“Anagi” Stove Construction in Sri Lanka

The most popular ICS in Sri Lanka is marketed under the trade name “Anagi”. The word “Anagi” in Sinhala language means precious or excellent. So “Anagi” stove is very useful as it saves firewood and cooking time. Lab tests carried out on the stove indicate a technical efficiency of 21% and numerous field cooking tests indicate average firewood savings over 30%...

Anagi was first introduced in 1986 by the Ceylon Electricity Board in collaboration with the ITDG under the Urban Stoves Programme. Its success prompted the stove to be selected for commercialization in the rural areas with the participation of the Integrated Development Association (IDEA) and the ITDG. Later the Asian Cookstove Programme (ARECOP) supported the programme to be extended to remote areas where access to commercial networks is absent. At present nearly 300000 stoves are produced annually and sold in the market.

“Anagi” is two pot single-piece clay stove designed to meet the cooking needs of a 6 people family. It can accommodate medium-size hard or soft wood and other loose biomass residues such as coconut shells, fronds and leaves. The stove design has been carefully developed to suit the cooking habits and the types of food cooked in Sri Lanka. The stove can be used directly, which is preferable for short cooking as done in urban houses. For cooking over a long period of time as in many rural houses, insulating the stove with a mud mixture improves the firewood saving capacity.

The life-time of the stove is about 3 years if it is used with insulation (normally insulation consist of clay/mud cover).

The stoves are made by skilled potters with the assistance of unskilled workers for assembling the various components of the stove. In general a skilled potter and 3 assistants could produce about 1000 stoves a month. The potter needs to be skilled in traditional pottery making technology for selection to be trained in stove making.

The stove has three main components as follows

- Fire box,
- 2nd pot hole, and
- Tunnel (which connects the firebox and the 2nd pot seat)
The secondary components are

- pot rests,
- buttresses,
- baffle,
- flame shield, and
- the door.

These are made separately using moulds. The three main components are thrown on the pottery wheel by a skilled potter.

The stove construction process consist of

- proper selection and preparation of clay,
- throwing the main components on a pottery wheel,
- moulding the secondary components,
- assembling all the components,
- finishing,
- air drying,
- packing inside the kiln and
- firing.

Although the "Anagi" stove is made in clay just like a traditional household pottery item, its features and its construction methods differ as a number of components have to be made and assembled unlike in the traditional pottery-making technology. Thus stove-making needs a special training to avoid excessive breakages in the construction and standardise the stove dimensions. Improperly made “Anagi” can be worse than an open fire hearth. The guide lines for this special training is given in a training manual titled “How to make Sri Lanka’s Anagi Stove”. This training manual is the work of ITDG and IDEA. A VCD prepared by ARECOP in collaboration with IDEA also provide the steps of making the Anagi Stove.

The manual provides detailed illustrations and description for all the steps of the construction process. It also gives a list of all the tools, moulds and templates required and how you can make it. The overall construction process lasts around ten days.

The “Anagi” stove production manual is available from IDEA, Integrated Development Association (IDEA), Galmaduwawatte Rd, Nattarampotna, Kundasale, Sri Lanka, Phone: +94 81-2423396, Fax: +94 81-4470649, Email: idea@sltnet.lk