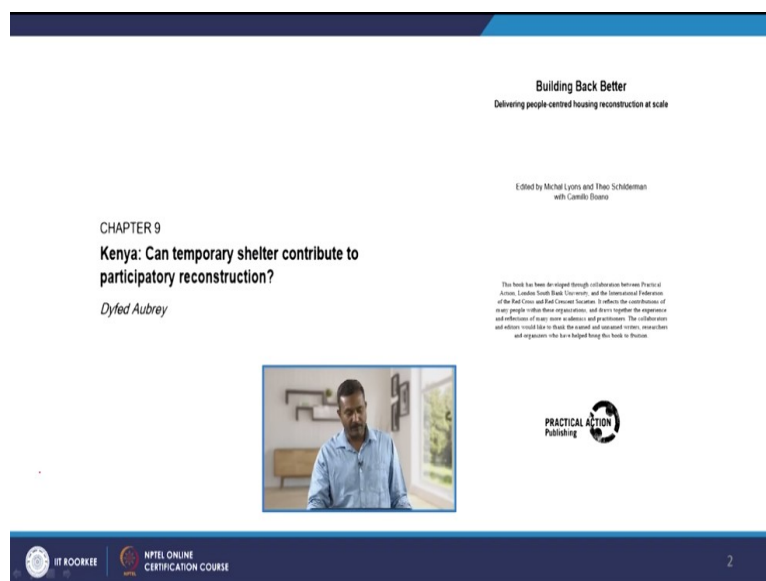


Disaster Recovery and Build Back Better
Prof. Ram Sateesh Pasupuleti
Department of Architecture and Planning
Indian Institute of Technology, Roorkee

Lecture - 22
Temporary Shelter Construction in Kenya

Welcome to the course disaster recovery and build back better. My name is Ram Sateesh Pasupuleti. I am an assistant professor in Department of Architecture and Planning, IIT Roorkee. Today, we are going to discuss about temporary shelter reconstruction in Kenya.

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So, this particular lecture has been derived from one of the important contribution from Dyfed Aubrey, which is the chapter 9 in build back better volume, which has been edited by Michal Lyons and Theo Schilderman with Camillo Boano. So, he talks about temporary shelter contribute to participatory reconstruction. So, that is the link between the temporary transition shelter and with the participation and how it can actually make shift into the permanent process.

The background of Kenyan condition, it is not a natural disaster but it is a kind of manmade situations especially the political violence. When you look at the natural disasters phenomenon or the risk phenomenon, even from the document of at risk or the CRED reports, it says almost more than 75% to 80% of the disasters are through the political violence.


So, today we are going to talk about the consequences of the political violence at specially in terms of shelter provision and how it has been organized and how it has been conducted as a pilot project and how it has been scaled up at a nation level and what kind of responses they have you know able to understand.

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THE 2007-08 KENYA CRISIS

It was a political, economic, and humanitarian crisis that erupted in Kenya after former President Mwai Kibaki was declared the winner of the presidential election held on December 27, 2007

Left over 1,200 people dead and over 500,000 people displaced (UNOCHA, 2008).



The first was the burning and looting of shops, commercial premises and houses

The second was an onslaught by opposition supporters on small farmers and landholders in the Rift Valley, perceived to be government supporters, with the aim of driving them away from the region.

The third pattern of violence was retaliatory and targeted mainly at migrant workers suspected of being opposition supporters

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So, in 2007 and 2008, after the former President Mwai Kibaki was declared the winner of the presidential elections in December 27, 2007. There has been a huge political clashes and along with various ethnic groups within the country and about 1200 people have been reported dead, almost 5 lakhs people displaced, that is as per the United Nations Office Coordination of Humanitarian Affairs report.

So, ideally there are 3 categories of this; one is the first was burning and looting all the shops, commercial premises and houses. So, all these mobs, they come to the city in the urban clusters and they started destroying, burning down whether it is a public property, whether it is a commercial properties.

So, this is one kind of attack. and the second was an onslaught by opposition supporters on small farmers and landholders in the rift Valley, perceived to be government supporters within the aim of driving them away from the region, so that is also how opposition parties you know make an attempt to drive all these people from the origin and the third one is of the pattern of violence was retaliatory and targeted mainly at the migrant workers.

People have suspected that these has been part of the opposition supporters, so that is where 3 patterns of victims have been analyzed.

