



This project is funded by  
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# GrEEEn

Going GrEEEn for a sustainable future



# A digital bookkeeping App to Improve Access to Finance

## A case study from Ghana



Unlocking Public and Private  
Finance for the Poor



## Acknowledgements

This publication compiles learnings from the work of the United Nations Capital Development Fund (UNCDF) team in inclusive digital economies in Ghana, where the team is implementing the project Boosting Green Employment and Enterprise Opportunities in Ghana (GrEEEn).

UNCDF would like to acknowledge the contribution of Meghan McCormick, CEO at OZÉ, who wrote this learning piece with Arianna Gasparri at UNCDF.

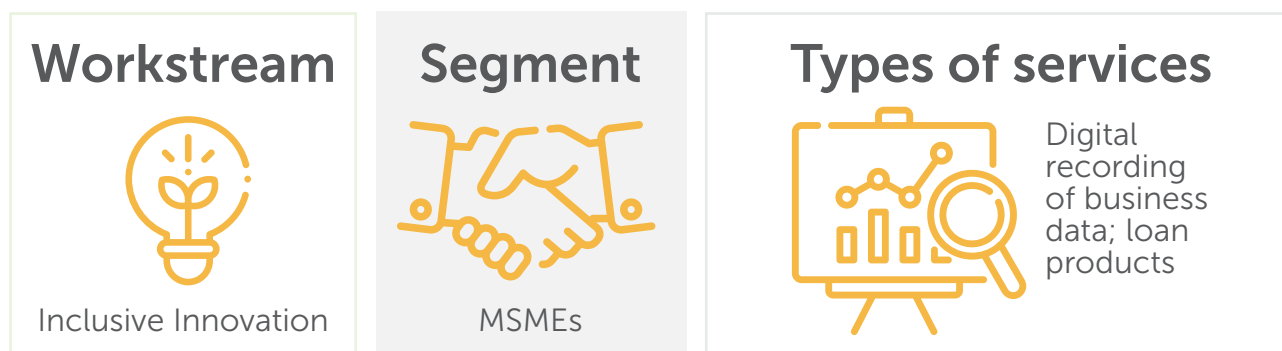
UNCDF would also like to acknowledge the contribution of Karima Wardak, who worked alongside Lisandra Fesalbon to structure and coordinate the production of this piece.

Finally, UNCDF would like to thank the European Union for partnering with UNCDF in Ghana and for making this publication possible.

## Project partners







## Why develop digital financial services for young entrepreneurs? \_\_\_\_\_

Addressing the youth employment crisis is a global development priority. In much of West Africa, including Ghana, high youth unemployment, the significant proportion of the working poor involved in vulnerable employment, and economic disengagement run the risk of creating disaffection, driving migration, inciting social unrest and slowing progress towards development goals. Self-employment and entrepreneurship seem the most common options for unemployed youth and access to financial assets and resources is gaining attention as a key contributing factor of youth's economic empowerment.

Young owners of micro, small and medium enterprises (MSMEs) are usually perceived as a high-risk segment when applying for credit; they often lack collateral, have no credit history, and may not comply with the requirements that financial services providers (FSPs) typically set to limit risk, such as proof of business ownership or years of experience. In the absence of traditional forms of collateral, FSPs use social capital as collateral, and youth are perceived as riskier. Negative stereotypes about young MSME owners are also a result of young people's low level of financial education and are often exacerbated by cultural and social norms.

Bookkeeping is a challenge for entrepreneurs of all ages. For young or first-time entrepreneurs, a lack of financial records has an outsized negative impact, because they have no lived experience to fall back on. Without data, young entrepreneurs are unlikely to make the right decisions. Lack of data also has an impact on their ability to access finance.

The lack of high-quality information, information asymmetry between clients and FSPs, and inefficient industry-level coordination (e.g. the absence of credit bureaus to verify information) are key factors that drive up costs of credit both for clients and FSPs.

Data-driven decision-making reveals new dimensions of information that could reduce the risk of lending; it could also help FSPs tap into an innovative mechanism to improve lending decisions and lower collateral requirements and interest rates, to potentially overcome one barrier to serving underserved market segments. Good data and support to use services create a solid foundation for business success, while setting up entrepreneurs to access the capital they need to accelerate their success.

## Brokering a partnership between a fintech and a bank

It is within the context outlined above that UNCDF supported the partnership between OZÉ and the Youth Banking Department of Ecobank to provide a comprehensive set of financial services and use the predictive power of data to support both MSMEs and FSPs in their respective goals.

