Caritas

NARRATIVE INTERIM REPORT 1ST JANUARY 2023 – 31ST DECEMBER 2024

Title: SPEEC – Sustainable Brick Production and Energy-Efficient

Cooking for Vulnerable Households in South Sudan

Start and End Date: 1st January 2023 – 31st December 2028

Implementing Organisation: Caritas Austria with partner organisations: Consultation Centre

for Empowerment and Welfare Organization (CCEWO), Solidarity with South Sudan (SSS), Self-Help Women Development Organization (SHWDO), Star Support Group (SSG) and Integrated Community Development Organization

(ICODO)

Project Location: South Sudan, Western Equatoria State

REPORTING PERIOD

From	1 st January 2023	to	31st December 2024	Sent on	28 th February 2025
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Date, author of report: February 2025, Werner Fritz and Benjamin Ibako

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SUMMARY OF THE PROJECT PROGRESS

After 2 years of implementation the SPEEC program could already contribute to the saving of $\underline{2,899}$ $\underline{t CO_2}$ by using energy saving stoves for cooking purposes.

The focus of the initial phase of the SPEEC project was on intensive information for all project participants about climate change, the SPEEC project, the use of energy-saving stoves and sustainable brick production. Experts from Ugastove and Makiga participated in kick-off workshops in Yambio to train partner organisations on the elements of fuel-saving stoves and brick production. The target group consisted of project partners and multipliers of the beneficiaries.

A very important success factor was the <u>pilot phase</u> between March 2023 and August 2023 to test the fuel stoves with a small number of partners and beneficiaries. This phase was closely monitored and the results of the tests were used to implement adaptations as quickly as possible and to make internal and external stakeholders interested in this project and motivate them to get involved.

After the testing phase 1,200 households in Western Equatoria who were still using open fire for cooking have been selected and trained on the use of fuel saving UgaStoves. <u>2,400 stoves</u> were ordered at the company UgaStoves, delivered to Yambio and <u>distributed to beneficiary households</u> between December 2023 and May 2024, a final batch was distributed in January 2025. A baseline survey was carried out with all beneficiary households and monitoring data were collected after some months of distribution of the stoves.

The second big result of the program aims at introducing sustainable brick production methods in Western Equatoria, especially in Yambio town. In the first two years <u>28 youth were trained</u> on the ISSB production method by an expert from Makiga company. <u>60.000 bricks were produced</u> with ongoing consultancy of the same expert. After a tender process the partner organization CCEWO contracted a company for the <u>construction of the CCEWO Women Learning Center</u>. The center was opened in August 2024 offering now space for education of 50 illiterate women who in the years before did their afternoon courses under a mango tree.

When designing and starting the program, it was uncertain how the acceptance of this "CO2 saving program" would be among the beneficiaries and partners: Are people in one of the poorest countries interested in climate change? Are young people interested in training a new method of brick production? Are the energy-saving stoves used sustainably and correctly? Is there interest in paying more for a house according to the "Makiga method"? And does it make a difference that the idea did not come "from the grassroots", but from Austria? After two years of the program we can say that additionally to the saving of CO2 tons the program has a huge-social-impact: there is great acceptance of the energy-saving stoves, feedback of all beneficiary households is very positive and there is big enthusiasm concerning the sustainable construction method.

In Western Equatoria State, it is especially important for projects with an innovative character to have the <u>essential players on board</u> from the very beginning. These are political institutions, especially the Governor and the responsible Minister of Housing, the Bishop and representative of the Catholic Church, the King of the Azande as representatives of the Kingdom as well as the Relief and Rehabilitation Commission as the responsible authority for non governmental organisations..

2025 the focus will be on following objectives:

- Training of 20 to 30 youth on the compressed earth brick method
- Training of 10 to 20 youth and representatives from our partners on essential business aspects
- Production of bricks for new buildings, constructed with compressed earth brick method
- Sensitization on environmental aspects
- Planting of 400 grafted mango-trees by about 200 households at their compounds
- Optimizing of the project monitoring using the tool Kobo

- TARGET GROUPS

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TARGET GROUP NUMBERS:

PLANNED								
Target groups (numbers and description) Concerning project plan / proposal: 1,250 vulnerable households 100 youth 100 young mothers in learning center								
REA	CHED per reporting date							
Target groups (numbers and description)	Reached target until end of December 2024: 1,250 households 28 youth (6 female, 22 male) 50 young mothers in learning center							

1. DESCRIPTION OF THE PROGRESS

1.1. Progress towards planned Objectives

Objective: to contribute to the SDG 12 "Promotion of sustainable consumption and production patterns by reducing 17.312 tCO₂ in the Western Equatoria Region of South Sudan.

