Caritas

NARRATIVE INTERIM REPORT
1ST JANUARY 2025 – 31ST DECEMBER 2025

Title: SPEEC – Sustainable Brick Production and Energy-Efficient Cooking for Vulnerable Households in South Sudan

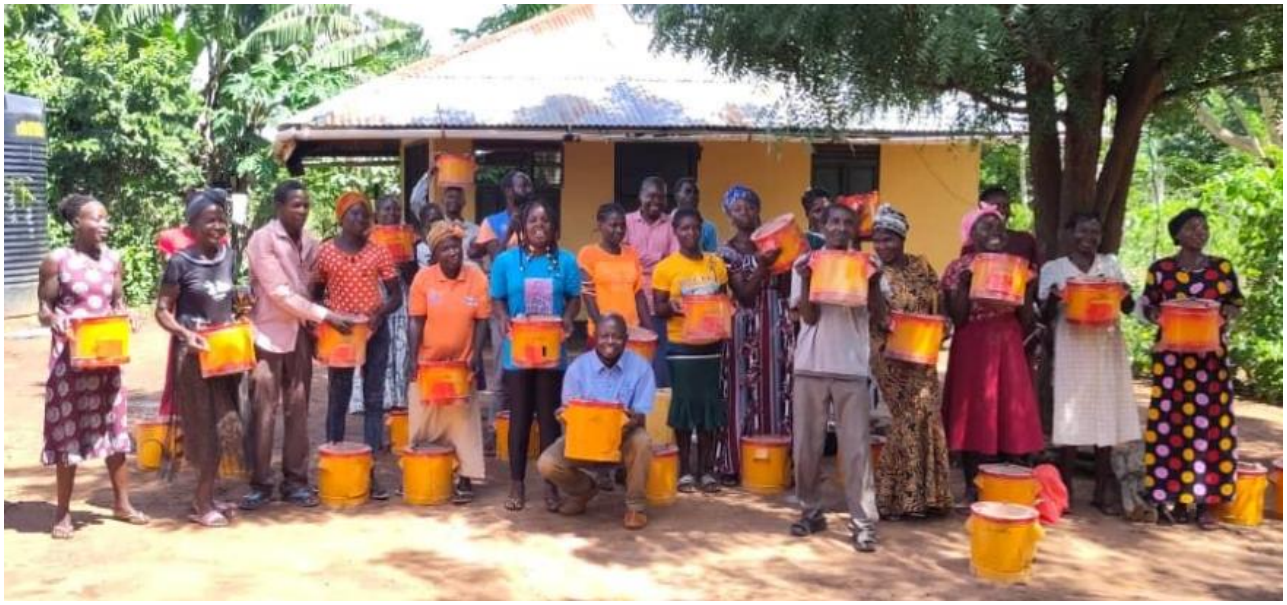
Start and End Date: 1st January 2023 – 31st December 2028

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	1st January 2023	to	31st December 2025	Sent on	28th February 2025



Date, author of report: March 2026, Werner Fritz and Benjamin Ibako

SUMMARY OF THE PROJECT PROGRESS

After 3 years of implementation the SPEEC program could already contribute to the saving of **7,679 t CO_2** by using energy saving stoves for cooking purposes.

(a)

In the first two years of the project, the focus was on building up the resources for the project priorities and making them available on site:

The machines for innovative and environmentally friendly brick production were delivered, the 5 partner organisations were prepared and the first 28 youth trained. The production of the first 60,000 bricks and the construction of the Women Learning Center in Yambio were seen as a model or prime example for future "ISSB Method Buildings" and all results were analysed accordingly, documented and presented to the public and stakeholders.

The 1,250 beneficiaries of the energy-saving stoves – who were still using open fire for cooking before SPEEC had started – were selected by the partner organizations and trained by experts and producers of the fuel saving stoves from Uganda. Learnings from the intensive test period were integrated into the processes before the project was rolled out.

An additional focus was on intensive information for all project participants and stakeholders about climate change and environmental topics and on generating great acceptance of the energy-saving stoves and sustainable construction methode.

(b)

During the reporting period 2025, the results of the "stoves quality checks" in all 1,250 households were completed by a midterm survey with 350 households. While user behaviour, especially the regular and correct use of the stoves by the households, is seen quite satisfactory, technical problems with several stoves were reported. Additional grates and tops were provided by the manufacturer and delivered. The monitoring visits were used to raise awareness on the importance of less use of firewood for coking and the consequences on the environment and the family income.

33 youth group members were trained on the Compressed Earth Brick Method. With the Nursery and Primary School in Gangura and the Bishop Hiiboro School in Diabio, two other buildings were constructed with this innovative method. The opening ceremonies were used for awareness raising and marketing for this type of construction technology.

The project part of grafting and planting trees will be set up new in 2026. In this year also the start of the scientific research of BOKU university is planned.

TARGET GROUPS

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
REACHED per reporting date	
Target groups (numbers and description)	Reached target until end of December 2025: • 1,250 households • 61 youth (12 female, 49 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 tCO_2 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 CO_2).*

In 2023 (94 tCO_2), 2024 (2,805 tCO_2) and 2025 (4,780 tCO_2[1]) the project saved 7,679 tCO_2 with substituting inefficient cooking methods with improved cookstoves (see Annex 2a and b for detailed calculation):

Year	**Planned** according to new calculation in 1st interim report	**Total Emission Reductions (Stoves)**
	Total Emission Reductions Stoves(tCO_2/y)	**(tCO_2/y)**
2023	94	94
2024	2,805	2,805
2025	4,027	4,780
Total	**6,926**	**7,679**

By the end of 2025, a total of three buildings, each made of 60,000 compact earth bricks, had been constructed. Emission savings for those three buildings have not been calculated yet. It turned out that it is difficult to establish a proper baseline, which is why the calculation is taking longer than expected. The resulting emission reductions are not currently factored into the calculations.

