

AgriGrid

Lessons learnt

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CATEGORY	ATTENTION POINT	RECOMMENDATION
Value chain selection	Because of seasonality, one sole agri-component may not be sufficient to upgrade the model	<ul style="list-style-type: none"> - Develop a portfolio of processing activities in order to have a balanced productive use of electricity throughout the entire year - Combine different agri activities which feed each other into a circular economy to avoid waste and stand stills - In order to avoid peak consumption during the harvesting season of any specific crop it is worthwhile to select crops which can be stored for several months and to have them processed over the year which also contributes to a more stable sales price and constant revenue stream
Data collection	If the targeted value chain is not considered as valuable by the local population (e.g rice bran), it is more difficult to collect actionable data	<ul style="list-style-type: none"> - Use informal and formal sources of data - Be prepared for uncertainty and ambiguity in the data - Models are rarely precise in their pre-feasibility stage; the objective is more about validating assumptions than creating a precisely fine-tuned model
Animation of local population	Farmers reveal more detailed data when discussing or potentially arguing in a group setting	<ul style="list-style-type: none"> - Focus groups often provide richer insights than individual interview - Plan focus group discussions early in the research phase to get lots of data fast, and for questions that require group input - This is a useful tool when time and budget is limited - Detailed individual assessments, if necessary, can happen at a later stage of the project
Market opportunities	Most farmers would prefer to supply their existing crops and production to a buyer vs. begin growing new crops, or start new processing activities	<ul style="list-style-type: none"> - Beforehand, identify and design interventions that are low-risk for farmers and that require minimal behavioural change
Agronomic understanding	A multi-disciplinary team is needed even in the early stages, especially an agriculture expert	<ul style="list-style-type: none"> - An agronomic expert is an indispensable asset, especially for identifying the strengths and weaknesses of value chains and anticipating technical and financial questions - The expert can be an inhouse staff, as well as a short-term consultant

Research team composition	The targeted site is remote ; many travels are needed to complete the set of data	- As it is R&D research you might not have all the information you want during the field mission. (e.g. the people you want to interview are not present, or maybe you have further question, but you are back to the office) ;to optimize your budget, think about having a liaison person on site
Scalability	The targeted value chain suffers from poor profit margin, forcing it into high volumes of activity that are not consistent with rural context	- Prefer value chains that are adapted to the rural context and easily replicable in several mini-grid projects, to achieve economies of scale
Operations	The agri process is too complex	Prefer value chains that require limited support and that require mainly technical processes (chemical processes can be hard to implement in rural areas due to poor accessibility and limited supply chains)
Financing	Targeting a Greenfield village or a Brownfield village	<p>- There are pros and cons to conducting the study either in "greenfield" (i.e. a village with no existing mini-grid) and "brownfield" (i.e. a village with an existing mini-grid) sites:</p> <p>→ A greenfield study allows for the integration of AgriGrid investment CAPEX in the initial site models and planning, but farmer feedback may be more abstract</p> <p>→ A brownfield study means that new generation capacity and agricultural investments must be added to existing sites, however may benefit from a higher quality of data</p> <p>- Developers should consider these trade-offs when deciding between assessing the implementation of AgriGrid models in either their existing site portfolio or in their greenfield site pipeline</p>