

## Village Level Permanent Shelter Monitoring Committee orientation- Sirkali Taluk

**Venue:** Sneha Training Centre

**Date:** 6/12/2005

### **Villages Participated:**

1. Keelamoovarkarai
2. Melamoorkarai
3. Chavadikuppam
4. Poombuhar
5. Naikarkuppam
6. Madathukuppam
7. Vanigiri
8. Pudukuppam

The orientation started with an introduction from Ms. Madivilla, Sneha staff about NCRC, its activities and relevance of the days programme with shelter construction. Finally Mr. Ram Mohan, Mr. Antony Xavier and Mr. Benny were introduced to the participants.

Mr. Antony Xavier introduced himself spelt out that without community participation shelter construction would not be qualitative and community has to be aware about this which is the major focus of the day.

Mr. Ram Mohan introduced himself and asked the participants to introduce themselves and also introduced Mr. Benny. He made it very clear that it should not happen as it happen in Bhuj where still 800 hundred houses are not occupied for the only reason that they were not built according the requirements of the Community.

Mr. Benny from SIFFS shared his Bhuj experience with the participants and the things which are to be focused for the day were:

- About the houses which is getting repaired.
- About the houses which are newly constructed.
- Common facilities which are must for every house.

Mr. Benny also said that it is very important that the house should be built on higher elevation to with stand the natural calamities. Tsunami did not cause much damage to those which built were on elevated surfaces. Since there is going to be so much of fund being invested and this is going to be there for future generation also for quality is very important. He said that foundation should be very strong especially 5 feet down the earth. Sometimes though too old houses they are still there without damage since because of strong base and quality. It was stated that it is well and good if basement is elevated from

ground level. Things which are very important are drainage, toilet, bathroom, saving rain water, etc. He oriented about the importance of water during construction like water to be used should not be salty if salty can be of serious consequences to the house build.

He suggested that the best way of doing rain water harvesting for common use (common ponds or barren land) is to plaster the pit with clay-like mud. This will prevent the water from getting absorbed. In extreme cases, not more than 2 inches high of water per month might get evaporated. Fitting up of a tank in every house will also help in storing up to 60 litres of rain water per family. During off season (other than monsoon), this tank can be used for other purposes.

Mr. Benny invited the participants for an interaction session wherein they were free to clarify their doubts and raise questions about the entire training programme. Questions like will the 'piles system' used in constructing houses be useful, the land being used for permanent shelter was previously agriculture land – will the building will be strong and calamity resistant, etc. The participants were also keen on knowing the Mixing proportion that should be used for putting concrete and the methods to be followed in centering process.

After noting all this questions, Mr. Benny provided a step-by-step explanation about the construction process to the participants.

- He started with brick usage in different kinds of infrastructure – usage of saline water has to be entirely avoided when making the bricks and it should also be **baked** well.
- To check the quality of water, it has to be soaked in water at least for an hour and more. If it does not get dissolved in the water, it proves that the bricks are of good quality and vice versa.
- The sand used for construction should be free from clay- like substances and should therefore be filter well. The presence of these clay substances is acceptable up to only 10%. A handful of sand shall be taken and dropped off – if it falls off without leaving any particles on the palm, sand is of good quality. Also, sand can be soaked in water – the portion which settles down is the sand and the other articles will float on the top.
- Water used at any stage of construction should be free from salinity for providing a crack proof, good quality house. Any salt content will, in turn, affect the durability of the houses leading to very early damages and cracking.
- As far as the storing of the cement sacks are concerned, it should be away from any type of wall or support. Similarly, the sacks should not be in direct contact to the ground but placed on some kind of wooden stands or racks. This will help in preventing the cement from absorbing atmospheric moisture.
- The paste made with sand and cement should be used within an hour's time from its preparation. The sand and cement (in the ratio of 6:1) should be mixed very well before being adding water. This paste should be applied in sufficient quantity in between every adjoining brick.
- The paste used for final plastering should be in 4: 1 ratio (sand: cement). 5:1 is also reasonable but anything beyond that will reduce the life of the infrastructure.

- The paste prepared for doing the concrete work should be 4:1: 2 (concrete stone:cement:sand), especially when being used for slab, roofing and column. The concrete settles down within an hour but it should not be disturbed for at least ten hours for gaining full strength.
- The thickness of the steel bars used for elevation, pillaring, etc should be 8mm for vertical erection and 6mm for horizontal erection. The rods or bars should definitely be ISI certified.
- Removal of the centering of the slabs can be done within 8 to 14 days. The column centering can be removed the very next day. He finally concluded that there should be a belt on all four sides of the house, constructed above the ground level to protect the house from the ill effects of salt water.\
- To remove the salinity from walls, wet paper pulps shall be applied on the walls and dusted off. This will cent percent remove the salinity, if any, from the walls helping in increasing the durability of the house.

The meeting came to an end with a vote of thanks given by Mr. Antony Xavier.