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Kenya - IDP situation map

Displacement affected five of Kenya's eight provinces and was concentrated in the Rift Valley Province, particularly in Nakuru, Trans Nzoia and Uasin Gishu Districts.

- move to host families
- set up spontaneous camps in police stations and churches
- Many sought to move to their ancestral homes in Nyanza, Western and Central Provinces

In the Rift Valley which is the majorly affected area, displacement affected 5 of Kenya's 8 provinces, in Kenya, we have 8 provinces and which has been considered the Rift Valley Province particularly in Nakuru, Trans Nzoia and Uasin Gishu districts. So, after this kind of Rebel groups forcing them and destroying the properties and attacking the people. So, this has caused a huge social destruction.

And in any kind of, situations obviously what kind of responses, the immediate response how people cope up to this kind of shocks and distress. One is move to the host families and some of them, they tend to move to their host families or like people who are migrants from different places, they go back to their places, setup spontaneous camps in police stations and churches.

Because the religious buildings, the schools, the police stations, these are some place where they can protect themselves and they can gather at least certain ethnic group can be protected with the protection of police station or the religious governance. So, this is how they started setting up some camps. Many sought to move to their ancestral homes in Nyanza, Western and Central Provinces.

So, they go back to their parental homes or their ancestral homes, so in that way, they could able to be secured themselves for some time. So, what you can see is about the big circles

here what you are seeing is it's about more than 30,000 people have been internal displaced populations and this is the size of the circle gives the shows of between 10,000 to 30,000 is the medium range and below less than 1000 is the smaller, it is entire IDP's.


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Trends in displacement

Displacement affected five of Kenya's eight provinces and was concentrated in the Rift Valley Province, particularly in Nakuru, Trans Nzoya and Uasin Gishu Districts.

In total, 313,921 internally displaced persons (IDPs) integrated in their communities (UNOCHA, 2009: 1)

In addition to this, by February 2008, 319,105 IDPs were recorded in 296 camps (UNOCHA, 2008: 1)



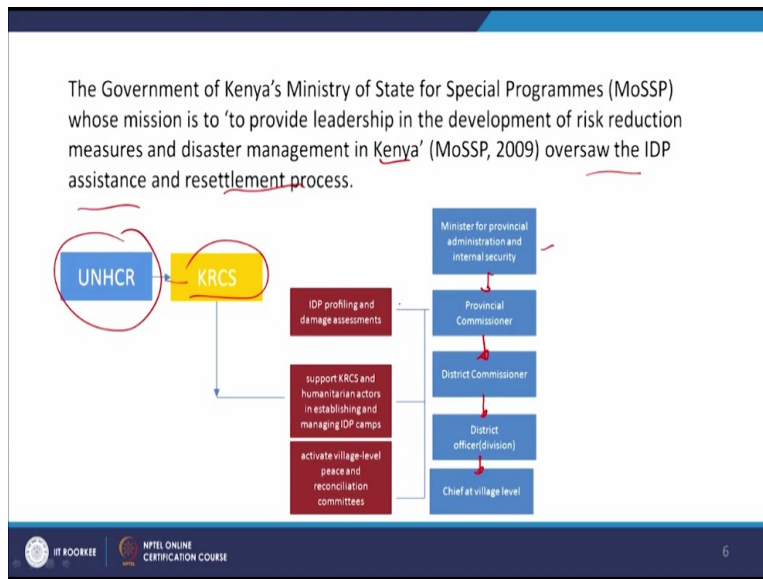
The slide contains three photographs illustrating IDP camps. The first photo on the left shows a makeshift shelter constructed from plastic sheets and tarps, with a person visible inside. The middle photo shows a large cluster of conical tents made from plastic sheets, with people and animals in the foreground. The third photo on the right shows a camp with several tents and people, with a horse and other animals nearby.

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And displacement of these affected 5 of these 8 provinces and out of the whole process, we can see at least in 2009 you have 3 lakhs 13,921 people, have been internally displaced persons integrated in their communities but whereas, the rest of them they have been recorded in 296 camps have been positioned in various camps.

So, what you can see is this camps which are being a temporary shelters whether it is the Pygmy kind of shelters or a kind of conical shelters with the plastic sheet or the tarpaulin sheets where they try to accommodate in a huge groups and some basic services have been provided in those camps in this clusters.

