	Average size of accessed land (acres)	Rent paid per year and per acre* (UGX)	No. of persons renting land	No. of persons doing non-agricultural activities
Households NOT doing agriculture in 2019								
MHN								
MRN								
FHN								
FRN								
FHA	8	4	33		6.1	24 286	3	3
FRA	8	8	36	10	2	46 563	8	5
MHA	8	7	37		14	0	0	7
MRA	9	9	37		2.8	39 648	7	2
Total	**33**		**36**				**18**	**17**

ADJUMANI	No. of inter-viewed persons	Head of household	Average age	Average no. of children if refugee woman	Average size of accessed land (acres)	Rent paid per year and per acre* (UGX)	No. of persons renting land	No. of persons doing non-agricultural activities
Households doing agriculture in 2019								
MHN	1		22					1
MRN								
FHN								
FRN								
FHA	5		42		6.2	55 000	1	3
FRA	6	5	30	8	3.3	82 000	6	4
MHA	6	6	37		16	20 000	1	5
MRA	6	6	40		4	55 833	6	6
Total	**24**		**34**				**14**	**19**
*Average of rent paid by those who rent land								
Households NOT doing agriculture in 2019								
MHN								
MRN								
FHN								
FRN								
FHA	9	3	35		4.2	21 429	2	7
FRA	9	9	39	9	2.1	0	0	8
MHA	9	7	36		16.2	0	0	7
MRA	10	10	43		3.1	0	0	10
Total	**37**		**38**				**2**	**32**

MOYO OBONGI	No. of inter-viewed persons	Head of household	Average age	Average no. of children if refugee woman	Average size of accessed land (acres)	Rent paid per year and per acre* (UGX)	No. of persons renting land	No. of persons doing non-agricultural activities
Households doing agriculture in 2019								
MHN								
MRN								
FHN								
FRN								
FHA	7	3	49		4.6		0	6
FRA	7	6	43	5	2.5	11 111	3	3
MHA	6	4	35		3.8		0	5
MRA	4	4	40		3	38 182	3	2
Total	**24**		**42**				**6**	**16**

*Average of rent paid by those who rent land

MOYO OBONGI	No. of inter-viewed persons	Head of household	Average age	Average no. of children if refugee woman	Average size of accessed land (acres)	Rent paid per year and per acre* (UGX)	No. of persons renting land	No. of persons doing non-agricultural activities
Households NOT doing agriculture in 2019								
MHN								
MRN								
FHN								
FRN								
FHA	10	6	41		4	37 773	4	8
FRA	7	7	42	5	2.9	26 429	5	7
MHA	9	7	32		4.2	40 000	1	6
MRA	11	11	41		3.1	37 500	6	8
Total	**37**		**39**				**16**	**29**

A3. Number of men and women selling the different crops and livestock

Number of men/ women selling		FHA	FRA	MHA	MRA	Sub-Total	Total
Sesame	Having done agr. in 2019	15	9	12	7	**43**	**88**
	Having NOT done agr. in 2019	10	10	15	10	**45**	
Maize	Having done agr. in 2019	13	7	10	8	**38**	**86**
	Having NOT done agr. in 2019	8	10	13	17	**48**	
Groundnut	Having done agr. in 2019	10	11	8	10	**39**	**81**
	Having NOT done agr. in 2019	12	9	11	10	**42**	
Cassava	Having done agr. in 2019	14	7	13	6	**40**	**92**
	Having NOT done agr. in 2019	18	9	18	7	**52**	
Onions	Having done agr. in 2019	1	4	2	2	**9**	**9**
	Having NOT done agr. in 2019	0	0	0	0	**0**	
Rice	Having done agr. in 2019	1	2	1	3	**7**	**14**
	Having NOT done agr. in 2019	1	2	1	3	**7**	
Sunflower	Having done agr. in 2019	3	5	2	3	**13**	**44**
	Having NOT done agr. in 2019	8	5	9	9	**31**	
Soy beans	Having done agr. in 2019	1	3	2	0	**6**	**21**
	Having NOT done agr. in 2019	2	4	6	3	**15**	
Beans	Having done agr. in 2019	3	4	1	4	**12**	**34**
	Having NOT done agr. in 2019	7	4	6	5	**22**	
Sorghum	Having done agr. in 2019	0	3	0	3	**6**	**31**
	Having NOT done agr. in 2019	4	7	6	8	**25**	

Number of men/women selling		FHA	FRA	MHA	MRA	Sub-Total	Total
Goats	having done agr. in 2019	15	12	17	16	**60**	**146**
	having NOT done agr. in 2019	23	21	22	20	**86**	
Poultry	having done agr. in 2019	17	16	14	13	**60**	**140**
	having NOT done agr. in 2019	25	16	20	19	**80**	
Cattle	having done agr. in 2019	4	2	5	3	**14**	**27**
	having NOT done agr. in 2019	1	1	9	2	**13**	
Pigs	having done agr. in 2019	2	5	5	4	**16**	**47**
	having NOT done agr. in 2019	9	7	6	9	**31**	
Sheep	having done agr. in 2019	0	2	1	0	**3**	**3**
	having NOT done agr. in 2019	0	0	0	0	**0**	

