



RESILIENCE **April 2011**

National Disaster Management Authority (NDMA)

Prime Minister's Secretariat, Islamabad





RESILIENCE

APRIL 2011

"Promoting a culture of prevention, mitigation and preparedness"

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Chairman's Message

The frequency and intensity of disasters has considerably increased during the past few decades. The calamities which previously occurred after years have now become a routine affair. This rise has resulted in colossal loss to life and property. In this scenario, our role as a prime disaster management body in the country has increased manifold.



When we look back at the year that just concluded, we have all the reason to take pride as we have achieved milestones in the accomplishment of our mission in the sphere of Disaster Risk Reduction in the country. We have done our part well with honesty and dedication whether it was Atta Abad Lake crisis, the recent floods, earthquake in Balochistan or the smouldering inferno in Lahore. Being a highly specialized agency, NDMA demands high level of proficiency and expertise in a number of areas like search, rescue and relief, early recovery, reconstruction and rehabilitation.

Our journey does not end here, we have a long way ahead of us. We should strive to discharge our responsibilities to the best of our abilities. Our quest for excellence is relentless and persistent. We need to push ourselves a little harder and to set targets just beyond our comfort zone as 'Excellence' is the gradual result of always striving to do better.

I hope that NDMA Team will always strive to put its best efforts for the completion of the mission to take on timely contingency planning, remain fully prepared and spearhead effective mitigation measures for the promotion of a disaster resilient culture in the country.

**Lt. Gen. (Retd)
Nadeem Ahmed**

COVER STORY

A Journey Towards Life



Photograph by Syed Haider Ali-ERCUCU/FAO

The enchanting sounds of children and swish of breeze as it serpents among the spiking wheat crops, signals the colors coming back to the life in flood affected areas

Following the unprecedented floods of 2010, the response from the Government of Pakistan's side has been led and coordinated by NDMA, with relevant government departments, ministries and the armed forces. Equally crucial has been the support of donors, Humanitarian Community, led by the United Nations through its relevant agencies and the INGOs and NGOs, without whose support, an effective response would not have been possible at the scale witnessed.

As is global best practice, disaster response for the floods has been divided into multiple phases. The first phase, i.e. relief, was carried out from July 2010 to January 31st, 2011, after which all emergency relief activities were ended except in a few areas where residual relief is still going on. The next phase, i.e. Early Recovery, has been initiated at all levels, with complete institutional transition as well, and is expected to continue till the end of this year.

The efficacy of response during the relief phase ensured that most sector-specific targets were achieved, and the basic requirements of the affected population were met. The assistance of the international community, and the coordination and institutional support of the Humanitarian Organizations were of great importance during this phase. As of March 2011, nearly 67 percent

of all shelter requirements were met through emergency and transitional shelter provision. In the same vein, 11,341 water purification kits were handed out, nearly 2 million medical consultations were conducted, medicines for 6 million population were distributed, and about 29 billion rupees were transferred to the flood affected population under the Citizens Damages Compensation Program also known as the Watan Card. Food distribution, to areas that were worst hit, continued for 6 months, and nearly 408 thousand tons of food items were given to displaced and sedentary people. All in all, the Government of Pakistan spent around 650 million dollars in immediate relief assistance, and was supported by around 1 billion dollars in the shape of foreign assistance, specifically earmarked for relief.

The larger goal, however, is to create an enabling environment that will allow people to renew livelihoods and rehabilitate their places of origin in a dignified manner by reducing dependence on relief handouts, and restart economic and social activity in the flood affected districts. This involves the immediate recovery and rehabilitation of priority sectors such as Agriculture, basic Health, Shelter, Water and Sanitation, Community Infrastructure, and Education.

During the relief phase, the primary coordination was led

by UN-OCHA and NDMA and conducted under the Inter Agency Standing Committee (IASC) cluster arrangement. This was replicated at federal, provincial/hub, and district level, for enhanced coordination.

The decision of the government to switch from Relief to Early Recovery (ER) is being supported with an institutional transition as well. With a view to put in place a coordination mechanism for early recovery, an Early Recovery Working Group was launched on 8th February 2011 in Islamabad, putting forth the plans to form similar ERWG mechanisms at the provincial and district levels. The ERWGs are co-chaired by the respective Disaster Management Authority and UNDP, as the lead UN agency for ER. Under the arrangement, eight Sectoral Working Groups (SWGs) have been formed as components of the ERWG around the eight prioritized ER sectors including: Agriculture and Food Security; Health; WATSAN; Housing; Non-farm Livelihood; Community Infrastructure; Governance and Education. Additionally, four Thematic Working Groups (TWGs) on Protection, Environment, Gender and Disaster Risk Reduction have been formed to ensure the mainstreaming of these themes across all the sectors.

