Humanitarian mapping

by Rupert Douglas-Bate

In order to better serve those affected by conflict and disasters, there is a real need among aid agencies to better understand their locations, numbers and needs. Geographic Information Systems (GIS) are computer mapping software systems. Currently they are being used by relief and development agencies to improve decision making and assist in the presentation of information relating to public health, epidemiology and humanitarian aid. To be most effective, maps must be:

- **Timely:** Maps should be available for use the moment a mission starts, so it may be worth a visit to your local bookshop to try and find paper maps relevant to the area you will be working in. GIS file formats can be updated with information as the situation unfolds. The presentation of such maps at sectoral coordination meetings can have an electrifying effect on understanding: maps speak louder than words.

- **Simple:** Maps that contain more than eight colours are too complicated. The scale needs to be appropriate to the situation, for example 1:10,000 for refugee camps and 1:100,000 for towns and surrounding villages. A proven idea is to draw a freehand map that contains the style and form of the desired map but not yet the content. Once this objective map is obtained the team can work backwards in terms of designing questions and data collection strategies.

- **Accurate:** Information on beneficiary needs that goes into maps is mostly numerical; therefore the questions to obtain this information need to be very carefully thought through. Systematic survey technique is important.

- **Culturally sensitive:** Radios, sat phones, vehicles and, indeed, maps may be treated with suspicion by local governmental authorities in conflict zones. The best way around this is to request a government person to be seconded on a fixed term contract to work with the mapping team. This will help dispel suspicion and enhance capacity building.

- **Relevant:** Given the advent of GIS, maps may now be rapidly generated and updated, within the above criteria. Placed upon a basic ground layer, overlays may include information such as population numbers, shelter, agriculture, hospitals, water and mass graves.

- **Planned and trained for in advance:** The manufacturers of GIS have donated their software for free to aid agencies but learning to use a GIS package is like learning a new language: a basic understanding is achievable in a few months but real understanding may take years. If you can, find some volunteers in industry or government already using GIS and ask if they will work within your organisation and help provide training.

Rupert Douglas-Bate is Development Director of Aid For Aid, a UK charity: www.aidforaid.org.uk. Email: rdouglasbate @aidforaid.org.uk