



Access to Microfinance

Enabling Communities to Purchase Appliances for the Productive Use of Energy

**GRÜNE BÜRGERENERGIE
(GREEN PEOPLE'S ENERGY)
RESULTS CASE STUDY**

Country	Côte d'Ivoire
Implementer	CARE INTERNATIONAL (NGO)
Target groups	Village Savings and Loan Associations (VSLA)
Other stakeholders	ENGIE Energy Access Côte d'Ivoire and YANDALUX Côte d'Ivoire SARL (solar installation companies); MFI Advans (Microfinance Institution); Coopérative des Encadreurs Communautaires (CEC) – Cooperative of Community Supervisors
Project duration	01/2022 – 09/2023



PROJECT APPROACH

Côte d'Ivoire struggles to meet its electricity demand, limiting economic and social development opportunities. Due to the high cost of grid extension, many rural areas require decentralised solutions to provide electricity.

In this context, the project aims to improve the incomes of off-grid rural communities, particularly women, by providing solar energy for productive purposes. The project targets Village Savings and Loan Associations (VSLAs), which are local organisations in which members from a community work together to pursue common income generating activities (IGAs), namely farming and selling fish, and share the resulting profits. The purpose of a VSLA is to provide financial opportunities to people who don't have

access to traditional financial services, due largely to their limited ability to provide collaterals and repay loans. For the lender, providing financing to such a group can be more attractive as it has a higher purchasing power, less default risk, and generates lower transaction costs than lending to individuals.

The GIZ-project GBE, works with VSLAs which had initially been set-up by CARE in another project, allowing to add a “solar component” without setting up new groups, which would not have been possible during the limited project duration. CARE, which is also the implementer of this GBE-intervention, actively supports the VSLAs in identifying IGAs, assessing their financial capacities, and setting-up their business plans for economic activities that require the use of solar appliances. If approved by CARE, the funding demand for PUE equipment is subsequently transferred to the Microfinance Institution (MFI) Advans that assesses the possibility of providing a loan to the group for financing the solar appliances.

GIZ supports this mechanism by financing a guarantee fund to ensure that the MFI is paid in case of default by the VSLA and covers around 40% of the investment made by the MFI. Not only does this raise interest on the side of MFIs to finance solar productive use appliances by decreasing their risk, but it allows them to reduce the offered interest rate accordingly, thereby making the loan more affordable for the end-users. Nonetheless, the selected VSLAs are required to make a credit deposit equal to 1/3 of the loan amount as an additional security for the MFI. CARE, GIZ, and the MFI jointly develop loan repayment schedules based on each IGA's production cycle in order to consider the often seasonal character of incomes, and hence, ability for repayment. The total repayment period is of one year.

In addition to providing and installing the solar equipment, the solar installation companies involved also conduct training seminars for VSLA members on the use, management and maintenance of the solar systems in order to ensure its longterm sustainable use.



Picture 1: Supported End-Users

METHODOLOGY OF DATA COLLECTION

The data for this case study report was collected through a review of project documents and five qualitative interviews with GIZ, CARE International, MFI Advans, CEC, and ENGIE Energy Access Côte d'Ivoire. Due to the recent installation of the systems, no quantitative data was collected.

The case study was conducted between January and May 2023. At that time, some project activities were still ongoing. As a result, the impacts captured are not exhaustive.

KEY FINDINGS

Project Achievements

20 VSLAs from the communities of Méagui, Gueyo, Duekoué, Daloa, and Taabo have presented their business plans to the MFI, and 17 have received a loan to purchase solar appliances for productive purposes. Three VSLAs are still in the process of collecting the required credit deposit in order to get their loan approved. Using the received loans, eleven VSLA's bought solar freezers of 210 litres each and six bought solar irrigation pumps. The solar irrigation pumps are used on land owned and/or farmed by the group. The solar panels powering the pumps have a peak capacity of 360W. The freezers are located in small kiosks in the villages. Thanks to the risk reduction through the guarantee fund provided by GBE, the interest rate of the loans could be reduced from 1.6% to 1.3% per month. The 20 VSLAs have a total of 456 members who did not access to credit before, 72% of whom are women.

Solar-powered irrigation allows farming to take place not only during the traditional two growing seasons per year, but also during the dry season. This would otherwise not be possible, or only with considerable effort to fetch water by hand. This significantly increases the farmers' agricultural output and reduces the time, effort and cost associated with fetching water for irrigation. Once the loans have been repaid, the VSLAs intend to invest the money saved in other aspects of their farms to expand their businesses. Solar pump irrigation has also had a positive impact on the lives of women in the rural communities, who previously had to use watering cans for irrigation, which required a lot of time and effort. However, with the advent of solar pump irrigation, women can now devote additional time to other activities.

The availability of solar freezers allows fish vendors to store fish for longer periods of time, preventing spoilage. This saves valuable time and money that would otherwise be spent on buying new fish from local fishmongers. They are also able to maintain consistent fish prices without having to reduce them in the evening to avoid spoilage losses, as some other fish vendors do.

Intermediate Impact

According to the interview partner from CEC, the introduction of year-round farming and the sale of chilled fish has greatly increased the productivity, revenue and income of the VSLAs and their members. According to several interviewees, this has already led to the creation of new jobs for VSLAs members responsible for the maintenance of the solar pumps and solar freezers. Taken together, this contributes to improved living conditions for all VSLA members and has a multiplier effect throughout the community, with the benefits extending beyond just the VSLAs themselves. For instance, with increased income, families can access better educational opportunities for their children and quality healthcare when needed.

