

And the Irish NGO, they have given a kind of target working group and the shelter working group along with the Irish NGO goal with coordination with the UNHCR, they developed a kind of joint shelter strategy. So, they have been some, this particular strategy have addressed some key issues, that has to be included in the process. One is the target group selection to ensure access to the most vulnerable, whether it is the women headed families or it is a elderly group or if they have lost their houses.

So, the widely varying degree of shelter experience and knowledge of design and construction between assistance agencies, which can lead to inadequate solutions with significant variance between shelter solutions. So, also there is a disconnect between the transitional shelter and the permanent provision and design of uncertainty because we are not sure how this is going to turn out, so the durable shelter end-point was unknown.

So, you are providing the shelter but how long they are going to stay here and how long it is good to last, how people are going to respond is very uncertain. There is also need to integrate livelihood assistance with shelter provision because it is not just for the home we are providing, how they can procure their livelihood later on, how they can do their farming facilities, how they can if there any labour how can they can get the work. So, this is all the livelihood aspects which has to be addressed.

(Refer Slide Time: 16:21)

Household selection

In assisting target group one, the following prerequisites applied:

- security in the area of return;
- household registration;
- willingness of household to return;
- evidence of land/house ownership which was readily available in district level cadastres.

Beyond this, the transitional shelter strategy noted: in the event that the financial resources available are not sufficient to cover the shelter needs of an entire returning community, among all potential beneficiaries, only the neediest households will be selected to benefit from the shelter assistance.

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In the household selection, in assisting target group one, the following prerequisites has been applied where the security in the area of return, because the first and prior most is because already they have been undergoing a lot of shocks because of the political stresses. So, first

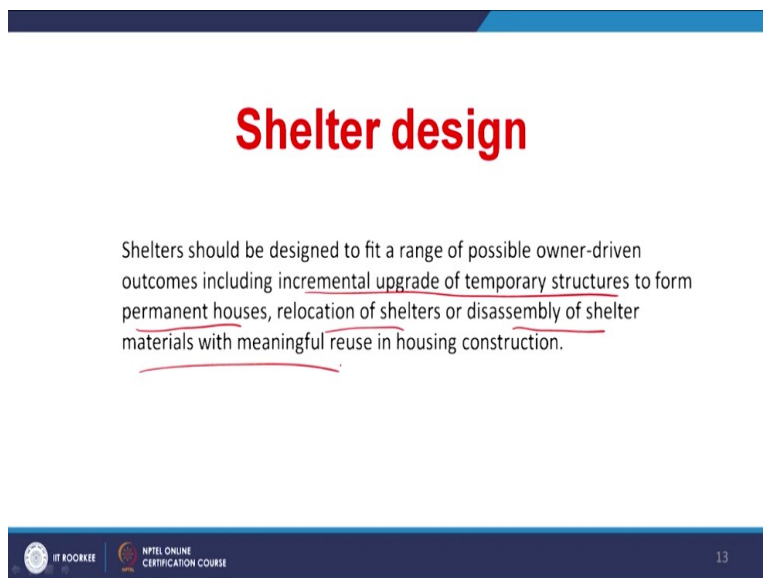
thing we have to ensure the security in the area of return, household registration that is where they have to register or the beneficiaries and all.

Willingness of household to return, so however, they are coming back with voluntarily they are coming back, evidence of land or house ownership which was readily available in district level cadastres. So, whether they have procured some land or not, so in that way, they could be able to see the household selections you know and but the problem is, with this kind of categories, it's not possible to accommodate everyone.

Everyone may not have procured the land, everyone may not have been able to afford to make their own move you know, so there is a bit complex situation of the resources, the financial resources may not be sufficient, for the whole entire community. So, that is where you need to select only the needy is to give the priority for the neediest households and would be eligible for the shelter assistance with priority.

And then shelter design, because this is where the owner driven practices are already advocated in many disaster and displacement practices.

(Refer Slide Time: 18:01)



Shelter design

Shelters should be designed to fit a range of possible owner-driven outcomes including incremental upgrade of temporary structures to form permanent houses, relocation of shelters or disassembly of shelter materials with meaningful reuse in housing construction.


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And this is where they talked about how we can incrementally upgrade the temporary structures to the permanent houses, relocation of shelters or disassembly of shelter materials with meaningful reuse so because once if you are making a temporary shelters and if you are making another project of permanent shelters, what happens to this material, so how we can reuse this material. These are some of the important considerations which has been given.

And what they did was when in the developing the design process and analysis has been made on the existing shelter typologies in that Rift Valley and they are basically a very simple techniques of timber pole houses, timber frame structures with the structural poles dug into the ground and usually cedar has been used to resist from the insect attack and the rot.

