(1) Shelter after Disaster,

Lessons learned from Pakistan, three years after the earthquake

How to clean a city like Geneva within a few days? Well: Either you ask a big enterprise to do the job and it will cost you some millions and will last several months, **or** you give every house-owner in the city a sweeper and ask them to clean themselves in front of their houses. This will clean the city in a very short time and at very limited cost.

This fact came to my mind, when I visited the earthquake area in Pakistan last October, three years after the disaster, where I observed some impact of the humanitarian shelter support.

In 1982, already 27 years ago, the authors of the UN-guideline "Shelter after Disasters" postulated the use of local materials for sheltering the affected population after a natural disaster instead of creating tented camps. But despite this proposal, for many more years a lot of humanitarian actors are still focused on tents as a first priority.

The very difficult access to the remote affected sites of the earthquake area in Pakistan in 2005 and the coming winter at the doorstep forced some humanitarian actors to come back to the UN- recommendation from 1982. The affected villagers were asked to help themselves to build their transitional family-shelters with some remains of their collapsed homes and were in addition supported by the humanitarian actors only with technical advise, tools, and the supply of additional building materials like wood and CGI sheets.

My visit to the earthquake area 3 years after the event told me some interesting lessons about shelters, which I would like to share with you:

(2) 1. Transitional Family Shelters have to be adapted to the context

As already said, some of the humanitarian actors like SDC, ADF, HEKS and MEDAIR supported the local population on site in their place with technical advice, tools and local available material for the construction of their transitional family shelter. Therefore it was possible to use as well additional material from the affected buildings. The supply of the additional material was organised in stages, according to the progress of the construction done by the beneficiaries themselves. In wintertime the families used stoves to heat these shelters. (3) Because of difficult access, in many cases the material had to be transported by donkeys and/or carried by the people to their remote sites.

Today these shelters are either still in use as a shelter as the reconstruction of the new permanent houses are not yet completed. (4) But in many cases the people have now started to dismantle the transitional shelter and to use this material step by step for their new permanent construction. Others use the temporary shelter now as a stable for cattle or as a storeroom. (5) These small-scale farmers in Kashmir are still today happy with the rapid supply of tools, advice and additional materials and they are still proud to have constructed their transitional shelters themselves on their own land. They are happy to have got this type of support instead of getting a winterized tent.

But in other cases the humanitarian actors, like CARITAS/CRS have chosen a different approach. Since CARITAS CH had experienced good results with insulated tents in Kosovo and Northern Iraq, they delivered very soon about 2000 insulated tents from Turkey (6) to the affected families in NWFP (each of these ADF tent cost about 250 USD).

Today these shelters are as well either still in use as a shelter because of the fact that (7) the reconstruction of the permanent new houses are either not yet completed ore they use these tents now as an emergency shelter for coming quakes, as a stable for small animals or as a storeroom. Today these families in NWFP are still very happy about the rapid delivery of

these tents, because these landless tenants are the owner of this tents and are therefore even able to take this shelter with them, in case the landowner quits the contract and send them away from his land.

(8) Some interesting similar other local solutions could not cover this especial aspect.

(9) Lesson learned Nr. 1:

Despite the aim for streamlining the efforts among humanitarian actors to standardize their approach for assistance in the field of transitional shelter: The approach of transitional shelter has still to be adapted to the social context of the beneficiaries.

(10) 2. There is a need for transitional shelters for the Community

After every natural disaster the humanitarian actors are always busy to cover the shelter needs for homeless families. But in most cases only limited effort is given to the fact, that there is always as well a need for sheltering the public purposes like schools, health-posts ore communal offices to bridge the time-span between emergency and reconstruction. These local public infrastructure and services have to become operational again quite soon after a disaster, and therefore these needs have quite often to be covered temporarily by external means. **Why?** Simply because of the fact that in the first phase of relief and rehabilitation the consolidation of private homes and livelihood are priorities for the affected population. As a result, time, money, material and manpower are only limited available at this stage for the rehabilitation or reconstruction of rooms for public buildings.

With the winter at the doorstep in October 2005 in Kashmir and NWFP, the need for winterized solutions was obvious. Some of the humanitarian actors started to cover the needs for shelters for schools and public health. But some of the delivered shelters were either not appropriate, some are simply too expensive (11) and some local solutions came only with remarkable delay (12) and without insulation.

For a shelter-price of only 1300 USD the SwS partner-NGO's CARITAS and HEKS together with the Turkish ADF have installed in NWFP and Kashmir about 500 insulated tents for temporary schools, (13) for vocational trainings and as community centres. Due to the good insulation of these tents, the planned supply for stoves for heating during winter was not necessary.

In many cases these insulated tents have now served for more than 3 years and have in many case covered the time span between emergency and the reconstruction of schools and other public buildings. Much longer than expected

But my visit showed me as well, (14) that only a proper maintenance will guarantee the proper use of these shelters and I learned, that the main structure of these shelters is still not strong enough to resist a huge load of rain or melted snow if the tarpaulin is not properly fixed and therefore water-sacks grows on it.