Table A4. Problems in selling agricultural products and livestock*

Maize	Insufficient storage facilities (7); Low prices (10); Price fluctuation (14) Low demand and high competition (5); Missing marketing skills and information (3) Problems in transportation and high costs (13); Distant markets and bad roads (6)
Cassava	Low prices (4); Price fluctuation (18) Missing marketing skills and information (3); Low demand and high competition (7) Problems in transportation and high costs (17); Distant markets and bad roads (5)
Groundnut	Insufficient storage facilities (3); Low prices (5); Price fluctuation (9) Low demand and high competition (5); Problems in transportation and high costs (5); Distant markets and bad roods (5)
Rice	Low prices (2); Problems in transportation and high costs (2) Distant markets and bad roads (1)
Sunflower	Low prices (6); Price fluctuation (1); Low demand and high competition (2) Problems in transportation and high costs (5)
Onions	Low prices (3); Price fluctuation (2); Low demand and high competition (1) Problems in transportation and high costs (1)
Sorghum	Low prices (4); Price fluctuation (4); Low demand and high competition (2) Problems in transportation and high costs (2)
Sesame	Insufficient storage facilities (2); Low prices (9); Price fluctuation (8) Low demand and high competition (4); Problems in transportation and high costs (5); Distant markets and bad roads (3)
Beans	Insufficient storage facilities (3); Price fluctuation (7) Low demand and high competition (3); Problems in transportation and high costs (5); Distant markets and bad roads (3)
Soy beans	Insufficient storage facilities (1); Price fluctuation (6) Low demand and high competition (3) Problems in transportation and high costs (6)
Goats	Low price (7); Price fluctuation (7); Low demand (5) Problems in transportation and high costs (7) No livestock market (with auction) (6); Outbreak of diseases (11) High fees demanded by local authorities (1)
Poultry	Price fluctuation (7); Low demand (3); Problems in transportation and high costs (2); Outbreak of diseases (8)
Pigs	Price fluctuation (3); Low demand (2) Problems in transportation and high costs (5); Outbreak of diseases (5)
Cattle	Price fluctuation (3); Low demand (2) Problems in transportation and high costs (2); Outbreak of diseases (5)
Sheep	Price fluctuation (1); Outbreak of diseases (1)

* The numbers in brackets indicate how often the related problem has been named

Table A5. Produced and sold quantities of crops

Quantities (kg) produced by men/women			Total	Quantities sold by men/women	Total
Sesame	having done agr. in 2019	19 071	**40 915**	15 555	**33 599**
	having NOT done agr. in 2019	21 844		18 044	
Maize	having done agr. in 2019	43 459	**77 945**	31 019	**54 880**
	having NOT done agr. in 2019	34 486		23 861	
Ground-nut	having done agr. in 2019	22 854	**40 721**	16 711	**28 783**
	having NOT done agr. in 2019	17 867		12 072	
Cassava	having done agr. in 2019	106 399	**219 287**	90 327*	**185 131***
				59 532**	
	having NOT done agr. in 2019	112 888		94 804*	**93 316***
				33 784**	
Onions	having done agr. in 2019	1 113	**1 113**	998	**998**
	having NOT done agr. in 2019	0		0	
Rice	having done agr. in 2019	4 885	**9 879**	3 120	**7 499**
	having NOT done agr. in 2019	4 994		4 379	
Sun-flower	having done agr. in 2019	7 494	**19 263**	7 485	**19 254**
	having NOT done agr. in 2019	11 769		11 769	
Soy beans	having done agr. in 2019	9 120	**19 240**	8 700	**17 460**
	having NOT done agr. in 2019	10 120		8 760	
Beans	having done agr. in 2019	7 560	**16 042**	6 100	**12 900**
	having NOT done agr. in 2019	8 482		6 800	
Sorghum	having done agr. in 2019	5 230	**17 888**	2 700	**11 813**
	having NOT done agr. in 2019	12 658		9 113	

*Cassava chips   **Cassava flour

Table A6. Costs for services (crops)

Quantities produced by men/women (kg)			Total (kg)	Costs for services (ploughing etc.) for whole crop (UGX)	Costs for services for producing 1 kg (UGX)	Total costs for services for producing 1 kg (UGX)	Quanti-ties sold by men/women (kg)	Total quan-tities sold (kg)	Costs for services for the sold quantities (UGX)	Total costs for services of the sold quantities (UGX)
Sesame	Hd	19 071	40 915	5 026 000		241	15 555	33 599		**8 097 359**
	HN	21 844		4 839 000	222		18 044		4 005 768	
Maize	Hd	43 459	77 945	5 070 000		116	31 019	54 880		**6 366 080**
	HN	34 486		3 938 000	114		23 861		2 720 154	
Ground-nut	Hd	22 854	40 721	4 704 000		238	16 711	28 783		**6 850 354**
	HN	17 867		4 989 000	279		12 072		3 368 088	
Cassava	Hd	106 399	219 287	7 707 000		85***	90 327* 59 532**			**18 380 088**
	HN	112 888		11 025 000	98		94 804* 33 784**		10 394 402	
Onions	Hd	1 113	1 113	50 000		117	998	998		**116 766**
	HN	0		80 000	0		0		0	
Rice	Hd	4 885	9 879	1 098 000		191	3 120	7 499		**1 432 309**
	HN	4 994		784 000	157		4 379		687 503	
Sun-flower	Hd	7 494	19 263	985 000		146	7 485	19 254		**2 791 830**
	HN	11 769		1 824 000	155		11 769		1 824 195	
Soy beans	Hd	9 120	19 240	1 300 000		163	8 700	17 460		**2 845 980**
	HN	10 120		1 835 000	181		8 760		1 585 560	
Beans	Hd	7 560	16 042	1 945 000		247	6 100	12 900		**3 186 300**
	HN	8 482		2 015 000	238		6 800		1 618 400	
Sor-ghum	Hd	5 230	17 888	265 000		125	2 700	11 813		**147 625**
	HN	12 658		1 964 000	155		9 113		1 412 515	

