

Instant Roof Shelter and Instant Eco Toilet

INTRODUCTION

Even as we are increasing fabrication of the bamboo LOG Emergency Shelters through fabrication in certain village centres in remote areas, I know that the demand for shelter is so great that it will still take time to have these available in sufficient numbers.

And I see the plight of displaced families, many still unable to return to their original villages, and many forced to survive on bunds or roadside, I have decided to create an extremely low cost instant roof (cost Rs. 2,500)) on a sharing basis. However, the matting that has to be used for cover would have to be fabricated by families themselves. The making of matting is quite common in our rural areas and is easily fabricated by families particularly women.

Clearly, tents will have a limited life and their cost is also increasing by the day. Under such circumstances, an option is needed which will allow protection from weather through a participatory process. Another great need of the hour is the availability of toilets. Since I am a great believer in eco toilets, a very economical system has been devised, using similar technique of construction as Instant Roof Shelter.

Both instant roof shelter and instant toilet require sets of bamboo lengths, a few nails, all tied with ropes. Since most households are skilled in making reed matting, through an effort on their part, reed matting can provide enclosure by using a simple bamboo frame. The structures is strong enough to serve under normal conditions.

1. What materials are used?

- Bamboo lengths, nails and rope to make a frame for an 8'x8' enclosure will be in the form of a pack. It will be installed by households themselves.
- Reed matting made by households and installed on the roof and sides of the structure to provide enclosure.

2. How will these be fabricated?

Work places are being established in Mirpur Khas in Markaz Centres (One is functioning while another will become functional soon), each has one satellite karigar village dedicated to small bamboo products. Among other products, important ones are the instant roof and instant toilet. I have placed an order for fabrication of 300 instant roofs and 150 instant toilets, for which material has already been delivered in Pono Markaz.

3. How will they be distributed?

As in the case of Heritage Foundation's popular award winner Pakistan Chulah, these will be distributed by Barefoot Entrepreneurs who are trained to help families to install them. A certain amount for their effort is built into the price of each unit. However, what is important that they would be authorized to distribute them only to those who have already got their matting completed. This is necessary so that as soon as the bamboo structure is erected, the matting is used to cover the entire structure which will provide protection from sun and rain. If the families wish they could begin applying earth plaster on the matting for further protection.

4. How will it become available?

- As one of the satellite karigar villages of Pono Markaz, Taj Mohd 1, Bamboo village has initiated the fabrication of instant roof option.
- The packs of the structure have become available for general use which can be easily transported elsewhere.
- Since the matting is being fabricated by households themselves, once the basic frame pack has been acquired, once erected it can quickly be covered by using matting fabricated by households themselves.
- I am planning to set up workplaces for simple bamboo cutting in several localities. By following the drawings and directions provided by HF, these will be quick to fabricate and quick to install.
- Teams of Barefoot Entrepreneurs are being organized who will supply instant roof shelters as well as instant eco toilets to families who has woven their own matting.

Will the toilets require special training?

The toilet kit will include especially designed floor mounted WC which allows the urine to be discharged into a pipe and the solid is collected in a removable bucket, which is emptied into compost bins. These bins will also be supplied along with 5 toilets to ensure compost making from solid waste.

The Barefoot Entrepreneur will help install all the elements and also provide training in the use of the toilets along with the following:

- Ensure that sanitation aquifer pits are dug upto 3-5 feet and need to be filled with stones and bajri gathered from the area by families.
- The fixing of drainage pipes to ensure the discharge of liquid from WC and also from shower into the sanitation aquifer pit.
- Helping households to set up compost bins for 5 toilets and explaining how the solid waste from the bucket is to be regularly emptied into the bins which should always be covered with straw or leaves etc., and will become compost in a few weeks.

Instant Roof Shelter



Instant Eco-Toilet

