Biogas Used For Tackling Energy Crises
A success story of using Biogas to run Electricity Generator
Beneficiary’s Profile

General Info*

Beneficiary: Muhammad Tariq
Age: 54 Years
Occupation: Agriculture & Petroleum
Village: 256 GB Phalor
Tehsil: Toba Tek Singh
District: Toba Tek Singh
Province: Punjab, Pakistan

Biogas Plant Info*

<table>
<thead>
<tr>
<th>Sr.</th>
<th>Type</th>
<th>Size</th>
<th>Date of Construction</th>
<th>Plant I.D</th>
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<tr>
<td>1</td>
<td>GGC</td>
<td>15m³</td>
<td>29-10-2011</td>
<td>TTS-P000280</td>
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*: As on 12-02-2014
In the rapidly developing twenty first century, the human beings have turned on their lives on machines to reduce efforts and ease their lives. Undoubtedly the machines have reduced human labor and hardships, but they have made human beings so dependent that the life stops working if the machines are turned off. The modern technology and machines use different types of energy to work and most of them are working on electricity and petroleum fuels.

Daily life in Pakistan is extremely disturbed due to severe energy crisis. The shortage of electricity and unscheduled loadshedding has compelled people for using alternate power resources to carry out their daily tasks. In this concern people mostly use UPS, diesel or petrol electricity generators, or solar power plants. These alternate power resources are so expensive that the poor can’t even imagine using them for fulfilling their electricity needs. However a limited number of population is using these alternate resources but they are also worried about the day to day increasing prices of petrol, diesel and other equipment used for generating and storing electricity at domestic level.

Despite of severe circumstances here we saw a person named Muhammad Tariq of Chak 256, Toba Tek Singh, who was not worried about using the alternate power resources or increasing prices of petrol, diesel.

Muhammad Tariq actually generates electricity on a 3KV electricity generator using biogas. A 15m³ biogas plant has been constructed in the rear area of his house near his agricultural fields. He constructed this plant in October 2011 with technical and financial support from Pakistan Domestic Biogas Programme (PDBP) under Rural Support Programmes Network (RSPN).

He told that the total construction cost was PKRs.75000, but he got a subsidy from PDBP-RSPN amounting PKRs.7500.

He told that he was not using this biogas to run electricity generator only, but using the biogas in his house as a kitchen and heating fuel as well. He told that he was heading a 12 person family, the consumption of gas cylinder in his house before construction of the biogas plant was 4 cylinders per month which he used to pay for PKRs.6000/month for fulfilling his kitchen fueling and heating needs. Similarly the electricity generator used to run on diesel which used to cost a sum of PKRs.9000/month, thus the average expenditures on kitchen fueling and
electricity generation at domestic level were PKRs. 15000/month. But now they are saving that sum of amount because they have to pay nothing for gas and diesel. He said “biogas is free, it has no expense, the construction amount we had covered in the first year through saving the money that was previously expensed on gas cylinders and purchasing diesel for the electricity generator, now we are enjoying these facilities all free, because we use to produce biogas from animal dung which is waste and pollution for us, but enjoying all facilities because of this gas-producing-waste”.

Muhammad Tariq detailed that the biogas plant was not only catering fueling and electricity needs of his family, but providing organic fertilizer for the crops as well. He told that he had been using bio slurry as a fertilizer that exhausted from biogas plant as waste after production of biogas; he has drained out this bio slurry into his fields. He shared that the crops grow-on-bio slurry were richer in nutrients and taste than those cultivated with chemical fertilizers. Thus he has reduced 50% of his expenditures occurring on chemical fertilizers.

Muhammad Tariq told that each one of his family members benefited from the biogas plant. He detailed “my wife is very comfortable with using biogas, now she has no fears of gas cylinder blast; she has no worries of refilling the empty cylinders, my savants are not living in dung-spread environment, and the entire family has no tension of load shedding as there is enough biogas to run the electricity generator.

He said with laughter “and the most benefited person is I, as it has saved my money and time, reduced my efforts, and paid me a lot”. He expressed his happiness saying “we don’t pay anything to produce biogas; we just give animal dung to it, and get facilitated with gas, electricity and organic fertilizer”.

He wished “all people in my village should benefit from the biogas programme, I am thankful to the biogas construction company and motivating all my neighbors and relatives to contact the company to avail the opportunity of subsidy provided on plant construction”.

Bio slurry (organic fertilizer) drained to fields