**Ecobank Ghana** is one of Ghana's leading commercial banks. The bank strategically locates its retail outlets in the fastest-growing towns and cities in Ghana, leveraging its footprint to gain competitive advantage. The bank delivers its products and services through different channels, and offers both digital and in-person support. With its network of over 2,000 agents, Ecobank aims to take its financial services to those areas that have been so far excluded.

**OZÉ** brings African small businesses into the digital era. OZÉ is a mobile application (app) for MSMEs that makes it easy for businesses to track sales, expenses and customer information. Data are analysed to provide tailored recommendations, reports and business education. If the entrepreneur needs extra support, an OZÉ coach is just a click away. As young MSME owners use OZÉ to manage their businesses and learn how to run them better, OZÉ learns about them and uses this information to assess their credit risk and connect them to capital.

### Number of OZÉ clients reached

**37,000**

registered businesses  
in Ghana



in March  
2020,

of which

**35%**

are owned  
by women

and

**61%**

by youth

Under the GrEEEn project, and in this specific UNCDF partnership, OZÉ helps Ecobank Ghana to assess the creditworthiness of young entrepreneurs of the Ashanti and Western Regions of Ghana: OZÉ's data and machine learning allow the app to predict credit risk and provide young entrepreneurs with affordable capital from Ecobank. OZÉ also supports the MSMEs, improving their capacity to borrow and accompanying them in their journey towards economic independence.

By March 2020, OZÉ had more than 37,000 registered businesses in Ghana, of which 35 percent were owned by women and 61 percent by youth. Over 1,000 entrepreneurs had applied for a loan.

The specific objective of the Ecobank–OZÉ partnership, which runs from 2020 to 2023, is to boost the financial inclusion of excluded young MSME owners on a sustainable basis by:

- a) **bringing** digital solutions to more rural areas and assessing the uptake and usage outside the Greater Accra Region
- b) **evaluating** the sustainability of a fintech start-up, OZÉ, serving these areas
- c) **building** a business case for FSPs basing their lending decision-making on the credit scoring of young entrepreneurs



## Overview of the implementation



**Scoping, requirement gathering and analysis.** Initial research was designed to help Ecobank and OZÉ understand the needs of MSMEs and the workaround solutions they are using to try to meet their needs. Ecobank and OZÉ also sought to understand which communication channels would be effective to reach potential customers and educate them about new products and services and improve their business and financial management skills.

The research used an ethnographic approach; interviewers spent up to two hours with research subjects to understand the environment where they work and live. This approach complies with a human-centric design approach with the objective of understanding customer needs to deliver a new or innovative offering.

Analysis was conducted around key themes to identify solutions fit for the targeted entrepreneurs and their goals, and for their needs in terms of record-keeping, bank choice, digital banking, start-up funds, credit and learning.

Results from this scoping study indicate that: as expected, digital literacy and smartphone ownership are lower in the Western and Ashanti Regions than in the Greater Accra Region; entrepreneurs from rural areas dream big and seem overconfident that they will achieve their goals; the notebook is the most popular way to keep records, but records often remain incomplete and do not allow for the analysis of business performance; and smartphone and digital transactions are increasingly being used to do business.



**1. Prototype adaptation.** Ecobank and OZÉ worked together to adapt their existing offerings to the specific needs identified in the research. Ecobank extended its agent network to ensure the proximity of services to the target group. OZÉ released its app with additional features to improve accessibility for entrepreneurs in the Western and Ashanti Regions and align with the Ecobank offering to enable future credit scoring. New features included: (i) the ability for those users who have more than one income-generating activity to have multiple business accounts; (ii) the possibility of having

an 'accountant' profile and maintaining accounts for multiple business owners, to incentivize usage in rural areas for those who do not own a smartphone; and (iii) integration of digital payments to improve the user experience of both MSMEs and their clients.

As Ecobank and OZÉ had made these adaptations, their Double Up! offer was released in January 2021, combining the Xpress Account from Ecobank and the OZÉ app, targeting youth and young entrepreneurs in the Western and Ashanti Regions of Ghana.



2. **Pilot phase.** Ecobank and OZÉ selected the Ashanti Region for the launch of the pilot in March 2021, leveraging their support teams based in Kumasi. The pilot was then extended to the Western Region in June 2021. Traditionally, OZÉ invests in digital advertising to acquire new clients; for this project and thanks to the support of UNCDF, OZÉ strengthened its in-person approach to onboard clients. The team hired new sellers and support staff who helped entrepreneurs to understand the app, download it and make their first transactions.