*Cassava chips; **Cassava flour; *** It was considered that 3 kg cassava chips give 1 kg of cassava flour

Table A7. Cost for seeds (crops)

Quantities produced by HH having done/having not done agriculture in 2019 (kg)		Total pro-duction (kg)	Quantity produced with seeds bought outside	Quantity of seeds for produ-cing 1 kg (kg)	Price of 1 kg of seeds (UGX)	Quan-tity of seeds used (kg)	Total quantity of seeds used (kg)	Costs for seeds (UGX)	Total costs for seeds (UGX)	Total costs for seeds for 1 kg of production (UGX)	Costs for seeds for 1 kg of produc-tion (UGX)
Sesame	Hd*	19 071	18 604	0.007	4500		247		1 111 500	27	
	HN**	21 844	16 716			117		526 500			24
Maize	Hd	43 459	23 258	0.01	5 500		480			34	
	HN	34 486	24 725			247		1 358 500	2 640 000		39
Ground-nuts	Hd	22 854	10 113	0.05	7 000		815			140	
	HN	17 867	6 184			309		2 163 000	5 705 000		121
Cassava	Hd	106 399	35 093	0.065	600		7 356		4 413 600	20	
	HN	112 888	78 079			5075		3 045 000			27
Onions	Hd	1 113	315	0.0004	180 000		0.13		23 400	21	
	HN	0	0			0		0			0
Rice	Hd	4 885	4 470	0.02	8 000		103		824 000	83	
	HN	4 994	670			13		104 000			21
Sun-flower	Hd	7 494	0	0.00005	85 000		0		0	0	
	HN	11 769	0			0		0			0
Soy beans	Hd	9 120	6 430	0.025	8 000		199		1 592 000	83	
	HN	10 120	1 540			39		312 000			31
Beans	Hd	7 560	3 440	0.075	8 000		401			200	
	HN	8 482	1 900			143		1 144 000	3 208 000		135
Sorghum	Hd	5 230	3 400	0.005	5 000				185 000	10	
	HN	12 658	3 930			20	37	100 000			8

Totals (column "Total production"): Sesame **40 915**; Maize **77 945**; Ground-nuts **40 721**; Cassava **219 287**; Onions **1 113**; Rice **9 879**; Sun-flower **19 263**; Soy beans **19 240**; Beans **16 042**; Sorghum **17 888**.

*Hd having done agriculture in 2019;   **HN having NOT done agriculture in 2019

Table A8. Kept and sold quantities of livestock

Quantities of livestock kept by men/women (number)			Total	Quantities of livestock sold by men/ women	Total
Goats	having done agr. in 2019	952	**2129**	**290**	**663**
	having NOT done agr. in 2019	1 177		**373**	
Poultry	having done agr. in 2019	1570	**3698**	**608**	**1 242**
	having NOT done agr. in 2019	2128		**634**	
Pigs	having done agr. in 2019	157	**447**	**67**	**186**
	having NOT done agr. in 2019	290		**119**	
Cattle	having done agr. in 2019	380	**681**	**63**	**104**
	having NOT done agr. in 2019	301		**41**	
Sheep	having done agr. in 2019	21	**21**	**13**	**13**
	having NOT done agr. in 2019	0		**0**	

Table 9: Costs for veterinary services and drugs (livestock)

Type of live-stock	Type of house-hold	No. of sold animals for which veterinary drugs have been used bought from outside	Costs of veterinary drugs/ head (UGX)	Costs for veterinary drugs for the sold animals (UGX)	Total costs for veterinary drugs for the sold animals (UGX)	No. of sold animals for which veterinary services have been used	Costs of veteri-nary services /head (UGX)	Costs for veterinary services for the sold animals (UGX)	Total costs for veterinary services for the sold animals (UGX)
Goats	Hd	231		1 386 000	2 934 000	110		220 000	564 000
	HN	258	6 000	1 548 000		172	2 000	344 000	
Poultry	Hd	289		1 445 000	3 658 000	228		228 000	379 000
	HN	448	5 000	2 240 000		151	1 000	151 000	
Cattle	Hd	57		855 000	1 245 000	51		510 000	730 000
	HN	26	15 000	390 000		22	10 000	220 000	
Pigs	Hd	38		456 000	1 464 000	31		310 000	770 000
	HN	84	12 000	1 008 000		46	10 000	460 000	
Sheep	Hd	7		42 000	42 000	7		14 000	14 000
	HN	0	6 000	0		0	2 000	0	
Total									**2 457 000**

