

have already become members of the proposed society. Meanwhile, BESCOM has started laying a separate feeder line from the electricity substation at Tovinakere.

Gasifier system for Namadachilume Forest Information Centre:

The Project Steering Committee has approved installation of a gasifier system of 10 KW capacity for generation of power to meet the requirements of the forest nursery and information centre at Namadachilume near Tumkur town. Namadachilume, the site of a perennial water spring, attracts considerable tourists to the spring and the medicinal gardens developed by the Forest Department. Location of a gasifier unit here would enable the demonstration of this bio-energy technology and creation of awareness amongst general public.

Community biogas plants: During November, 2003, five cow-dung based community biogas plants were successfully commissioned in Chikkannanahalli and Kabbigere villages of Koratagere cluster providing cooking gas to 28 households. The successful functioning of these plants and the perceived benefits to the households using them, have generated demand from several households in these villages and other clusters. Based on the technical feasibility, 28 more plants have been constructed in 16 villages. These new plants have benefitted 452 persons belonging to 91 households.

The plants are being successfully managed by the community through biogas user groups (BUG). Apart from contributing dung required for operation of the biogas plants, each member contributes an amount between Rs.20 to Rs.40 per month towards the maintenance of the plants. Since the inception of the project, operations of these biogas plants has resulted in saving of 228 tonnes of firewood and has reduced CO₂ emission by 91 tonnes.

Cluster-wise details of community biogas plants are given below:

Cluster	No. of biogas plants	Benefi-ciary hhs/ (persons)	Total No. of hhs	% of hhs using biogas
Koratagere	10	45 (222)	446	10.1
Madhugiri	5	14 (84)	539	1.8
Sira	6	18 (74)	777	3.3
Gubbi	6	24 (120)	632	3.8
Tumkur	6	18 (89)	626	2.9
Total	33	119 (589)	3020	3.9

Study on the cowdung slurry ratio: A study was conducted for Krishna BUG in Ajjenhally village, Koratagere cluster, over a period of 2 weeks, to determine cowdung:slurry ratio to enable the biogas using households to share the extract produced by the biogas units. During this period a total quantity of 1420 Kgs of cowdung was fed to the biogas plant and the slurry collected during the period was 800 kgs, giving a ratio of 1: 0.56.



20 cmtr community biogas plant, K. Gollarahatti (Koratagere)

Pressure Cookers for cooking: In order to increase efficiency in energy use, to reduce cooking time and to enable more households to use biogas, the project is encouraging use of pressure cookers for cooking. 14 biogas using households in Koratagere cluster are now using pressure cookers of 7.5 litre capacity. It has also been decided to encourage use of gas lighters instead of match sticks for lighting the biogas stoves.

Leaf-litter based biogas plants: 2 leaf-litter based biogas plants of 8 and 6 cubic metres have been constructed at Ajjenhally and Obenahally village respectively in Koratagere cluster, on a pilot basis, to provide cooking gas to the families which do not own any cattle. These plants when fully operational are expected to meet the energy requirement for cooking for 11 households. A meeting was held on 9th September, 2004 with these two Biogas User Groups in the presence of the executing agency (TIDE), the technology developer (ASTRA) and the funding agencies to find ways to operationalise the plants.

Community Irrigation Systems (CIS): Community irrigation systems are being set up under the project to improve the incomes of the farmers as well as their capacity to productively utilise and pay for bio-energy services. Each system involves a community borewell which satisfies the irrigation needs of 6 to 10 farmers having lands around the borewell. Each farmer is provided with water for irrigating upto half an acre of land. These farmers are organised into a