

Cooking and living – guilt-free

Pakiran Hosahalli, Village, Sidalgatta Taluk, Chikka ballapur District

Manjula's pretty farm house is only partially visible from the road that connects Vijayapura to H. Cross. A small pathway through the green mulberry fields leads to the house which is hidden behind a curtain of trees that dot her lush green two acre farm. The bark of a dog, cattle mooing and goats bleating, combined with smell of hay and dung completes the image of a picture perfect farm house. Incongruously, smoke from the chimney of the farm house is missing.

Manjula is visible at a distance, feeding the cattle with green fodder and patting them with affection. The cattle seem to be well-fed and cared for. The cattle shed by the house looks very clean and devoid of usual heaps of dung on the floor. When complemented for her efforts, Manjula smiles and says "These cows are part of our family. They contribute to the income and comfort of the family."

Munivardhana, Manjula's husband clarifies Manjula's statement. He explains that even though their primary occupation rearing silk worms, they also rear three farm cows and a buffalo. They own two acres of land and have taken two acres on lease around the farm house. The major portion of the land is used to cultivate mulberry to feed the silk worms. In the remaining portion they cultivate food crops for domestic use and as fodder for the cattle.

The couple also manages a milk collection centre in the morning. The neighbouring farmers bring the milk to their house. Manjula and Munivardhana add their share of around 20 liters of milk per day to this and send the collected milk to the nearby chilling plant.

"Milk is not the only resource that these cattle provide us," Munivardhana points out. "They also give us other benefits. We get a lot of dung as three of the cattle belong to farm species. Earlier we used to dump the dung in the compost pit and use the compost as manure. Now we realize that we were not optimizing on the total benefits from the dung. Despite sitting on a rich resource we had not realized its real value," Manjula adds.

Both Manjula and Munivardhana were able to visualize the entire scenario in a new light, when the workers of SKG Sangha conducted a *gramsabha*¹ to explain the new initiative of bio-gas plants. As both had studied till Class X, they could easily comprehend the advantages of installing a bio-gas plant. They were able to understand that by having a bio-gas plant at home

¹ *Gramsabha* is a village level meeting where all the residents of the village are expected to participate.



they would be able to utilize the dung for production of gas for domestic use, enrich the quality of manure and more importantly contribute, may be in a small way, to the reduction of pressure on the forests and decrease greenhouse gas emissions.

"Not that we did not know the negative impact of cutting wood from the forest earlier. Both of us knew it as we were also a part of the discussion in our village on conservation of forests and environmental impacts. But in the absence of options we justified our consumption by thinking the small quantities we used would not make much difference to the global environment," accepts Munivardhana. "But when we came to know about the bio-gas plant, it created an opportunity for us to get rid of this guilt and do our bit," he adds.

Some statistics:
In a typical village-level household
Amount of wood consumption for cooking per annum:
Forest denuded due to fuel wood consumption per annum:
Amount of GHG emanated per annum:
Amount of time spent for collecting fuel wood:
Reduction of deforestation by shifting to bio-gas instead of burning fuel wood:
Carbon credit gained by shifting to bio-gas instead of burning fuel wood:

Proudly pointing to her bio-gas stove, Manjula recalls the hard days of the past. Manjula's family that comprises of her parents-in-law Ramachandrappa and Jaylakshamma, her husband, Munivardhana and two young children of five and three years, used wood as fuel. As sericulture is a labour-intensive activity, the family also needed to feed around ten daily labourers during the harvest season.

Jayalakshamma, Manjula's mother-in-law recalls that three of them, Munivardhana, Manjula and herself, used to take turns to go to the forest and collect or cut wood. They had to spend around three hours every alternate day to collect enough wood for cooking. They had to walk two kilo meters to reach the forest and search for dried twigs. On not finding enough they had to cut the branches of the trees. "We did not mind the distance and the effort but the constant fear of getting caught by the forest guards used to be quite stressful," explains Jaylakshamma.

If caught while cutting or carrying wood, the forest guards would seize their axe or sickle and the wood and also collect a heavy penalty. Apart from the feeling of guilt for which was overpowering, the feeling of waste of time and loss of opportunity used to make them helpless.

Manjula's family decided to go for the bio-gas plant as they were convinced that this way they would get free fuel from the dung they were using for composting and also get the manure as they were getting earlier. The initial expenditure they had to incur for installing the bio-gas plant was something that they could afford. Their gas plant has now started producing enough gas for the family and replaced fuel wood for cooking. They are not dependent anymore on the fuel wood which was always in short supply. Instead they have a more sustainable energy source which uses dung, the rich resource they have in plenty, and is but a part of their occupation itself.

Munivardhana has constructed the bio-gas plant close to the fields and bore-well. This helps them to mix water with the dung. Moreover, he thinks that if the vermi-compost unit is installed along with the bio-gas plant closer to the fields, it is more convenient to transfer the slurry to the fields or vermi-compost unit. While this called for an increased length of the gas pipe, the couple feels it is a better option.

Manjula is happy that cooking has become very easy for her and is devoid of problems of smoke. But more importantly, she is happy that it has ended the compulsion of collecting fuel wood and the necessity to steal wood from forest escaping the guards' watchful eyes. She is happy that it has saved her family from shame and guilt. "The chimney that does not emanate smoke is the symbol that indicates our pride of being a part of the community of informed and responsible global citizens," Manjula signs off pointing at the chimney.