A10: Types of non-agricultural activities carried out

Number of HH involved in non-agricultural activities		Number of HH for which this is the main source of income	Number of HH involved in non-agricultural activities		Number of HH for which this is the main source of income
Boda-Boda driver	16	11	Hair dressing	3	1
Trader/ shop keeper	15	10	Casual laborer	3	1
Brewing	15	13	Selling drugs/ nurse	2	1
Fisherman / fish seller	14	6	Charcoal seller	2	2
Market vendor	11	5	Artisan	2	2
Catering /restaurant	10	4	Watch man	2	2
Village mobil. extension	10	5	Clinical officer	1	1
Builder	9	3	Butcher	1	
Tailoring	7	5	Hotel	1	1
Teacher	4	3	Mechanic	1	
Carpenter	3	3	Cinema	1	
Total		**68**	**Total**	**133**	**11**

A11. Transformation activities

Type of product	Activity	Classification P = processing NP = no processing
Cassava	Chips	**NP**
	drying leafs	**P**
Maize	Grains	**NP**
Sesame	Grinding paste	**P**
	Making oil	**P**
Groundnuts	Shelling	**NP**
	Rosting	**P**
	Milling	**P**
Onions		**NP**
Beans	drying leafs	**P**
Rice	unhulled	**NP**
	hulled	**P**
Tomatoes	fresh	**NP**
	dried	**P**
Eggplant, occra	dried	**P**
Soja, beans	rosting	**P**
	grinding	**P**
Sorghum	brewing	**P**
Slaughtering		**P**

A12. Questionnaire

"Endline" survey RISE
component 3 Agriculture

Categorie of interviewed person

Man = M   Doing agriculture = A   Host = H
Female = F   Not doing commercial agriculture = N   Refugee = R

No=0   Yes=1

Has the interviewed person participated in the baseline?

2019 [   ]   2022 [   ]

Date
Name of Enumerator
No. of interview
District
Subcounty
Settlement
Parish
Village
Group
Name of the interviewed person:

Refugee or host   refugee=1   host=2

Sex and age   Female=1   Male=2   Age

Head of household

No=0   Yes=1

If head of household is a woman refugee, please indicate **the number of children!**

A. Crop production

A1. Do you have access to arable land?

0 = no access, 1 = access to arable land

If no, go to section B. Livestock production/animal husbandry

A2. Have you been doing commercial agriculture during the last year?

no = 0; yes =1

A3. If yes, what is the estimated size of the land available for growing crops? (acres)

A4. Do you rent some of this land?

Yes = 1; No = 0

If Yes: What do you pay for renting the land (per year)?

	Crop 1	Crop 2	Crop 3	Crop 4	Crop 5
A5. Which agricultural crops (at most 5) have you mainly grown in last two seasons (Nov 21 to Now 22)?					

A6. Do you sell any of the cultivated crops?
Yes = 1; No = 0;

If yes, continue with question A6.

If no, go to section B Livestock production

A7. Which of these crops do you sell?

1 = Selling ; 0 = No selling

	0	0	0	0	0

A.8 What did you get for the different crops (selling price/unit)**?**

A9. What do you buy in the market for <u>cultivating </u>the crops which you have sold?

0 = the input is not bought; 1 = the input is bought

	0	0	0	0	0
A.9.1 Seeds	0	1			

A.9.2 Fertilizer

A.9.3 Herbicide

A.9.4 Pesticide

A.9.5 Other 1 …………….

A.9.6 Other 2 …………….

A.9.7 Other 3 …………….

Remark/Explanation: The interviewers have to collect the market prices of the different inputs ; correspondingly information has also to be collected by the interviewers regarding the quantities of these inputs needed for the cultivation of the different crops (see separate questionnaire)

A10. Did you get any inputs for free e. g. from NGOs, UNHCR, OWC, other donors, implementing agencies?

No = 0, Yes = 1

A.10.1 Seeds

A.10.2 Fertilizer

A.10.3 Herbizide

A.10.4 Pesticide

0	0	0	0	0

A11. Did you use paid labour for growing crops (field clearing, ploughing, weeding, planting, harvesting, post harvest handling)?

Yes = 1; No = 0

0	0	0	0	0

A12. If yes: **How much did you pay for these services** (in UGX)**?**

A13. Which quantity of the different crops did you produce in last two seasons (Nov. 21 to Nov. 22)?

0	0	0	0	0

Indicate the unit

Number of units

Calculation in kg

A14. Which quantity of the different crops did you sell?

0	0	0	0	0

Indicate the unit

Number of units

Calculation in kg

A15. Did you process and transform a part of the crops which you have sold? E.g. Making flour out of wheat…..

0	0	0	0	0

Yes = 1; No = 0

If no transformation, go to A17

A16. What processing steps did you do?

A17. Which quantity of the crop did you transform? *If a part of the sold crop is transformed, continue with question A21.*

A18. Why did you not process any of the crops you are growing?

A19. Do you see any possibility for processing? Yes = 1, No = 0

A20. What is necessary in your opinion for enhancing processing?

A21. What are your main problems in selling your agricultural production?

B. <mark>Livestock production/animal husbandry</mark>

B1: Did you keep animals/livestock in last two seasons (Nov 21 to Now 22)? yes = 1; no = 0

Yes = 1; No = 0

If no, go to section C

B.2 What type of animals do you keep?

Not this animal = 0; this animal is kept = 1

How many of each type of animal do you keep? 1, 2, 3 ….

Goats	Sheep	Cattle	Poultry	Bees colonies)	Pigs	Rabbits

B.3 Did you sell any animals or animal products the last one year?