Indicator: after 6 years, 17.312 tons of emissions have been saved by the use of sustainable cooking methods (16,921 t CO2) and sustainable brick production (391 t CO₂)

In 2023 (94 tCO₂) and 2024 (2,805 tCO₂) the project saved 2,899 tCO₂ with substituting inefficient cooking methods with improved cookstoves (see Annex 2a and b for detailed calculation):

Year	Planned according to PDD Total Emission Reductions Stoves(tCO₂/y)	Total EmissionReductions <u>Stoves</u> (tCO ₂ /y)
2023	83	94
2024	2.713	2,805
Total	2,796	2,899

Until the end of the project in year 2028 it is expected that the project will save around 16,924 tCO₂ with substitutin inefficient cooking methods with improved cookstoves:

ER ₂₀₂₃	94 tCO ₂
ER ₂₀₂₄	2,805 tCO ₂
ER ₂₀₂₅	4,027 tCO ₂ (planned)
ER ₂₀₂₆	3,791 tCO ₂ (planned)
ER ₂₀₂₇	3,323 tCO ₂ (planned)
ER ₂₀₂₈	2,884 tCO ₂ (planned)
ER _{total}	16,924 tCO ₂

<u>Total emission reduction bricks</u>: As of the end of 2024 two buildings with 60,000 compact earth bricks each were built. Emission savings for those two buildings have not been calculated yet. This emission savings calculation will be submitted by the end of March 2025.

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1.2. Progress towards planned Results

1.2.1 Result 1: 1,250 households apply sustainable cooking methods

Indicator 1: after 6 years, 1,250 households use fuel-saving stoves for cooking

In the first two years of program implementation 2.500 fuel saving stoves were distributed to 1,250 households. A very detailed monitoring was done in the second year with a sample size of 68% of the households (855 monitoring interviews done).

The indicator itself aims at a 100% usage rate ("1,250 households use the stoves"). But in reality the calculation for emission savings in the PDD was based on a planned usage rate of 80% (1.000 households use the stove). According to the monitoring data and the information collected during the interviews the usage rate in the first year after distribution is much higher -86.9% (1,086 households use the stoves).



Indicator 2: after 6 years, 1,250 households report income savings by use of fuel-saving stoves

As there was no concrete question on this indicator in the monitoring survey done in 2024 it is not yet possible to give precise information on the achievement of the indicator. It will be measured during the monitoring survey end of 2025 by including questions on potential income savings. But during the monitoring survey (final open question for any comments) a number of households already gave feedback that they have income savings because they need less firewood/charcoal.

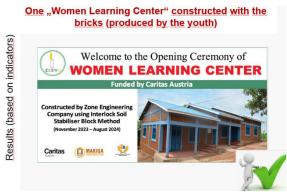
1.2.2. Result 2: Sustainable brick production is introduced in this region

This new and innovative bricks production was well introduced in the project region. The new method and the involvement of youth, who before the project earned their income with traditional brick production, was very well accepted by the community. It is especially important for projects with an innovative character to have the essential players on board from the very beginning. These are political institutions, especially the Governor and the responsible Minister of Housing, the Bishop and representatives of the Catholic Church, the King of the Azande and representatives of the Kingdom as well as the Relief and Rehabilitation Commission, who is responsible for the coordination of NGOs in South Sudan. All those stakeholders were invited and participated in the opening of the center.

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Indicator 1: after two years, one learning center is constructed with the compact earth brick method

In August 2024 the Women Learning Center constructed with bricks according to the earth brick method was opened. 50 women, who in the time before attended their afternoon courses under a mango tree in Yambio, have now an ecological building where they can attend school classes.



Indicator 2: after 2 years, 28 youth are trained in sustainable brick production

This indicator is achieved after 2 years of project implementation. 28 youth were trained by Makiga company to produce bricks according to the ISSB method.



Indicator 3: after 2 years, 2 youth groups are employed for the production of the bricks for 2 community buildings

This part of the result is already achieved. The trained youth were hired by the local partner organization CCEWO (Consultation Center for Empowerment & Welfare Organization) to produce the bricks for 2 community building (Women Learning Center in Yambio and Primary School in Gangura).



1.2.2 Result 3: Thei sustainable brown

Vestern Equatoria State for

Indicator: after 6 years, about 100 youth have regular income from a business for sustainable brick production

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In the first 2 years 28 youth have been trained and had an income from sustainable brick production for the 2 community buildings constructed. Those buildings were both funded by Caritas Austria. Now efforts have to be made to sensitize other stakeholders (authorities, other NGOs) and the local population to use the earth brick method for their own housings. This is planned for the next 4 years of implementation.

