**BIOGAS ASSESSMENT PROJECT**

**Site ID: 47**

**Date**: **September 30**, **2022**

**Interviewer**: Sorry for the loss of your uncle who passed on 2020. I know it is going to be difficult for you to answer the question, as you were not staying with him. But since you stayed very close to his house and interacted with him regularly. I hope you will be able to answer some of the questions. And, if you don’t know the answer the question that’s fine, we can always move on.

**Interviewee**: Okay, fine.

**Interviewer**: First question, where did the digester originate from?

**Interviewee**: I believe it was a non-governmental organization, but the government.

**Interviewer**: I also believe that it was funded by the NGO?

**Interviewee**: Obviously.

**Interviewer**: Where you around when it was being built?

**Interviewee**: No, I was not around.

**Interviewer**: But, I can imagine you we told or you found out who built it? Who built it? Is it your late uncle or the installation company?

**Interviewee**: That time when I asked him, he told me the visitors installed the digester

**Interviewer**: What was his role?

**Interviewee**: He was responsible for gathering and preparing feedstock for the digester. And, this was easy for him because he had a cow house.

**Interviewer**: Some beneficiary say they were responsible for digging the hole….

**Interviewee**: That’s true. He dug the hole, but the visitors placed the bag in the hole and assembled the pipes and other fittings. So, I think he was responsible for digging the hole and preparing the feedstock.

**Interviewer**: In this community, we have a lot of people and a lot of households. How was he selected as a beneficiary?

**Interviewee**: My late Uncle was a very hard working person; he was not lazy in all his doings. So, I think the people who brought the digesters here thought that he would manage it, and it would reach to other people, as he was not a stingy man. You know when some people get this kind of things they always keep it to themselves and block other people from learning from them or even giving them a chance to appreciate the technology. Also, he was a very trustworthy and reliable man, and you can tell that by the simple fact that he worked with almost every non-governmental organizations, which came here for developmental projects.

**Interviewer**: And as you have rightly said, he might have been chosen because he had cows, because most of the beneficiaries are chosen based on that.

**Interviewee**: Yeah, he had cows, so I think that’s why he was selected.

**Interviewer**: Do you know about biogas?

**Interviewee**: I know a little about it

**Interviewer**: What little do you know?

**Interviewee**: I know biogas is a technology that uses biodegradable things to produce energy for cooking.

**Interviewer**: Okay, what was his expectation of biogas? Or, what do you know about the uses of biogas?

**Interviewee**: I believe he expected to use biogas for cooking, like I said, he used it for cooking. The other thing was that he had expectation of protecting the environment by stopping using firewood and charcoal for cooking… Simply put, biogas stops women from going to the mountains to search for firewood. It also stops people from making charcoal, thereby protecting the environment. I mean, you can’t use firewood or buy charcoal when you have biogas. So, he expected to stop using such things for cooking, and it was beneficial to the family – that’s what I know. And when I saw all that, I thought to myself that the project implementers brought the digesters to protect and conserve the environment by stopping people from reckless cutting down of trees.

**Interviewer**: Okay, what kind of training did he receive in regards to biogas?

**Interviewee**: I think he expected to go for training, but he never went. I remember this other time, we talked and he hoped to go for training to learn one or two things about biogas. But, he did not go for training. This thing was only brought here, but not everything was completed.

**Interviewer**: Did it produce fire?

**Interviewee**: Yes, it did.

**Interviewer**: Did he ever cook on it?

**Interviewee**: Yeah, and for a long time.

**Interviewer**: Like how long?

**Interviewee**: I think it was 7 to 11 months. But, it didn’t last a year.

**Interviewer**: He had the right to deny the digester, but he did. Why do you think he accepted to build a digester here?

**Interviewee**: I think he accepted to save money he was spending on a charcoal or firewood; I also think he accepted it to enable his wife to stop going to the mountains to search for firewood. On top of this, I think he accepted the digester to protect and conserve the environment.

**Interviewer**: How did you meet your energy needs that time?

**Interviewee**: Bluntly speaking, the first and common means of cooking here is by firewood. This is followed by charcoal. Statistically, I can say 75% of the people here use firewood; if you go to 100 households, you would find that 70 to 75 households are using firewood, and the rest use charcoal. I’m saying this because the charcoal we use here is not made here. It`s made in Mozambique. So, sometimes it’s hard to find and it’s expensive too.

