**BIOGAS ASSESSMENT PROJECT**

**Site ID: 46**

**Date: September 29, 2022**

**Interviewer:** Thanks for granting us an interview. Since, the actual beneficiary has transferred to Chingale, Zomba, and her phone is not going through. You can answer for you sister, and where you don’t have an answer, let me know to move to the next question. First question, where did this digester from?

**Interviewee**: I do not know who brought here.

**Interviewer**: How many people were coming?

**Interviewee**: I do not know how many people are coming, but I was just seeing people carrying manure and all that.

**Interviewer**: But, you saw the visitors?

**Interviewee**: Yeah

**Interviewer**: How many were they?

**Interviewee**: It was three or four people, I think.

**Interviewer**: Do you know where the funds for the digester came from?

**Interviewee**: Mmmh, I do not know.

**Interviewer**: Before any development project, they always say the one responsible for funding the project, and in most cases it’s the government or an NGO or even member of parliament, who funded this digester?

**Interviewee**: Mmmh, I don’t know.

**Interviewer**: What was your role?

**Interviewee**: We sourced cow manure and water to make feedstock, and then we fed the reactor.

**Interviewer**: Did you have a cow house?

**Interviewee**: No

**Interviewer**: So where did you get the manure?

**Interviewee**: We asked from different people within the community.

**Interviewer**: Which houses?

**Interviewee**: We asked from that house, and we also asked from another family, but that one is very far.

**Interviewer**: Let us say more than 800 meters far together. Okay, where did you get water?

**Interviewee**: There is a borehole there. It is about 100 meters away.

**Interviewer**: That side where I passed by?

**Interviewee**: Let’s say it is 200 meters… or 100 meters as you have said.

**Interviewer**: Did people give you the cow manure for free, or you bought them?

**Interviewee**: It’s true some people ask for money. However, the people here just give out for free.

**Interviewer**: Why?

**Interviewee**: I think they don’t see value of it. In addition, people here don’t really use manure as fertilizer. It’s only a very few who use manure strictly as fertilizer here. So, people don’t see value in it.

**Interviewer**: Why don't people using cow dung as fertilizer?

**Interviewee**: Maybe, we are not just used to it. Or, maybe we are used to inorganic fertilizers.

**Interviewer**: During the time you were building it, how many people were involved?

**Interviewee**: It was five people who were involved in sourcing and preparing feedstock, collecting water from the borehole; it was three females and two males.

**Interviewer**: Did you hire people to help you?

**Interviewee**: No

**Interviewer**: We have many families in this community, how were you family selected as a beneficiary?

**Interviewee**: I don't know what the selection process was, but I think it’s because we are very poor, and they wanted to improve our livelihood.

**Interviewer**: Some people have told me that there was a community meeting where community members chose the beneficiaries? What’s your comment?

**Interviewee**: Yes, it’s true. We had a community meeting and people were chosen there. Nevertheless, people got selected for a number of things, for instance, in our case I think we were chosen because we are poor, so they wanted our livelihood to change. Some were chosen because were hardworking and trustworthy, so people trusted them that they could manage the digester.

**Interviewer**: Okay, did you know about biogas before?

**Interviewee**: We didn’t know anything about biogas.

**Interviewer**: On the day of choosing the beneficiaries, did you attend the meeting?

**Interviewee**: Yeah.

**Interviewer**: You had the right to say no. I have seen people chosen as village champions but refusing to take up the role, why did you accept it to be built here?

**Interviewee**: We found it to be a good thing; with it, we thought we could use it for cooking as well as lighting.

**Interviewer**: Okay, what were you expectations?

**Interviewee**: I basically expected to use it for cooking as well as for lighting.

**Interviewer**: What kind of training did you receive?

**Interviewee**: People at the community meeting were told that the beneficiaries would go for training, but it never materialized. I didn’t go for training, but I don’t know if others went.

**Interviewer**: How did you meet your energy needs before the Intervention?

**Interviewee**: We used to get wood from there bushes and mountains.

**Interviewer**: Where is it?

**Interviewee**: It’s far

**Interviewer**: If you go there at 6:00 in the morning, what time do you come back?

**Interviewee**: Maybe 2 or 3 in the afternoon.

**Interviewer**: How often do you go there?

**Interviewee**: I go there four times a month.

**Interviewer**: Is it for free?

**Interviewee**: Yeah

**Interviewer**: What challenges do you encounter there?

**Interviewee**: It’s just tiresome, as we carry heavy loads. It’s very far; imagine we cross three rivers in the process.

**Interviewer**: What do you call a river here?

**Interviewee**: “Mkuwu”

**Interviewer**: I knew that you meant a river, though you didn’t say it as we say it. We call it “Mtsinje”

**Interviewee**: (Laughs heavily) yeah, it’s “Nkuwu” here

**Interviewer**: Oh, it’s far. What about forest officials?

**Interviewee**: We go there very early in the morning and we usually go Saturdays, and not during weekdays.

**Interviewer**: You have told me had no livestock, right?

**Interviewee**: Yeah

**Interviewer**: Were there people who had cows that time, but weren’t chosen?

**Interviewee**: Yeah, lots of them.

**Interviewer**: Some people who had cows were not picked in favor of people who had no cows. Why?

**Interviewee**: Yeah, people were chosen based on personality. Some people weren’t given because people considered untrustworthy, so people thought they would sell it or something. Even some people who were considered rich did not get the digesters because people thought they would not value it, or would find it involving to the extent of not using it, and then continuing buying charcoal.