(Refer Slide Time: 18:53)

In developing the design, an analysis was made of existing houses in the Rift Valley, and most were found to be simple timber framed structures, with structural poles dug into the ground. Usually cedar is used which is resistant to insect attack and rot. Floors are made of compressed earth, walls are made of mud or timber and roofs are iron sheet or thatch.



Assembling the frame

14

So, floors have been compressed earth, walls are made with mud or timber roofs, sometimes an iron sheet or thatch. So, what you can see is now these are all some of the traditional patterns, which they could able to gather from that location and how they just start that timber poles and then they try to make the frame and that is how a small low cost house has been dealt.

(Refer Slide Time: 19:13)

The following principles were derived:

- Ability to build and inhabit the shelter within two days of receiving assistance.
- Ability to upgrade temporary shelters into permanent houses: i.e. robust structure and roof should be provided.
- Ability to disassemble the shelter and move to a different site
- Ability to disassemble the shelter and reuse components significantly in permanent housing reconstruction
- Ability to extend shelters from basic Sphere standards to suit specific owner-driven needs

15

They have also adopted some basic principles. You know, one is ability to build and inhabit the shelter within two days of receiving assistance, so how quickly one can build. Ability to upgrade temporary shelters into permanent houses, so one is from a kind of transition shelter, how it could be upgraded to a permanent shelter because that is where we talk about the robust quality of the house.

Ability to disassemble the shelter and move to a different site, imagine in the other category which we discussed if they want to relocate, they found a land in some places, want to move this house there, so how we can actually dismantle this and how we can re-fix the same thing. Ability to disassemble the shelter and reuse component significantly in permanent housing reconstruction.

Maybe some components we can still use in the permanent shelter reconstruction, ability to extend shelters from basic sphere standards to suit specific owner-driven on the sphere standards of setup some guidance what to do and what not to do. So, based on the sphere standards, the following kit has been prepared. One is they developed a living space of 18 square meters, which is about 3*6 meters for up to 5 individuals.

And then the shelter would be erected directly on the ground, elevated that floor with proper drainage around the structure. The structural frame is made of wooden poles while the roofing will consist of corrugated, galvanized iron sheets, nail to the structure because of the moisture and other things. The beneficiaries will then build the walls with materials locally available such as additional corrugated iron sheets, mud and straw bricks.

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Based on this, Sphere standards, and the principles listed, the shelter cluster recommended:

The design of the transitional shelter kits provides a living space of 18 m² (3 × 6 m) for up to five individuals.

The shelter will be erected directly on the ground (elevated dirt floor, with proper drainage around the structure).

The structural frame is made of wooden poles, while the roofing will consist of corrugated galvanized iron sheets nailed to the structure.

The beneficiaries will then build the walls with materials locally available, such as additional corrugated iron sheets, mud and straw, bricks, etc. (Kenya Shelter/Non-Food Items Cluster, 2008: 7).


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 16

So, that is where so basically it provides the structure and the communities can actually fill that you know the shelter with their own feasible material.



(Refer Slide Time: 21:06)

Shelter prototype

Based on these guidelines, GOAL and UNHCR commissioned local artisans to build a prototype in Nakuru, where it could be easily accessed for comments by IDPs living in the Nakuru Showground camp and relevant provincial administration, MoSH and MoSPH officials.

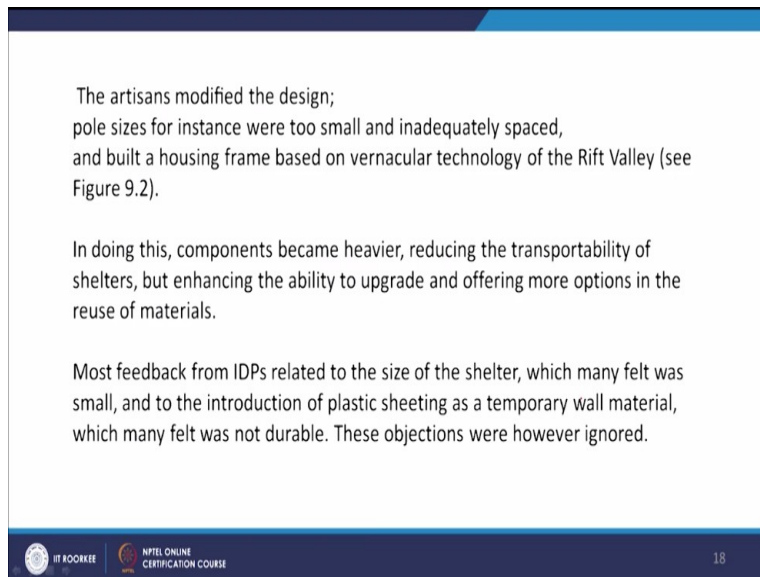


Shelter prototype

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Now, what you can see is, based on these guidelines for GOAL and UNHCR brought local artisans to upgrade, to build a prototypes in this Nakuru place. So, it's a kind of pilot project where by doing so they have also taken the feedback of the people and how we can improve it further. So, that is one of the form which you can see a shelter prototype which has a timber post and as you see plastic sheets has been tied around.