1.2.3 Result 4: A minimum of 1,250 households are aware of the environmental damages and the financial burdens caused by unsustainable cooking and construction methods

Indicator: at least 1,250 households report having more knowledge about the impact of unsustainable cooking and construction methods

1,250 households who were provided with fuel savings stoves are aware of the impact of unsustainable cooking methods. Regular contacts with those households during the selection process, baseline study and monitoring visits were opportunities to raise awareness on the importance of less use of firewood for cooking and the consequences on the environment and the family income.

Concerning construction methods, the population of Yambio knows about the methods used for the construction of the Women Learning Center. Mainly the inauguration in August 2024 was a perfect opportunity to raise awareness on environmental challenges in the region. A total of about 200 guests were present at this event including representatives of the Governor of Western Equatoria, the Bishop of the Dioceses and representatives of different civil society organisations.

More awareness, including radio emissions will be done in the coming years to have the topics of climate change and environmental protection high on the agenda.

1.2.4 Result 5: A minimum of 900 households have successfully planted one grafted mangotree at their compounds

Indicator: 75% survival rate of planted mango trees

This is result is not yet achieved, but activities towards this result already started at the beginning of 2025.

1.2.6. Result 6: Scientific research on the introduction of sustainable cooking and construction methods done

Indicator: 2 master theses are done on defined research questions

This result is not yet achieved, but activities towards this result are planned for the years 2025-2028.

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1.3. Progress towards Planned Activities

In the first six months of the project Caritas Austria's SPEEC team in Yambio focussed its efforts on setting up the project management and structure, on informing and discussing with all partner organisations about the details of the program, on elaborating and signing cooperation agreements with partners including budget, instalments and detailed activity plans.

1.3.1 Activities to result 1 "1,250 households apply sustainable cooking methods"

1.3.6.1. Fuel savings stove pilot phase

Framework

- The testing period for UGA cooking stoves started in May 2023 and ended in September 2023
- 3 partner organizations (Solidarity with South Sudan, Star Support Group and Self Help Women Development Organization) participated in the testing period with 49 households
- One interview-round with the beneficiaries was conducted at the beginning of the testing period (baseline survey) and one at the end of the pilot phase
- Major comments of the households, partners and Caritas Austria were summarized in a final "pilote phase report"

Objectives of the pilote phase:

- To test if the project and the type of stoves are accepted by the community
- To check if the number of stoves per household, the types chosen and the stove-mix were relevant for use by the target group and should be taken over during the main-part of the project
- To have learnings from users, partners and Caritas and get inputs for improving and adapting the project
- To prepare partners for a completely new program-type within the Caritas Austria program portfolio in South Sudan
- To prove if the stoves are energy and time efficient compared to the previous conventional stove types

Results assessment and feedback stakeholders

- Between 28th August and 15th September 2023 a post testing period assessment was conducted to 49/50 households selected for the testing period for the Energy Efficient Cook Stoves from Ugastove
- The partners and the selected number of households per each partner who participated in the testing phase are indicated in the table below

No	Partner	HH selected	HH participated in testing period	HH interviewed	
01	Solidarity with South Sudan-	20	19	19	
01	Riimenze	20	19	19	
02	Star Support Group	15	15	15	
03	Self Help Women Development	15	15	15	
03	Organisation	15	15	15	
	Total	50	49	49	

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Key observations (

- Over 90% of households who received two stoves each are using both of them daily
- Over 90% of households have abandoned all the other former cooking methods for the energy efficient cooking stoves
- No single stove was observed as damaged, meaning they are properly maintained and are durable
- All the users interacted with expressed joy for the stoves
- Many people in the neighborhood of the testing households expressed eagerness for the stoves
- There is high interest on environmental topics expressed by partner organisations and beneficiary households

Summary and Recommendations

- The role and responsabilities of the Caritas Austria South Sudan Office in the project structure shouldn't be changed: The office organizes the trainings and workshops and offers technical support to the partners, while the partners are responsible for implementation of the project activities and regular follow-up with the beneficiary households
- The interviews with the target groups will be done by partners with support of Caritas Austria Office South Sudan. All interviews will be conducted in the households of the target groups and not e.g. in the offices of the partner organizations
- One school of a partner with about 200 pupils should be included like a new target group of the project and an extra big (institutional) stove should be bought for it
- The types of the stoves recommended are one charcoal stove and one dual stove per household. This "stove-mix" shouldn't be changed during the project period
- The idea of producing stoves in the area shouldn't be forgotten even if it's not a key objective of the program
- The big interest of the community should be seen as chance for the climate mitigation: Partners should continue to raise awareness in the community about climate change. Caritas Austria should deliver regular information on CO2 savings concerning SPEEC-program and wellprepared information materials with key messages on environmental topics
- A sample of 30% of total beneficiaries for annual midterm surveys seems appropriate.