## Initial results from pilot phase

While the pilot is still ongoing at the time of writing, UNCDF and OZÉ have already been able to show results of several quick-win features during the first months of deployment in the Ashanti Region. As of June 2021, after three full months of active acquisition, the OZÉ app had registered 1,910 new users.

On a broader scale, looking at the three project objectives outlined above, UNCDF can attest that:

- a) **Uptake and usage of the digital solutions offered in areas outside the Greater Accra Region takes time.** The digital bookkeeping app (OZÉ) is relevant for young MSME owners in rural areas, yet lack of digital literacy can represent a barrier to adoption. While the higher level of digital awareness of entrepreneurs in the Greater Accra Region may result in faster uptake of the app, the pilot phase in the targeted areas in the Ashanti and Western Regions has shown that the demand for such solutions needs more time to take off and a different approach. Having OZÉ support staff on the ground has proven successful for uptake and usage of the solution, to overcome barriers linked to low digital literacy levels in peri-urban and rural areas of Ghana.
- b) **Developing the business case for serving rural customers takes time.** For a tech start-up, two metrics matter when evaluating the sustainability of a market: the cost of acquiring a customer (CAC), and the earnings generated over the time the customer

stays with the app (known as lifetime value, or LTV). For a market to be sustainable, LTV needs to be higher (the benchmark is three times higher) than CAC. Despite the market potential, in rural areas with less density of population and with people with lower levels of digital literacy, CAC may be higher than in urban areas. At the same time, higher poverty rates or lower incomes in these areas may mean a lower LTV compared with that in urban centres. While CAC relative to LTV is still uncertain, development partners like UNCDF play the role of market enabler by supporting the private sector to pilot innovation in underserved areas where costs are higher.

- c) There is high potential for digital lending based on credit scoring by FSPs.** The project has begun to demonstrate that, through the use of the app, customers are generating data that inform FSPs of their creditworthiness; loan appraisal (risk assessment, approval, disbursement and repayment) can be automated and the whole lending process can be digitized. This automation of the lending decision can lower the cost of origination to the point where banks can make profits even at a reasonable interest rate. Where OZÉ has been able to approve loans in less than 24 hours and Ecobank facilitated automatic repayment, the combination of these two quick steps has contributed to demonstrating the viability of the model. These early results are promising; however, there is still work to be done before the model can reach a large scale that will be sufficient for commercial banks to make digital MSME lending a core part of their business.