Selling = 1; No selling = 0

Selling of animals

Selling of animal products

Goats	Sheep	Cattle	Poultry	Bees colonies)	Pigs	Rabbits

B4. Which quantity of animals and animal products did you sell last year?

Number of animals sold
Quantity sold of
eggs

honey
propolis

	Goats	Sheep	Cattle	Poultry	Honey	Pigs	Rabbits
honey							
propolis							

wax							
head/hides/skins							
milk							
meat							
yogurth							
Others							

B5: What did you get for the different animals and animal products (selling price/unit)?

Eggs		**Honey**		**Hides/Skins**		**Milk**	
		Propolis		**Head**		**Yogurth**	
		Wax					

Meat

goats	
cattle	
pig	
poultry	
sheep	
rabbit	

Other | |

If no animals or animal products are sold, go to section C

	Goats	Sheep	Cattle	Poultry	Bees	Pigs	Rabbits
B.6 What do you buy for keeping and raising the animals?							
0 = not bought, 1 = input bought							
B.5.1 Fodder, feeds							

50

B.5.2 Vetenary drugs

B.5.3 Payment for labour (herdsmen, vet. service e. g. for vaccination)

B.5.4 Others 1 …………………

B.5.5 Others 2 …………………

B.5.6 Others 3 …………………

B.7.Did you receive any (breeding) stock or any animal husbandry related inputs/ services for free (e. g. from NGOs, UNHCR, OWC, other donors or implementing agencies…)

Quantity of breeding stock recived

Vetenary drugs, vaccination recived etc. (Yes = 1; no =0)

Goats	Sheep	Cattle	Poultry	Bees	pigs	Rabbits

B.8Did you tranform some of the animals which you have sold?

Transformation = 1; No transformation = 0

Which processing steps did you do?

Goats	Sheep	Cattle	Poultry	Bees	Pigs	Rabbits

B9. What were your main problems in selling animals/livestock, their products…?

	I work as	**and I work also as**	**No non-agricultural activites**
C1. You grow and raise a large part of the food which is needed by your family. However, some cash is always needed, too. How do you manage for getting additionnal cash? Which (non-agricultural) activities do you undertake for getting cash?			

C2. How many hours do you spent in non-agriculture activities (in a week - a month - occassionally)?

Number of hours worked

per day	per week	per month

C3. _For refugees only_: Do you get cash aid and/or food aid from the UN agency etc.

	Beans	Oil	Maize
I get food aid: Yes = 1; No = 0	3	0,5	
I get cash aid: Yes = 1; No = 0			22,000UGX/montl

A13. Terms of Reference

Terms of Reference (003I)

Area:	Midterm/endterm evaluation of component 3 RISE project	Locations:	Arua, Terego, Moyo, Obongi, Madi Okollo and Adjumani districts
Expert: (including mobile no. and e-Mail address):	Dr. Agnes Gerold +49 1777 233 862 amgerold@aol.com	Expected Result:	- Midterm for BMZ/Endline for EUTF survey report of RISE component 3 - Actual indicator values for all outcome and output indicators are available
Timing:	October to November 2022	Approval (GIZ):	Required
		No. of days invoiced to GIZ:	**23** 2 international travel days; and 10 days in Uganda**.** 11 home-based days **2nd mission:** X international travel days; X days in Uganda; XX days home based (we may not need this second mission, since the presentation of the findings can be presented and discussed via MS Teams)

Stakeholders:		Phone	Email
Clients:	AFC GmbH		
Responsibility Contract (AFC):	Matthias Webendörfer	+49 228 923940 32	Matthias.Webendoerfer@afci.de
Team Leader (AFC):	Martin Stange	+256 778 685777	Martin.Stange@afci.de
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Uganda M&E coordinator:	Leonard Asiku	+256 781 483144	Leonard.Asiku@afci.de
Regional Coordinator:			
Expert reports to:	Martin Stange, Team Lead of Component 3 (Agriculture) of Response to Increased Demand on Government Service and Creation of Economic Opportunities in Uganda (RISE) Program		

Background and Rationale:
Uganda is the country hosting the most refugees in Africa. Over 1.4 million people live in the refugee settlements in the north and southwest of the country. The majority comes from South Sudan, 82% of who are women and children under the age of 18. Among them are many unemployed youth and households headed by women, a large part of them illiterate. Furthermore, the north of the country is structurally disadvantaged due to the consequences of the Ugandan civil war. There is only insufficient private development, barely formal employment and the investment climate is not favorable. The main source of income is agriculture, in which more than 70% of the Ugandan workforce is active. The

Ugandan refugee policy allows the newly arrived refugees to pursue employment and establish businesses. A piece of land is made available to the refugees but important prerequisites for its adequate use are missing. In order to be able to put the small areas under intensive cultivation, the access to suitable seeds and seedlings, knowledge of modern production technology as well as marketing possibilities have to be improved. Also, not all refugees can or want to engage in agricultural activities.