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So, how the government have tackled with the situation, the Government of Kenya's ministry of state for special programs, which we call it as MoSSP, the Ministry of State for Special Programs and this particular ministry's mission is to provide the leadership in the development of risk reduction measures and disaster management, within Kenya. And this has looked at the oversea of the IDP, International displaced persons and the resettlement process.

So, UNHCR have also supported that the KRCS which is the Kenyan Government Agency, which has been constituted to provide the resettlement program and they have given some kind of support. So, Kenyan Government have thought that they are self-sufficient to manage this resettlement process but still there has been some support from the UNHCR.

But, in terms of the understanding of the hierarchy of the government setup, one is the minister of our provincial administration and internal security, which has been looking at the internal security aspects and they are further directed with the provincial commissioner because as I said there are 8 provinces, so each province has been headed by a provincial commissioner.

And then, it further is reflected in the district, each province is divided into different districts, so that is where we have and each district is headed by the district commissioner and whereas, each district is again divided into subdivisions and that is where the district officer has been heading the division and again each division is composed of different villages and the chief has been constituted to look at the village level.

But now in this IDP process, the internal displacement of these persons, first of all how to identify whom, who is the most important people to be you know secured enough to put them in the camps or to put them in the transitional centre. So, how we can profile it and how to make the damage assessments, though this has been conducted as a part of the provincial commissioner's responsibilities, in coordination with all the subgroups which is the district level and the chief level.

So, they are able to see a kind of vertical coordination, also the support to KRCS and the humanitarian actors in establishing and managing the IDP camps, activate village level peace, reconciliation committees. So, these are all a kind of bureaucratic system, how each group is living and how they are able to response, how they are able to give support for this kind of IDP setup.

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compensation package of KSh10,000 (EUR€100) per IDP household and an additional KSh25,000 (€250) for each household with a destroyed house

'there lacks accountability and consistency in allocation of the KSh10,000 and KSh25,000 to IDPs.

Operation rudi nyumbani (return home)

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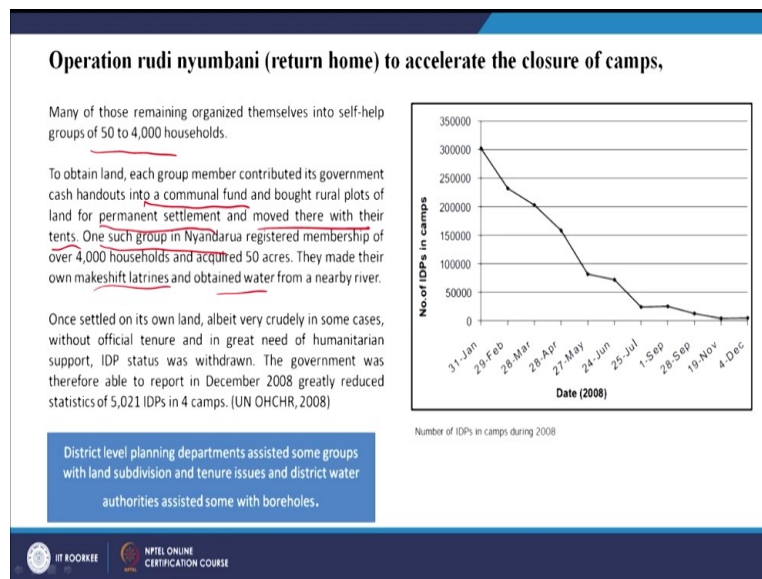
So, initially, there is a compensation package issued by the government about in a Kenyan of 10,000 which is about 100 Euros per IDP household and an additional 25,000 for each household with a destroyed house. So, that is how they have given about 250 Euros+100 Euros, so that is a kind of compensation package. But then this was not very successful, different and analysis report.

And evaluation reports talk about this particular process lacks accountability and consistency in a location of 10,000 and 25,000 Kenyan currency for these IDPs and this is where, they also started an operation called operation Rudi nyumbani, which is the how to return to home.

Because, we cannot keep providing them all the facilities, for how long one can provide, so that is where the transition camps have been provided initially.

But then how we can reduce the support system and so that how we can make them independent of this process. So, this is where the operation rudi nyumbani return home has been set up and it has been accelerated to close the temporary camps.

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So, this is where many of these remaining you know they organized themselves into a self-help groups 50 to 4,000 households. And in order to obtain the land, each group member contributed its government cash handouts into a communal fund and bought rural plots of land for permanent settlement and moved there with their tents. So, which means whatever the cash inflows they have got, some of them they have tried to form into groups.