**Interviewer**: Oh, you get charcoal from Mozambique?

**Interviewee**: Oh, yeah.

**Interviewer**: What do yourself use?

**Interviewee**: I often use firewood. Still, sometimes I use charcoal.

**Interviewer**: In 6 months, how many bags of charcoal do you buy?

**Interviewee**: Maybe, I use two or three bags. We usually buy charcoal during the rainy season because firewood is usually wet around that time. Around this time is not common to find the people cooking using charcoal.

**Interviewer**: How much is a bag of charcoal?

**Interviewee**: It’s sold in range of K3000 to K5000 depending on the size.

**Interviewer**: Where do you get firewood?

**Interviewee**: We get it from the mountains.

**Interviewer**: I have seen a lot of mountains around this part. Everywhere you look you see a mountain, and you house is even on a foot of a mountain [less than 50 meters]. How often do you go there to source firewood?

**Interviewee**: We go there four times a week. It’s within.

**Interviewer**: How did you manage your feedstock before the intervention?

**Interviewee**: Before that digester, he was getting the manure to the farm to be used as fertilizer.

**Interviewer**: Does it work?

**Interviewee**: It works, but it takes time to work. For example, if you put the manure in the farm today, you should expect it to start working next year.

**Interviewer**: How do you make it?

**Interviewee**: We collect manure from the cow house and heap it at the farm. Then, we place the manure on top of the ridge and place vegetation i.e. maize stalks on top, and then we make the ridges again onto which seeds are planted. So, when the rain comes it breaks down the manure, and it takes about a year to complete break it down. So, it takes a year or so to work as fertilizer. Though, it takes time for this method to work, it’s good because it helps the soil to retain moisture, and it generally improves the soil.

**Interviewer**: How did it work after commission?

**Interviewee**: I can’t really say because I never got the chance to see the stove working. But, I knew that they were cooking on it, because I would hear them talking about it.

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

**Interviewee**: I think it was only manure. As I said, I didn’t really interact with it to know it fully.

**Interviewer**: And water too?

**Interviewee**: Yeah! Water too!

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

**Interviewee**: I just heard about that they mixed cow manure and water, and then feed it.

**Interviewer**: Do you know how often did they feed it and in what quantities?

**Interviewee**: Hmm, I don’t know.

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

**Interviewee**: That I can’t know as well.

**Interviewer:** In own words, what were the challenges?

**Interviewee**: Aah, in his own words, he mentioned that the installers didn’t come back from the time they installed it. Also, that it was malfunctioning sometimes, which was hard for them to fix because they did not receive any training. Then, after sometime, the bag shrunk and that was the end of it.

**Interviewer**: So one major problem was that the installers did not follow up after installation of the digester…

**Interviewee**: Yeah, for example, if they could have come after the bag shrunk, I believe they could have fixed it using the expertise.

**Interviewer**: What went problem?

**Interviewee**: I don’t exactly remember what it was, but he said something like the bag shrunk and it was not producing gas, and I don’t know what caused it.

**Interviewer**: Did he call the installers?

**Interviewee**: Yes, he did. But, they only told him that they would come to fix it and they didn’t.

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

**Interviewee**: I can only say that it’s broken.

**Interviewer**: How did it reach that state?

**Interviewee**: I can’t know, but I remember I asked him about the digester and he told me that it doesn’t work.

**Interviewer**: It sounded to me like when you want to cook you use firewood, and you use manure as fertilizer for your crops even now, right?

**Interviewee**: Yeah! Nothing has changed.

**Interviewer:** We are going towards the end of the interview.Do you know how much reactor cost?

**Interviewee**: No, I didn’t hear anything on that.

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

**Interviewee**: I don’t know anything about that.

**Interviewer**: What is your opinion of biogas?

**Interviewee**: When the digester came here, we admired it. And when we heard that many people would get the digester after the first roll out, we were happy because we really admired it. We admired it because life is hard when you cooking on firewood or charcoal. And, when we look at the environment, the mountains, we feel sad because we don’t know how bad things will be if we continue like this. So, if there is a solution other than biogas, then we would really appreciate it. What I want is we community people to move away from what we were told by our fathers that firewood is for cooking and start using modern methods of cooking. I remember, this other day I was passing through Namonde village in Group village Ching’ani and I saw solar panels mounted on people’s houses by a certain NGO. I was so attracted, so I asked the people and they told me that 10 people were given the solar panels by a certain NGO, and they use solar panels for cooking. They went on to say they stopped using firewood and charcoal after the got the solar panels. So, if I can be given a chance to choose between biogas and solar panels, I would go for solar panels without a doubt. And, I believe that if organizations can supply the people with solar panels, I’m sure we would save the environment.