1.3.6.2. Selection of the households, baseline and midterm survey

To conduct a baseline, criteria for households' selection were developed as a precondition for selection of the beneficiary households and a profile of the beneficiary households was developed. After developing the selection criteria and profile of the beneficiary households, a baseline was conducted to identify the types of the existing cooking methods beneficiary households have been using including the fuel consumption of these cooking methods. 1,250 households were selected and interviewed by the partner organizations in different locations under supervision of Caritas Austria.

Criteria for beneficiary identification, selection and profiling:

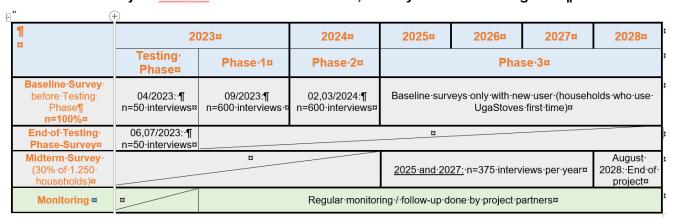
The participating households should be committed to comply with the minimum standard of operation/implementation e.g. documentation in the household book, willing to use the stoves, willing to be visited/monitored etc.

- The household uses open fire as cooking method
- Household/family member(s) participating in the project should have the ability to read and write this is important for the use of household book for proper documentation of key project results.
- > The participating household should be a participating beneficiary of the partner in the previous or current projects.
- ➤ The participating household should be committed to working with the partner for 4-5 years.

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- The household should remain committed to use and not to misuse the stoves during project implementation. This should be made clear during identification and selection of the beneficiary household.
- The selected household should be committed to gradually shift from the use of the traditional 3 fire-stones to the energy efficient cooking stoves.
- ➤ The selected household should be committed to participate in other related activities of the energy efficient cooking stoves e.g. awareness raising, trainings, planting and maintaining mango trees, documentation, monitoring and evaluation.
- > The household should be willing and committed to participate in research and other surveys related to the energy efficient cooking stoves.
- ➤ Participating household should have a multiplier effect by encouraging other community members to use the energy efficient cooking stoves.
- A participating household can also be a non-beneficiary member but remain committed to the terms and conditions stated above.

The following monitoring plan was developed for the SPEEC program:



Project·SPEEC: Procurement·stoves, Survey-and Monitoring-Plan¶

All the questionnaires and monitoring documents for efficient energy cooking stoves are documented and filed both in hard and soft copies for further references.

Questionnaire baseline survey and end of testing phase survey see Annex 2.

1.3.6.3. Purchase and distribution stoves

<u>Purchase and transport of the stoves</u>: From the beginning on the project-design of the SPEEC program was based on a cooperation with the company Ugastove, Uganda. Therefore, the SPEEC team entered immediately in contact with Ugastove to negotiate prices and delivery conditions. In April 2023 the first 100 stoves for the testing phase were ordered and stored in the premises of Caritas Austria in Yambio. Another 1.200 stoves were ordered after the testing phase in October 2023 and transported from Kampala to Yambio in December 2023. The third part of the stoves were ordered in December 2023 and transported to Yambio in February 2024.

<u>Delivery of the stoves to beneficiary households</u>: The stove management was done depending on the number of beneficiary households per partner and the number of stoves needed. A delivery note was signed by partners confirming the number of stoves received. Beneficiaries had to sign a letter of agreement which was a condition to receive the stoves. The agreement was signed by the person receiving the stoves, the partner organisation and Caritas Austria. The letter of agreement bears the same household number as in the baseline survey questionnaire for easy tracking of beneficiary

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households. A distribution list of the households also includes the same number for a particular household across all the documents. Each household got 1 charcoal stove and 1 dual stove.

