

Lab DDD Energy Group

Measuring the results of an energy access project The experience of Enda Tamweel, in Tunisia



Enda Tamweel, a pioneering institution of inclusive finance in Tunisia, has been committed for several years to the promotion of ecological practices and activities (see our article on this subject). In 2019, with the support of ADA and MicroEnergy International, the organization developed a new financial product: **Eco-chams loans**, to **finance solar water pumping and irrigation systems** for small producers. These new loans were first tested during a pilot phase, with date palm producers in southern Tunisia. Before deploying this innovative product to other agencies, Enda Tamweel decided to carry out a study to measure the results of the pilot phase.

In this article, **Khereddine Kahia**, head of agricultural and environmental strategy at **Enda Tamweel**, shares his experience in carrying out this step-by-step study: the key points, the surprises, the difficulties, and the benefits for the institution.

1. Defining our objectives

When we launched our line of Eco-chams green loans, in 2019, we really innovated, offering an investment loan with a reduced interest rate and an extended loan period, allowing small producers to invest in pumps powered by solar energy. We had chosen to first test this product in 6 agencies, out of the 105 that we have. For this, we have benefited from the support of ADA and MicroEnergy International, as part of the [Green for Growth Fund](#) project. Initially, we had planned an 8-month test phase, but due to the COVID-19 health crisis, the pilot phase was extended until 2021.



It was obvious that we then had to **evaluate the results of this pilot phase**: to **judge its relevance** for the clients and the institution, and if necessary to be able to convince the management team to roll out the Eco-Chams product to other regions. It was also important to convince the sales force (field officers) of the contribution of this product in terms of customer income improvement and risk management, and to **motivate** them in its promotion. And finally, such a study would provide feedback to the donor on the results of the project.

As part of the study, we wanted to measure two important aspects: (1) the **satisfaction** of the beneficiaries, and (2) the **changes** generated by the Eco-Chams loan. In particular, we wanted to check whether this type of green product made it possible to achieve the objectives set by our environmental policy: to make customers' businesses **more energy efficient** in order to generate **cost savings** and/or **limit the environmental risks** on their activities. .

2. Choosing our methodology

We already had available **some data from our management and information system (MIS)**, in particular on the number of Eco-chams loans granted, their amounts and durations, and some information on the profile of the beneficiaries. This data already allowed us to see that we had not achieved the expected commercial results, with 122 loans granted out of an initial objective of 240 (this is largely explained by the health crisis and the risk context, which were not favorable to the marketing of a new product). But for a finer and deeper understanding, it was essential to **collect additional data**.

We therefore decided to combine a qualitative and quantitative approach, with:

- **A qualitative survey of the various stakeholders involved in the project** (Enda Tamweel teams and partners), through individual interviews;
- **And a quantitative survey of the 122 beneficiaries** of the Eco-chams loan, through a questionnaire.

Enda Tamweel has a **Marketing department** that is used to carrying out studies with our customers. We have therefore chosen to prepare and carry out these various surveys internally. In coordination with the Eco-Chams project manager and the Strategy department, the Marketing team was responsible for developing the questionnaires, conducting the interviews and surveys, and analyzing all the data. In particular, we were able to mobilize the **“Call Center” team internal** to the Marketing department, accustomed to carrying out customer surveys and follow-ups by telephone. This is a major advantage, because it allowed us to keep control of the entire study and to have a better apprehension and understanding of the results.

3. Preparing our questionnaire

When developing our customer questionnaire, we had the opportunity to benefit from a **co-development workshop within the LabODD**, in partnership with Cerise and ADA. We had developed a first version of the questionnaire that workshop participants were able to test online, via KoBoToolbox. We benefited from relevant feedback, which enabled us to improve our questionnaire.

From this workshop, I would say that several good practices emerged:

- **Keep it short and prioritize:** It is essential to keep questionnaires relatively short, which is not always an easy exercise. In this type of study, we would like to ask many questions, explore many aspects. As this is not possible, it requires identifying priorities. My recommendation is to focus on the information that will be most useful in making relevant recommendations.
- **Make explicit the expected results:** We may tend to focus on rather broad impacts, such as the improvement in quality of life, which is actually linked to various factors. In the chain of expected results, it is recommended to focus on more immediate and specific changes: for example, in our case, reducing energy expenditure or changing irrigation practices.
- **Think carefully about the order of the questions:** The order of the questions is important, so that interviewed customers are given confidence. It is better to start with the most factual, easy to answer and non-intrusive questions, before going little by little to more complex and personal questions, linked to perception and analysis. In our case, it was key to start with questions related to uses (e.g. which pumping system

before, which irrigation technique before/after, which crop, etc.); then go on to questions related to satisfaction and impacts.

- **Test your questionnaire beforehand:** Asking for additional opinions or conducting pilot interviews allows you to check the order of the questions, the logic of the questionnaire and the wording of the questions. It is a question of detecting the formulations which would not be clear or could be subject to interpretation. Clear, concise and unbiased wording is essential to ensure quality data collection!