## Success story: Angela, owner of LampsANG

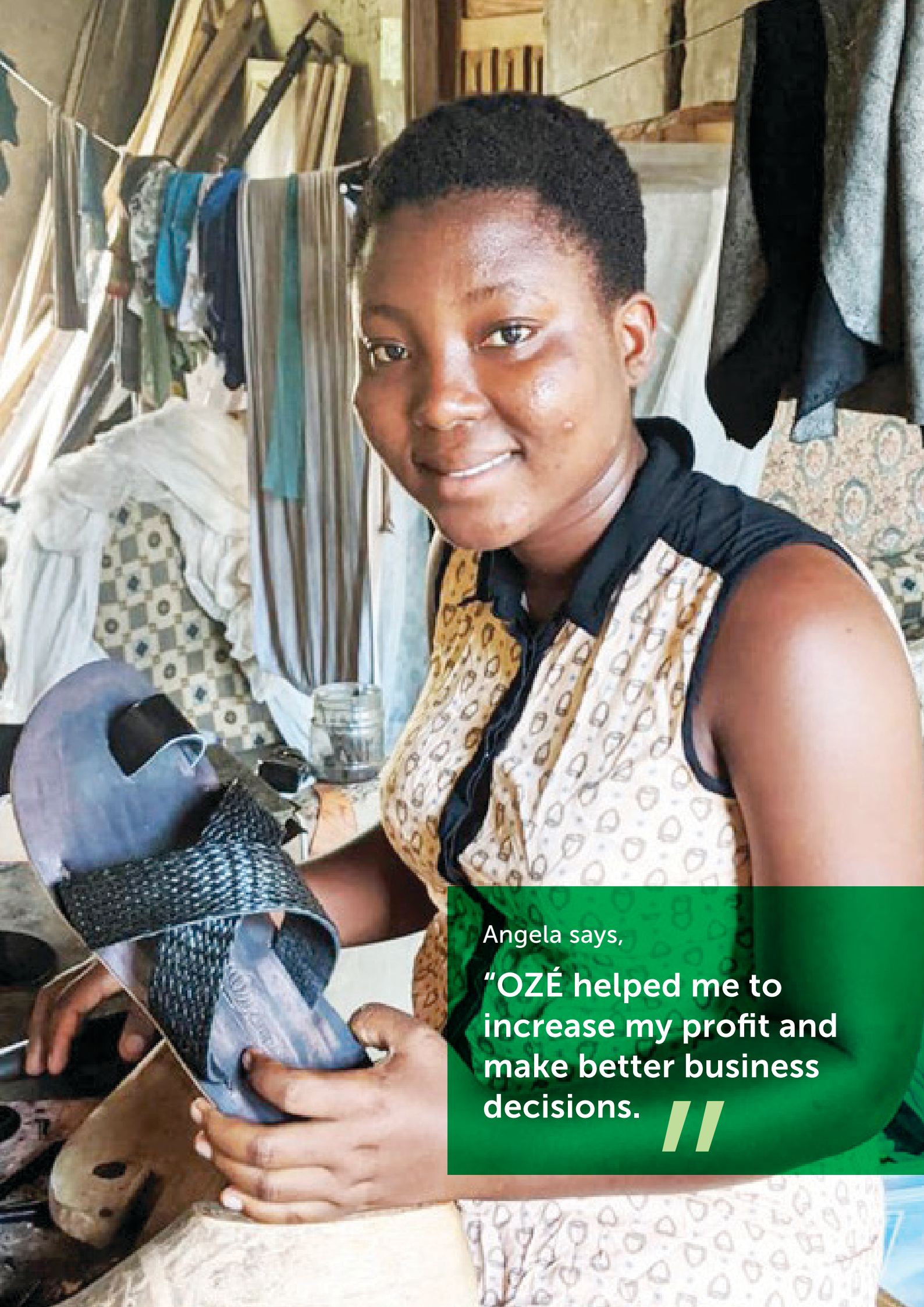
Angela is 22 years old and was born in Apemanim Kokobeng (Ashanti Region, Ghana). After studying at Bosome Senior High Technical School, she started her own business in Kumasi at the age of 18. She now runs a small business producing handmade shoes in Kumasi, called LampsANG Leather Shoes and Slippers.

Angela used to keep records manually, but had trouble measuring her performance, including her profits and growth, until she had the OZÉ app. Angela met the OZÉ team in April 2019, and they helped her to use the app. She has been using the app for two years, and values both the record-keeping aspect of the platform and the access to credit.

Before using OZÉ, Angela was unaware of the effect of the high delivery costs she paid. With the help of OZÉ, she was able to analyse her transactions to see what was causing spikes in her expenses and adjust her prices.

Angela had not borrowed before, because she could not find a product that fitted her needs. She had applied for a loan once before, but unfortunately did not have enough





Angela says,

**"OZÉ helped me to  
increase my profit and  
make better business  
decisions."**



evidence to prove the profitability of her business. Angela was looking for additional capital to invest in her business and increase her turnover. After one year of app usage, Angela had gained confidence and decided to apply for a loan from a local financial institution. The financial institution required Angela to submit her transaction details to demonstrate her creditworthiness. This time, Angela was able to download her transaction history from the app and share it with the lending institution. Her loan was easily approved for a period of six months. Angela was able to buy additional materials and increase her sales.

Angela then decided to apply for a new loan. The financial institution still perceives Angela as a risky client, however, as her business is not yet formalized. Also, the relatively low amount she needs brings high operational costs for the financial institution, which assesses loan requests manually. These inefficiencies and a lack of information are reflected in the high costs of Angela's loan.

The OZÉ team, conscious of the potential of Angela's business, based on proven validated data collected through the app, believes in her capacity to repay and her potential to grow. OZÉ offered Angela the much-needed capital to fuel her growth: in March 2021, Angela's application was approved for a six-month, low-interest OZÉ loan. Angela paid the loan back successfully and on time.

OZÉ combines performance data entered into the app with behavioural data generated by the use of the app, and also with a bank or mobile money statement if the user has one. These data are analysed by a machine-learning model to predict credit risk and calculate affordability.