[1] If BOKU University agrees on adapting all mentioned values

1.2. Progress towards planned Results

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

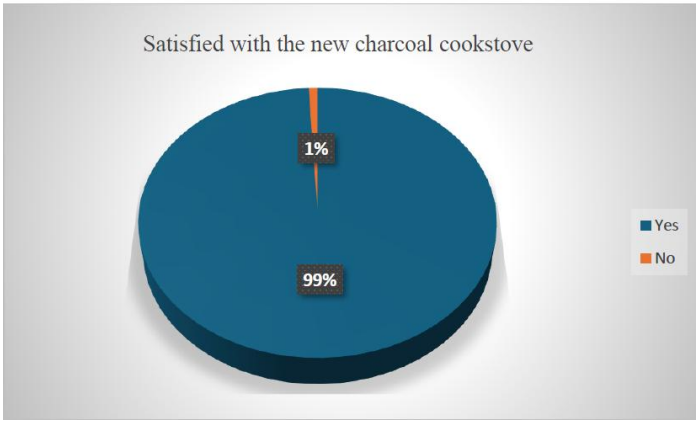
Indicator 1: *after 6 years, 1,250 households use fuel-saving stoves for cooking*

The main part of this objective was already achieved in the second project year, when the training for the households and the delivery of the stoves was finished.



In the first part of 2025 Caritas Austria coordinated “stoves quality checks” in all 1,250 households, who got 2,500 fuel saving stoves during the first two years of the project. The results of these checks were completed by a midterm survey with 350 households *(see chapter 5, “Surveys, monitoring and evaluation”).*

The midterm survey confirms that nearly 100 % of the households use the stoves regularly for cooking and are very satisfied with them.



The planned refresher training by a representative of UgaStove couldn’t take place because of security problems in Western Equatoria State and the tasks were taken over by the field officers of the SPEEC partners as part of the monitoring visits.

While user behaviour, especially the regular and correct use of the stoves, is very satisfactory, technical problems with several stoves (only charcoal stoves medium) were reported during the reporting period. The problem was solved by providing graves and tops from the manufacturer. Faulty stoves can thus be "repaired" by the caregivers of the beneficiaries themselves without having to replace the stoves. This topic will also accompany us in the following year. The next delivery from Uganda is expected in the first week of May 2026, and immediately afterwards there will be follow-up training for the project partners, who are in direct communication with the households. Pictures see chapter 5.

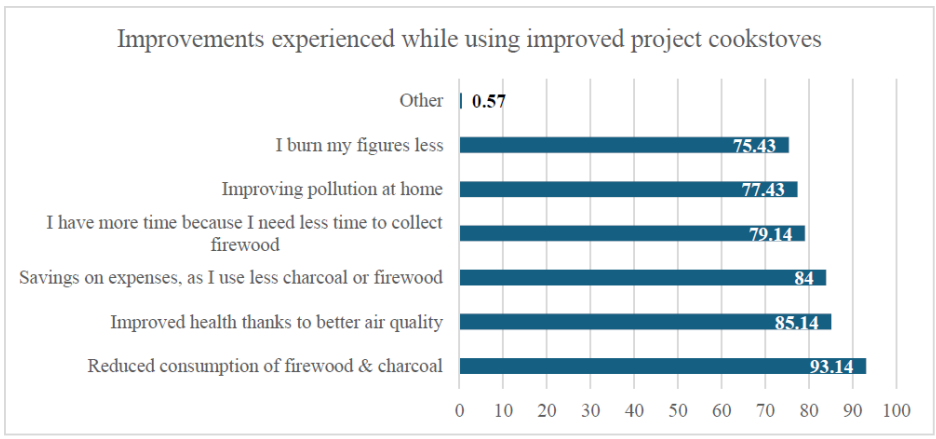
Indicator 2: *after 6 years, 1,250 households report income savings by use of fuel-saving stoves*

In order to analyze this indicator, the questionnaire for the midterm survey 2025 was adapted.

The survey shows that 84% of our beneficiaries have been able to save on expenses while using less charcoal or firewood using the fuel-saving stoves. Other results:

- 93% of the beneficiaries experienced reduced consumption of firewood and charcoal
- 85% experienced improved health,
- 79% have more time to do other tasks,
- 77% said pollution at home improved and 75% now have less burning of fingers.

16.2. Improvements experienced while using the improved project cookstoves



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

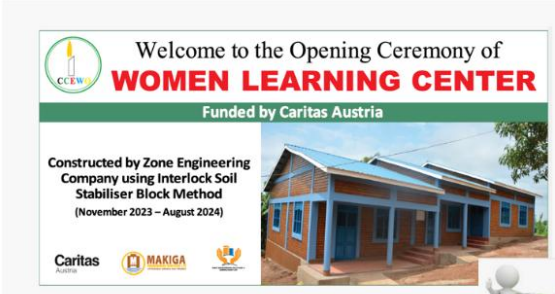
As already documented in the year two report of the SPEEC program, the new bricks production was well introduced in the project region. The innovative method and the involvement of youth people was very well accepted by the community. Representatives of nearly all relevant institutions and authorities (especially governor, ministers, and chiefs from the communities) turned to Caritas Austria, praised the buildings constructed in this way and showed their great interest in SPEEC project.

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

This objective was already achieved in August 2024, when the Women Learning Center was officially opened.

Results (based on indicators)

One „Women Learning Center" constructed with the bricks (produced by the youth)



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

This objective was already achieved in August 2024, when training for 28 youth was finished.

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

This objective was also already achieved in 2024: 28 trained youth were employed by the local partner organization CCEWO (Consultation Center for Empowerment & Welfare Organization) to produce the bricks for the Women Learning Center in Yambio and the Nursery and Primary School in Gangura (opening 2025, see picture below on the right hand).