During the LabODD co-development workshop during which the questionnaire was tested

4. Collecting our data

Data collection was carried out by the Marketing department in February 2022, over a period of around 30 days.

For the qualitative survey, 12 people were interviewed among the Eco-chams project team, Enda Tamweel's Operations Department, Enda staff involved in the process (supervisors, portfolio managers), and partners: ADA (technical partner), ALCA (Agri Leaders Consulting Agency, in charge of the training component), and Green Power Company (supplier/installer).

For the quantitative survey, all 122 Eco-chams customers were contacted by the call center, but not all of them could be reached. For example, some phone numbers we had didn't work. In the end, we managed to interview 75 customers. **The ideal would have been to make field visits to a representative sample of customers**, but the context of the health crisis did not allow it at that time. We therefore conducted the **interviews by phone**, with the difficulties that this entails. However, discussions with customers proved to be rich in very useful information.

5. Analyzing the data

The results of the study were very useful and interesting. They revealed **many positive aspects, justifying the relevance of this green product:**

- First of all, interviews with network and head office **staff** demonstrated their **commitment** to climate and sustainable finance.
- On the **client** side, the study revealed a **high level of satisfaction**: 93% of clients said they were satisfied with their portfolio manager; 93% appreciated the quality of the advice received within the framework of this project; and 86% of customers expressed satisfaction with the supplier's installation service, with an average waiting time of 12.7 days, in line with the deadline announced by the supplier (15 days maximum). And

according to the Net Promoter Score method, 70% of the contacted customers are ready to recommend this product to those around them.

- The study also revealed **positive impacts** that exceeded our expectations. The results showed an unexpected take-up of the solar water pumping solution: while 63% of customers previously used diesel as a source of energy to run their irrigation system, they are 79%, thanks to the Eco-chams loan, to have **abandoned fossil energy** in favor of solar energy. We were even more surprised by the **take-up rate of the more water-efficient drip irrigation system**, which rose from 33% to 62% with the Eco-chams loan. We did not expect such a significant change in practice. This shows the effectiveness of the awareness-raising and support work of the project's partner engineers. The clients themselves reported having **improved their knowledge of agricultural and irrigation techniques**. And 88% of the customers surveyed felt that they had a more economical irrigation system thanks to the Eco-Chams loan, thus confirming that this product makes it possible to achieve the objective of **reducing energy expenditure** that we have set.



The results also identified **several areas for improvement**:

- The **failure to achieve our commercial objectives** (40% of the objective achieved despite the extension of the pilot phase) is a signal that encourages us to set up specific and mandatory **monthly objectives** for sales representatives.
- The study showed that the majority of Eco-chams loans were granted to **men** (76%). If we want to reach women, we need to think about a suitable program.
- We found that only 10% of interviewed customers knew about the product through social networks, compared to 41% who knew about it thanks to those around them. This result indicates that it is necessary to intensify our **communication campaigns** on social networks and to better disseminate the information necessary to make the product known.
- Another important point revealed by the study: 49% of the interviewed customers think that the **amount granted is not adapted to the needs** of their project. This is a crucial issue! To better meet their expectations, we therefore plan to integrate into the Eco-chams product the investment in the irrigation system (and not only the pumping system), as well as a part reserved for working capital.
- Finally, the study showed a high level of satisfaction with the services of our partner supplier. Until now, we had left the **choice of supplier** to customers, but with a wide variety of service qualities. We are now considering limiting this choice to a smaller list of suppliers, to ensure better quality for our customers.

6. Using the results

All of these results were extremely helpful. They allowed us to **identify the adjustments needed** to improve the relevance and effectiveness of the product, and to **validate and announce the roll-out of the Eco-chams product** to all our agencies. This deployment is done gradually, in order to be able to make adaptations if needed (on the financial product, communication, the objectives set, partner suppliers, etc.). After the southern zone, we therefore begin to grant Eco-chams loans in the center and in the North of the country. We accelerated the training of internal staff on renewable energy, pumping systems and irrigation techniques, so that they can promote these solutions to customers.

The study also clearly confirmed the importance of the **support component**. So that this component can still be offered to our customers, we have asked the NGO Enda inter-arabic to take on the total management, including the cost of field operations. This proposal has been validated, and to date the support is taking place in all agencies in the southern region of Tunisia.

To conclude

Measuring your results means giving yourself the means to improve your products and services to better meet the needs of your customers. On the Enda Tamweel side, it is clear that we intend to carry out this type of study on a regular basis. Especially since we have many other innovative projects, for example integrating into Eco-chams other technologies such as solar water heaters, photovoltaic, solar dryers, etc.

If I had to give recommendations to organizations willing to measure the results of energy access projects, I would tell them to think carefully about the indicators to be used so that the results allow them to formulate relevant recommendations.