Each of the Sector Working Group (SWG) and Thematic Group (TG) is being co-chaired by the related government entity and the relevant UN agency. The initial task to be performed under the ERWG mechanism is geographical mapping of all the ER actors at the district level, its comparison with the ER needs and a calculation of the gap, with a view to compiling a Strategic Early Recovery Action Plan.

Within each sector, there is an accompanying transition in the nature and kind of activities being carried out. By the end of the first month of the Early Recovery phase, around 54 projects, with \$464 million funding had been initiated in various parts of the country under the UN-Pakistan Floods Relief and Early Recovery Response Plan 2010 (PFRERRP-2010). Roughly the same amount is being spent on projects outside the appeal as well.

Housing:

In the housing sector, the focus has been diverted from transitional temporary shelter arrangements (which included tents and tarpaulins) to permanent One-room



structures (made up of either brick or mud). The technical specifications for various One-Room shelter designs have also been presented to all Working Group members and their feedback regarding DRR and Environmental concerns is being addressed. For Early Recovery projects, a total of 234,889 homes (160,000 One Room shelter and 74,889 Transitional shelter) have been committed and, as of 24th March, 54,131 homes (14,530 One Room shelter and 39,601 Transitional shelter) have been completed.

Agriculture and Food Security:

During the relief phase, the agriculture/food sector reached 750,000 of the 2.3 million agriculture dependent households that were affected by the floods. These households received a combination of certified wheat seeds, fertilizer, oil seed and crop and vegetable packages. 652,000 households continue to receive agriculture assistance, including livestock support and cash-for-work.

In response to the Government's announcement of the closure of the relief phase of the humanitarian response, a Food Security and Agriculture Working Group has been established for a more structured response to the current needs of flood-affected households in the early recovery phase.

The Agriculture and Food Security Sector Working Group is focusing on two main components:

1. Agricultural production and availability of food for households, which considers:
 - Resume and increase agricultural production at household level
 - Livestock assistance and restocking;

- Rehabilitation and improvement of farm irrigation networks
 - Land rehabilitation and forest tree plantation
 - Improvement of rural infrastructures (markets, community centers) and agriculture infrastructures (hatcheries – fisheries and poultry, forest and fruit nurseries)
 - Improve quality/access of services rendered to small farmers
2. Households access to nutritious food through:
- Nutrition and targeted supplementary feeding
 - Primary school feeding
 - Food processing
 - Kitchen gardens



Non-Farm Livelihood:

The extent of the damages suffered during the floods also caused the loss of livelihood for many people not directly associated with agriculture. The purpose of initiating this new group is to ensure the restoration of their basic sources of income. Salient activities in this sector include cash-for-work programmes, enterprise recovery, training in employable skills, value chain improvements etc.

Education:

During the early recovery phase, it is being ensured that all children, adolescents and young people affected by the floods have access to safe and well-equipped learning opportunities. For this purpose, GoP and the humanitarian community will move ahead from the child friendly spaces and school-in-a-box scheme to the establishment of temporary learning centers (TLC), repair of partially damaged and construction of

completely damaged schools. The establishment of TLCs, repair and construction of affected schools which was started in late relief phase, will be focused as a priority in the early recovery phase. Besides, DRR and teaching and learning skills in emergency situations will be provided to the citizens committees like PTCs/SMCs, school management and students.

Water and Sanitation (WATSAN):

The priorities for this working group will focus on achieving measurable improvements in the health of flood affected population through the efficient, effective, and timely implementation of Water, Sanitation and Hygiene programmes targeted at the most vulnerable. During the early recovery phase, as on March 28th, the progress up till now is 20, 651 hand pumps and 1,970 water supply schemes have been repaired/installed benefiting a total of 5,226,594 beneficiaries.

The main objectives of the early recovery phase in Water and Sanitation include;

- Restoration of access to safe drinking water to pre-disaster levels
- Improve access to safe drinking water from surface-water sources
- Restore access to sanitation facilities to pre-disaster levels

Health and Nutrition:

The transition in these two inter-related sectors has seen a shift from emergency interventions to long-term rehabilitation of partially damaged facilities, restoration of basic village level health services, and the restitution of access to medicine and other related healthcare items. Over and above all this, nutrition interventions will continue under the UNICEF program in Sindh, where the effects of the floods have exacerbated chronic malnutrition.