Results (based on indicators)

60.000 ISSB-bricks are produces by the youth





oyed for the production of bricks. Some of them e Bishop Hiiboro Nursery and Primary School, another ISSB community building project that has started.



The school was finished 2025 and officially blessed and opened by the Bishop in May 2026.

1.2.3 Result 3: There is supply and demand on the market in Western Equatoria State for sustainable bricks

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

In the first 3 project-years in total 61 youth people have been trained in / were earning income through sustainable brick production and / or construction of community buildings.

In the project period 2025, Caritas Austria has forced its efforts to sensitize other stakeholders (authorities, other NGOs) and the local population to use the earth brick method for their own constructions.

The indicator that 100 trained young people generate income through the production of ISSB bricks and participation in the construction of buildings should be achieved. However, a deviation from the premises in the course of the project description 2021 and 2022 is essential: If a building is constructed, a tender is usually necessary that includes the construction of the building with the production of the bricks needed. Young people and start-ups usually do not meet the formal criteria for these tenders (successfully completed projects, legally correct company, proof of capital, number of employees who receive regular salary, etc.). In contrast, construction companies are increasingly demanding trained specialists. If the buildings are constructed in Western Equatoria, residents have a competitive advantage over external parties who travel for the job.

<u>The focus of SPEEC in the second half of the project (2026-2028), is in the following directions:</u>

- Pushing of the establishment of construction companies specialising in this method.
- Basis training of further youth and additional (follow up) training for already trained people.
- Boosting private demand, i.e. the construction of buildings that does not come from international development projects.

In the tender documents of the organisation Shalom for the Bishop Hiiboro School, an ISSB construction method was expressly assumed. Furthermore, the employment of young people was positively taken into account in the evaluation scheme. The application of more than 6 attractive construction companies shows that the market is already reacting to the impulses from the SPEEC project.

1.2.4 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*

Caritas Austria has created training documents on this topic and translated them into the language of the Azande. The field officers of the SPEEC partner organisations were trained and commissioned

to take the issues with them in their monitoring discussions and to sensitise the 1,250 beneficiaries accordingly.



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Guideline for SPEEC Environmental Awareness Campagne:

Fuel saving stoves reducing firewood and charcoal for forest protection and fighting climate chance

The problem:

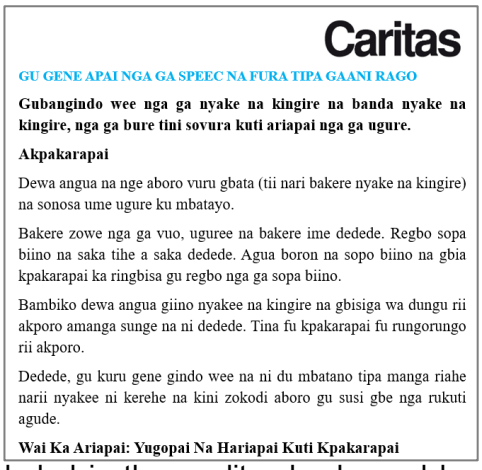
Deforestation and growth of urban population (Consuming more and more firewood and charcoal) are increasing the negative impact of climate changes.

Wild bush fires, draughts and unpredictable floods are more frequently. Agricultural seasons are changing and farmers are facing problems to plan for their cultivation.

Because of deforestation the prices of firewood and charcoal as main household fuel have increased enormously. This is affecting the poorest of the poor households.

Moreover, the traditional way of using open fireplaces as main cooking facility is consuming high amounts of firewood and risks of getting burned, especially for small children, are high.

How to do a change: Awareness and solutions



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GU GENE APAI NGA GA SPEEC NA FURA TIPA GAANI RAGO

Gubangindo wee nga ga nyake na kingire na banda nyake na kingire, nga ga bure tini sovura kuti ariapai nga ga ugure.

Akpakarapai

Dewa angua na nge aboro vuru gbata (tii nari bakere nyake na kingire) na sonosa ume ugure ku mbatayo.

Bakere zowe nga ga vuo, uguree na bakere ime dedede. Regbo sopa biino na saka tihe a saka dedede. Agua boron na sopo biino na gbia kpakarapai ka ringbisa gu regbo nga ga sopa biino.

Bambiko dewa angua giino nyakee na kingire na gbisiga wa dungu rii akporo amanga sunge na ni dedede. Tina fu kpakarapai fu rungorungo rii akporo.

Dedede, gu kuru gene gindo wee na ni du mbatano tipa manga riahe narii nyakee ni kerehe na kini zokodi aboro gu susi gbe nga rukuti agude.

Wai Ka Ariapai: Yugopai Na Hariapai Kuti Kpakarapai

The awareness of environmental damages was also included in the quality checks and brought following result:

During the environmental awareness campaign, it was found that 63% beneficiary households were already aware of environmental damages with only 37% were not aware of environmental damages. The partners will continue with the awareness on environmental damages this year during the quarterly quality checks.

1.2.5 Result 5: A minimum of 900 households have successfully planted one grafted mango tree at their compounds

Indicator: *75% survival rate of planted mango trees*

The idea was to graft mango trees and to distribute them to the households. Caritas started a first sub-project for grafting with Riimenze Farm (implementing partner: Solidarity with South Sudan) and a second with Star Trust. Both were not successful. In 2026 this activity will be set up newly – Caritas is discussing with BOKU University to switch from mango trees to another tree, e.g. avocado.

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 2026-2028.