The following distributions were done by the partner organisations to the beneficiary households:

SPEEC PROJECT - STOVES DISTRIBUTION PLAN

A. Testing Period

Partner	Number of Households	Number of stoves distributed	Date of Distribution
Solidarity-Riimenze	20	40	31.05.2023
SSG	15	30	01.06.2023
SHWDO	15	30	08.06.2023
TOTAL	50	100	

B. SPEEC Phase I

Partner	Number of Households	Number of stoves distributed	Date of Distribution		
Calidania Diimana	199	398	23.01.2024		
Solidarity-Riimenze	1	2	24.01.2024		
SHWDO	200	400	02.03.2024		
SSG	200	400	14.03.2024		
TOTAL	600	1,200			

C. SPEEC Phase II

Partner	Number of Households	Number of stoves distributed	Date of Distribution	
Callidade Dilasana	30	60	24.01.2025	
Solidarity-Riimenze	20	40	31.01.2025	
SHWDO	50	100	08.04.2024	
SSG	50	100	31.05.2024	
CCEWO	250	500	03.06.2024	
ICODO	200	400	30.05.2024	
TOTAL	600	1,200		

1.3.6.4. Training- and awareness-program for partners and target groups

• Workshop with trainers from UgaStove

In the first week of March 2023 a workshop on fuel-saving stoves as CO2 saving initiative took place in Yambio which was prepared and moderated by 2 managers of UgaStove who were coming from Uganda.

<u>Target group</u>: Project officers, field extension workers and representatives of women groups of 5 CBO partners. The number of participants reached 45.

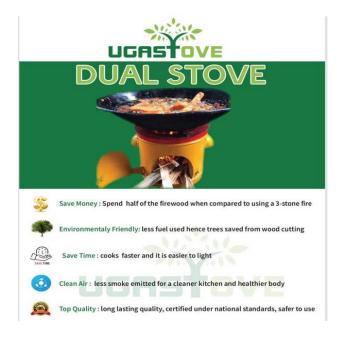
The workshop was focused on the following topics:

- Explaining advantages of fuel-saving stoves in comparison to traditional cooking techniques
- Training the proper usage of the stoves
- Practicing safe handling
- Testing fuel efficiencies
- General environmental topics

During the workshop the testing period for the stoves has been discussed together with the project managers of our implementing CBO-partners:

50 households who qualified for testing got two types of fuel-saving Ugastoves (Charcoal stove and the Dual- Charcoal / Firewood stove).

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During the workshop participants got introduced to the design of the SPEEC sub project "Improved cooking stoves" and had the opportunity to ask questions for clarifications. Hence, the workshop event was also used for a participatory approach in project planning.

The most exciting part of the workshop was the practical training using different types of Ugastoves and testing them versus the traditional cooking technics, like the "Three stone open fireplace" and the locally manufactured metal-stoves.

Moreover, participants learned how to use saw-dust as alternative fuel and how to measure the fuel efficiency of different types of cooing stoves. At the end of the workshop, all participants enjoyed the wonderful food which has been prepared during the cooking trails!

• Capacity building during selection of households, distribution of stoves and monitoring After the pilot phase all 1.200 households were trained by the field officers of the 5 implementing CBO-partners and target group leaders. The events during the distribution of the stoves, the baseline surveys and the monitoring interviews were used for training purposes. After the trial phase the concept was changed to the extent that the baseline interviews were conducted directly with the families in their homes and not, for example, in the office of the partner organization.

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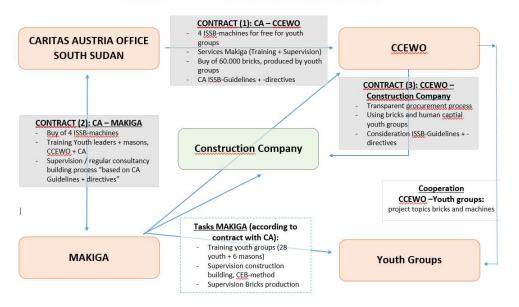
1.3.7. Activities to result 2 "Sustainable brick production is introduced in this region"

1.3.2.1. Contracting of Makiga company

The following entities were involved in the production of the bricks: Caritas Austria Office South Sudan, CCEWO (Consultation Centre for Empowerment and Welfare Organization), their youth groups and the Ugandan company MAKIGA. The construction company "Zone Engineers" comes into play as the 5th partner and was commissioned with the construction of the buildings via a tender process.

Within the SPEEC program, CCEWO is a sub-partner of Caritas Austria. The entire set of rules, including responsibilities, processes and budget was defined in a cooperation agreement between Caritas Austria and CCEWO. For the production of the bricks, Caritas Austria provided CCEWO with 4 ISSB brick pressing machines free of charge and paid for the material for the production of the 60,000 bricks, which are subsequently used for the construction of 2 buildings (Women Learning Center and Primary School). The bricks were produced by the youth who are trained, hired/commissioned and coordinated by CCEWO. CCEWO and the youth were supported by an expert from the company Makiga, who was commissioned by Caritas. CCEWO is obliged to handle the project according to the guidelines of Caritas Austria and to comply with Makiga's specifications in the production of the bricks.