Women, who used to spend a lot of time fetching water for irrigation, can now be more involved in social activities and family welfare. This leads to a more balanced and fulfilling lifestyle for these women, while contributing to the overall well-being of the community. Furthermore, some women are planning to start small businesses after receiving their VSLA loans. This will ultimately lead to greater empowerment and independence for women in the community, while contributing to the overall economic growth of the village.

Challenges in Project Implementation

Administrative procedures involving CARE, and the MFI delayed the initial start of the project implementation. It took considerable time to find common ground and reach an agreement on project implementation. This agreement covers key issues such as fund management, traceability of bank accounts, interest rate reduction, and monitoring of loan payments.

During project implementation, five VSLAs had taken a loan from the MFI for purposes other than solar equipment and independently of the GBE support program. In order to receive a loan under the guarantee fund for a solar system, they had to first repay the previous loan taken. Since they were not able to do so in the short term, they were replaced by other VSLAs, which also caused delays.

Also, a loan deposit of one third of the credit amount is quite high for the VSLAs, which has caused some VSLAs to struggle and resulted in delays in loan disbursement.

In order to ensure proper implementation of all project activities despite the delays, the project's duration has been extended by an additional three months to the original 21 months.

Although these challenges were eventually overcome and resolved, they highlight the importance of effective management of guarantee funds and loans to ensure a smooth implementation process.



Picture 2: Solar-Powered Irrigation Appliance in Use

Lessons Learned

To ensure the successful and efficient implementation of such projects, it is essential that the implementer (in this case CARE), the provider of guarantee funds (in this case GIZ), and the participating MFIs engage in thorough and comprehensive negotiations and strategic planning well in advance to reach common ground concerning the responsibilities and contributions in the project. This allows potential obstacles and challenges to be identified and addressed proactively, minimising the risk of delays or setbacks during the project implementation phase. Investing sufficient time and effort in this preparatory phase is therefore crucial to achieving the desired results and ensuring a positive outcome for all stakeholders.

To successfully implement projects within the given timeframe, it is recommended that the implementers verify the loan status of all targeted VSLAs. This is to avoid any potential delays caused by other loans which have already been granted. Furthermore, to facilitate efficient follow-up, it is necessary for the project implementer to either be located in the implementation area or to have an office there. Also, it is important to choose a VSLA that already has a bank account with the partnering MFI, since setting up a new account or transferring an existing one can be a time-consuming process that could further delay project implementation.

Furthermore, lowering the credit deposit rate could alleviate the challenges faced by some VSLAs in collecting the required amount, thereby also contributing to preventing delays in loan disbursement.

Finally, it is recommended that a project of this type should last at least three years. This makes it easier to monitor the project, overcome implementation difficulties and assess the various impacts.

Sustainability of the Intervention

Ensuring that VSLAs comply with their contract and make timely repayments to the MFI is crucial to the long-term success and sustainability of the project. GIZ, CARE, and the MFI continuously monitor the use of the equipment to ensure that the VSLAs are using the loan appropriately, thereby strengthening their repayment capacity. This is done, for example, through regular field visits by the MFI. These measures maintain accountability and transparency and promote financial stability for all parties involved.

The solar installation companies have provided a comprehensive one-year warranty for major maintenance to ensure the smooth initial operation of the solar pumps and refrigerators. This warranty period has been aligned with the loan repayment period, so that the VSLAs are not faced with unforeseen expenses or complications during the first year of operation, thereby ensuring their ability to repay their loans.

In addition, two members from each VSLA have been trained to carry out minor regular maintenance tasks which improve the performance and reliability of the systems. If major maintenance or repairs are required after the one-year warranty period, the VSLAs will hire the solar company technicians and pay for these services out of their own income.

Furthermore, with regards to the financing approach itself, it is important to mention that as long as it is not used up, a guarantee fund can continue to be used to secure further loans. It can therefore be considered as an instrument which allows maintaining (and up-scaling) preferential financing offers over time.

CONCLUSION AND OUTLOOK

The project's implementation approach is suitable thanks to the committed collaboration of all the stakeholders. The project's primary objectives and goals were successfully achieved, resulting in the financing and installment of 17 solar productive use appliances (so far). The project thus contributed to positive changes in the lives of the beneficiaries and the community, such as increased income which improves access to educational and healthcare services.

The financing strategy proved to be beneficial to the VSLAs as the loan interest rate was reduced from 1.6% to 1.3% per month. This benefit was a direct result of the guarantee fund offered by GIZ and MFI financing the group as a whole rather than providing loans to individuals.

CARE intends to scale up the project approach once the VSLAs have repaid their loans. As long as the funds of the guarantee fund are not used to cover loan defaults, they can continue to be used to finance similar projects throughout the country. The project helps to ensure this by regularly monitoring the proper use of the solar equipment purchased.

A further measure to ensure that solar equipment suppliers fulfil their warranty obligations, which can be recommended for similar future projects: Instead of receiving the full purchase price upon delivery of the solar equipment to the VSLAs, the solar companies should be paid in installments, with the final payment made at the end of the warranty period. This payment structure would serve as an incentive for reliable and timely maintenance of the equipment when needed.

MORE INFORMATION

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