1.3. Progress towards Planned Activities

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

(1)	A first baseline on the recent cooking methods was conducted in 2022 including discussions with women focus groups on their preferences in cooking stoves.	**Activities finished before project year 3 (=actual**
(2)	Decision Technology: The project promoted UgaStoves, a Ugandan fuel-saving stove, to reduce firewood consumption and CO_2 emission and contribute to less pollution during cooking: *"The Ugandan Company is well known in the region representing 30 years of experience supervised and promoted by GIZ and other international companies. Moreover, compared with other fuel-saving stoves in*	

East Africa, UgaStoves have a high thermal efficiency of 27.3%. Traditional open-fire stoves have an efficiency of only 10%."



(3) Purchase of 100 improved UgaStoves (50 firewood stoves, 50 charcoal stoves) and distribution to 50 households for testing phase.

(4) The testing phase for 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.

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	

(5) Purchase of 2,400 subsidized improved stoves and preparation of the distribution to 1,200 households.

The implementing CBO-partners were responsible for identifying beneficiary households according to specific criteria like the size of households, the number of fireplaces, mode of preparing the daily dishes. Caritas purchased the stoves and coordinated the transport to Yambio and the distribution to the beneficiaries through the SPEEC partners.

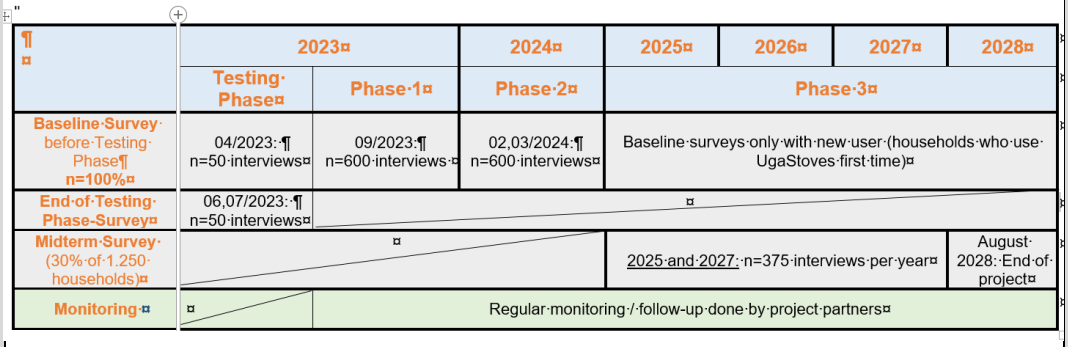
(6) After intensive awareness creation and training in proper usage of UgaStoves, 1,200 stoves were distributed to the households (2 stoves per household). The project didn't ask for a contribution from each household. Participants had to commit to shifting from the traditional three-stone-open fireplaces to fuel-saving stoves.

B. SPEEC Phase I

Partner	Number of Households	Number of stoves distributed	Date of Distribution
Solidarity-Riimenze	199	398	23.01.2024
	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
Solidarity-Riimenze	30	60	24.01.2025
	20	40	31.01.2025
SHWDO	50	100	08.04.2024
SSG	50	100	31.05.2024
CCEWO	250	500	03.06.2024

(7)	Regular accompaniment of families and monitoring of the impact. **Project·SPEEC:·Procurement·stoves,·Survey-·and·Monitoring-Plan¶**  	
(8)	During the reporting period 2025, the results of the "stoves quality checks" in all 1,250 households were completed by a midterm survey with 350 households *(see chapter 5, "Surveys, monitoring and evaluation").*	**Activities project year 3 (= actual reporting period)**
(9)	Technical problems with one type of Uga-stove: While user behaviour, especially the regular and correct use of the stoves by the households, is seen quite satisfactory, technical problems with several stoves were reported. Project team tried to solve the problem by providing grates and tops from the manufacturer. Faulty stoves can thus be "repaired" by the caregivers of the beneficiaries themselves without having to replace the stoves. This topic will also accompany us in the following year.	
(10)	Ordering of 5 additional instutional stoves for schools (100 l) to increase the number of beneficiaries and the amount of CO2 saving. And to reach with the students from the schools a new target group for the environmental topics of the project.	
(11)	The planned refresher training by a representative of UgaStove couldn't take place because of security problems. The tasks were taken over by the field officers of the SPEEC partners as part of the monitoring visits.	

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

(1)	Decision Technology: Result 2 of the project focuses on promoting sustainable brick production. The project introduced the Compressed Earth Block method, aiming to replace the traditional method of burning clay-brick for local construction, which consumes a tremendous amount of firewood and contributes highly to deforestation and CO2 emission. The earth blocks are compressed by manual brick press machines producing interlocked blocks. The technique uses a minimum amount of cement for construction. The advantages of that method have been well-proven in local housing projects in West Africa.	**Activities finished before project year 3 (= actual reporting period)**

		
(2)	<u>Contracting of Makiga Company</u> for the supply of 5 block machines, training of youth leaders and masons and regular consultancy and training of six masons. Makiga Company in Kampala, Uganda, manufactures appropriate technology for low-cost house construction in Uganda using the compressed earth block method. 	
(3)	<u>Training of 28 youth in compact earth block technology:</u> 28 youth from selected youth groups in Yambio who are already engaged in brick making were trained by technical experts of Makiga company on the production of bricks using the compact earth block technology. The content of the three-day training was the following: • Safety precautions while using the ISSB machine. • Parts and functions of the machine. • Servicing of the machine and its importance. • Correct soil selection and sieving for the production of the inter-lock bricks. • Calculating the correct ratio of soil, sand, cement, and water-prove cement. • The correct way of mixing the soil, sand, cement, water prove cement and water. • Correct filling of the machine with the earth, pressing the machine and removing the ready compressed brick from the machine. • Correct arrangement of the compressed bricks for drying and curing of the bricks. • Constructions of the corners using the inter-lock bricks. • Constructions of joint T in the building using the inter-lock bricks. • Constructions of double pairs and single pairs using the inter-lock bricks. Training of masons on construction with interlocked bricks separately and “on-the-job”.	