The <u>Overall Objective</u> of RISE
Strengthen local authorities in delivering government services to all people in the refugee-hosting districts of **Arua, Moyo, Obongi, Madi Okollo, Terego and Adjumani,** and to enable greater resilience and self-reliance among both refugee and host communities by creating economic opportunities.
<u>Output 3</u> of RISE
Refugees and hosting communities, especially single women, have increased their income by improving agricultural production

The relevant **module indicators** component 3 contributes to

➢ Number of people (Refugees and local communities) who have participated in learning groups realized by the project, have increased their real income 284,930 UGX from the sale of agricultural production by an average of 30%. (2000 of 4000 women, 3000 of the 4000 being youths)

The **output indicators** of component 3 for which AFC is fully responsible for

➢ Number of refugees & host communities have increased their real income by 30% from new agricultural production. (2000 of the 3000 are single women or female headed Households)

➢ Number of households (Refugees & local population) that were engaged in farming before the measure, have increased their agricultural production Y (tons; 2,368,169 UGX market annual value) by 30%. (1750 refugees, & 1750 host population)

➢ 3,000 refugees and local people including 2,000 single women, who had not previously engaged in commercial agriculture, increased their real income 478,848 UGX by 30% from the newly started agriculture production

➢ Percentage of trained beneficiaries/farmers that have added a value-adding processing step

➢ Number of farmers trained in agricultural processing and market-oriented skills.

➢ Number of VSLA participants who can save for at least one complete saving cycle

Objective and Purpose:

Based on the basis values of the indicators determined through the baseline survey conducted before the project interventions started in 2019, the midterm/endline survey will determine/populate the values of all above mentioned indicators again. The purpose of this evaluation is to examine, whether the intended project impact has been achieved or not. The survey will serve as endline survey for the EUTF funding which will phase out in March 2022 and it will be the midterm evaluation for the BMZ funding which has been extended to September 2023.

The evaluation should also identify critical success factors and reason of failures of RISE component 3 interventions. Hence, it will summarize the lessons learned to inform future programming decisions.

The analysis will evaluate the inclusiveness, relevancy, efficiency, effectiveness, and the sustainability of the (economic) impact of the project interventions.

Methodology

The baseline survey 2019 was designed as a tracer study. Hence the midterm analysis should, wherever possible, interview the same beneficiaries that had been interviewed during the baseline survey. This should increase comparability and relevance of the results. Therefore, the content of the questionnaires (for individuals, market information and FGD) needs to be very similar to the content in the questionnaires which were used during the baseline survey. Since the number of beneficiaries and number districts has been increased during the implementation, the sample size used during the baseline has to be increased accordingly. Depending on how many beneficiaries of the baseline survey can still be traced and depending on the (new) stratification of the target group and the increased number of beneficiaries to be reached, the consultant needs to calculate the total number of interviews necessary to attain a significant survey result.

The consultant will have to apply a mixed method approach, consisting of both qualitative and quantitative data collections, as well as literature/project document review. During the desk review, the available monitoring and evaluation data, which has been collected during project implementation by the project staff, will have to be analysed/considered. This includes the updated beneficiary lists, VSLA data files, training (attendance) reports/data files, economic data collection files, project surveys and assessments, the baseline report, monthly staff reports, quarterly/annual donor reports, input distribution reports, joint monitoring reports, etc.

The consultant and the trained enumerators (NEs & FECs) will collect primary data through Focus Group Discussions (FGD) and individual interviews with beneficiaries, Village Savings and Loans Associations (VSLA) and learning groups.

The collected and reviewed data will be validated through triangulations

Description of Tasks/Roles:

The consultant will be responsible for:
- Reviewing and update the methodology for the mid-line/end-line evaluation
- Analyse project documents and review relevant literature, including (inter)national reports/statistics, value chain analysis and relevant technical reports in order to triangulate the collected data with available data.
- Developing questionnaire/s for both individual interviews, markets data and FGDs and validate them through the national experts (NE) and team lead of the RISE project
- Training and accompanying the enumerators during pre-testing and thus adjusting the questionnaire/s according to the findings of the pre-tests
- Randomly select together with the NE the additional beneficiaries to be interviewed
- Supplement the tracer sample (size) to the current number of beneficiaries. Ensure an appropriate stratification and randomization (error probability <10%) of the interviewed people and focus groups, keeping in mind that the methodology chosen must be geared to populate the missing baseline of the indicators
- Designing a template for the compilation the data
- Applying quality assurance measures to ensure data quality and clean raw data respectively
- Analyzing the compiled data
- Elaborate a draft report with the main findings and present the main findings at a (online) workshop attended by GIZ/AFC personnel, and other relevant stakeholders
- Prepare and submit the final report of the evaluation, incorporating the feedback from all stakeholders
  Other stakeholders:
- The M&E coordinator (Leonard Asiku) will help the consultant in identifying the relevant actors for interviews and field visits and will provide the consultant with available documentation.
- The enumerators (NEs/Field Extension Consultants) will help in data collection and data entry

Timeline
This consultancy is starting in first half of October 2022 and is expected to be concluded in November 2022 approximately 23 days. The international expert is requested to remain available for reviews and improvements until the piece of work is validated by the consortium.

Expected Deliverables:

• A properly defined methodology to be used, sample size, and pre-tested questionnaire/s
• Data collection tools including FGD guide ahead of field work
• Data entry tools for data analysis
• Cleaned-up raw data
• Data analysis and presentation of preliminary findings
• Power point presentation of the main findings
• A detailed survey report containing the findings/recommendations of the baseline survey, amongst others:
    • Overview of socio-economic stratification of the target group
    • Lessons learnt during implementation: Success factors and reasons for failure
    • The indicator values (gender and age and refugee/host specific)
The report shall be submitted in four hard copies (to AFC Bonn) and one soft copy (Microsoft WORD). The report shall include all data and materials used as an annex (e.g., survey database, questionnaires, interview guidelines, maps, pictures, GPS data, etc.).