**Interviewer**: If think you have touch on my next question, I wanted to ask you that if you were given an opportunity to choose or design your own waste or energy intervention, what could you have chosen instead?

**Interviewee**: When I look at the time that my uncle used the digester, I think it’s too short to be considered as an alternative to firewood. But, I think solar can work for a long time because it relies on sun, and you know the sun is ever-present (laughs)…. So Personally, I would go for solar panels.

**Interviewer**: Why do you think your uncle’s digester didn’t work for long?

**Interviewee**: I think the digester didn’t work for long because project implementers did not follow up after they installed it. It is also important to give beneficiaries training regardless of what kind of technology it, so that you enable them to manage the technology. For example, if you can give me a dairy cow and leave, of course, I will accept it, but something will be missing. I will need is training, for example, I will need you to tell me what I should do to maximize milk production especially in regards to feeding. Because without that, I might be feeding it with local feed and it may fail to produce milk. And after a month or two, I might even call you to tell you that the cow is not producing milk. Then, you will ask me what I’m feeding the cow, and then you will learn that I’m not feed it accordingly and you will advise me on feeding to maximize milk production.

**Interviewer**: So, it failed because the people did not receive training?

**Interviewee**: Yeah, you can’t give anyone a new thing without explaining what thing is about. You need to explain what ought to be done for that thing to last long.

**Interviewer**: Why do you think an organization would do that? Because when you think of an organization you think that, everything is well planned and organized. Why did this organization fail to do the training or implement this accordingly?

**Interviewee**: It could be that they failed to come and monitor the project because of the transition of government. In my thinking, I believe change of government also affects the operation of NGO. I think governments do have special working relationship with certain organizations, so when the government goes out of power, certain organization also crumble. For example, we have seen certain projects that stopped abruptly after regime changes. I’m thinking of the livestock donation project [a flagship program by former President, Joyce Banda]. Once government changed, the project disappeared and even the organization that was implementing it seized to exist. We had certain organizations that were very active during the era of Peter Mutharika, but we don’t see them here no more after he lost power. So, a lot of organizations have gone, and you can agree with me. It’s only World Vision that has stayed here for long. I remember that time we had ADRA, it`s no longer here. And, it does not only apply to organizations, it also applies to individuals. For example, the person you have come with, the former ADC [Area Development Committee] chair, he was very active in spearheading developmental projects during the time of Peter [former president]. But, now he’s no longer active. So, I’m of the view that change of government affects operation of non-governmental organizations too.

**Interviewer**: So you think certain organizations are connected to the government?

**Interviewee**: I do think so. I do believe governments have certain powers, which they use to work with certain organizations, and they choose which organization to work with. So, when the government changes, the new regime blocks certain organizations because they knew that they are attached to previously regime.

**Interviewer**: What you are saying is true to some extent. I mean there was an organization called Beautiful Malawi, which was run by the former first lady. They were seen everywhere in Blantyre doing cleaning services with city council. But once they lost power, they organization couldn’t be found. So, it’s one of those things.

**Interviewee**: Yeah, I know it. It was popular

**Interviewer**: But, when the previous regime lost power, I tried to locate them but I couldn’t find it. So, yeah, it could be true. But, for the digesters and government change, it was 2 years in between them. So, we may never know if there was some politics involved. That was my last question. In closing, do you have anything to say?

**Interviewee**: I don’t know if the organization which was dealing with my uncle is still around. But if it’s still there and they want to bring the digester, I would like to … (laughs) you know something like a succession thing. Just like what has happened to England, the queen has died and her son has replaced her. So if the same can happen here with digester it cannot do anyone harm.

**Interviewer**: (laughs) I get you. Thanks for the interview; I really appreciate it, brother.

**Interviewee**: Welcome.