KAMRAN AHMAD
GIS Officer, MIS/GIS Department UNHABITAT Pakistan
Kamran.ahmad@unhabitat.org.pk, kamranspacian@gmail.com
Cell: 92-300-5599311

INFORMATION MANAGEMENT FRAMEWORKS IN SUPPORTING MULTI CLUSTER BASED COORDIANTION- LESSON LEARNED FROM FLOOD 2007
Key word: Disaster, Information Management

Abstract:

The cyclone along with torrential rains caused severe flooding in parts of Sindh and Balochistan provinces during June-July 2007. Due to these natural calamities 2.5 million people were affected, 5,600 houses were destroyed which caused 371,092 people homeless. Geo-spatial technology plays an important role in overall coordination and information management during the post disaster relief activities. Visualization of information into a maps help better coordination and planning. A coordinated information management strategy assess the damage, find the real needs and help monitoring the progress of relief and rehabilitation activities. Accurate and reliable information greatly reduce human suffering and eventually save life. This paper describes the mechanism and various steps taken by UN-HABITAT in supporting post flood information management system reflecting early recovery relief interventions that provides a framework for future Disaster Information Management in Pakistan involving key partners National Disaster Management Authority (NDMA), Provincial Disaster Management Authority (PDMA), and District Disaster Management Authority (DDMA).

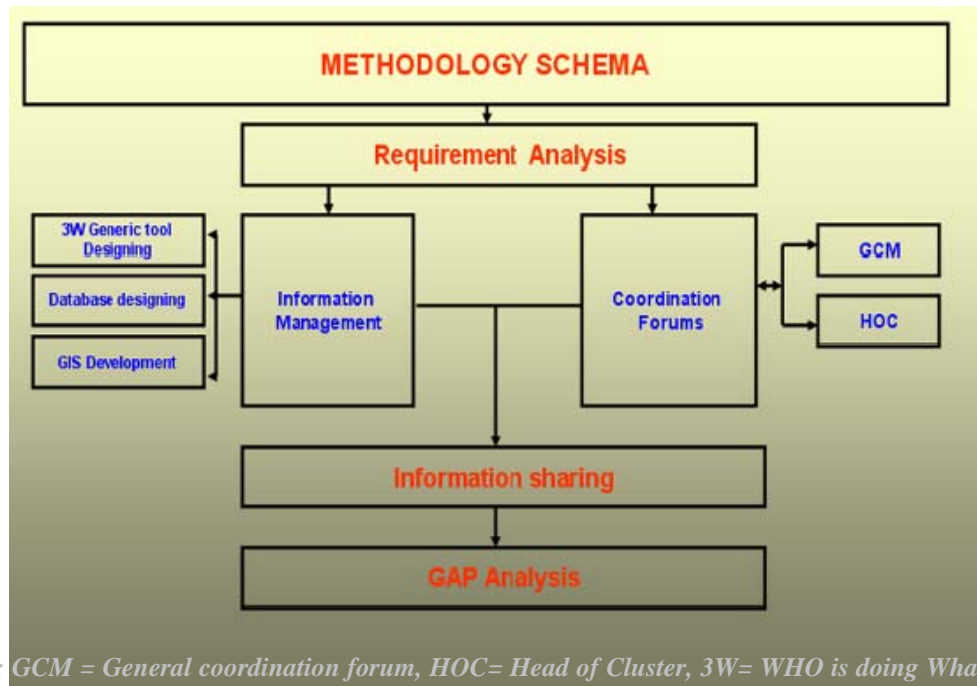## INTRODUCTION AND BACKGROUND:

Intense storms and a major cyclone at the end of June/early July 2007 caused severe flooding affecting more than 2 million people in Balochistan and Sindh provinces in southern Pakistan. It is reported that over 370,000 people are believed to have been displaced from their homes by the flood and a significant portion of the housing stock, schools and health facilities are completed destroyed or partially damaged. A total of 15 districts across the Balochistan province and 2 districts of sindh province have been affected. Bridges and communications infrastructures have been badly damaged and many areas remain inaccessible by road.