And they put some money and they bought some plots in the rural area. So that, you know they can move with their tents. And one such group is Nyandarua registered membership of 4,000 households which has acquired about 50 acres land and they made their own makeshift latrines and obtained water from a nearby river. So, basic services is an important task, how in order to just live there for them it is not just only a shelter, it also has to be with service aspect.

And the tenure has become a big issue in this particular phase, because and also profiling the vulnerable people who are the beneficiaries, is also important as task. So, in that way you know, the government also try to reduce, we are planning to reduce their supports that they

can slowly become independent. Whereas, the district level planning departments, they have actually assisted some of the groups in terms of land subdivision and tenure issues and also district water authorities also assisted some with the boreholes.

So, that you know, some service infrastructure could be set up for them. So, you can see here that you know, the IDP how it has actually progressed and it has come down, later on, the number of internal displaced persons, how they have come down gradually.

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Housing reconstruction

The shelter cluster, recognizing the role of transitional shelter as a catalyst to enable families to make a step change from dependency on external assistance, anticipated that the provision of transitional shelter on owners' land would trigger return (Corsellis and Vitale, 2005).

Transitional shelter has been defined as follows:

Transitional shelter provides a habitable covered living space and a secure, healthy living environment, with privacy and dignity, to those within it, during the period between a conflict or natural disaster and the achievement of a durable shelter solution. (ibid.: 11)

Handwritten annotations on the slide include: a red line under the first sentence; a red line under the definition text; a red cloud-like shape containing the word 'Nishkriya'; a red circle containing a diagram of a house with an arrow pointing out; and a red circle containing the words 'Settling down'.

Logos for IIT ROORKEE and NPTEL ONLINE CERTIFICATION COURSE are visible at the bottom.

In terms of the housing reconstruction, because this transitional shelter it is not just a norm, it is not narrowed down to your product, it is a verb, it is a process, it is a catalyst to enable families to make a step change from dependency on external assistant, anticipated that the provision of transitional shelter on owners, land would be trigger return, you know that is where this is the process of how you have to make them aware of the situation and so that they can become independent.

So, this is how the definition of transitional shelter which it says the transitional shelter provides a habitable covered living space and the secure, healthy living environment, with privacy and dignity to those within it, during the period between a conflict or a natural disaster and the achievement of durable shelter solution. So, there is also the time factor. So, between the event and this is event of disaster and this is about settling down.

So, this particular phase they need to be served with some dignity, some basic services, some basic safety aspect.

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Target groups:

In developing forms of transitional shelter assistance the shelter cluster considered that broadly there were three target groups:

1. Those who wish to return to their former place of residence.
2. Those who wish to relocate elsewhere in the country.
3. Those who wish to integrate in their current place of displacement.

These groups could be further divided to those with land tenure, those without and who intend to rent and those without who intend to buy land (Kenya Shelter/Non-Food Items Cluster, 2008)

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And how do one can identify the target groups, so what they did was, they have broadly classified into 3 target groups, one is those who wish to return to their formal place of residence, those who wish to relocate elsewhere in the country, those who wish to integrate in their current place of displacement, so how they can integrate, the second one is go back to the former place, the third one is go to somewhere else.

And then these groups has been further subdivided based on, land tenure whether they have land or without land or intend to rent or those without who intend to buy land you know, so, this is how the different categories they have identified.

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Key issues included:

1. Target group selection to ensure access to the most vulnerable.
2. The widely varying degree of shelter experience and knowledge of design and construction between assistance agencies (Da Silva, 2007) which can lead to inadequate solutions with significant variance between shelter solutions.
3. The disconnect between transitional shelter and permanent housing provision
4. Design for uncertainty: the durable shelter end-point was unknown.
5. The need to integrate livelihoods assistance with shelter provision.

The diagram illustrates a collaborative model for shelter provision. It features three blue rectangular boxes: 'UNHCR' on the left, 'Irish NGO GOAL' on the right, and 'joint shelter strategy' at the top center. A double-headed horizontal arrow connects UNHCR and Irish NGO GOAL, indicating mutual collaboration. A vertical arrow points from the 'joint shelter strategy' box down to the space between the two agencies, suggesting that the strategy is a shared outcome of their partnership. Red circles are drawn around the UNHCR and Irish NGO GOAL boxes, and a red line is drawn around the joint shelter strategy box.

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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.

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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 be given 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.

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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.

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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

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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.

