

Challenging camp design guidelines

by Jim Kennedy

Current guidelines for camps for displaced people need to be adapted to cater realistically for camp lifespan and population growth.

Faced with the challenges of siting and designing a refugee camp, most professionals turn to UNHCR's *Handbook for Emergencies*¹ and/or Sphere's *Humanitarian Charter and Minimum Standards in Disaster Response*². These one-size-fits-all manuals set out everything from the minimum area of shelter space needed per person to the width of the firebreaks required within the camp.

Armed with these guidelines, a camp planner can negotiate for land and design a layout for a given number of inhabitants. However, it is often the case that within a year or two the camp is already overcrowded, denying both dignity to its inhabitants and space to pursue livelihoods. This is not usually the result of unexpected additional influxes of displaced people but a consequence of flaws within the guidelines themselves.

planners must take a long-term perspective

The reality is that the average lifespan of a refugee camp is close to seven years, with some camps for Palestinian refugees still on their original sites after more than 50 years. As the lifespan of a camp can never be accurately predicted planners must take a long-term perspective. While both sets of guidelines suggest an annual population growth rate in refugee camps of 3-4% they fail to act on the consequences.

UNHCR's manual recommends the promotion of economic enterprises for camp residents - but does not assign space for the workshops, home-based enterprises, granaries or tool storage which these require. In order to create a camp which provides shelter with dignity to all its residents and which will continue after many years to comply with the minimum standards set out in the guidelines, the numeric formulae they use need considerable adaptation.

The UNHCR guidelines stipulate an area of 900,000m² for a camp for 20,000 people. This provides a recommended 45m² per person which includes a plot for vegetable gardening. However, once the space stipulated as necessary for fire-breaks, non-residential buildings and buffer zones between shelters is taken into account, the 45m² quickly starts to disappear. Neither Sphere nor UNHCR give any numeric guidelines for how much area should be taken up by all the non-residential buildings - schools, clinics, warehouses, administration offices and community centres. (The UNHCR handbook provides a general guideline but no actual square metreage.)

If a camp of 20,000 refugees grows by 4% a year then it would take nine years (just two years more than the average lifespan of all camps) for the theoretical average family to grow from five members to seven members and the total population to grow to 29,605. If

in year one the average land area per person in the camp follows the UNHCR guideline of 45m², by the end of the ninth year this area of land per person will have been reduced below the minimum to 32m². The area within a family shelter per person will have been reduced from the UNHCR minimum of 4.5m² to 3.2m². If just one square metre of that space is taken up by tools or materials storage for a home-based enterprise, then the area for shelter is reduced almost to the point where the refugee or IDP lacks even sufficient space to lie down and sleep.

Design from the bottom up

Caught between the lack of internal consistency in the numerical guidelines and the pressures of population expansion, the camp planner needs a different approach. The key - stated early on in UNHCR's guidelines but practically ignored thereafter - is to

design and calculate from the smallest components to the largest, and from the bottom up.

Setting aside reservations about the guidelines' universal applicability, and assuming that the 4.5m² per person interior shelter space stipulated in the UNHCR *Handbook* (3.5m² according to Sphere's more austere standards) is adequate, then the necessary shelter space for a family of five would be 22.5m² - but in reality this should be 31.5m² if the family is to be able to expand to seven members over time. If these families are grouped in communities of 80 people (again, following UNHCR guidelines), then only 11 families should occupy each community block rather than the suggested 16.

The next concern is to add enough space for all the extra outdoor facilities which the guidelines fail to assign space to - latrines, showers, outdoor cooking areas, a water source and waste disposal. The area for each community block might now be 2,839m² - already some 400m² more than for the community for 16 families under the original UNHCR guidelines.

Once the space for the pathways and firebreaks is added in, and a non-residential block added for each eight residential blocks, the final area per person on a camp-wide basis would be 61m² at the end of the ninth year. This would necessitate an initial calculation for the first year, before any internal population expansion, of 89m² per person - almost double the UNHCR recommendation and three times that of Sphere. Even this, however, does not take into account the need for space for home-based enterprises, nor the fact that up to 40% of land offered for camp construction is sometimes unsuitable for construction, due to steep gradient, high water table or other physical features.

Hierarchy of spaces

In most camps, buildings and spaces come in only two sizes: a single family plot/shelter and much larger

non-residential buildings usually grouped together close to the front entrance of the camp. This rigid division by building function often creates tension. Those who live towards the edge of the camp feel excluded and social instability may be greater. Those who live at the edges of residential communities facing directly onto the open spaces in which the non-residential buildings are located may have no transitional space between the supposedly private spaces of their homes and the public spaces surrounding the clinics, schools or administrative offices. While they may derive some benefit from being able to place goods stalls or other businesses close to these busy areas, they also suffer considerable loss of privacy and security.

Rather than planning a camp by placing a series of physical **structures** onto an empty plane, the planner should start to think of the camp as a hierarchy of different interlocking **spaces** which the built structures in part help to form. Some of these

spaces will be absolutely private, and some of them absolutely public, and many will contain a combination of the two. Although some of the spaces will indeed continue to be defined by the buildings that they contain, there will be many other spaces which will be empty at the outset in order to be filled subsequently by the refugees and their own needs for livelihoods and social interaction.

There should not be extreme adjacent contrasts of private and public, or large and small, and there should always be some intermediary space between the two. With some sort of transitional space or spaces between the larger non-residential buildings and the closest residential communities, there will be more privacy and greater security for adjoining residential areas. Outlying communities will include smaller, neighbourhood public spaces. Residents will have a greater say in their uses and form and therefore a greater commitment to them – and to the camp as a whole.

The challenge is to convince the humanitarian community and host government authorities that an extra 100-150% land is necessary and that this would not be used for initial building but for low-intensity use, perhaps for several years. However, only by adopting this approach can a camp truly embody the philosophy, and not just the numbers, of UNHCR's durable solutions and Sphere's shelter with dignity.

Jim Kennedy is currently working as a shelter consultant in Sri Lanka, and is conducting doctoral research at Delft University in the field of refugee camp design.

Email: jpk18269@hotmail.com

1. UNHCR *Handbook for Emergencies*, Geneva 2000. www.aidworkers.net/resources/unhcr-handbook.html

2. Sphere Project *Humanitarian Charter and Minimum Standards in Disaster Response*, Geneva 2004. www.sphereproject.org/handbook/

Kibumba camp for Rwandan refugees, Goma region, North Kivu, Zaire (1994).