SPEEC / BRICKS CONTRACT-CONSTRUCT



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Caritas Austria bought the 4 ISSB machines from <u>Makiga</u> and commissioned an expert from the company Makiga with the training of young people, leaders of the youth groups and masons. Youth got the following certificate for completing the training on sustainable brick production:



The Makiga expert Clement Walyendo accompanied the brick production and building construction during the whole duration. For doing this he had several consultancy missions to Yambio between September 2023 and December 2024. His presence was necessary to ensure the professional production of bricks and the professional construction of the buildings according to standards. His main tasks were the following:

- Participation in the kick-off workshop in March 2023
- Training of youth in production of the interlocked earth bricks
- Supervising the production of the bricks /
- Inspection and confirmation of the quality of bricks before construction begins
- Monitoring the construction process and consultancy to Caritas Austria, CCEWO, ICODO and the construction company
- Final Assessment of the buildings and certifications according to ISSB Method

1.3.2.2 Production of bricks for two buildings and construction of a Women Learning Center in Yambio

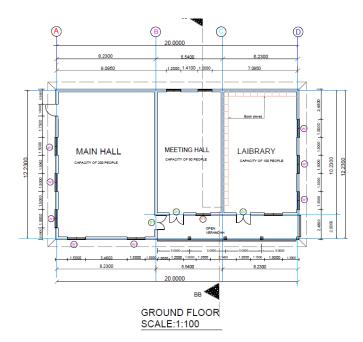
CCEWO was responsible for the management of the construction of the Women Learning Center in Yambio, while ICODO (Integrated Community Development Organization) was responsible for the construction of the classroom block at St. Peter Nursery & Primary School in Gangura (only bricks were purchased by the SPEEC program, costs for the construction of the building were not part of the SPEEC budget).

The 28 youth from Yambio who completed the training on sustainable brick production were hired by CCEWO to produce 30.000 bricks for the Women Learning Center in Yambio and 30.000 bricks for the primary school in Gangura. Youth were trained and supervised by the expert from Makiga company.

Both organisations selected the construction company in an independent tendering processes accompanied by Caritas Austria and with the consultancy of a lawyer of Caritas in South Sudan. Caritas Austria signed also a cooperation agreement with ICODO, which has stipulated that the bricks for the construction of the school must come from ICOCO's youth groups.

The company "Zone Enineering" was the winner of both tender processes and constructed the Women Learning Center in Yambio and the Primary School in Gangura. The contract with Zone Engineering was signed in November 2023 and construction work started immediately. The following is the ground floor plan of the building:

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The Women Learning Center in Yambio was inaugurated in August 2024 in the course of a big event with participants from important stakeholders of Yambio.

1.3.3 Activities to result 3 "There is supply and demand on the market in Western Equatoria State for sustainable bricks"

Activities towards the marketing of the ISSB brick production method and the extension of the services of youth will start in the second semester of 2025 after a review process. More options will be evaluated – either youth themselves open their own small companies (which demands high business skills of individuals who in majority don't have a higher education degree) or one brick production business is supported which then hires the trained youth as workers.

1.3.4 Activities to result 4 "A minimum of 1,250 households are aware of the environmental damages and the financial burdens caused by unsustainable cooking and construction methods"

There were regular contacts with the beneficiary households of the fuel saving stoves (during the selection process, baseline study and monitoring visits) which were also used to raise awareness on the importance of less use of firewood for cooking and the consequences on the environment and the family income.

Concerning construction methods, the population of Yambio knows about the methods used for the construction of the Women Learning Center. Mainly the inauguration in August 2024 was a perfect opportunity to raise awareness on environmental challenges in the region. A total of about 200 guests were present at this event including representatives of the Governor of Western Equatoria, the Bishop of the Dioceses and representatives of different civil society organisations.

More awareness, including radio emissions will be done in the coming years to have the topics of climate change and environmental protection high on the agenda. It is planned to organize radio talk-shows to sensitize listeners on fuel-saving stoves and environmental protection (e.g. via the local: Radio Anisa and FM-Yambio or on Eye Radio and Miraya FMon the national level).

These activities will be the focus of the project years 2025 and 2026.

