

NEED FOR CHILDREN TO PLAY

Among children's rights is the right to play and the need for activities that would help them grow mentally and physically. Most children in Sindh villages have no access to recreational activities. It is only when during the 7th EcoWorkshop we encouraged student volunteers to set up a basket ball net and play basket ball with the village children that we now find children taking up rudimentary sports activities. Moak Sharif children who seemed down cast appear to be much happier as they are found playing in the assembly area where an earth platform has also been constructed.

Accordingly, it becomes important for HF to create play/recreation areas in all villages where our rehabilitation/development work is going on.

It would be a good idea to create children's committees who would take care of various items provided to them. Children should be taught to write 'thank you' notes.

Setting up Sand Pits

1. Create sandpits close to all Satellite Learning Centres. Fill them up with sand and arrange for buckets, mugs and water. The pits can be created by excavating a 1-0" deep pit and placing a loose bamboo fencing around it.
2. Arrange for areas where clay modeling can take place.

Basket Ball Courts

1. Provide a drawing for laying out a basket ball court.
2. Provide a net and ball to a committee of children formed for this purpose.
3. Ensure that the net and ball are stored properly by making the committee responsible.

Setting up Chess/Draughts Playing Arrangement

1. Create chess/draughts board table with mud size 3'0" x3'0" by using black and white glazed tiles procured from Nassarpur? or by painting black and white squares on the mud top. The top should be well plastered so that it can survive during rains
2. Place mud seating (similar to one made in Moak Sharif) to enable 2 children to sit.
3. Get chess pieces fashioned out of clay with white and black glazed surface.
4. Form a committee of children to store and make the pieces available.

GENERAL INFORMATION FOR COMPOSTING OF AGRI-WASTE

1. General Information

1.1 Type of Waste and Collection

- Straws, stubble, stover, haulms of different crops.
- Make a compost yard in corner of the farm; heap crop residue in one corner; have water supply available.

1.2 Shredding

- Shred all crop residue to be used for composting.
- Use shredder machines where possible for recommended size of 2 to 2.5cm.

1.3 Mixing Green Waste with Brown Waste

- Maintain C:N (carbon:nitrogen) ratio of 30:1
- Mix carbon and nitrogen material together.
- Green coloured waste material: glyricidia leaves, parthenium, freshly harvested weeds, sesbania leaves are rich in nitrogen. Animal dung is also good source of nitrogen.
- Brown coloured waste material i.e. straw, coir dust, dried leaves and dried carbon are rich in carbon.
- Place alternative layers of carbon rich material, animal dung and nitrogen rich material and heaped to get quicker result in composting.

1.4 Compost Heap Formation

- Make a heap of min. 4 feet high and have shade
- All crop residue should be mixed together (after placing them in layers).
- Ensure that layers of carbon and nitrogen with intermittent layer of animal dung are placed.
- After forming the heap, moisten the entire heap thoroughly.

Ref: http://agritech.tnau.ac.in/org_farm/orgfarm_composting.html

2.0 SUGARCANE TRASH COMPOSTING

- Composting can be done above ground in a corner compost yard.
- Use shredder or chopping machine or manual chopping.

2.1 Input for Composting

- a) Microbial consortium: TNAU bio-mineralizer: one ton of trash to two inoculums. Alternatively use dung slurry; b) Animal Dung
- Dung or fresh poultry litter can be used as nitrogen to reduce the C:N ration.
 - Use 50 g fresh dung to one ton of sugarcane trash.
 - Mix dung with 100 litres of water and mix thoroughly with sugarcane trash.
 - Add rock phosphate at 5kg/ton waste to increase phosphorous content of the compost.

2.2 Make Heap Formation, Turning and Moisture Control

- After mixing a heap should be formed with min. height of 4 feet to generate sufficient heat.
- Material should be turned once in 15 days bringing the bottom layer to the top and vice versa for uniform composting.
- Throughout 60% moisture should be maintained; moisture is a critical factor for good composting.

2.3 Composting Maturity

- Volume reduction, earthy odour, brownish black colour, reduced particle size are evidence of compost maturity.
- After this, compost heap should be spread for curing.
- Sieve through a 4mm sieve after 24 hours for uniform compost material.
- Residue should be recycled with the next composting batch.

2.4 Nutrient Value

- Sugarcane compost contains 0.5% nitrogen, 0.2% phosphorus and 1.1% potassium, which is good source of nutrients for sugarcane crop.

2.5 Compost Application & Limitations

- Apply @ 5 tons/hectare.
- Shred the waste into small pieces for quicker composting action.
- Shredding can be carried out in the fields.

Ref: http://agritech.tnau.ac.in/org_farm/orgfarm_composting.html

3.0 BANANA WASTE COMPOSTING

3.1 Collection and Crushing

- Collect and crush banana leaves and crush them with an earth mover.