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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

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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).



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.

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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



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.

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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.

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

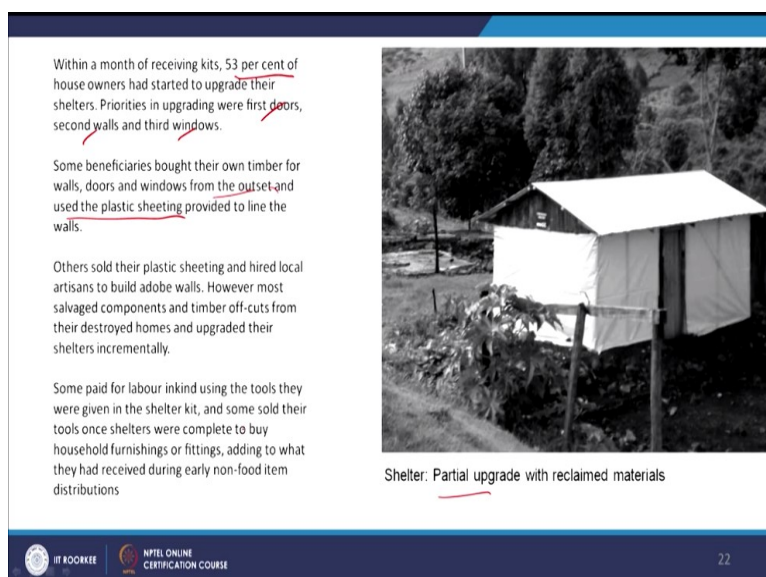


Shelter: Upgrade with timber off-cuts

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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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And also, this is a kind of partial upgrade with reclaimed materials they have the developed with the kind of whatever, they have able to procure from the past site or with their feasibilities, they have made some modifications to their shelters. And within a month 53% of the house owners have started to upgrade their shelters and this is very quick, within a month if this kind of change is 53%.

The priorities were first doors, second walls and the third is windows, so the ventilation aspect. And some beneficiaries bought their own timber for walls, doors and windows as we have seen in this complete set is in a timber. For the outset and used the plastic sheeting provided to the line of the walls, so they covered with a kind of partial covering with a plastic sheet.

Others sold a plastic sheeting and hired the local artisans to build adobe walls. So, they have given it back and they sold it in the market and they could able to get some money and they could able to put some more money and built the adobe walls and so this whole process you know, it's all showing up an incremental process depending on each household what kind of economic feasibility they had, what kind of infill they are responding to their needs and demands.

And some paid for the 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. So, once the tools have been sold, they even bought some more household furnishings and fittings.

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Scaling-up low cost housing

It accepted the transitional shelter pilot as the basis for its minimum standard for a low-cost house unit, but required a minimum floor area of 20 m² instead of 18 m² and 'permanent' walls of adobe or timber. Launched a project to build 40,000 low cost houses. By the end of March 2009, 16,240 were built, mainly through partners of UNHCR and the MoSSP.

The methodology of beneficiary selection and implementation of low-cost housing followed which developed in the pilot transitional shelter project.

Like the bulk of housing resettlement programmes, the Government of Kenya's housing reconstruction launch document *Return Home (Rudi Nyumbani)* (MoSSP, 2008), written in consultation with the United Nations Development Programme (UNDP), makes no mention of linking housing provision with other forms of livelihoods assistance.

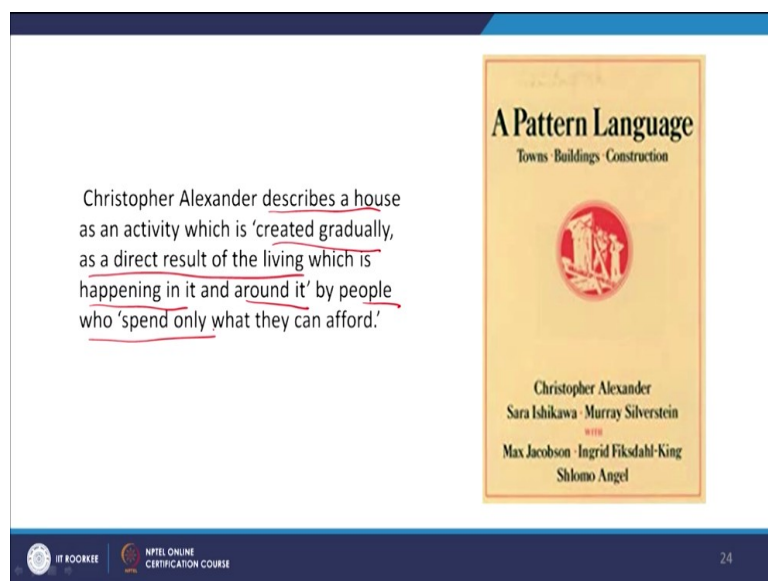
One exception, the IOM, linked low-cost housing with peace building and support of agricultural activities.

