



Meet the Maddela family*

Romeo and Rhoda Maddela and their three young children live in a peaceful mountain community in the Province of Nueva Ecija, Central Luzon, Philippines. Members of the 15,000-strong Indigenous Bugkalot tribe, the land where they live has been their ancestral domain ever since their forebears built bankside settlements along the river, which to this day provides a source of water, food, and transportation.

The root of the name Bugkalot means “interwoven”, and the Maddela family’s lives are entwined with the land. Their communities are close-knit. Their homes are interwoven with native rattan; even their traditional artifacts are interwoven with bamboo.

To a casual observer, life in their village, surrounded by lush, tropical vegetation, with a nearby river providing sustenance, as it has for generations, seems peaceful and simple. But, living as subsistence farmers with limited access to modern amenities has left the family vulnerable to financial shocks, lacking access to health care, and restricted in their ability to realize their dreams for their children’s future.

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Life as a subsistence farming family

Mr. Maddela is a subsistence farmer who grows corn and relies on local agents to give him a fair price for his crop. Unfortunately, the payment for crops doesn't always come on time when there's a pressing financial need. With little cash left after covering the cost of basic necessities and no access to a bank to put it in anyway, it is difficult for the Maddelas to put funds aside for a rainy day.

Mrs. Maddela keeps a market garden, but it's mostly for their own family's needs. When cash is tight, her brother, who works as a casual laborer in Cabanatuan City, helps when he can, sending remittances to his family. However, his income isn't stable either. He misses his family, the cycle of village life, and the traditions of his community. If he had decent work at home, he'd be on the first bus back.

When a sudden expense arises—for an unexpected funeral in his extended family, for example—there have been times when Mr. Maddela has had to resort to borrowing from one of the local Five-Six moneylenders. Last time, the 20% interest rate proved crippling until his brother-in-law was able to help clear the debt. Mr. and Mrs. Maddela dread having to go down the moneylender route again.

Healthcare for the Maddelas

The family are fit and healthy, but working the land is hard on the body, and accidents can easily happen. Last month, their neighbor sustained a nasty gash from a machete and lost a lot of blood. The local clinic was, as usual, unstaffed at that time, and the nearest hospital was an hour-long bumpy ride down a dirt path and then a two-hour road journey to San Jose City.

Instead, the family and neighbors had to patch him up, treat him as best they could, and hope for the best. He was out of action for a long time afterward, so the neighbors all pitched in to farm his land while he recovered. He was lucky and survived the accident, but having a clinic with a healthcare worker on site in his village so that he could access emergency care would have taken the luck out of the equation.

Similarly, for Mrs. Maddela, after two straightforward deliveries at home with the neighbourhood midwife, she expected the birth of her third child would all go smoothly. But the labor and birth were a lot harder than she expected, and she would have felt a lot safer delivering in a medical facility with monitors to keep an eye on the baby and provide some pain relief for her. Having regular antenatal care would also help other women like Mrs. Maddela in her community have healthier pregnancies and safer deliveries by picking up any health concerns in good time. It would also make it easier to check their children's health and keep them updated on their childhood immunizations.

Education for the Maddela children

Mr. and Mrs. Maddela take great pride in the fact that all three of their children are going to school. The Bugkalot ancestral domain stretches across 73,000 hectares, but only a handful of schools exist. They are fortunate to live only an hour's walk from one of the elementary schools, and so far, their three children have all been able to get elementary-level education.

The eldest will be going to junior high school soon, though, and they're worried about the cost of transportation and boarding, as the nearest high school is several hours away. They would love to keep their son closer to home as he goes into his teenage years, and they wish there was a high school closer by.



Mrs. Maddela's business ambitions

The Maddelas want all three of their children to finish high school and go on to college or even university. Their middle child is as bright as a button and thirsts for knowledge. Mr. and Mrs. Maddela hope she can get a solid school education in their community and then go to Bulacan State University. In her quieter moments when she's not busy with her family responsibilities, Mrs. Maddela dreams of seeing her daughter cross the stage, in cap and gown, at her graduation.

