

Nanumea, Tuvalu.

Date: 25th November; 2010.

Dear Sara,

BIO-GAS PROJECT ON NANUMEA 2010:

I wanted to inform you that Sipele Samuelu, Kaupule Secretary had informed Kaupule on my appointment as the representative of Alofa Tuvalu on Nanumea to coordinate and facilitate the Bio-Gas project on the island. This was discussed yesterday, Wednesday the 24th November. Today, Thursday the 25th November, I managed to meet with the four owners of bio-gases established on the island and discussed with them some of their experiences and their needs which are listed below:

1. Gloves – It was reported by Tumau that he managed to use green leaves as manure into the digester. The smell is appalling and neighbours are complaining of the strong smell. He used his hands to fill the tank and he had to wash his hands with hot water to get rid of the smell. He stopped using green leaves as manure.
2. Steel buckets – Pigs' waste are hard so it has to be mashed/pounded using a stick. A plastic bucket is not suggested.
3. Chicken wire – The team suggested to fence the area for the digester to keep away children from throwing other materials into the digester. I suggested 10-12 meters of chicken wire for each of the homes, would be fine.
4. Instructions of the digester – I gathered from the discussion that they are not too sure on the process of gas collection and when to use the stoves. Some say would take one meter before it is enough gas for cooking. Some told me that they need to put bags of sand on top etc etc. I suggest that you give us some proper instructions on this that I would distribute to all of them so we could have the same understanding.
5. Materials for the pig pen – Sipele reported that all of the materials are on Funafuti and need to be transported. She would contact Eti Esela on Funafuti on this delay. This had delayed the filling of the digester with manure.
6. Funnel - The recipients requested that they need a bigger funnel to fill the manure into the digester. The current one is too small.

Status of the digester:

1. Lack of water on the island

It was reported that the digester consumed about one bucket of water when manure is applied. Since the island is experiencing drought at the moment (there had been no rain since September/October) so the recipients are having difficulty to fill the tanks with manure. Sipele is in the process of getting the consent from Kaupule to allow those homes an extra bucket of water per day to fill the tanks. Most families do not have water so are rationed from community water cisterns.

2. Stoves not yet lit:

We managed to visit the two homes today and tested the stoves ie Tumau and Paolo. We tried to light the stoves and we smell gas but the stoves are not lit. We think probably not enough gas to enable to light the stove as yet. Tumau reported that his stove was lit when the Planner tested it a few weeks ago.

3. Level of manure:

The three digesters when visited, the inner tank raised to about 1 foot high. The recipients reported that when the day is hot the inside tank rises but falls in the evening. According to the recipients, they do not think they have managed to fill the digester with the 20 buckets as required. That is why, they suggested the need for the materials for the pig pen. Plus the lack of water at the moment, had contributed for these homes to be reluctant to fill the digester with manure.

4. Change of site for a digester at Isala's residence:

Isala's son, Cameron is no longer staying at his parents' home when all of his parents died but with Steven, who is a neighbour. He reported in today's meeting that he shifted the digester to Steven's home since he is staying with Steven. This has yet to be discussed with Kaupule and Falekaupue to endorse the change of site for this digester. I would come back to you on this as Cameron's intention of staying with this family is not yet known and whether this is a long term arrangement. I need to discuss this with the families and would report to Kaupule for their consent for this change of site of this digester or get an alternative.

Cameron also reported that the pipe where he filled the manure into the digester is blocked but all had been cleaned and shifted. No manure had yet added into this digester.

I think the above gives you the status of the Bio-Gas Project on Nanumea. I am copying this, to all Kaupule and those families who are recipients of the project in order for them to know that I have conveyed their needs. At the same time, is a way to give some insights for the Kaupule on the needs required by these families and to report to them the status of the project. I hope that you would take note of the needs especially to encourage Eti to send the rest of the materials as soon. Please confirm the dates for Sikeli's visit to Nanumea.

Hope to hear from you soon.

Teuleala Manuella Morris

Cc: Sipele Samuelu, Kaupule Secretary
All Kaupule
Project Recipients