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So, with this, the government have understood that yes there is a possibility that to scale up this process. So, now what they did was they developed from 18 square meters to 20 square meters and the permanent walls of adobe and timber and they launched the project build about 40,000 low cost houses. So, by the end of March 2009, it is about 16, 240 were built and mainly with the partnership of UNHCR and MoSSP.

So, this is a kind of a very bulk project and the Japanese agencies and different NGOs also have given us support for that.

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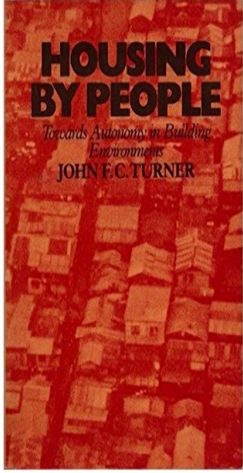


But when you talk about the theoretical understanding of it, you know as I said you in the beginning transition shelter is not a noun, it is a verb, it is a process. So, as Christopher Alexander describes a house is an activity which is 'created gradually, as a direct result of living which is happening in it and around it' by people who spend only what they can afford. So, it starts with you, when you actually start personalizing your own spaces.

When you start living in it, you realize that you know, what you need and accordingly people start amending that, not only within the house, around the house.

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the 'use value' derived from this approach was more significant than market value, as what housing does for the user is more important than what it is.



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And this is the similar observations made from John F.C. Turner on his work in Mexico, housing by people. So, that is where he talks about the use value derived from this approach was more significant than the market value, as what housing does for the user is more important than what it is. So, this is not a product, it is a process how man evolves, a house into a home. And he tried to see that the use value is more significant than the market value.

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John Habraken in Supports (1972) categorizes three levels of decision making:

1. the tissue (urban fabric)
2. support (base building) and
3. fitout (infill).

The tissue tends to remain the same, supports will change with time and infill will change more regularly. This system of subdivision allows users to interface with the level that is relevant to them:

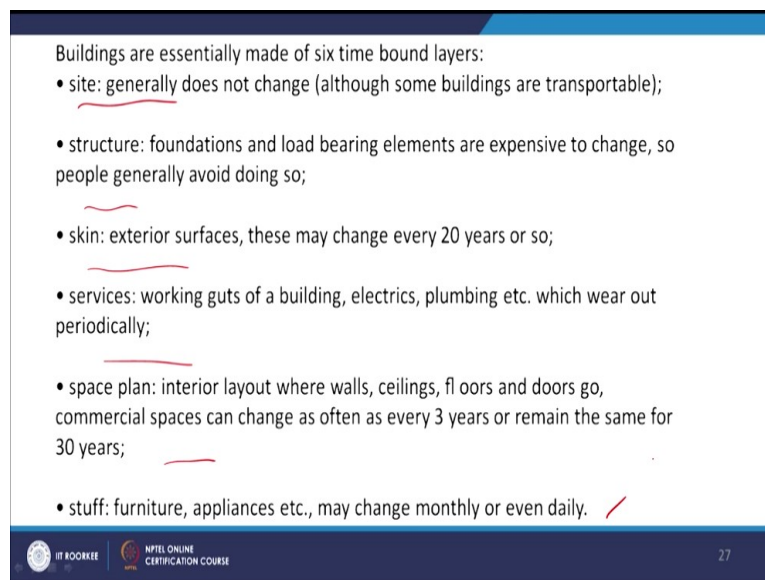
- the consumer (or household) on the infill level,
- the housing corporation or developer on the support level and
- the municipality on the tissue level.

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And similarly, John Habraken supports on 3 levels of decision making; one is the tissue and the support which is the base building. The tissue refers to the urban fabric and the support refers to the base building and the fitout refers to the infill, what the people have done in their houses and the tissue tends to remain the same because it's a larger content and the supports will change with time and infill will change more regularly.

