PROVISION OF DRY TOILETS IN EARTHQUAKE HIT AREAS OF PAKISTAN – LEARNING FROM FIRST HAND EXPERIENCE

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Abstract
Along with profound grief and misery caused by the large scale death and destruction in the wake of the earthquake of 8th October, 2005 in Northern Areas and Azad Jammu & Kashmir, a number of tough challenges were also thrown on the nation for organizing rescue, relief, rehabilitation and reconstruction for the unfortunate affectees. The disastrous earthquake left about 80,000 dead and millions injured, shelter-less under the open sky in the killing winters with the rapidly increasing intensity of coldness. After a brief and intense rescue phase, the relief phase started with provision of shelter and food to the hundreds of thousands of people rendered homeless and shocked by the tragedy. As saving and securing lives was the top most priority at this time, other aspects of relief did not receive as much attention of those engaged in this difficult task. It was, however, soon realized that provision of safe drinking water and hygienic sanitation facilities were equally important for saving those lives on a sustainable basis. Relief organizations therefore started installing water supply with filtration equipment and construction of dry toilets/pit latrines in the Relief Camps. PWP with the financial support of Global Water Partnership – South Asia (GWP-SAS) decided to play its role in this national service by providing some water supply and sanitation facilities in the relief camps set up for the affected people. This paper will highlight the steps taken by PWP to line up various technical and non-technical agencies building a partnership for construction of water supply and dry toilet facilities in some of the relief camps for prolonged hygienic use. This paper will narrate the process which leads to selection of a far away relief camp for this provision. Need assessment and situation analysis will be part of this paper. The paper will also cover a concise note on start of work and changes in the needs during carry out of the activity. It will also give an account of difficulties and problems faced by the team worked in the camp. Finally the paper would highlight the lessons learnt for future guidance, rapid response and implementation of immediate relief actions.

Keywords
Disaster management; dry toilets for disaster area; provision of sanitation for earthquake hit areas.

Introduction

Earthquake of 8th October, 2005 brought grief and misery at very large scale causing deaths and destruction in Northern Areas and Azad Jammu & Kashmir. A number of tough challenges were thrown up to the nation for organizing rescue, relief, rehabilitation and reconstruction for the unfortunate affectees. After a brief and intense rescue phase, the relief phase started with provision of shelter and food to the hundreds of thousands of people rendered homeless and shocked by the tragedy. As saving and securing lives was the top most priority at this time, other aspects of relief did not receive as much attention of those engaged in this difficult task. It was, however, soon realized that provision of safe drinking water and hygienic sanitation facilities were equally important for saving these lives on a sustainable basis. Relief organizations therefore started installing water supply and filtration equipment and construction of field toilets and pit latrines etc. in the Affectees' Camps.

Gearing up
Keeping in view its role, mandate, and allocation of a grant of US$ 10,000/- by GWP-SAS for earthquake relief work, PWP decided to play its role in this national service by providing some water supply and sanitation facilities in the camps set up for the affectees.

Linking up
The first step in this connection was to assess our technical and financial capacity and link up with an organization that could provide us technical assistance for constructing these facilities. After consultation with colleagues in PWP it was decided that Pakistan Council for Renewable Energy Technologies (PCRET), an organization under Ministry of Scientific and Technological Research could provide the necessary technical designs and experts. A request was therefore sent to the Secretary, MOST who most readily obliged by directing the DG PCRET to collaborate with us in this national cause. A meeting was subsequently held with Director (Projects), PCRET who provided us the designs of UNICEF approved pit latrines and their cost estimates and also promised to depute supervisory staff for supervision of the work on ground. He also promised to help in construction of water supply facilities.

Where to work
The next step was to identify the locations where these facilities were needed and where PWP could work. It was considered that the best course for this purpose would be to link up with some relief organization already working in the field. A meeting was therefore held with the UNHCR officials in their head office in Islamabad. They helped by providing a list of their teams of volunteers working at various locations in AJ&K and NWFP and put us in touch with their team leader in Balakot.