Governance:

This SWG is focused on restoring the damaged or destroyed public sector infrastructure, capacities, equipment and more importantly, the citizens' documents lost due to the floods. The SWG has finalized the Terms of Reference and a tool for gap analysis.

Community Physical Infrastructure (CPI):

The focus of the community restoration activities is to facilitate the return process through improved access to native areas of flood affected people. This will be done through drainage of flood water and clearing of sludge and debris from the fields and roads. Regeneration of the economic hubs will become achievable through the provisions of vocational trainings, distribution of productive tools, and small cash grants under cash for work programme.

Community restoration of almost 11000 affected villages before the end of 2011 will remain the most significant challenge, however, it is hoped that 90 approved projects will be fully funded in next couple of months and the implementation of these projects in 29 severely affected districts will help achieving the objectives.

Thematic Groups:

The four Thematic Groups around the areas of Protection, Environment, Gender and Disaster Risk Reduction aim at not only mainstreaming these

normative themes across all sector specific activities and products, but also at coordinating stand alone initiatives peculiar to the theme. All the four TGs have finalized their ToRs and are at advance stages of data collection as well as the formulation of guidelines for the SWGs.

Conclusion:

The transition from Relief to Early Recovery is now underway at all levels, and new requirements and priorities are constantly being highlighted. Close coordination between NDMA, PDMAs, Government departments, and the Humanitarian Community, now led by UNDP, is ensuring that the transition is done in the best possible and most efficient manner. Some of the issues currently being faced include internal capacity, resource mobilization, and in some cases, local outreach. However, it is expected that with the help of all stakeholders and partners, all such hurdles will be overcome and Early Recovery phase will be able to fulfill all its objectives and play its crucial role in the long-term rehabilitation of the affected population.

Revival of Agriculture; A Dream Come True

Photograph by Syed Haider Ali-ERCU/FAO



With a life full of struggle, Janatan Mai stands by her wheat crops with which she had many financial and nutritional hopes

Photograph by Syed Haider Ali-ERCU/FAO



Seeing it all happening what was turned into a dream after floods, Malik Gamo stands victorious behind his spiking wheat crop in Layyah district

'Bumper Crops After Floods 2010 in Pakistan' :

Heavy monsoon rains of July 2010 caused massive flooding in the Pakistan's living history. The merciless waters in the form of flash and riverine floods caused damages up to 2.4 million hectares of standing crops.

According to the Provincial Departments of Livestock and the Ministry of Livestock in Islamabad, 449 668 head of livestock had died in the flood-affected areas. In addition, millions of livestock had faced acute food shortages. Moreover, the stocks of stored grains and seeds, as well as fodder and straw that are critical for

livestock survival had also been washed away.

In a rural setup, a farmer's survival, prosperity and socio-economic growth rely on steady crop cycle, availability of essential fertilizers, good quality of seeds and availability of irrigation resources. With such devastation, the life of a common farmer fell into serious jeopardy, which required multidimensional support and assistance before the complete recovery of the agriculture sector in Pakistan.

The Emergency assistance to support flood-affected vulnerable farmers was geared up by National Disaster Management Authority (NDMA), I/NGOs, UN agencies and the donor community. The NDMA coordinated the response at federal, provincial and district levels throughout the country.

The immediate challenge was to help affected farmers for "In Time" wheat plantation. Agriculture partners under the guidance of NDMA responded immediately to deal speedily and *in time* distribution of agriculture inputs across the country to affected districts. Certified wheat seeds, Urea, Di -Ammonium Phosphate (DAP) fertilizers and vegetable seeds were distributed to ***over 768,000 households*** in Khyber Pakhtunkhwa, Punjab, Sindh and Balochistan provinces by cluster partners. Food and Agriculture Organization of the United Nation (FAO), due to its vast geographical reach, played an important role in distribution of agricultural inputs to the most affected outreached areas. Special emphasis was laid on the high quality of wheat seed and fertilizers so that all the efforts would result to ensure the revival of food security. The vegetable seeds enabled families, especially women, to start growing vegetables immediately, allowing them to be cropped within six to eight weeks.

The wide spread distribution of highest quality of seeds is expected to result in bumper crop yield. Since the floodwaters brought natural fertilized rich soil and fulfilled the water need; further enrichment by phosphate fertilizers is expected to boost this year crops.