(4)	Production of 60,000 bricks for two community buildings: The trained youth were hired by CCEWO to produce the bricks for the two community buildings.	
(5)	Contracting a construction company for the construction of the buildings: The best bidding company for the building will be selected after a transparent procurement process. Contracts were signed with the partner organizations ICODO (Gangura Nursery and Primary School) and CCEWO (Women Learning Center).	
(6)	2025, the Opening Ceremony of Nursery and Primary School in Gangura was used for awareness raising and marketing for this type of construction technology.	**Activities project year 3 (= actual reporting period)**
(7)	With the Bishop Hiiboro School in Diabio, the construction of another Nursery and Primary School building (constructed with compressed earth brick method) was pushed. The project was financed by Caritas Vienna and started 2025. The Opening Celebration took part in the first quarter of 2026. The bricks where again produced by youth, who had been trained before.	
(8)	Marketing activities to make the production of inter-lock bricks and the construction of houses according to the Compressed Earth Block Method interesting for private and public builders.	
(9)	Intensive Stakeholder Management by the SPEEC partners and by Caritas Austria to promote sustainable brick production in the region of Western Equatoria State.	

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

(1)	Training of 28 youth group members on the Compressed Earth Brick Method.	**Activities finished before project year 3 (reporting period)**
(2)	Construction building 1: Women Learning Center in Yambio (financed through SPEEC project).	
(3)	Construction building 2: Nursery and Primary School in Gangura (not financed by SPEEC)	
(4)	Intensive public relations and awareness raising.	**Activities project year 3 (=actual reporting period)**
(5)	Construction building 3: Bishop Hiiboro School in Diabio (not financed by SPEEC).	
(6)	Training of 33 youth group members on the Compressed Earth Brick Method.	
(7)	SPEEC partner CCEWO started and registered a new organisation, specialised on this innovative technology: "Creative Youth Group Production and Construction (Operation Licence Number: No-000125" Their key staff members are youth trained within SPEEC program.	

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"

(1)	Sensitization events on environmental aspects stoves: The project foresees 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 (saw-dust-stoves, living hedge for firewood production, appropriated small-scale biogas), sustainable charcoal production, replanting of trees, climate mitigation, principals of sustainable agriculture, sustainable construction and others. The target groups of these events are the targeted households in the program, but also the population of Yambio town. In the first 2 years of the project, this training and awareness raising was included in the intensive training and monitoring program for partners and beneficiaries.	**Activities finished before project year 3 (= actual reporting period)**
(2)	Sensitization events on environmental aspects bricks: During construction time of the buildings, our partner organizations invited youth leaders, masons, local authorities and the local population to eyewitness the CEB method using the ISSB- technique. These events were meant as a discussion-forum allowing critical questions and observations. The young people received this information in the course of the professional training of the expert from the Makiga company. The most effective events in terms of public relations were the Opening Celebrations for Women Learning Center in Yambio and the Primary School in Gangura. Even local and national radio stations have reported on the school buildings and tried to sensitize listeners to fuel-saving stoves and environmental protection.	
(3)	Fuel saving stoves: Monitoring visits with the beneficiary households of the fuel saving stoves were used to raise awareness on the importance of less use of firewood for cooking and the consequences on the environment and the family income. The local field workers of the partner organisations who carried out the monitoring were trained in these topics and received information material and handouts in the local language.	**Activities project year 3 (= actual reporting period)**
(4)	Environmentally friendly brick production and building construction methods: the population of Yambio knows about the innovative method used for the construction of the Women Learning Center. Mainly the Opening Celebrations for the Nursery and Primary School in Gangura and the information about the construction process of the Bishop Hiiboro School in Diabio were a perfect opportunity to raise awareness on environmental challenges in the region. E.g. Gangura: A total of about 200 guests were present at the Opening – including representatives of the Governor of Western Equatoria, the Bishop of the Dioceses, local Authorities and Representatives of different civil society organisations.	

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

The idea was to graft mango trees and to distribute them to the households. Caritas started a first sub-project for grafting with Riimenze Farm (implementing partner: Solidarity with South Sudan) and a second with Star Trust. Unfortunately the mango grafting encountered many challenges and both trials were not successful.

In 2026 this activity will be set up newly – Caritas is discussing with BOKU University to switch from mango trees to another tree, e.g. avocado.

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*

Activities towards this result are planned for the years 2026-2028.

2. CHALLENGES DURING IMPLEMENTATION, LESSONS LEARNT AND MITIGATION MEASURES TAKEN

2.1. Challenges year 1 and 2 done

- Unclearness concerning acceptance of the new cooking and construction methods
- Unclearness if the target groups use the methods in a correct way
- Monitoring
- Legal topics

2.2. New challenges

- Challenge 1: Stove quality
  Both the quality check and the midterm survey found that many of the top wear and the grates have been damaged making cooking difficult.
  ➔ Reactions: the top wear and grates were ordered from Ugastove.

- Challenge 2: Youth don't open their own business
  The original plan was that youth will be trained on business skills and will open their own brick business. But most of them are analphabets and the market is not big enough for many small brick production businesses.
  ➔ Reactions: The project will follow the "movement of the market", that constructing companies and CBO open their business and employ the trained youth.

- Challenge 3: Security Situation
  The political instability in South Sudan which leads to insecurity across the country hindered implementation of some key project activities e.g. refresher training on utilization of cookstoves.
  ➔ Reactions: This training is planned to take place in September 2026

- Challenge 5: New technology – building houses without donors
  There is a fear that if this new technology is not adapted and marketed without donor support, this may not be applied once the donor support ends.
  ➔ Reactions: continuous engagement of stakeholders and marketing of the ISSB technology for production of bricks and construction of houses and institutions. Intensive support on marketing issues to the partner CBOs.