Stages of the mid-term/End line survey	Stake holders involved	Required time and location
1st Mission		
• **Inception meeting:** On arrival to Uganda, the consultant, team lead component 3 and the M&E advisor shall hold an inception meeting during which the terms of reference are further discussed and the (field) program agreed • • **Desk review** of project documents and relevant literature, (inter)national reports/statistics, value chain analysis, available M&E data collected during the implementation by the project including the beneficiaries' lists, VSLA data files, training (attendance) reports/data files, economic data collection files, project surveys and assessments, the baseline report, monthly staff reports, quarterly/annual donor reports, input distribution reports, joint monitoring reports, etc. • **Development of the questionnaire**	International expert, Team Lead, M&E advisor and one admin International Expert International Expert	1 Day (Arua) 3 days (home based) 2 Days (home based)
Conducting the interviews These are both FGDs, market data and individual interviews,	NEs, FECs, one admin and M&E advisor	8 days (Moyo, Obongi Terego, Adjumani, and Madi Okollo)

Development of a **template for compilation and first analysis of the collected data** Based on the elaborated questionnaire the consultant will develop a template to be used by the NE to compile the collected data.	International expert	2 Days (Arua)
Compilation of the collected data The NEs shall compile/enter the collected data into an excel sheet prepared by the international expert for easy analysis	NEs	4 Days (Moyo, Obongi Terego, Adjumani, and Madi Okollo)
Aggregation of the different districts data The M&E advisor with one of the admins shall help to aggregate data from the different districts into one file which will then be sent to the consultant for analysis.	M&E Advisor and one admin	2 days (Arua)
Data Analysis and report writing The international expert shall then analyse the data he/she receives from the M&E advisor which he/she will use for drafting evaluation the report	International expert	3 Days (home based)
Sharing of the draft report by the international expert The international expert will then share the draft report with the team lead, NEs and M&E advisor who are expected to read and analyse the report and submit their comments for further modification of the report.	International expert NE/M&E advisor	1 day (home based) 3 Days
Presentation and discussion of the results of the investigation Within the framework of a meeting of the responsible staff of the project and other keypersons, the international expert supported by the local experts will present in Uganda the results of the investigation for discussion and comments.	International expert, NEs, M&E advisor, and Team Lead, other stakeholder	1 Days (home based) (Online)
Finalization of the report Based on the comments and results of the discussions in Uganda the international expert will finalize the evaluation report.	International expert	2 Days (home based)

Signatures:	AFC: _____	Client: _____	Expert: _____

A14.   Results of the investigation (PP-Presentation)

End line Survey Report
RISE component 3

Presentation of results

March 2023

Agnes Gerold

1. Introduction

The Overall Objective of the project RISE (06/2019 – 09/2022):

- ˝ Strengthening of local authorities in delivering government services to all people in the refugee-hosting districts of Arua, Moyo and Adjumani, and

- ˝ to enable greater resilience and self-reliance among both refugee and host communities by creating economic opportunities.

The mission was carried out within the framework of Output 3 of RISE:

- ˝ Refugees and hosting communities, especially single women, have increased their income by improving agricultural production.

Objective of the mission

- ˝ Collection of information required for evaluating the achievements of component 3 through its module indicator and its output indicators.

- ˝ Identification of critical success factors and reasons of failures of the interventions of RISE component 3 in view of formulating of lessons learned.

- ˝ Evaluation of inclusiveness, relevancy, efficiency, effectiveness and sustainability of the (economic) impact of the project interventions.

2. The indicators

Altogether 7 different indicators had to be taken into consideration:

- ˝ the module indicator of component 3 and the

- ˝ 6 output indicators of component 3

Module indicator

4000 <u>refugees and persons from host communities</u>, 2000 being women and 3000 being youths, who have participated in learning groups realized by the project, <u>have increased their real income of 284 930 UGX from the sale of agricultural production by an average of 30%.</u>

Output indicators

OI.3.1: 3000 refugees and persons from the host communities, 2000 being single women or female headed households, have <u>increased their real income by 30% from new agricultural production</u>

OI.3.2: 1750 refugees and 1750 host population that were <u>engaged in farming before</u> the measure, <u>have increased their agricultural production of</u> Y tons (2 368 169 UGX market annual value/head) by 30%.

OI.3.3: 3000 refugees and local people, including 2 000 single women, who had not previously been engaged in commercial agriculture<u>, increased their real income of 478 848 UGX by 30% from newly started agriculture production</u>

OI.3.4: <u>Number of farmers trained</u> in agricultural processing and market-oriented skills.

OI.3.5: Percentage of trained beneficiaries/farmers that have <u>added a value-adding processing step</u>

OI.3.6: <u>Number of VSLA participants</u> who can save for at least one complete saving cycle

3. Methodology

The end-line survey is based on the base-line survey carried out in 2019 – hence the

- ″ same definitions are used for operationalization and calculation of the values of the indicators;

- ″ same characteristics taken into consideration, i. e. men / women, (not) involved in commercial agricultural activities, refugees or hosts and

- ″ persons involved already in 2019 in agricultural activities and persons not involved in 2019 in such activities

- ″ the end-line survey was planned as a tracer study; but of the 180 persons interviewed in 2019, only 95 could be searched out; missing persons have been replaced by a person of the same category (MHA etc.)

