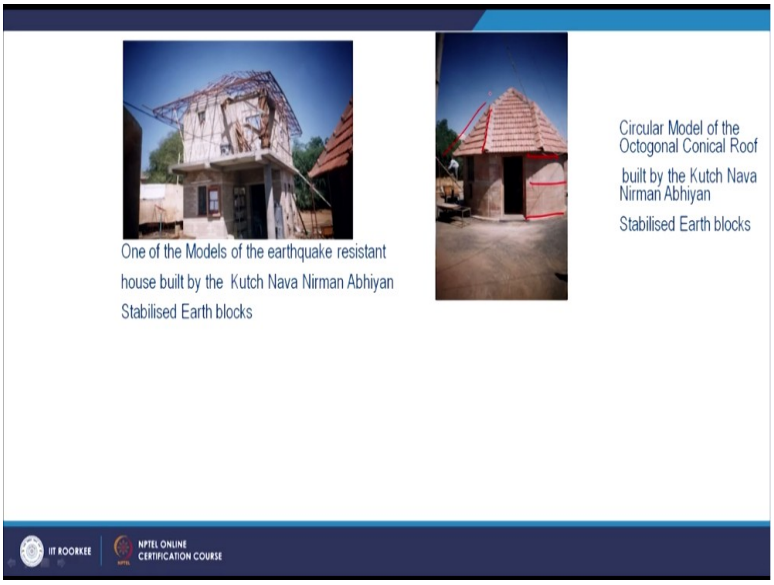

And following various guidelines which we showed by the GSDMA and all others IS codes, Kutch Nava Nirman Abhiyan of that time has developed many of the models earthquake resistant, one is G+1 model, one is the imitation of the Bonga, what you can see is the plinth band, sill band on the roof band. So, following these codes as well as the guidelines which has been issued by the authorities, so they also demonstrated that how the transfer of this technology can be implemented like the upgradation of the Bonga roof.

So that is where they are talking about the octagonal conical roof with the help of truss, fabricated truss.

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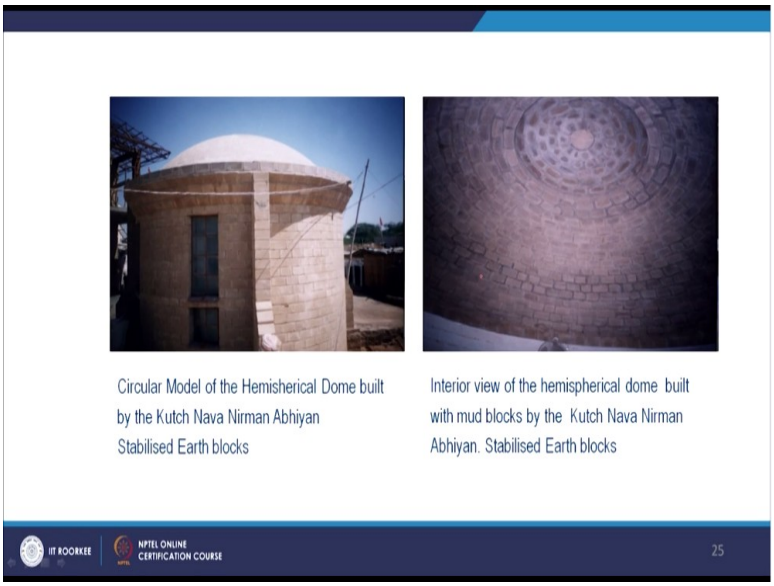

Also, some of the circular models which is a hemispherical dome. This is completely done with the bricks, you know with the mud blocks.