3. SOCIAL IMPACT AND COOPERATION WITH STAKEHOLDERS

The SPEEC project goes far beyond CO2 saving or climate action. In order to understand the effect on the population in Western Equatoria State and on authorities, it is important to keep the actual situation in mind:

South Sudan is the second poorest country in the world according to the Human Development Index. The population is facing complex political, social and economic challenges:

- The risk of war remains high. The war in neighbouring Sudan, which has been raging since 2024, is exacerbating the situation.
- In total, the conflict in South Sudan has displaced 2.2 million people from their home villages. The number of internally displaced persons (IDPs) and refugees continues to rise.
- 7.7 million people in South Sudan do not have access to sufficient food and suffer from hunger (IPC phase 3 or severe). The plight is particularly evident among children: 2.1 million children under the age of 5 are affected by malnutrition, some of them acutely.
- The trade route to war-torn Sudan is cut off and further isolates South Sudan. The withdrawal of American support leads to the suspension of humanitarian projects that are essential for survival.
- Government employees, police officers, and military personnel often receive no salary for up to a year, which has implications for crime and corruption.
- The increasing frequency of floods and droughts affects the poorest areas.
- The education system is one of the most disadvantaged in the world: an enormously high illiteracy rate of up to 80% in rural areas, a lack of teachers and infrastructure, a lack of materials and catastrophic hygienic conditions.

And in this phase, Caritas Austria and BOKU university come up with an innovative programme called SPEEC:

- 1,250 families have received Uga-Stoves, giving them a way to "cook more cost-effectively, tastefully, time-savingly, and environmentally friendly." This number is not so small in a region like Yambio. The average number of family members or eaters at the table will be over 8 people in any case. Through our 5 partner organizations, we reach the poorest of the poor, often living in the middle of the rainforest that is difficult to reach. The distribution of stoves and training often take place at the partners. Then the (mostly) women go back to their families in all directions, mostly on foot, sometimes by bike, rarely by motorcycle.

- People were involved from the very beginning of the project, asked about their habits and interests. Despite the struggle for survival, they are interested in the environment. Every year there is at least one personal meeting at their home (monitoring session), where questions are answered and news is recorded. In their language, by a well-trained field worker. The start up workshops were facilitated by experts from Makiga and Ugastove.

- 3 schools have already been built with the new method: Vocational training courses are regularly held at the Women Learning Center in Yambio. More than 400 children are taught in the two primary schools in Gangura and Diabio.

- 63 young people have already received attractive vocational training through SPEEC (brick production). The certificate was presented to them either by the bishop or by the Minister of Housing. More important: All of them were able to contribute their knowledge in the production of bricks for the 3 buildings and/or in the construction of the schools and earn money for their families.

- All relevant authorities and representatives had been invited for the start up events and opening celebrations. And they actually come, show their respect and great interest and then serve their social media channels and target groups. For example, the openings of the schools were broadcast live on Bishop Hiiboro's Facebook channel. Excerpt from a press

article: “Residents describe the new facility as a source of great hope, significant relief, and tangible support for a village that has long been underserved.

- The SPEEC project team receives feedback again and again that this project has a huge presence and visibility in the region and that it is always talked about (about bricks, vocational training, stoves, environmental protection, planting trees, etc.). There is hope and people feel valued and grateful for the help. The interest of the population in environmental issues and the great desire for change should not be underestimated.

4. INTERLOCKING STABILIZED SOIL BLOCKS, ISSB (VOCATIONAL TRAINING FOR YOUTH)

This report is on the three SPEEC Interlocking Stabilized Soil Blocks (ISSB) trainings 2025 in Yambio and Diabio.

4.1. Makiga Company

Makiga Company manufactures appropriate technology for low-cost house construction in Uganda using the compressed earth block method. The earth blocks are compressed by manual brick press machines producing interlocked blocks. The technique uses a minimum amount of cement for construction. Makiga is offering training to constructors and local masons using the compressed earth block method. The role of Makiga in SPEEC program:

- o Training for youth for sustainable brick production
- o Training of masons for building constructions with interlocked bricks
- o Supply of brick press machines
- o Supervision/Advise for the construction of two community buildings.

4.2. Trainings

- First Training: 20th March – 22nd March (3 days), Yambio, 15 youth
- Second Training: 14th July – 18th July 2025 (5 days), Diabio, 20 youth
- Third Training: 2nd September – 5th September 2025 (4 days), Yambio, 10 youth

The trainees learnt:

i. General information about ISSB technology, i.g. meaning of ISSB technology, materials used for making ISSB blocks, advantages of ISSB over other types of blocks and machines used in the process.

ii. Steps of making ISSB in details.

- ✓ Soil preparations, soil sieving and soil testing



- ✓ Blocks making: Batching of the materials, mixing of the materials, loading the press, pressing the block and ejecting the block from the machine.





✓ Blocks stacking and curing



✓ Testing the quality of the blocks: drop test, water absorption, bridge…

iii. Basic building guideline

The trainees received training on the basic building guideline such as;

- ✓ Foundation
- ✓ Cement sand mortar mixing
- ✓ Corner and around opening
- ✓ Beam work
- ✓ Intersections like L-section, T-section, + -section etc.

4.3. Certification

All the freshly training 33 youths were awarded certificates at the end of each of the three trainings. Certificates were signed by Clement Walyendo on behalf of MAKIGA, Benedict Wingba on behalf of CCEWO and Werner Fritz, Caritas Austria. These certificates show that they have gone through training about how to make and use ISSB for construction.