So, this keeps changing very frequently and the system of subdivision allows users to interface with a level that is relevant to them. So, how each community response to these different 3 categories? The consumer or households they act on infill level, the housing corporation or a development agency on a support level or the municipality works on a tissue level.

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Buildings are essentially made of six time bound layers:

- site: generally does not change (although some buildings are transportable);
- structure: foundations and load bearing elements are expensive to change, so people generally avoid doing so;
- skin: exterior surfaces, these may change every 20 years or so;
- services: working guts of a building, electrics, plumbing etc. which wear out periodically;
- space plan: interior layout where walls, ceilings, floors and doors go, commercial spaces can change as often as every 3 years or remain the same for 30 years;
- stuff: furniture, appliances etc., may change monthly or even daily.

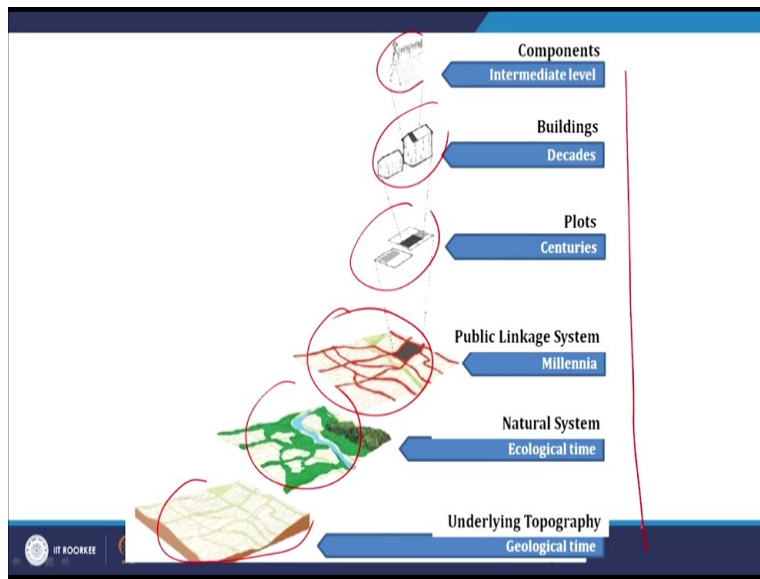
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And similarly, buildings are also essentially made of 6 time bound layers. This is space time phenomenon which Ian Bentley also talks about it. One is a site, which generally does not change, although a few buildings are transportable. The structure, the foundations and load bearing element are expensive to change because in the structure, once if you setup the foundation, it is very difficult to change.

You can break the walls; you can take out the prefab walls, so people generally try to avoid doing that. The skin which is the exterior surfaces and these may change over 20 years or so. Whereas, the services working guts of a building, electrics, plumbing which wear out periodically, so you need a periodic maintenance of it. A space plan, an interior layout, where walls, ceilings, floors and doors go commercial spaces can change as often as every 3 years and remain the same for 30 years.

And the stuff, the intermediate elements of furniture, appliances may change even monthly or even daily.

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Similarly, Ian Bentley also talks about how different layers of the space time the underlying topography, the natural system and the public linkage system and the plots and the buildings and the components which changes at different time aspects.

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If a standard structure is acceptable in owner-driven processes, this is of great value in humanitarian operations:

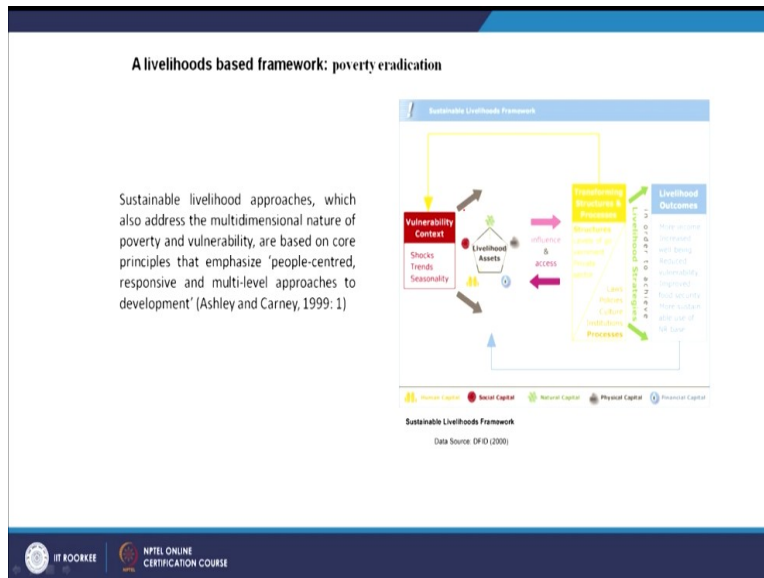
1. If the intervention is an upgradeable temporary shelter then budgeting, procurement and distribution of standardized kits is a relatively simple operation.
2. If the intervention is permanent construction then standardized structural options designed in collaboration with end users can be developed into standard bills of quantities and set key-stage grant disbursements, while still allowing flexibility on the design of skin and space plan. This is much lighter on professional resources and time than an entirely bespoke approach.