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1.3.5 <u>Activities to result 5</u> "A minimum of 900 households have successfully planted one grafted mango-tree at their compounds"

Activities towards result 5 have started at the beginning of 2025

1.3.6 <u>Activities to result 6</u> "Scientific research on the introduction of sustainable cooking and construction methods done"

Activities towards this result will start in 2025

1.4. Challenges or obstacles encountered during implementation, lessons learnt and mitigation measures taken

<u>Challenge 1: Unclearness concerning acceptance of the new cooking and construction methods</u> Reactions:

- Intensive training facilitated by Caritas Austria and experts from Ugastove and Makiga
- Intensive communication between experts, partners and beneficiaries
- Clear and transparent legal framework: cooperation agreements between partners and Caritas and letter of agreement between partners and beneficiary households
- Test period documented to-do's and learnings

Challenge 2: Unclearness if the target groups use the methods in a correct way Reactions:

- 100 % baseline and monitoring by native speaking experts from the partner organizations
- Awareness raising on the correct use of the cooking methods
- Objective of the training was not only the correct use of the cooking methods but also the understanding of the overall impact of deforestation / environmental damages
- Regular meetings with the managers and multipliers of the partners

<u>Challenge 3: Managing transport challenges as a very critical point</u> Reactions:

- Some stoves were destroyed during transportation of the first batch. After long discussions with the responsible transport company, Caritas decided to manage the order of the destroyed stoves and the transport independently and within a short period of time
- Delivery of stoves to partners were documented and filed. Intensive coordination by Caritas
- Knowledge transfer with similar projects in other countries

Challenge 4: Limited budget and raising prices

Reactions:

- Important features of the project were not budgeted (e.g. training of local craftsmen for continuous production of the stoves) and solutions had to be found. E.g. training for multiplicators on the ground in Yambio (and not in Uganda) saved travel costs
- Challenge of inflation was already managed during the tender process of the construction of the building
- Flexible missions of the Makiga engineer, who was coming from Uganda

Challenge 5: Monitoring

Reactions:

- Taking into account that quality monitoring takes time and resources
- Learning from the test period: e.g. Interviews were done in the households and not in the office of the partners
- Training of the partners that they are doing the monitoring by themselves in good quality and using the correct templates

Challenge 6 Legal topics

Reactions:

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 Tender processes with intensive involvement of Caritas Austria office South Sudan and South Sudan lawyer

1.5. Implementing structure of the project

<u>The coordination organisation</u> of SPEEC is Caritas Austria in Yambio headed by the Country Manager South Sudan Werner Fritz with his "SPEEC team" Benjamin Ibako as Program Manager and Edward Rabbi and Enoch Dazanga as Extension Officers. Tasks of day-to-day business such as finance, monitoring or field work are handled according to the line organization.

Operational implementation is carried out with local organisations with which individual cooperation agreements have been concluded: Consultation Centre for Empowerment and Welfare Organization (CCEWO), Solidarity with South Sudan (SSS), Self-Help Women Development Organization (SHWDO), Star Support Group (SSG) and Integrated Community Development Organization (ICODO). These organizations are led by directors who meet regularly with representatives of the Caritas Austria Office in South Sudan.

The <u>project structure of each organisation</u> depends on the area of responsibility (stove-management, construction building, planting mango-trees...) and the individual organization. For example, at CCEWO, the Director took over the project management of the construction of the Women Learning Center himself, while at ICODO it was handed over to a Project Manager.

1.6. Coordination and cooperation measures taken concerning other stakeholders

Caritas involved central stakeholders from the very beginning::

 Representatives of all ministries and public bodies were invited to the openings of the new SPEEC buildings. About 20 of them give speeches. In the picture below, the ceremonial opening of the Women Learning Center. In addition to Caritas Country Manager, the Minister of Housing and Public Utilities, the Bishop's Office Manager and a Representative of the Azande Kingdom.



The project includes yearly sensitization workshops creating awareness about the impact of fuel-saving stoves, resource management and sustainable construction: Topics discussed during these events are: Alternatives to generate locally household fuel, sustainable charcoal production, replanting of trees, climate mitigation, principles of sustainable agriculture, sustainable construction and others. The last event took place November 5th 2024, the next one is planned in the first week of April 2025. Representatives of other Caritas, national or international partners, as well as opinion leaders, are also invited to these events.

During construction, Caritas invited youth leaders, masons, local authorities and the local population to eyewiteness the new method.

1.7. Sustainability of the project

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<u>Self-Sustainability of the target group</u>: The introduction of the new cooking methods to 1,250 households has helped the target group to save money as fuel consumption is minimum compared to when they were using the traditional and other cooking methods. The target group is now able to meet their cooking needs independently without depending on external support to meet their needs.