4.5 List of trained youth

20. – 22. March 2025, Yambio

1. Emmanuel Sebit Francis
2. Mboringba Grace Thomas
3. Tondu Baptist Wingba
4. Gaaniko Isaac Angelo
5. Maire Nelson Anthony
6. Rimorewo Joseph James
7. Jacob Bakosa Enosa
8. Nanyoyo Stella Micheil
9. Thomas Kisanga Adriano
10. Bakerepai Fred
11. Citward Kabas Angelo
12. Christine Severino Philip
13. Derick Nyakangba Paul
14. Jackson John Zakayo
15. Maku Bernado Wingba

1. – 5. September 2025, Yambio

1. Daru Luke Patrick
2. Solomon Sarah Sabit
3. Biara Alex Frances
4. Miniallah Elias
5. Jackline John
6. Elias Paul Rasu
7. Dengbari Martin Bakote
8. Natalia William
9. Bakata Joseph
10. David Simon

14. – 16. July 205, Diabio

1 Clement Kalesto
2 Emmanuel Faustino Apayo
3 Zangagume Gabriel Anicento
4 Peter Ernesto Duakiti
5 James Woduapai Danato
6 Mark Raphael Tumba
7 Peter Justin Anthony
8 Jackson Justin Duakiti

SURVEYS, MONITORING AND EVALUATION

5.1 Energy-Saving Stoves

During the reporting period 2025, the results of the "stoves quality checks" in all 1,250 households were completed by a midterm survey with 350 households.

Summary of the results:

A) Quality Checks

→ Stoves – during the quality checks, it was found that 0.08% of the stoves (2 dual stoves) had total whole breakage from two different beneficiary households while 99.92% stoves (both charcoal and dual stoves) are still in good condition despite the damage to the top wear and the grates as shown in the picture below:



→ Minor repair of stoves – the quality checks also found that some beneficiary households were making some minor repairs mainly of the top wear and the grates as shown below:



Modified Top Wear



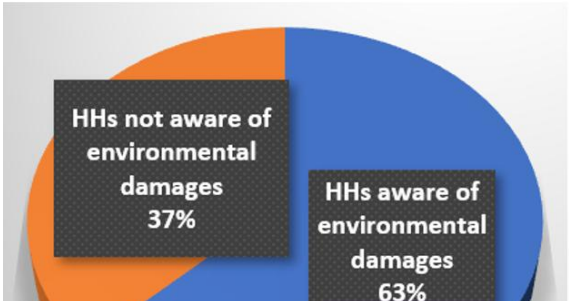
Grate



Newly made Top Wear

These repairs were individually made by different beneficiary households.

→ Environmental damages – environmental awareness campaign was one of the most important topics discussed with the beneficiary households (HHs) and the result is shown below:



B) Midterm Survey

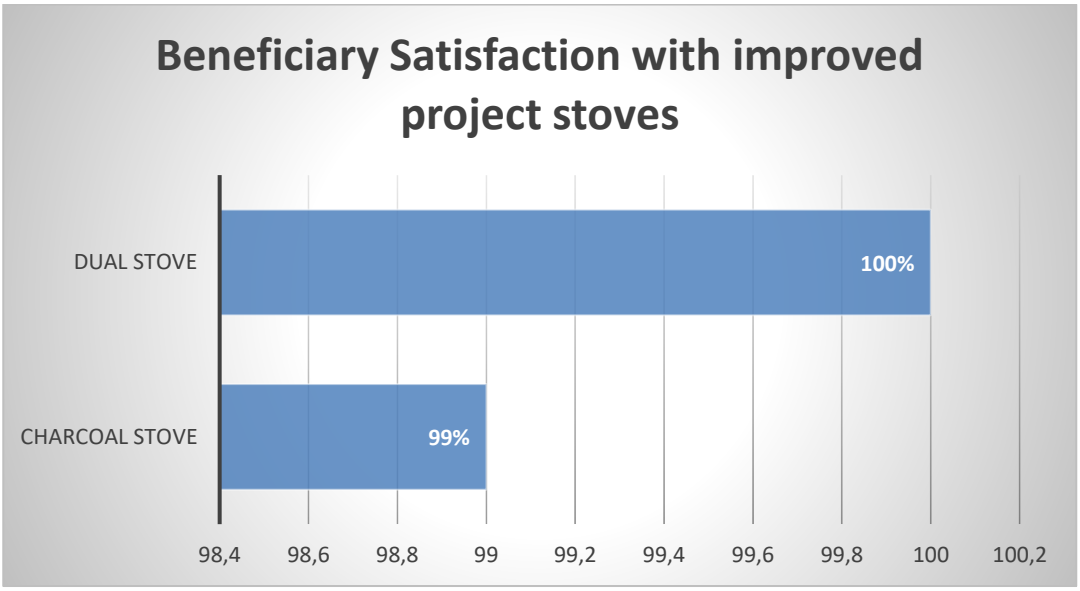
→ Number of hours spent cooking food for family: 47% of the beneficiaries interviewed said they spend 1 hour cooking for family members, 14% spent 1.5 hours, and 17% spend 2 hours. The survey also found that there is unattended cooking practice among beneficiaries.

→ Stoves used for cooking or boiling water: 93% use improved project stoves (charcoal only) and 92% use improved project stove (wood and charcoal, dual).

