

FINANCIAL SCHEMES



CASE STUDY



Gham Power Nepal

Off Grid Bazaar (OGB)

Gham Power's mission is to increase access to solar powered agro-processing equipment for rural populations. Off Grid Bazaar (OGB) is an innovative and interactive online platform designed by Gham Power Nepal to scale the installation of off-grid solar agro-processing equipment for small-holder farmers in rural Nepal. The fund blends debt and grants to fund pre-qualified clean energy projects. The platform serves a variety of functions. By using information provided by smallholders, Off Grid Bazaar monitors Gham Power's last mile distribution channel, automates project design while simultaneously collecting valuable data such as system usage and PayGo repayments.

[More details on Off Grid Bazaar Website](#)

Organization type	Impact fund
Country focus	Nepal
Type of finance	 Crowdfunding  Debt  Grant  Mezzanine  Equity
Stage of enterprise	Early stage, Growth stage
Sector focus	 Clean energy

Funding accessed

Euro 1.1 million in private capital and USD 520,000 in grant funding.

Funders

High net worth individuals (impact investors) based in the Netherlands.

Financial tools accessed

Offgridbazaar.com functions as a fundraising platform. After registering on the online platform, investors browse approved project listings and opportunities to provide grant financing. In addition to receiving equity stake and project financing, Gham Power has also received ground-level assistance from several grantors and other accelerator programs to successfully deploy Offgridbazaar.com.

Fundraising Timeline

The total timeline for deal closure was around 8 months.

Gham Power created an innovative online project development platform – Offgridbazaar.com – to offer agro-processing equipment (AP) to rural smallholder farmers through PayGo financing. Gham Power’s last mile distribution channel records smallholders’ agricultural needs into Off Grid Bazaar. Then, an algorithm utilizes the information gathered to suggest an affordable and optimally sized AP for each customer. The right-sized APs are then displayed on the platform as an investment opportunity for investors and grant foundations globally, who lend and/or subsidize the cost of APs. When the funding goal for a specific opportunity is reached, Gham Power delivers the AP using a decentralized sales channel. The enterprises’ primary source of income comes from the profit generated in the sale of APs and the asset management fee levied on investors that use Off Grid Bazaar as an investment channel.

Amount of funding raised

Gham Power has raised euro 1.1 million in private capital and \$520,000 in grants. Out of euro 1.1 million, euro 110,000 has already been raised as convertible notes. As for the remaining fund, we are under government approval process which should be closed by 3-4 months. The instruments used for the funds are ordinary shares and preferential shares.

Tenor or holding period

There are separate holding and tenor periods for the capital raised. The first batch of capital, raised from preference shares, amounts to euro 200,000 and will mature in 6 years; an additional investment amount of 468,000 is based in two separate special purpose vehicles with a repayment timeline of 3 and 10 years respectively.





Gham Power's business model requires a good mix of grant, preferential and ordinary shares, as well as project financing.

Results to date

Since all the funds have not been received already, this list consists of the activities that were conducted using grant funding previously deployed. The funds were primarily used to develop the Off Grid Bazaar platform and to initiate partnerships that would ensure the proper deployment of the platform. Some portion of the grant was used to incentivize early adopters by subsidizing AP costs. Remaining funds were used as working capital in the early stages of implementation.

Regular impact assessments will be conducted to gauge, in greater detail, the causal impact of the funds once received.





Learnings

Gham Power operates in a frontier market and there are several learnings that can be leveraged by other enterprises operating in emerging economies in Asia. Here are five lessons learned that they would like to share with fellow enterprises:

1. Consider the best types of financing tools for your business goals. Gham Power's business model requires a good mix of grant, preferential (repayment timeline) and ordinary shares, as well as Project Financing.
2. Understand your regulatory environment. Depending on operating country, government and institutional regulations may prohibit specific types of capital inputs. As such the enterprises must understand all regulations that govern capital injections. Not understanding these regulations can prove to be an obstacle and should be considered while devising fundraising timelines.
3. Be prepared for the due diligence process. Investor due diligence and investment analysis for enterprises operating in less-developed nations are often reviewed with more scrutiny due to the possibility of potential malpractice.
4. Know your financing options. There are less choices to SMEs in terms of accessible finance. For example, local grants may be limited and international grants are highly competitive. This can give the investor an advantage when deciding deal terms therefore an enterprise must be able to articulate, in the simplest of terms, the ideation phase, the problems they're tackling, the potential to scale of the project and grantors additionality.
5. Manage your risks. All financiers (private investors and grantors) factor risk management into their decision making. While it is not always the case that private investors make their decisions solely based on risk, grantors mandatorily require risk registers.