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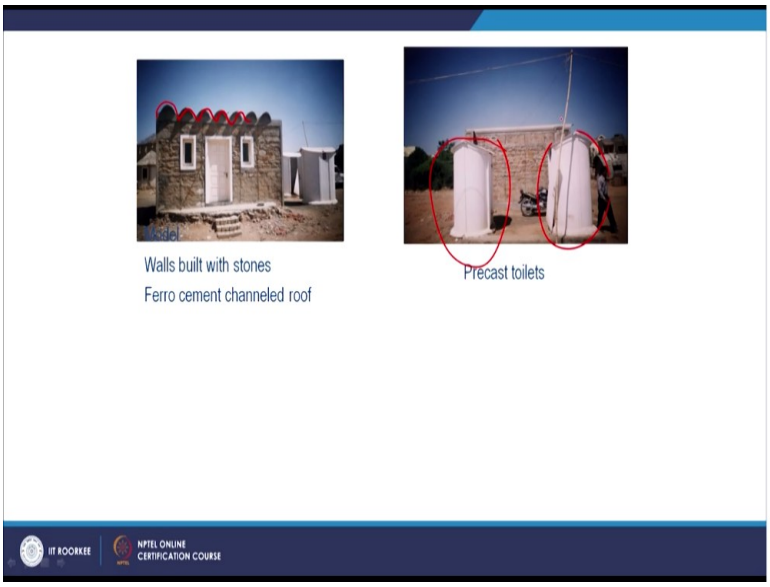

And the Ferro-Cement Channels which I have showed you just now how they are fabricated and some of the houses were also constructed on that and as well as some toilets, you can see that these are the precast toilets, toilet units so these are some of the interventions, some ideas because this whole disaster becomes the follow-up of this becomes a kind of place a laboratory of different ideas and experiments.

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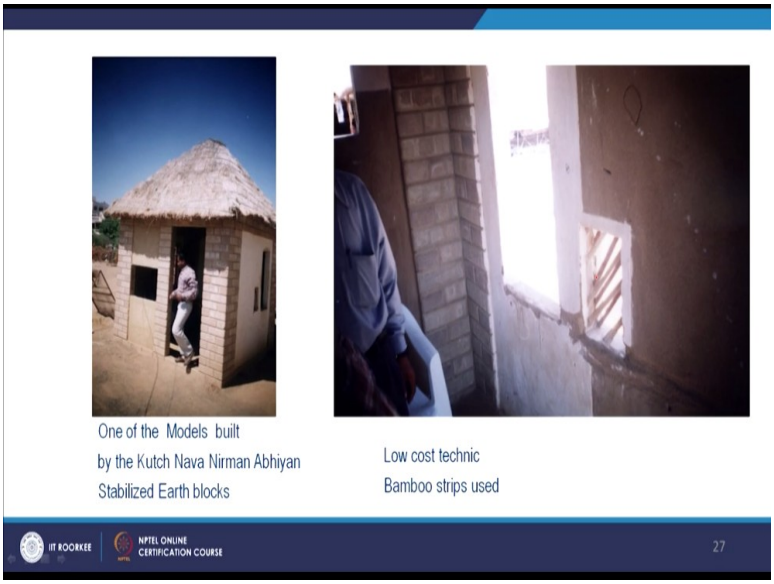

So, even some incorporation of traditional technology like bamboo how we can make use of bamboo and embed that in the shelter forms and thatch. So, there is a combination of both these CSEB blocks, rammed earth as well as thatched roofs, so there is different works.

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And similarly, in the hospital what you can see is that they are building some units of the geodesic domes which has known for its earthquake-resistant structure and which will have less area and more volume. So, this is the earthquake resistant model built by Nirmithi Kendra as I said to you the diagonal bracing in the foundation with these circular balls where the building can bear the forces, the earthquake forces as well.

And the same community hall, the Catholic Relief Services has taken the reconstruction activity of the Paika village and here you can see that this whole community hall which has been damaged has been reconstructed and using the CSEB blocks and the Mangalore tiles.

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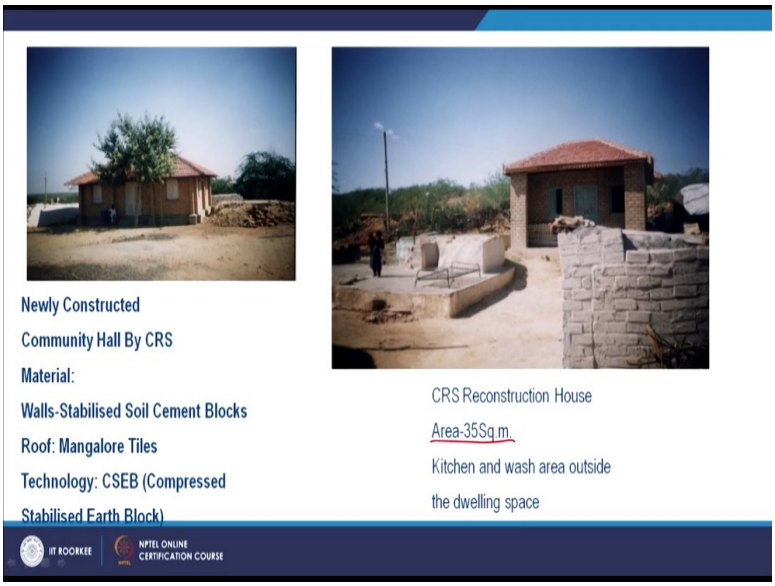

