



Inclusive Energy Fund Case Study 2

Developing a clean, green energy bakery to diversify
farmer income

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FOUNDATION

IEF Case Study 2

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- Cooperative: Bukhaturwe Community Development Initiative (BCDI)
- Country: Uganda
- Theme: Clean, green energy for production

Introduction

Bukhaturwe Community Development Initiative (BCDI) is a Fairtrade and Organic certified coffee producer on the foots of Mount Elgon, Uganda. BCDI is an all women cooperative who aim to empower female coffee growers and reduce the gender equality gap in coffee. Their mission is to deliver high-quality, specialty coffee whilst shaping our industry through social, environmental and economic development for smallholder farming communities and actively addressing gender equality. BCDI started in 2018 with 10 farmers. In 2024 they have approximately 370 women farmers with a production capacity of over 600 metric tons of exportable coffee.

Project Objectives

BCDI identified the potential of using clean energy for cooking and the health risks related to inhaling smoke from firewood. They also noted the lack of bakery product suppliers within their community and therefore proposed a clean, green energy project using solar-aided ovens which use re-usable 'lava' rocks. BCDI planned to establish a training centre that could train members on how to run a bakery so they can sell bakery products and become trainers of others, to diversify and improve their livelihoods.

Challenges and Lessons Learnt

BCDI successfully identified a solar oven supplier and built a bakery training centre (through constructing a new building) which is now equipped with two solar lava rock ovens.

Over the course of the project, BCDI have provided ongoing training to 28 members in baking, with a focus on creating opportunities for youth (11 of the trainees are under 35). These members have gained skills and knowledge in baking and making a range of baked goods including mandas, sumbusa and cookies.

Martin Mafabi, age 34, Project Manager, commented that the solar ovens have supported to diversify the incomes of farmers, especially members who benefited from the bakery training who are now starting to supplement their earnings from coffee. Towards the end of the IEF project, the bakery started making some returns. Some of the women are now trainers in the training centre

and have started supplying bakery products produced in the bakery to nearby schools. Some have also started to employ others.

Justine Wamale, age 54, one of the bakery trainees, said that after she acquired skills she began making mandas and sumbusa. She explained that she had a capital of 20000 Ugandan shillings to start with and she sells her products to the nearest trading centre where she is able to earn at least 7000 Ugandan Shillings daily to support her family in buying food, school materials and some chickens.

"The project has made me famous in the village after I started making mandas upon acquiring skills in bakery making and hence the children and the community at large have nicknamed me 'Maama Mandas'"

FGD Member

"I really appreciate the bakery project because it has reduced dependence on my husband since I have it to keep me busy and earn from it though I still need capital to have a serious baking business"

FGD Member

Challenges

One challenge was improving trainee skills at operating the solar oven as this was a new technology that trainees were unfamiliar with, so the supplier was contacted to provide further training. The PO leadership team reflected that although some farmers who have acquired skills in bakery making have started small bakery businesses and have a good market for their products, they still face a challenge of capital in order to expand the business. Bakery trainees also commented that they need more capital to grow their business and increase their diversified income.

Next Steps

BCDI plan to continue with the baking centre and have identified members who will remain at the training centre as trainers to share the skills to other members. They also note that the bakery could be improved in the future, by having better and more solar ovens in place in order to train more members and increase and improve income across the cooperative.

"My capital is still small but I am optimistic that it will increase slowly and after it has increased, I have a plan of buying a goat and a cow."

Justine Wamale