<u>Environmental Sustainability</u>: The target groups have been educated on the sustainability of the project by raising awareness on the impact of environmental degradation by reducing deforestation, using renewable energy, and managing natural resources responsibly to ensure environmental sustainability. E.g. massive cutting of trees for charcoal production affects the environment and contributes to climate change. If not addressed, this will affect environmental sustainability.

<u>Financial Sustainability:</u> Since the project is for 5.5 years, there is a clear long-term vision plan to continue the engagement of different stakeholders and target groups by incorporating financial sustainability through training youth groups in brick production and running it as a business. The project has developed a strong commitment and communication strategy for sharing information with stakeholders and documenting the project results.

The project stakeholders and target group have developed a very strong working relationship for coordinating implementation of project activities which has minimized both internal and external factors that could affect the sustainability of the achieved results.

1.8. Outlook for next reporting period

2025 the focus will be on following objectives:

- Training of 20 to 30 youth on the compressed earth brick method
- Training of 10 to 20 youth and representatives from our partners on essential business aspects
- Production of bricks for new buildings, constructed with compressed earth brick method
- Sensitization on environmental aspects
- Planting of 400 grafted mango-trees by about 200 households at their compounds
- Optimizing of the project monitoring using the tool Kobo

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2. SURVEYS, MONITORING AND EVALUATION

2.1 Stoves

A <u>baseline survey</u> was conducted during the testing period and the current phase of the SPEEC project (n=1.250 surveys). The purpose of the baseline survey was to determine the types of cooking methods already being used by the households, fuel consumption including challenges related to the existing cooking methods.

Every baseline information was documented to ensure that the stoves are managed well during and after the distribution by filling the questionnaires, signing the letter of understanding for the stoves and participation of the beneficiary households till the end of the project before the household could receive the stoves. This letter was signed by the household, the partner and Caritas.

A <u>monitoring plan</u> was developed by Caritas to assist partners in conducting monitoring with the beneficiary households as shown below:

<u>2024</u>

Partner	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
SSG	/	/	265	/	/	265	/	/	265	/	/	265
SSS	/	/	270	/	/	270	/	/	270	/	/	270
SHWDO	/	/	265	/	/	265	/	/	265	/	/	265
CCEWO	/	/	250	/	/	250	/	/	250	/	/	250
ICODO	/	/	200	/	/	200	/	/	200	/	/	200

A monitoring checklist supported partners to conduct regular monitoring and to follow up with the beneficiary households and then write monitoring report in the same format on the progress of the SPEEC project implementation.

Sustainable Brick Production and Energy-Efficient Cooking for Vulnerable Households in South Sudan QUARTERLY MONITORING CHECKLIST FOR PARTNER ORGANIZATIONS Checklist done by: Date: HH Number: Partner: _ 1.Presence of EE 2.HH using the EE 3.Conditions of the EE stoves after 4.If damaged in N0.3, please describe the 6.Any maintenance stoves for cooking & stoves with the HH HH started to use nature of damage by ticking any of the following that apply: on the stoves done by the household? boiling water Broke Broke Medium Dual Medium Yes No ed clay n clay lining n grate breaka top

7.List the po	ssible maintenan	ce made on the by ticking	stoves by t	the HH if yes in N0.6	S.List any onsite technical advice or induction you provided on the use of the stoves by the HH
Wear of the top	The cracked clay lining	Broken clay lining	Broken grate	Made a new prototype of stove	
9.Note any c	ther relevant obse	ervations you r	nade during	monitoring	10.Note any opinion or ideas on the stoves mentioned by the households

The information collected were used to coordinate the implementation of processes, identify challenges beneficiary households face while using the stoves and how these challenges can be mitigated. The monitoring plan will be optimized 2025 by using the online tool Kobo.

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2.2 Interlocking Blocks / Bricks

<u>Certificate for Inspection</u> in accordance with building regulations of Western Equatoria State for the Women Learning Center in Yambio. CCEWO received this certificate from the Ministry of Housing and Construction after an appropriate inspection. The presentation took place in the course of the opening by the responsible Minister.



Makiga Sample blocks have been tested for strengths and durability by the following organizations:

- Kenya Bureau of Standards
- Uganda Bureau of Standards
- Rwanda standards Board
- University of Bath
- Jome Kenyatta University and Technology

Annex:

Annex 1: Financial Report

Annex 2a: Carbon reductions report (1.1.2023 – 31.12.2024)

Annex 2b: ER with midterm

Annex 3: Fotos

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