And similarly, you can see that houses they are giving about 35 square meter area of a house, where they have a small open space and sometimes using the previous doors if they have.

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And here, in this village what they did was they have not designed any layout but what they did was just adjacent to the house where they already have an existing house just adjacent to it they have like imagine you have a house here, so adjacent to it they have built it. So, that the structure remained, the structure of that layout remained as it is and like now today, you see that the crossroad is like this where the community center in the center and gradually things have developed later on.

But now, what you are seeing is a view of the village which has been reconstructed at the same places like you can see a small Bhongas next to it where they were living temporarily.

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And there is also some earthquake-resistant models which were developed by Caritas-KVT but these are very not even relevant to this area but they are very uniform and standardized forms of the concrete models where people showed their reluctance in not to stay in these houses. When I started interviewing them, they said no we cannot stay in these houses and some of the, there is a 100 crore hospital projects which can at least resist to 9 Richter scale.

So, in that way, they try to progress to resistance aspect of it and what are the responses of this community. So, now you can see a community has been given this house by an NGO, next to it the community themselves have built this house by using the stone.

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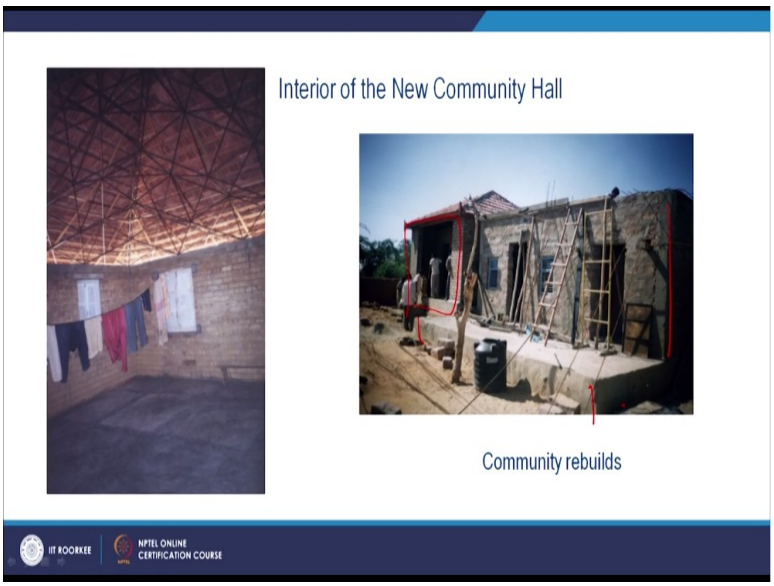

They know that they have, a stone is an unsafe material but they have built with their own for their own needs, for their own. So, this is where we have to learn that what community needs and what community demands and now to give them some guidance even if they are wishing to go with the stone how safe it is but what are the better ways to construct and what are the rightful ways to construct using these materials.

You know, what are the codes we have to follow; this is where the technicality has to be addressed in some support system for the community to build themselves. So, these are some of the examples from the Gujarat earthquake whereas in following the Gujarat we have Tsunami and immediately after Tsunami the Kashmir earthquake and in the Kashmir earthquake, I was working in a company in UK.

And I was immediately, after the post Kashmir earthquake, a lot of agencies were working towards it and they were looking for a quick technologies, quickly build houses that is why at that time UNWTO has also approached our company and I was actually designing some kind of prefab houses from Britain and where setting for frame houses where we can do a flat-pack approach, what you can see is the panels here.