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Once a kit is developed, if a standard structure is acceptable in a owner-driven process and this kind of intervention is upgradeable temporary shelter than budgeting, procurement and distribution of standardized kits is a relatively small, simple operation. If the intervention is permanent construction, then the standardized structural options designed in collaboration with end users can be developed into standard bill of quantities and set key-stage grant disbursements.

Because each stage we have to look at the funding allocation as well and while still allowing flexibility on the design of skin and space plan. So, there is a basic code dwelling concept and how we tailor different options within it. This is much lighter on professional resources and time than an entirely bespoke approach.

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And we have to understand when we are dealing with this kind of poor communities, one has to look at the livelihoods framework, it is not just only a shelter and this is where, the defeats ASAL framework to sustainable livelihood framework is very apt and considering because how an individual or a communities or a social group, how their abilities to access certain resources whether it is a social, economic, human, natural, political.

Whatever the resources, how they are able to access the resources, on one hand, they are already subjected the vulnerability context, they are already in the context, which will have some influence on their access to the abilities, you know the abilities to access the resources and that is where we talk about with these abilities, how they transform the structures and processes, whether in the form of regulatory framework, whether in the form of public and private sector.

And then how they create their own livelihood opportunities and this is where we talk about the more income increased, wellbeing, reduce vulnerability, increase food security you know, like that there is whole set of framework, which actually an individual or a group or a community can actually work with it.

So, this is very important when we are looking at the transitional shelter and as well as when they are actually looking at the owner-driven process, you need to understand the whole resources and their vulnerability context itself.

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The enabling approach to shelter provision

The enabling approach recognizes that people can build houses themselves at lower cost than through government provision and can meet their own housing needs more specifically this way in accordance with the resources that they have available.

Finance. The enabling approach recognizes the bottleneck to housing created by limited access to finance.

Land/Tenure. The Habitat agenda states 'access to land' and security of tenure are strategic prerequisites for the provision of adequate shelter for all' (UN-Habitat, 1996: paragraph 75).

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The enabling approach, how we can enable this process and one is the finance you know because this is one the enabling approach recognizes the bottleneck to housing created limited access to finance. So, we talked about the cash flows, we talked about how at a stage wise, how we can deliver the financial disbursement. Land tenure, we talk about the access to land and security of tenure which are the prerequisites for any provision of adequate shelter for all.

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Materials/Labour. Materials have major cost implications and inappropriate building regulations can inhibit the production of housing.

People and governance
people need to be able to participate individually and collectively in:

- national policy-making;
- planning, implementation and monitoring of housing projects;
- managing institutions that provide services;
- wider political processes.

(UN-Habitat, 2006: 45)

Legal and Regulatory Frameworks. Governments can play a key role in supporting the creation of enabling environments for housing provision through reviewing legal and regulatory frameworks.

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Also, the materials and labour because materials have a major cost implications and also inappropriate building regulations can inhibit the production of housing. So, the legal frameworks, that is where we talk about the governments can play a key role in supporting the creation of enabling environments for housing provision through reviewing legal and regulatory framework.

How can we accommodate the indigenous materials in the regulatory process, that is an important challenge for all the building course. And the people and governance, where we talk about how we can engage the people to participate individually and as well as collectively. The national policy making, the planning and implementation, monitoring of housing projects and the managing of the services and wider political processes.

We have this whole framework actually enables the owner-driven, participatory owner-driven process, even though it is a transitional but how we can, what are the different ways, how we can engage them and how if you can actually give this kind of support systems. So, this can gradually lead to an important transition in their lives because they can be self-reliable, they can make their own system, they can rely on that system they can.

Only we need to provide a little support system in order to progress with it. I hope you got a better idea on transitional housing in Kenya. Thank you very much.