Needs Assessment
After securing necessary technical design and expertise it was decided to undertake a needs assessment visit of the camp at Balakot. This was necessary not only for ascertaining the needs from the affectees and authorities responsible for running the camps but also for seeing firsthand the conditions on ground where work had to be done. After a journey of about six hours the assessment team comprising CEO PWP, Secretary PWP (paper writer) and Director (Projects) PCRET arrived at the Hassa Tent Village for earthquake Affectees of Balakot, setup in the grounds of Government College Balakot. The destruction caused by the earthquake in Balakot was unbelievable.

Situation on Ground

Immediately on arrival at Hassa, meetings were held with the UNHCR team leader and the Army Officers of the camp. They were informed about the purpose of our visit, out capacity and expertise and offer of help. Our team was warmly welcomed and taken around the camp to see the situation first hand. It was found that the Army engineers had laid a pipeline for bringing water from adjoining mountain streams to the camp and installed some temporary community taps. However, there were no sanitation facilities like toilets, bathrooms etc. These were indicated as the first priority by the camp incharge, alongwith facilities for water filtration etc. In view of total absence of sanitation facilities, PWP decided to give priority to construction of pit latrines and bathrooms. The camp had a population of about 2,500 people that was shortly expected to grow to 3,000. At the desirable level of one latrine for 20 persons, a total of 150 latrines were needed. Another international voluntary organization had committed to the camp authorities to build 100 pit latrines. Keeping in view the resources available to it, PWP agreed to build another 40 sites for these facilities were identified jointly with the camp authorities and the team returned to Islamabad to organize material, labour and transport for starting the work.

Starting Work

On returning to the camp in a few days after making the necessary arrangements, it was found that the other NGO had already put up some temporary pit latrines. These latrines had very shallow pits with no arrangement for proper disposal of the refuse with temporary canopies hardly suitable for withstanding the rigours of the weather. The camp authorities, however, felt that these were serving the purpose for the time being and therefore they requested to construct bathrooms for female inmates of the camp because they had not taken bath ever since October 08, due to non-availability of a suitable places. In keeping with their preference PWP reviewed its financial support and agreed to include building of bathrooms instead of mere dry latrines and started work accordingly. A set of 8-bathrooms were

constructed initially, alongwith a clothes washing area in front. The material used was corrugated galvanized iron (CGI) sheets, wooden parts and cement/concrete. The quality of work was gladly appreciated by the camp authorities.

Changing Needs

By the time work on the bathrooms was completed, a need was badly felt for sheltered cooking spaces, as a number of fire incidents had taken place in the camps due to the inmates using cooking stoves inside or just outside the tents. PWP on the request of camp authorities constructed 14 cooking sheds of 30'x8', each accommodating 5-6 cooking stoves. These were greatly welcomed by the camp inmates who immediately occupied them.

Difficulties and Problems

In this ongoing endeavor a number of difficulties and problems were encountered by PWP. Briefly, these are as follows:

i) Access to far flung affected area along with materials.
ii) Non-availability of labor in affected areas.
iii) Knowledge on dry toilets was least available in Pakistan which could suite to a temporary rescue camp without damaging the environment.

Lessons Learnt/Recommendations

i) Needs of relief work as assessed initially can change as time passes due to services provided by other agencies or other needs emerging subsequently. Relief organizations have to prepare for lot of flexibility due to shifting perceptions of needs by the camp authorities and inmates.
ii) Putting up improperly designed, environmentally unsustainable and disastrous structures cause another havoc to already affected people. Proper design should be developed keeping in mind the hydrology of different areas where such earthquake or natural disasters are predicted.
iii) Time is of essence. Camp inmates and authorities prefer to use imperfect facilities put up urgently rather than wait for better quality. However, such preference can cause problems later on, as the pit latrines at Hassa showed.
iv) Initial cost estimates go haywire later on due to inflated prices or import of labor and material from other areas as well as many unforeseen expenses.

References:

None.