(15) Lesson learned Nr. 2:

Beside the efforts to standardize transitional family shelters: There is a need as well to develop an appropriate and solid winterized community shelter at a reasonable price.

(16) 3. A winterized tent has a summer problem

In Switzerland we know that every winter garden will face a summer problem and therefore it needs a shadow system for keeping the sun away. And the same is to say as well about winterized tents of humanitarian actors in most of the disaster prone areas having a period of cold winter. HA of SDC made the relevant experiences already in the 80ties and now again in Pakistan, together with other organisations.

(17) Small and fixed windows together with a wind- and watertight surface are fine for keeping the heat inside the tent during wintertime but are definitely not appropriate in summer when you need ventilation. A dark colour of the tarpaulin helps to heat up the tent by the sun during the winter period, but this effect is absolutely not appropriate in the warm summer season. In Pakistan the teachers and student helped themselves to ventilate the tent by dismantling partially the gable walls or, as an even worse solution, (18) by cutting out the plastic windows. This created then, as already mentioned earlier before, the risk for a collapse of the structure during next winter.

(19) Lesson learned Nr. 3:

Winterized tents have to be adaptable for summer time. There is a need for improved ventilation during the warmer period of the year. A dark colour of the tent is not useful in summer.

(20) 4. There is a need to learn from local traditions

After the Earthquake in Pakistan the reconstruction of new buildings was and is still under the control of ERRA and NESPAK who organised, together with international support, seismic appropriate designs for new constructions. Foreign actors like NGOs and IO's are in most cases only allowed to reconstruct public buildings in the earthquake area. For private buildings ERRA installed training centres where masons and beneficiaries could learn how to build seismic safer homes. ERRA, the Pakistani "Emergency Relief and Rehabilitation Authority" is supported by the semi govern-mental NESPAK, the "National Engineering Service of Pakistan". (21) It is obvious that modern engineers in Pakistan are, as everywhere, dealing with concrete and reinforcement iron bars. These are parameters, which can be calculated according to the National Seismic Standard. Therefore ERRA forced the private owner as well to use concrete and iron bars for the seismic improvement of their new homes. But many remote settlements are far away from local market and the access to these places in many cases does not allow the use of transport vehicles. And quite often the beneficiaries have no means to buy iron bars and cement for concrete columns in their remote homes.

(22). But there are traditional solutions for seismic reinforced structures in the earthquake areas of Pakistan. Tom Schacher from SHA/SDC, together with UN-Habitat, was investigating these traditional constructions carefully and they proposed to ERRA the use of these structures as well as possible solutions, especially for those remote settlements. But this advise was not well received by the Pakistani engineers in NESPAK, simply because these traditional constructions have never been tested by scientists nor are they easy to be recalculated.

Only after several attempts and thanks to a strong support from SDC, UN-Habitat and the Pakistani Army, Tom was allowed to erect test constructions. And finally ERRA agreed to accept two type of traditional seismic appropriate construction **Batar** in NWFP (23) and **Dhaji** in Kashmir (24). Tom Schacher organised with his team information sessions, vocational workshops and trainings, where examples of Dhaji- and Batar constructions were explained and executed. With the support of ERRA, SDC, UN-Habitat and IFRCS he created the necessary training manuals. (I will show you at the end of my presentation these manuals)

Up to now more than one hundred thousands of these traditional constructions are now completed, and a culturally accepted local tradition is now improved and renewed. For this cultural effort, SDC together with Tom Schacher and his team has got the International Holcim Award 2008 for sustainable constructions..

(25) Lesson learned Nr. 4:

For durable shelter-reconstruction we have to look out for already existing traditional and culturally accepted solutions. If necessary we have to improve and to promote them.

(26) 5. There is a need to learn the "Lessons learned"

Since quite a time everybody and each institution speak about "**Lessons learned**". And during my visit in Pakistan I was sometimes asking myself where all the lessons learned have landed. I wonder where all these lessons learned are now stored inside the institutions of humanitarian actors, for being found later on when a similar situation needs a lesson learned.

I am convinced that there is a need to share experiences and lessons learned. And this is Knowledge sharing.

But I also think that there is a need as well for institutions like NGOs and Humanitarian actors for having a proper library of lessons learned which is rapidly accessible and well known within the institution. Such a library has to be promoted and updated regularly. Only by this the lessons learned are not lost or spoken in the wind.

But this means Knowledge Management and this is a duty of the management of each humanitarian actor.

I am happy that sheltercentre is giving you, the shelter-family, twice a year the opportunity to **share your experiences, ideas and concerns** in the field of shelter issues during the twoday event of "sheltermeeting". This is as well a place to learn lessons and to create useful contacts. Take the opportunity and promote as well yourself this **shelter-platform**.

And I am proud that sheltercentre is able to give you as well a support in your **Knowledge Management** by giving you free access to its shelter library. If everybody knows in your institution about shelter-library and how to use it, a further step in you Knowledge Management is made. We will show you afterwards again how to get access to this Library. And as a new contribution to this library I will give you a short view on the two training manuals of Tom Schacher:

- Bhatar handout

- manuale dhaji

I thank you for your attention.

Heiner Gloor