Responding to the flood has been a challenge for the newly established National Disaster Management Authority (NDMA) in terms of information management, effective coordination of the many stakeholders and monitoring the progress of services being provided to those affected. Immediately following the typhoon and floods, the Inter-Agency Standing Committee Country Team, through the Heads of Clusters, requested the establishment of a unified Inter-Cluster Information Management Working Group (ICIM) in order to provide early, cohesive and complementary informational support to all key stakeholders involved in the flood-affected areas. The Inter Cluster Information Management (ICIM) Working Group and the 'Pakistan Flood Information Center' (PFIC) Web Portal, is managed by UN-HABITAT, WFP and UNRC (financial supports has been received from UNDP, UNICEF, UNFPA for this activity).

OBJECTIVE:

- **Development of Generic Tool for multi-cluster coordination**

- **Development of Frameworks for Information processing and management and gap identification**

METHODOLOGY SCHEMA

DEVELOPMENT OF GENERIC TOOL:

Generic tool is wonderful tool for capturing true picture of real world , particularly ongoing relief activities for life saving in any affected area, this tool is comprises of many clusters contents such as (shelter, health education and general with many more). This kind of unique method adopted after stake holder consultation and consensus, because it was observed that important information was available at national, sub-national level but on different format, was too difficult for conclusion and gap identification. This kind of tool is developed in a way that it can be linked with new era technology Geographical Information System (GIS) to strengthen timely and precise decision by visualizing information on piece of paper, this multidisciplinary information tool also lead monitoring and evaluation of ongoing intervention and particularly gap identification to utilize optimum sources.

Forms designed on bases of multidisciplinary database and established consensus among actors for each cluster form and shared with the Head of cluster (HOC) and National Disaster Management Authority (NDMA). After reviewing and getting feed back necessary changed are incorporated in those forms, for detail see fig-1.

Fig-1: Snapshot of Reporting Form of Water and Sanitation (WES) Cluster

STATIC FIELDS

- o Organization Name:
- o Focal Person:
- o Cell
- o Organization Address:
- o Reporting Date:
- o Province Name
- o District Name
- o Tehsil Name
- o Project Title
- o Project Description
- o Project Start Date
- o Project End Date
- o Funding Status
- o Funding Amount
- o Donor Name
- o Remarks

INFORMATION PROCESS AND SHARING/ DISSIMINATION MECHANISM:
INFORMATION PROCESSING

The post flood 2007 intervention activities and beneficiary information collection was really a gigantic task. UNHABITAT distributed 3W reporting format to all stake holders including Govt. and INGO/NGO and all UN Agencies those who were involved. The mechanism used for this coordination and dissemination, participated in every forum like GCM, Cluster Head meeting and also forward 3W format through e-mail like use Google group channel. Continuously follow up carried out by telephone and also field visit to all stake holders and gather information.

WHO IS DOING WHAT, WHERE (3W)

Stake holder information segregated district wise and also sector wise to see who is doing what and where. All information plotted into a single peace of paper for detail see maps.

In flood affected areas of Baluchistan and sind, there were almost forty six (46) stake holder including five UN Agencies and twenty three INGO and eighteen local NGO intervening for relief support for affected population.