**Interviewer**: How much manure did you start it up with?

**Interviewee**: I have forgotten how manure cow manure we used it to start it up. But, I think we use 50 buckets (20 liters) of water.

**Interviewer**: That was a lot.

**Interviewee**: Yeah, if you ask anyone, who was involved in this would tell you that it was hard work. It wasn’t easy to feed it the first time.

**Interviewer**: I believe you heard or you saw how it worked after commissioning. How did it work after commissioning?

**Interviewee**: It never worked at all.

**Interviewer**: Not even for a day?

**Interviewee**: I'm not sure if it worked after installation. It never worked.

**Interviewer**: How did you intend to use the gas?

**Interviewee**: It was cooking only.

**Interviewer**: How many people were intended to use the gas?

**Interviewee**: We were six people.

**Interviewer**: What were operation requirements?

**Interviewee**: It required feeding with cow manure and water.

**Interviewer**: How did you prepare the feedstock?

**Interviewee**: It was just like the first day; first we collected manure and placed it a bucket. Then, we used adding water and stir. We stirred the feedstock until the slurry was thick and smooth. After that, we used to pour the feedstock into the digester.

**Interviewer**: How often did you feed it and in what quantities?

**Interviewee**: I don’t remember how often we feed it.

**Interviewer**: Who is responsible for feeding it?

**Interviewee**: It was the mother and her son.

**Interviewer**: What did they say about feeding it?

**Interviewee**: They said it was very tedious especially the first day.

**Interviewer**: What were the maintenance requirements?

**Interviewee**: I don’t know what the arrangement was like. But, I know that they didn’t use it. I don’t think people used it. It never worked.

**Interviewer**: What were the challenges?

**Interviewee**: She used to complain that it didn’t work after all the effort she did put. I think that`s the only challenge she had.

**Interviewer**: How would describe the current state of your digester?

**Interviewee**: After sometime everything, for example, the digester bag and the pipes were taken inside to protect them from thieves.

**Interviewer**: In your opinion, how did it reach this stage? Or, what caused it to fail?

**Interviewee**: The digesters failed because the installers did not follow up the project after installation of the digesters. They just planted the digester and disappeared. So, it was hard for the people to maintain it. In addition, she found it difficult to keep the bag outside since she is woman, so she just decided to hire people too take it out.

**Interviewer**: How does she meet her energy needs now that it's not working!

**Interviewee**: She uses firewood.

**Interviewer**: Charcoal?

**Interviewee**: People who use charcoal are considered rich. Charcoal is not for everyone. People sell charcoal at K2000 a bag that doesn’t even last a week. So, she uses firewood only.

**Interviewer**: We are going towards the end of the interview. How much did the reactor cost?

**Interviewee**: We don’t know.

**Interviewer**: Did you contribute anything in kind?

**Interviewee**: We only contributed cow manure, water. The rest of the things came with the installers.

**Interviewer**: Was there any masonry work that was involved?

**Interviewee**: No, the hole was simply dug without and it had no brick wall around it.

**Interviewer**: What special item that had to be imported from another country?

**Interviewee**: We don’t know whether it’s from Malawi or not. We don’t know.

**Interviewer**: Okay, we are remaining with two questions. What is your opinion of biogas?

**Interviewee**: Biogas is a good thing. It is good source of energy. It's good because it free. You don’t need money to spend on anything.

**Interviewer**: But, it never worked…

**Interviewee**: It never worked. But, they way they explained it; one has to say biogas is good.

**Interviewer**: What is it that they explained that you thought this thing is good?

**Interviewee**: The fact that it makes people without searching for firewood is very crucial. Another thing is that, you don’t spend money on it since it uses things you don`t buy, for example, cow manure.

**Interviewer**: Why do you think it failed?

**Interviewee**: It failed because there was no close monitoring of the project itself; Also, they were taking long to offer support on every phase of it; they took time to come after feeding it, and they never came after installation as well. After commissioning, they were supposed to come and see how people were faring, but they never came. That’s why it failed.

**Interviewer**: If you could have designed your own waste or energy intervention, what would you have chosen instead?

**Interviewee**: Aah, I don’t know, maybe a solar system because as it can be used for cooking as well as lighting. Alternatively, the installers simple need to install biogas properly, so that it can be usable. It’s a good thing because it requires things that are readily available, for example, cow dung, water. Therefore, biogas is good because it is cheap, and it doesn’t need money.

**Interviewer**: Which alternatives need money?

**Interviewee**: Even a solar system; to maintain a solar system you need money to replace the bulbs and batteries. Moreover, it’s not easy to find such things. As for Biogas, cow dung, water is always available and free.

**Interviewer**: So, you would go for biogas first, but it needs to be installed in a manner that it could work. Alternatives, you would choose a solar system. Okay, thanks for the interview. And, please share her contact, so I can reach out to her and ask some specific questions.

**Interviewee**: Okay, sure. We have here number.

**Interviewer**: Do so, please. Thanks.

**Interviewee**: Welcome.