And there all, this is not the house exactly built-in the POK but built elsewhere but I do not have the photographs, so I am trying to show some similar models of it. So, here the trusses, the roofs everything is a flat-pack approach. So, in a uniform and standardized format, so that we can reduce the waste by design and we pack it from the factory, we ship it to the POK and as well as then we send to few labours there and they erect it on spot.

So, here that is where I say that I realized a villain's role as a designer sitting in my desk. I have never been to the site, I never been to the context, I never introduced to the context. I am not knowing who are the beneficiaries, what do they need, what was the livelihood and this is where I was playing a villain role and that is where I looked at my further research of how we can actually take the research, what are the gaps, how to reconcile in between the gaps between the development groups and the beneficiary groups.

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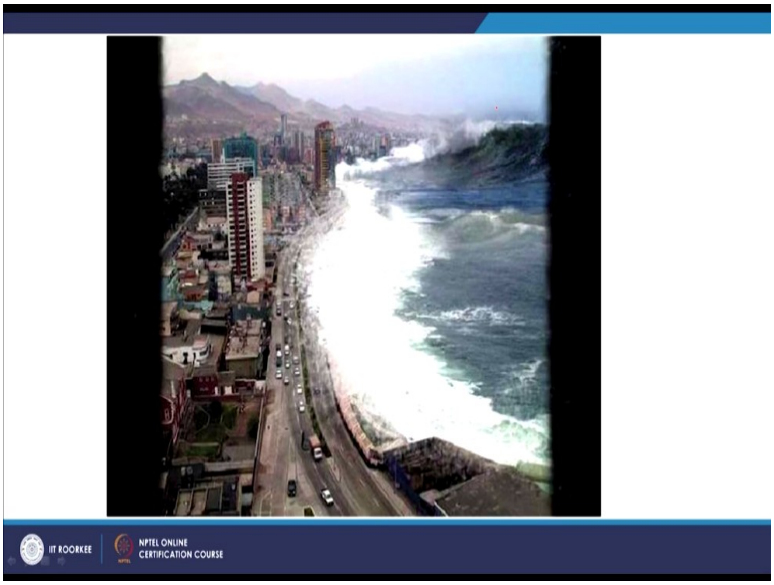

Then, before that Kashmir earthquake, we have the Tsunami.

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And what you can see is a Giant Tsunami which has been destructed the Banda Aceh and the Indian Ocean Tsunami in 2004, the Boxing Day Tsunami.

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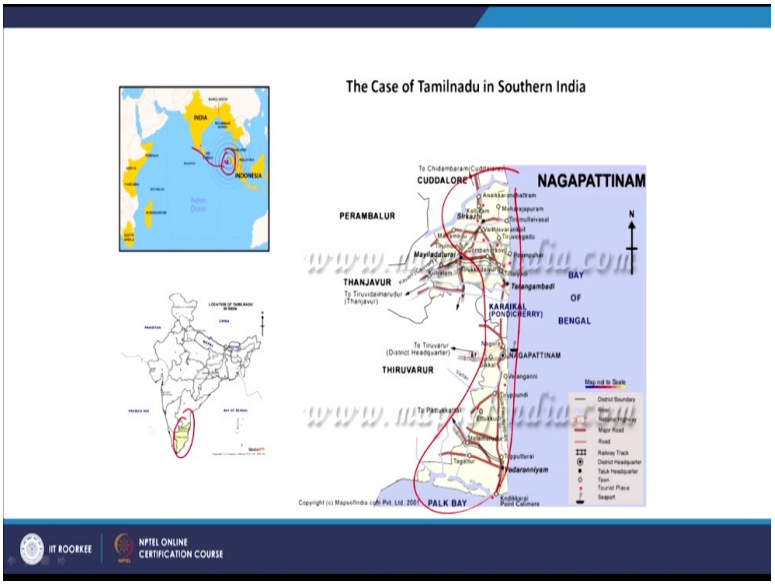

And it has affected the Tamil Nadu, the southern state of Tamil Nadu especially in the Nagapattinam and of course the Cuddalore and the East Coast of the Tamil Nadu but the epicenter was somewhere near Sumatra and waves have traveled almost in this direction.

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