3.2 Procedure for Decomposing Banana Waste

- Place on a 400-500 sq ft area in layers of approx. 2 feet. Pour a solution containing EM (Effective Micro-organisms) to speed up the decomposition process. EM can be acquired from suppliers.
- Place maximum of 3 layers and cover the entire pile with 50-60% shade net to avoid excessive direct sun.
- Keep the pile moist by weekly application of water.

3.3 Time for Composting

- Banana stem takes atleast 75 days for composting. Further de-composting is required for another 45 days.

3.4 Ingredients for Composting

For final output of 200 tons of compost

- 30 tons of sandy soil.
- 60 tons of decomposed garbage waste
- 60 tons of banana and plant waste
- 60 tons of cowdung
- 10 tons of dry decomposed poultry waste

3.5 Procedure for Composting

- Place all the above in a large pit in 4 to 5 installments.
- Use buckets to thoroughly mix the ingredients.
- Water well to assure that the materials remain moist
- 2-3 days of effort are required to put each installment of ingredients and to mix them.
- After the entire quantity is put into the pit and mixed, cover it with tarpaulin or plastic sheet.
- Once a month mix and spray water to keep moist
- It will take 2 months of decomposing in the pit for the compost to be ready.

BAREFOOT EXPERTS – The KaravanChulah Adhi

Summary	Among barefoot experts being trained is Meerzadi, a young woman who has learned how to make the smokeless KaravanChulah. She is the first barefoot social franchisee of Heritage Foundation. All possible help will be given to her in order for her to make a success as a KaravanChulah Adhi to spread the chulah construction technique. A week earlier when I suggested that she should charge Rs. 200 for her services, she had shied away from it. However, by the time of my visit on 16 th , she had received an advance payment for 7 chulahs.
Advantages	The following are the advantages of the KaravanChulah: <ul style="list-style-type: none"> • Saving in fuel consumption. • Prevent smoke in the eyes and protection from respiratory diseases. • More hygienic cooking arrangement, avoiding insects, animals etc. • DRR-driven arrangement of elevated platform, providing protection from flood waters. • Use of arched vault provides protection from rain. • Organized kitchen space, with place for storage of utensils, incorporates elevated platform for safe drinking water storage.
Procedure	The following procedure is to be adopted: <ol style="list-style-type: none"> a. The franchisee must complete her Chulah Mihrab by building the remaining walls. b. Naheem Shah to ensure that the mihrab is built by the kubba (vault) experts. This will be done as part of the franchisee's training. c. The franchisee should complete the entire structure including finishing with lime plaster on roof as well as walls. d. The franchisee should arrange to provide a chick matting front to provide protection from livestock intrusion.
Workshop	Organize KaravanChulah workshops. The first such workshop to be held in Kakoo Wasan, and later in other villages. The following procedure is to be followed: <ol style="list-style-type: none"> a. Carry out a day visit to Moak Sharif and show how food is cooked. Demonstrate the benefits of the KaravanChulah as well as banana circle, roof gardens and arrangement for separate enclosure for livestock . b. Announce the date of the workshop. Issue Rs. 10 entry fee tickets to those interested to learn. c. Identify one woman ready to build her chulah and has made mud bricks. d. Workshop by the KaravanChulah Adhi, who will be paid Rs. 500 as fee, and will complete the chulah during the day.
Info Reqd	Drawings to be prepared by HF's Waseem, presentation drgs. by Hina.

BAREFOOT EXPERTS – THE TAILOR ADHI

Summary	Among barefoot experts being engaged by Heritage Foundation are Tailor Adhis (<i>Adhi</i> =Sister in Sindhi), the first one of which has begun working in the Masi (<i>Masi</i> = Women in Sindhi) Centre at Moak Sharif. She is the second barefoot social franchisee of Heritage Foundation. All possible help will be given to her in order for her to make a success as a Tailor Adhi to train others in stitching. When patterns are provided she will be able to also teach cutting and making various stitched products. It is possible that we might have to get other trainers for finishing embroidered items. For the time being the Tailor Masi will do fine to spread her own skills to other women.
Replication	The first Tailor Masi franchise allows us to assess the capability and drawbacks of the system. The women have been supplied with cloth and threads to start off with and they are all busy practicing. The trainees are paying Rs. 300/month to the trainer and she has already got 5 women as trainees. This system has possibility of replication and will be used in other Masi Centres being constructed in 3 other villages i.e. Kakoo Wasan, Sukh Mal and Dost Mohammad Khokhar.
Furniture, Fabric etc.	<ol style="list-style-type: none"> a. All Masi Centres should be fitted with matting, low tables for sewing machines, table for cutting patterns, arrangement for electric iron and a stand for hangars. b. A Fabric Bank is being set up to provide fabrics, cut pieces etc. for making various stitched products.
Workshop	Workshops will be organized in the Masi Centre for capacity building of the Sewing Machine Masis in order to be able to get more complex products including embroidered /hand crafted products made.
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