The problem is how to raise the money. Now that her children are no longer toddlers, she would like to start a small business, perhaps trading some of the dry goods that all have to be brought in from outside the community, or operating a private minibus so that her neighbors can more easily get to San Jose City. The road to the city is pretty good, but then she thinks about the practicality of this idea. The arterial roads are still mostly unfinished dirt, which get very hard to navigate in the rainy season. If the community could do something about those last-mile road connections, it would make all the difference.

Whatever the business idea, it's hard to get started without savings. Her brother told her that banks are willing to lend you money, and not at moneylender rates, but he said that access to this kind of formal credit is not for the likes of them: poorly educated, informally employed, or working as subsistence farmers, lacking collateral, lacking even a cellphone signal, that would enable them to access an online-only bank.

The village meeting



A few weeks ago, the Maddelas heard something that could change the trajectory of their lives. They attended a community assembly, along with 80 or so of their neighbors. The leaders wanted to sound them out on a new project, planting bamboo. They explained that there's a growing market for bamboo to make many different eco-friendly products. They said bamboo could be more widely used in their own community too, for decent housing and larger-scale community facilities. The Maddelas have a small bamboo grove on their land. They've used the fast-growing poles to make some of their furniture, and the young roots are tasty and nutritious. But the village leaders were talking about something on an entirely different scale: planting thousands of hectares of bamboo, with an annual harvest starting six or seven years down the line.

At first, they were afraid that the project would entail turning over their smallholder farmlands to bamboo cultivation. With a seven-year time lag from planting to harvest, this wouldn't work for them at all. Then they found out that the proposal wouldn't entail converting any of the community's farmland, but would use currently unused land that is unsuitable for farming.

The project was also going to bring jobs to the community. There would be planting and monitoring teams, people for the seedling nursery, people to bring the seedlings around the project site, and people for logistics. The idea was that recognized leaders of the different clans would help select the names of the workers so that each clan was represented. Mrs. Maddela thought that maybe her brother could be one of those workers.

The transformation

The profits from the sale of the bamboo would take a few years to materialize, but when they did, that would be transformational. Having more income from another source within the community would help families break the cycle of reliance on moneylenders and would help reverse migration. The village leaders were already starting to think about what they'd do with the money. The first thing would be to hire their own doctors and nurses and build their own community health centers. This was a high priority for them. The second was education. With steady income for the village, every child could be educated, and there would be enough for a scholarship fund to help them go on to further studies. The project would also improve the arterial roads, which are necessary for transporting the bamboo out of the village.

The village elders also knew that financial literacy was low among their community. The bamboo plantation plan included a savings and financial literacy program to teach families how to better manage their family finances, with a focus on the mothers to set a savings goal for all of the families. However, the other problem is that access to banking is non-existent. It would take some technological innovations to overcome that barrier, including access to virtual banking. Even then, they would need to demonstrate that the community had collateral to gain access to loans.

At the community meeting, the village leaders explained that the bamboo roots would be mapped and geo-coded using a microchip for each root. This would make the bamboo countable using drones or satellite technology. That data would turn the humble bamboo plant into a secure, bankable, tradable asset. It would enable the community to give their bamboo a precise valuation, insure it, and use it as collateral.

The Maddelas left the meeting with a lot of food for thought. It was a very lively meeting, with many different opinions. Some of the villagers didn't see it as progress. They saw it as a threat to their traditional way of life, and they had misgivings about handing over control of even a small part of their ancestral land to people outside the community to manage. They said it could be the thin end of the wedge, with all kinds of unintended consequences down the road. Some of the ideas, especially about the technology involved, were hard to grasp. As they left the meeting, Mrs Maddela heard her neighbor grumbling about why the project included financial literacy training. Weren't they capable of managing their own financial affairs?

But Mr. and Mrs. Maddela were among those who were positive about the idea: maybe their ambitions for their community to have decent health care, local jobs, and some money in the bank weren't just dreams after all. For their children, one day, these things could just be part of normal life.