With OZÉ, credit has become an enabler of growth for Angela's business. Her business has grown and now her cash flows are allowing her to accelerate her business further. She was just approved for an OZÉ loan almost three times the size of her first one.

## Lessons learned for practitioners

**Importance of understanding the target audience.** OZÉ and Ecobank Ghana ran several human-centred design workshops to make better-informed decisions about the design of the solution and the business requirements. Initial results confirmed the business opportunity and influenced the go-to-market strategy of the two partners.

**Ensuring institutional interest in serving the last mile.** At the institutional level, Ecobank has a clear vision to expand its footprint in rural areas and serve the underserved. The top management are indeed aware of the market opportunity at local level. The project allowed Ecobank and OZÉ to expand to those areas where their presence is limited but needed. The partnership helped and encouraged both partners to reach out to more hard-to-serve areas, where the cost of acquisition is higher but the revenue potential is also strong.

**Buy-in of the FSP partner.** Despite the limited positioning of Ecobank in lending to young entrepreneurs, the top management recognized the multiple advantages of this niche market. Ecobank's commitment to be the first mover in this market has made the difference, as the company saw an opportunity for its positioning in the long term. This project allows Ecobank to test how digital solutions can facilitate the bank's lending activity while ensuring good portfolio quality and cost-efficiency. This is crucial to ensure the effectiveness of the model.

**Training and support function to entrepreneurs.** The use of technology in rural areas can be a challenge. Low digital literacy can represent a barrier for those entrepreneurs targeted by the project. Continuous support and mentoring coupled with monitoring of app usage is key for the success of the project. OZÉ is providing a comprehensive set of business support services and coaching to assist entrepreneurs in their digital bookkeeping.

Based on lessons learned during the pilot, as well as the long-term objectives of UNCDF in playing the role of a market facilitator for more inclusive digital economies, UNCDF will continue to work with OZÉ and FSPs such as Ecobank Ghana to prove that digital lending to MSMEs is a viable business. Project partners want to extend the power of digital record-keeping and digital banking into harder-to-reach regions.

Importantly, this project is a great example of how fintechs and traditional banks can collaborate, with the support of organizations such as UNCDF, to provide de-risking solutions for the financial inclusion of MSMEs.

## About the GrEEEn Project

The Boosting Green Employment and Enterprise Opportunities in Ghana (GrEEEn) project is a four-year project from the European Union, the Embassy of the Kingdom of the Netherlands in Ghana, United Nations Capital Development Fund (UNCDF) and SNV. The project aims to create greater economic and employment opportunities for youth, women and returning migrants by promoting and supporting sustainable green businesses in selected regions (Ashanti and Western).

GrEEEn will contribute to address the root causes of irregular migration by supporting sustainable and climate-resilient local economies, green jobs and development in regions of departure, transit and return. The objective of GrEEEn is to create local financial ecosystems that facilitate the development of micro, small and medium enterprises (MSMEs) and enable the transition of local economies to green and climate-resilient development.

GrEEEn is implemented under the European Union Emergency Trust Fund (EUTF) for Africa.

Discover more at <https://www.uncdf.org/green>

## About UNCDF

The UN Capital Development Fund (UNCDF) makes public and private finance work for the poor. With its capital mandate and instruments, UNCDF offers 'last mile' finance models that unlock public and private resources, especially at the domestic level, to reduce poverty and support local economic development. This last mile is where available resources for development are scarcest, where market failures are most pronounced, and where benefits from national growth tend to leave people excluded.

UNCDF's financing models work through three channels: **(i) inclusive digital economies**, which connect individuals, households and small businesses with financial ecosystems that catalyse participation in the local economy and provide tools to climb out of poverty and manage financial lives; **(ii) local development finance**, which capacitates localities through fiscal decentralization, innovative municipal finance and structured project finance to drive local economic expansion and sustainable development; and **(iii) investment finance**, which provides catalytic financial structuring, de-risking and capital deployment to drive SDG impact and domestic resource mobilization.

By strengthening how finance works for poor people at the household, small enterprise and local infrastructure levels, UNCDF contributes to SDG 1 on eradicating poverty, with a focus on reaching the last mile and addressing exclusion and inequalities of access. At the same time, UNCDF deploys its capital finance mandate in line with SDG 17 on the means of implementation, to unlock public and private finance for the poor at the local level. By identifying those market segments where innovative financing models can have transformational impact in helping to reach the last mile, UNCDF contributes to a number of different SDGs and, currently, to 28 of 169 targets.