Risk

Gham Power routinely creates and updates risk registers to identify the most likely risks that could hinder or delay the projects. By defining and acknowledging these risks at the beginning of each implementation stage and regularly updating the register with the increased knowledge available over time, the business model is modified as steps are taken to mitigate the risks and/or risk consequences.

To provide a holistic risk assessment, Gham Power actively engages and considers the risks associated with a variety of stakeholders, including government agencies and regulatory bodies, local organizations and implementation partners.





Impact Measurement

Gham Power conducts regular impact assessments and evaluate if the end beneficiary is profiting as originally intended. While the scope of these assessments was limited by a manual process, Gham Power is currently developing and piloting IOT enabled smart-meters that track the operational use and a number of impact parameters such as area of land irrigated, solar electricity used, amount of water pumped, etc. digitally. Once completed, the remote sensing will allow the enterprise to automate the measurement of other impact parameters like increase in farmer's yield.

The enterprise was recently awarded technical assistance through the Frontier Innovator program. The technical assistance was delivered by Impact Investment Exchange (IIX), which conducted an impact measurement and analysis and developed a framework for Gham Power. The assessment included two phases:

1. Impact Measurement

Site visit to collect data and information necessary for impact measurement.

2. Impact Analysis

The data collected is analysed to develop an impact matrix. Gham Power's matrix includes following parameters:

- Increase in access to energy
- Increase in cost saving
- Increase in productivity of farmers
- Reduction in CO2 emission.

The following indicators are used:

- Number of beneficiaries of off-grid solar (people who previously had no access to electricity)
- Amount of solar electricity (energy- kwh) produced
- Hours of operation (eg: solar water pumps, this is the amount of diesel displaced for the same number of operating hours, and hence the cost saving)
- Indicators of productivity change include yield per hectare or yield per acre (currently collected through manual surveys)
- CO2 emission reduction is calculated by looking at kwh of solar used or hours of operations of solar pumps vs the required diesel usage for same operation based on CO2 footprint per Liter of diesel needed for those systems.

Gham Power will use the IIX framework to quantify impact achieved against the decided upon indicators which can then be quantified in financial terms. The intention is to calculate and support Social Return on Investment (SROI), which would indicate the amount of social impact created for every dollar of investment raised. The Gham Power SROI currently stands at 4.55.

Gham Power plans to conduct at least a randomized control trial in 3 years' time and is currently raising capital for this initiative. for investors, and contribute to an ecosystem in Southeast Asia that will attract more investment capital to the region.



Q & A

Do you have any feedback for funders interested in offering this type of finance?

All of the impact investors that we are currently engaged provide patient capital funding and the space for us to revise and adjust our business models as our understanding and the market continues to evolve. Their expectation for return is reasonable for a social enterprise like ours, where the end users are often at the bottom of the pyramid.

In our opinion, it is in the best interest of both the investor and investee to consider the nature of the business, the end consumers, and discuss, the ask, the expected returns and the timeline, well in advance.

For grant funders, we believe that investing in the capacity development of an enterprises is always more beneficial (to maximize impact potential) than directly subsidizing the cost for end beneficiaries. We have seen this trend lately and appreciate it.

Do you have any advice for other enterprises interested in accessing this type of finance?

Accessing private capital is never easy and will tend to be even more difficult if your SME does not have quantifiable impact. Choices narrow down even further in frontier markets. The best financing pathway for SMEs would be to use grant funding to generate impact and impact potential and then start looking for private capital.

Always keep in mind that grant funding is tied to specific and rigid milestones that cannot be altered once the project commences and therefore, issues with flexibility arise.

Are you currently seeking any additional financing? If so, please describe the type of finance or financier you are looking to partner with.

Yes. We are seeking patient capital funders who provide concessional finance debt (up to 3%). This funding will be invested in testing farmer's PayGo repayment capabilities and patterns. This data when compiled will be absolutely critical to ensure low loan defaults and high profitability during Gham Power's scale-up.

The total private capital raised (1.1 million euros) will be able to sustain our business model for the next year and a half. Our capital requirements for the 5 years after that is 20 million from initial estimates. Our institutional investors have committed a portion of this fund, but we will keep fundraising give that additional capital will be required over time.



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