Categories of persons/households taken into consideration

- ″ **MHA -** Man-host involved in commercial agricultural activities

- ″ **MRA -** Man-refugee involved in commercial agricultural activities

- ″ **MHN -** Man-host not involved in commercial agricultural activities

- ″ **MRN** - Man-refugee not involved in commercial agricultural activities

- ″ **FHA -** Female-host involved in commercial agricultural activities

- ″ **FRA** - Female-refugee involved in commercial agricultural activities

- ″ **FHN** - Female-host not involved in commercial agricultural activities

- ″ **FRN -** Female-refugee not involved in commercial agricultural activities

Subsistence farmers produce (small quantities of) a large number of different products (for own consumption and commercialization)

- ″ in the calculations: 10 different crops and 5 different animals kept by the farmers were considered :

- ″ sesame, maize, groundnut, cassava, onions, soy-beans, beans, rice, sun-flower, sorghum

- ″ goats, poultry, cattle, pigs and sheep

<u>Real income:</u> Distinguished between

- ″ farmers oriented towards the market and selling a part of their production (MHA, MRA, FHA, FRA) and

- ″ farmers producing only for their own needs, not doing any commercial farming (MHN, MRN, FHN, FRN).

- ″ Estimation of "real income" of the households based on the concept of "gross margin" :

"Real income" = market value of the sold product (turnover farm gate) minus the variable production costs (costs for seeds, fertilizer, pesticides, veterinary drugs etc.)

4. Socio-economic characteristics

- ″ Realization of interviews -> November 6 – November 16, 2022 by 7 enumerators in districts of Arua/Terego, Moyo, Obongi and Adjumani

- ″ Interviews of 180 persons

- ″ 141 persons have been heads of household (78%)

- ″ 57 women have been heads of households (single women)

- ″ 45 persons (25%) were of 35 years of age or younger (average age: 38 years)

- ″ Refugees and the host population are also involved in non-agricultural activities:

133 persons (74%) of the 180 interviewed

persons are involved in non-agricultural activities

for 79 persons (44 %) the non-agricultural activities

are the main source of income

- ″ Commercial activities and integration in the market have considerably increased

Number of farmers selling the different crops has considerably increased compared to 2019

Number of farmers selling now livestock has also considerably increased

but - besides a very small number of eggs - no animal products are sold

5. Values of the indicators

Calculation of real income from selling of agricultural production (crops and livestock) requires information about

- ″ the sold quantities and the selling price (farm gate) - > turnover for every sold commodity

- ″ the (variable) costs (inputs as seeds, fertilizer, veterinary drugs etc., bought in the market)

But, not all the farmers buy inputs for crops and livestock in the market

Mainly services for ploughing etc. and seeds are bought in the market

veterinary drugs and veterinary services (vaccination).

Indicators	value reached in 2019	value planned for 2022	value reached in 2022
Module indicator: 4000 refugees and persons from host communities, 2000 being women and 3000 being youths, who have participated in learning groups realized by the project, have increased their real income of 284 930 UGX from the sale of agricultural production by an average of 30%.	284 930 UGX (per year and head)	370 409 UGX (per year and head)	5 305 138 UGX (per year and head)
OI.3.1: 3000 refugees and persons from the host communities, 2000 being single women or female headed households, have increased their real income by 30% from new agricultural production	478 848 UGX (per year) and head)	622 500 UGX (per year and head	4 297 740 UGX (per year and head

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Indicators	value reached in 2019	value planned for 2022	value reached in 2022
OI.3.2: 1750 refugees and 1750 host population that were engaged in farming before the measure, have increased their agricultural production of Y tons (2 368 169 UGX market annual value/head) by 30%.	2 368 169 UGX (per year and head)	3 078 620 UGX (per year and head)	12 678 089 UGX (per year and head)
OI.3.3: 3000 refugees and local people, including 2 000 single women, who had not previously been engaged in commercial agriculture, increased their real income of 478 848 UGX by 30% from newly started agriculture production	See indicator OI.3.1		

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Indicators	Value reached in 2019	Value planned for 2022	Value reached in 2022
OI.3.4: Number of farmers trained in agricultural processing and market-oriented skills.			13 336
OI.3.5: Percentage of trained beneficiaries/farmers that have added a value-adding processing step	12%	22%	59%
OI.3.6: Number of VSLA participants who can save for at least one complete saving cycle			6300 (99% of the VSLA participants)

6. Conclusions and lessons learnt

The achieved values of the indicators are considerably higher as the planned values.

This can be explained by different reasons:

- ″ Agricultural and economic activities have been considerably intensified

- ″ With one exception, all the households not involved in agricultural activities in 2019, are now involved

- ″ The number of considered crops has increased from 5 to 10 including crops newly introduced (sunflower, rice, soya)

- ″ The overall cultivated area has increased from 292 acres in 2019 to 1013 acres in 2022 (+ 247%).

- ″ Marketing of agricultural products has increased regarding the sold quantities and the number of involved household.

- ″ 133 farmers (74%) are involved in non-agricultural activities; for 79 of them these activities are the main source of income.

Feedback and propositions of beneficiaries:

- ″ Delivery of the different inputs more in time

- ″ Increased focus of input support on livestock, mainly goats

- ″ Hiring of land for refugees (by the project)