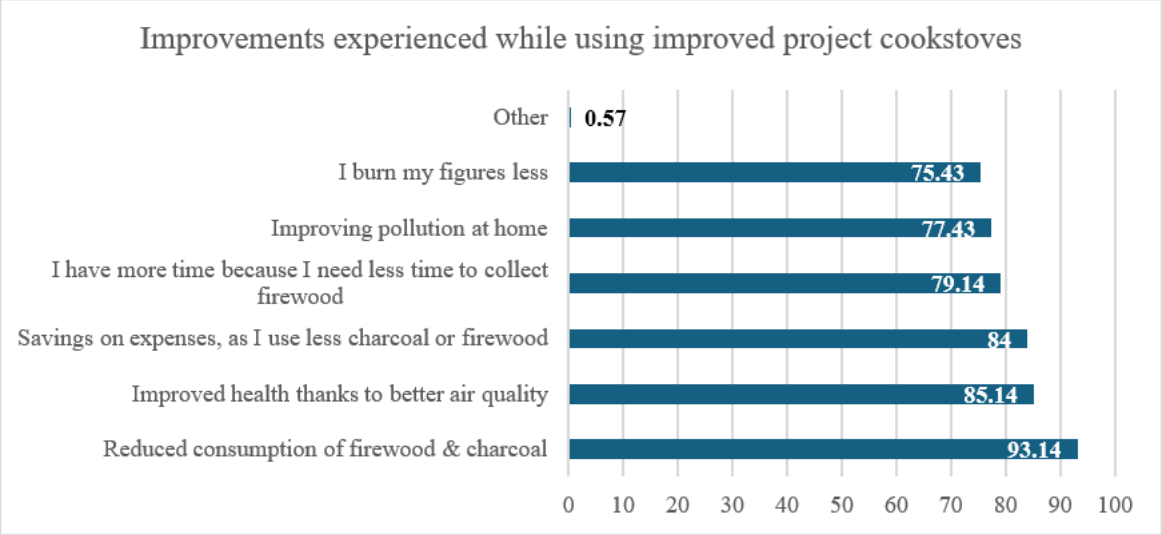
→ Types of fuel used for cooking or boiling water: 95% beneficiaries use charcoal and 85% use firewood.

→ Condition of the improved project stoves: 76% (charcoal only) and 63% (wood & charcoal-dual) are damaged.

→ Beneficiary satisfaction rate with the improved project stoves: 99% are satisfied with charcoal stove while 100% are satisfied with dual stove.



→ Health benefits of the improved project stoves: Beneficiaries expressed health benefits of the stoves as seen below:



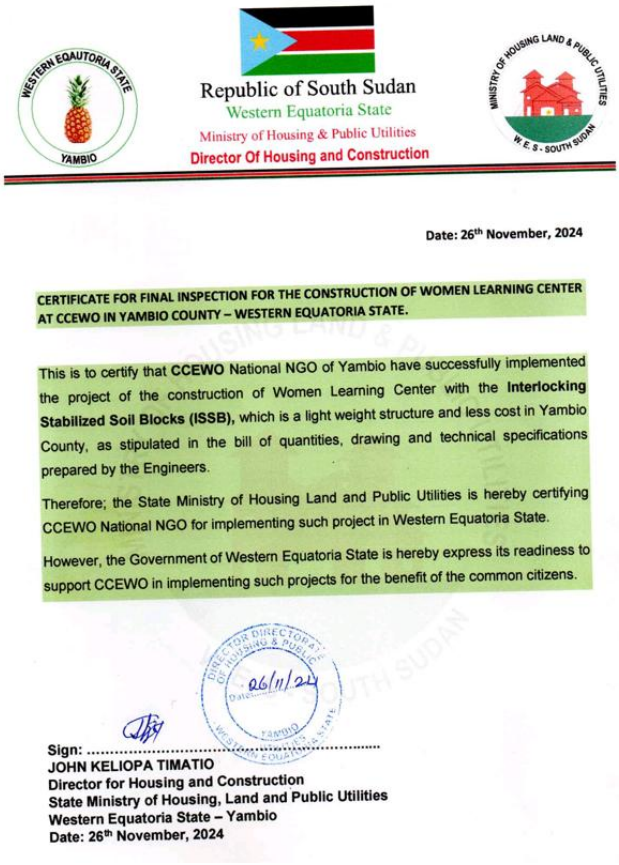
C) Learnings

→ Households' quick adoption to efficient energy cookstoves and using daily for cooking.

→ Beneficiaries in rural setting prefer dual stove while in urban setting, they prefer charcoal stove.

5.2 Interlocking Blocks / Bricks

Certificate for Inspection 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.



Republic of South Sudan
Western Equatoria State
Ministry of Housing & Public Utilities
Director Of Housing and Construction

Date: 26th November, 2024

CERTIFICATE FOR FINAL INSPECTION FOR THE CONSTRUCTION OF WOMEN LEARNING CENTER AT CCEWO IN YAMBIO COUNTY – WESTERN EQUATORIA STATE.

This is to certify that **CCEWO** National NGO of Yambio have successfully implemented the project of the construction of Women Learning Center with the **Interlocking Stabilized Soil Blocks (ISSB),** which is a light weight structure and less cost in Yambio County, as stipulated in the bill of quantities, drawing and technical specifications prepared by the Engineers.

Therefore; the State Ministry of Housing Land and Public Utilities is hereby certifying CCEWO National NGO for implementing such project in Western Equatoria State.

However, the Government of Western Equatoria State is hereby express its readiness to support CCEWO in implementing such projects for the benefit of the common citizens.

06/11/24

Sign: .....
JOHN KELIOPA TIMATIO
Director for Housing and Construction
State Ministry of Housing, Land and Public Utilities
Western Equatoria State – Yambio
Date: 26th November, 2024

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

5. OUTLOOK FOR NEXT REPORTING PERIOD

2026 the focus will be on following topics:

1.) Grafting of trees, distribution to the households at their compounds and planting.

2.) Pushing another public building constructed with compressed earth brick method – production of bricks for this building.

3.) Beginner-training on the compressed earth brick method for 20 youth and refresher workshop for already trained youth people. Training of 15 youth and representatives from our partners on essential business aspects.

5.) Critical observation of the quality of the stoves. -> In the event of quality defects, corrections are carried out quickly.

6.) Implementation of the SPEEC monitoring program with high-quality reports.

7.) Increasing the amount of CO2 saved by expanding the target group for stoves to 5 schools in Western Equatoria State (institutional 100 l institutional stoves with chimneys).

6. ANNEX

Annex 1: Financial Report
Annex 2: Carbon reductions report (1.1.2023 – 31.12.2025)
Annex 3: Budget amendment and file note