(Refer Slide Time: 21:36)



The artisans modified the design; pole sizes for instance were too small and inadequately spaced, and built a housing frame based on vernacular technology of the Rift Valley (see Figure 9.2).

In doing this, components became heavier, reducing the transportability of shelters, but enhancing the ability to upgrade and offering more options in the reuse of materials.

Most feedback from IDPs related to the size of the shelter, which many felt was small, and to the introduction of plastic sheeting as a temporary wall material, which many felt was not durable. These objections were however ignored.

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And then this artisans, started modifying the design, the pole sizes were too small and inadequately spaced, built a housing frame use a vernacular technology of the Rift Valley and by doing so, this whole component become heavier and the reducing the transportability of shelters because it's very difficult for them to transport from one place to another place but enhancing the ability to upgrade and offering more options in the reuse of materials.

So, but, still, it has given a scope to enhance to upgrade and you know, with the given shelter. Many of them, they felt it was small but then, the introduction of this plastic sheeting has a temporary wall material that many people as a psychological interpretation, they felt it is not durable. And but the agencies some have they have ignored all this process and when this whole pilot project has been finished.

And that is where the beneficiaries have objected to use the plastic sheeting but when they want to scale up this project that is where they say that 86% of the survey, they have said that the transition shelters were larger than the previous houses.

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When the pilot project was completed it was found that most beneficiaries still objected to the use of plastic sheeting, but 86 per cent reported that transitional shelters were larger than their previous houses (Danish Refugee Council, 2008).

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A bill of quantity was derived from the prototype shelter, which formed a standard shelter kit, and the GOAL procured and stockpiled materials for 497 shelter kits in its Nakuru warehouse.

Each kit provided for an 18 m² house and cost \$385. GOAL then trucked the materials to accessible central points, delivering around 120 kits per distribution.

Community members offloaded trucks and locally hired artisans divided the materials into kits; this was made simple by each kit being identical. Each household arranged transportation from the distribution point to their home (a maximum of 3 km), using their own labour or hiring the assistance of donkeys, tractors or pickups.

The artisans assisted beneficiaries in setting out their shelters, monitored quality and provided technical assistance in community self-help construction.

And this is where based on the feedback, based on some adjustments; a bill of quantity has been derived from the prototype shelter and where a standard shelter kit has been developed, about 497 shelter kits in its Nakuru warehouse. So, now each kit has 18 square meter house, which is costing about 385 dollars and what they did was the GOAL agency have trucked all the materials to accessible central points, delivering about 120 kits per distribution.

Then, the community members offload the truck and then they divided the materials into kits and each household then arranged the transportation from the distribution point to their home. So, it is basically from one central space, then it started distributing to the intermediate points and then the community members facilitated themselves to transport to that whether by using their own labour or hiring the assistance of donkeys or tractors or any pickups.

So, the artisans assisted beneficiaries in setting out the shelters, monitored the quality and provided the technical assistance but most of these kits have been erected in a days' time you know 2 days, 3 days. So, it is a very quick development process.

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PERSONALISATION IS A NATURAL RESPONSE TO CULTURAL DEFICIENCIES AND ECONOMIC OPPORTUNITIES



Shelter: Upgrade with timber off-cuts

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21

But in any disasters, we have also understood that the personalization, the personalization is a natural response to the cultural deficiencies and as well as economic feasibilities and opportunities. So, what people started developing was thereby towards the near, so people started developing to upgrade their house, using the timber off-cuts you know what you can see is the timber shingles, where shingles they try to cover with that and make more of a permanent look.

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Within a month of receiving kits, 53 per cent of house owners had started to upgrade their shelters. Priorities in upgrading were first doors, second walls and third windows.



Some beneficiaries bought their own timber for walls, doors and windows from the outset and used the plastic sheeting provided to line the walls.

Others sold their plastic sheeting and hired local artisans to build adobe walls. However most salvaged components and timber off-cuts from their destroyed homes and upgraded their shelters incrementally.

Some paid for labour in kind using the tools they were given in the shelter kit, and some sold their tools once shelters were complete to buy household furnishings or fittings, adding to what they had received during early non-food item distributions



Shelter: Partial upgrade with reclaimed materials

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22