Information received from stake holders converted into GIS format and finally sector-wise mapping has been developed.
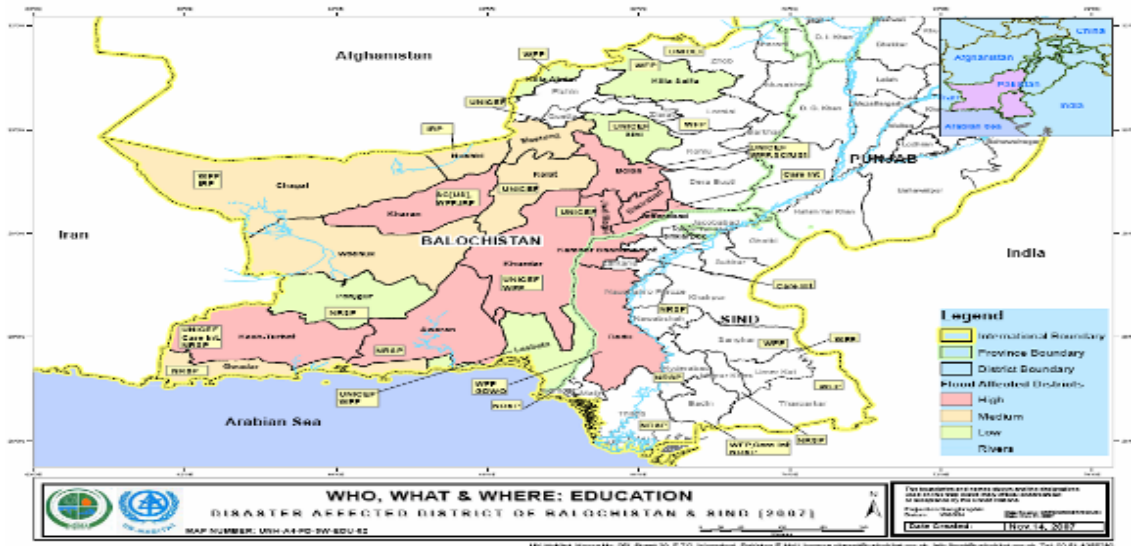
Figure.2:   WHO is Doing What Where by district in Flood affected area

In this context 3W mapping has been done for each cluster separately and observed that more than 20 organization were intervening in sectors particularly WASH, shelter and nutrition. In rest of sector less than that organization working but particularly mainly UNFAO is intervening in livestock and agriculture sector.

INFORMATION DISSIMINATION MECHANISM:

PFIC WEB PORTAL

Post flood Information center (PFIC, http://pfic.webexone.com) a web portal initially designs by ISAC for flood information and later this portal is officially handed over to UNHABITAT. All output information in term of maps/reports and also important document like minutes of meeting, workshop/training reports and field assessment report of flood affected area is uploaded at this portal and available for every stake holder and user.

UN-Habitat Post Flood Disaster Information Management and GIS Mapping team reviewed existing information in Pakistan Flood Information Centre web portal (PFIC). There are different sections of information available including,

DISTRIBUTION OF OUTPUT MAPS/REPORT:

More than 1000 color printed Maps /Graph has been disseminated almost in all forums like General Coordination Meeting (GCM) and cluster head meeting and continually made practiced that shared these maps through e-mail with all stake holders and also immediate respond to stake holders with changes and alteration into maps . All these maps were also regularly uploaded at Post Flood Information Center (PFIC) and mentioned this channel into all forums and also written at bottom of each map.

GOOGLE GROUP/INFO FLOOD:

This group is comprising all stake holders concerned and technical staff e-mails address, this group was used to disseminate information like maps/report and also invitation of upcoming events like GCM, cluster head meeting dates and especially announcement dates of workshop/training. So in glance information spread around stake holders and also available for reference. This group is maintaining by UNORC.

DISTRICT WISE GAP IDENTIFICATION:

After three to four month intervention it was assessed by different sources that still 0.5 Million population require humanitarian assistance according to assessment results, Five districts in Sindh and Balochistan remains top of the list with 8000 and more house holds that require urgent humanitarian assistance, for detail see fig.3.
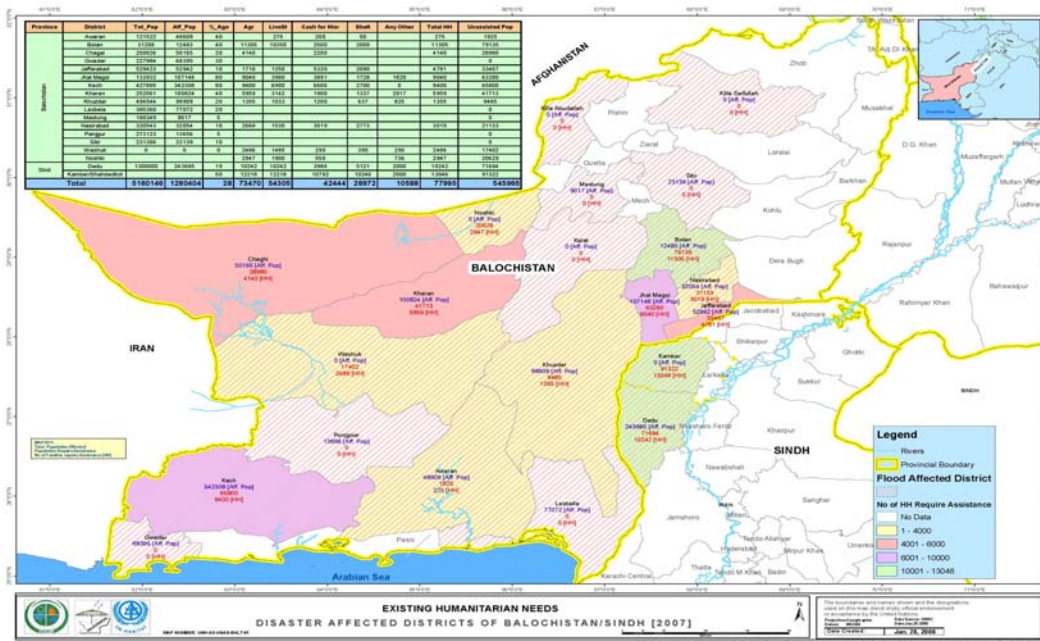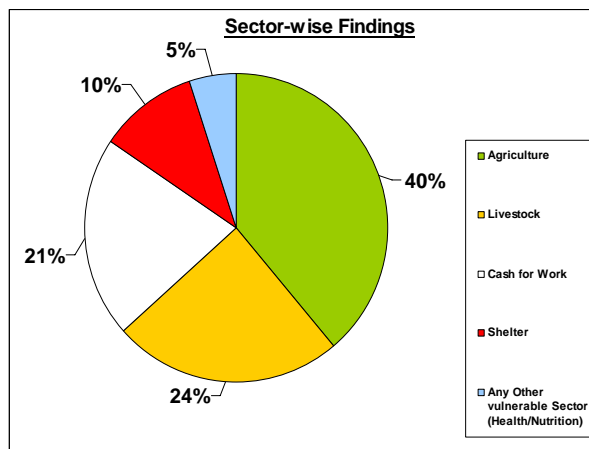
Figure.3: District Wise Household Required Assistance

SECTOR-WISE GAP ANALYSIS:

In flood affected areas of Baluchistan and sind there are many sector in which effected families need assistance, particularly with segregation as more than 20 percent families need assistance in agriculture, cash for work and livestock and less than 20 % families require assistance in rest of sectors such as health and nutrition , water and sanitation and most important finding are that almost 10 % families looking shelter for living safely as per facts that some of families has been received shelter from humanitarian partners but those were not winterized shelter, for detail see fig.4,

Figure: 4 Sector-wise families (%) showing humanitarian needs.

RECOMMENDATIONS:

- Institutional Development of National, sub-National and district level disaster management authority in policy formulation and decision making.
- Strengthen human resources capacity in term of generic tool designing and information Management and also use of GIS/GPS.
- Standardized and possess the mechanism of reporting and coordination among all stake holders.
- Licensing of all humanitarian actors under authority.
- Information gathering and dissemination by developing web based System.
- Comprehensive GIS based infrastructure should be prepared.