According to Space and Upper Atmosphere Research Commission (SUPARCO- February 2011 report) the prospects of wheat are good and better than last year. The Supply of certified seeds was better by 30 percent over last year, which is an important factor in improving crop productivity. Supply of fertilizers was

better than last year up to December. The Phosphate supply in general was higher by 10 percent & supply of urea by 8.3%. The satellite based vegetative analysis for wheat crop till Feb 2011 indicates a good crop for Punjab province as compared to last year as well as above the average of last ten years. Punjab's share for the year 2010/11 wheat production is anticipated at a staggering 77 percent of the total national wheat production.

An additional challenge was to keep affected livestock alive. With animal feed scarcity, the approaching winter coupled with weak body conditions was expected to increase further animal losses. In an effort for preservation of livestock assets, the animal compound feed ensured the survival of the livestock. These efforts have reached to the scores of more than 320 000 million households in KPK, Punjab, Sindh and Balochistan.

Complementing cash for work activities are in progress such as cleaning and de-silting of water channels, land rehabilitation and access road rehabilitation. These complementary activities are not only helping in rebuilding infrastructure but also providing financial support to the farmers.

In the early recovery phase, it is vital to support farmers to maximize crop production, support to spring (Kharif) planting, focusing on provision of agriculture inputs (including maize, rice, summer vegetable seeds), livestock support to replenish livestock losses and rehabilitation of agriculture productive infrastructure particularly in irrigation system.

The International Community jointly with NDMA and district authorities are aiming at improving the resilience of farming communities to natural disasters including preparedness, disaster risk management and contingency planning in the early recovery interventions.

Beside relevant achievements of the relief phase, for the flood-affected population, only recovery part has been initiated and the farming communities remain still far from *pre-flood* living conditions. In an effort to bring the farming communities back to normalcy, it will take at least two more cropping seasons to recover as such. However if the support is discontinued at this stage, this will frustrate the achievements obtained during early recovery phase. Furthermore, the interventions on farmer's livelihoods should address both immediate



Photograph by Syed Haider Ali-ERCUCU/FAO

Cash for work activity in progress in Layyah district to rebuilt water channels

needs of the vulnerable population as well as the long term dimensions of poverty in rural areas.

Impact

Because of the coordinated efforts of GoP, I/NGOs, philanthropist, wheat has been sown on an area of 9.2 million ha against the Federal committee for Agriculture (FAC) target of 9.045 million ha for the year 2010-11. It is expected that Pakistan is heading towards an all time record crop of around 24.5 million tons of Wheat in 2010-11.

Organizational Strengthening Efforts

The National Disaster Management Authority (NDMA) since its inception has made concerted efforts at all levels to enhance its capacity to deliver effectively. Following noteworthy developments have taken place;

- **Call Center:** In order to register affectee complaints for timely redressal and create a data base for feedback, NDMA Call Center was established.
- **Media Wing:** The Media Wing has been strengthened with a multi-dimensional role to disseminate guidelines in pre and post disaster situations among the masses, monitor NDMA related coverage and arrange various events.
- **Logistic Cell:** Logistic Cell was established to receive all humanitarian assistance, maintain inventory, store and dispatch it to the affected areas.



Chairman NDMA visiting NDMA warehouse in H11 in Islamabad.



- **Strategic Plans Unit (SPU):** Along with rescue, relief activities, NDMA started early recovery phase as well. In this regard, SPU was established in NDMA in September 2010 to enhance sector specific technical capacity of NDMA and to provide programme related inputs for Early Recovery.
- **Information & Technology Section:** NDMA IT Section was established to provide enabling software solutions in the overall mandate of NDMA for the seamless and swift functioning of the organization.
- **Information Management:** To provide all humanitarian responders with effective methods for reliable capturing, reporting, sharing, and analyzing information concerning the humanitarian situation according to baseline indicators and population needs, a deliberate information management system has been established..

NEWS & EVENTS

NDMA Dispatches Two C-130 Aircrafts with Relief Goods to Japan

On 24th March 2011, on the instructions of Prime Minister of Pakistan, Syed Yousuf Raza Gillani, to express solidarity and share the grief of the People and Government of Japan in wake of the devastating earthquake and tsunami, NDMA dispatched two C-130 aircrafts carrying 24 metric tons of urgently needed food items to Japan. The humanitarian cargo included 13.5 tons of High Energy Biscuits, 9 tons (7200 liters) of Milk and 1.5 tons (500 bottles) of clean Drinking Water. The Acting Chairman NDMA Brig. Sajid Naeem and Japanese Ambassador to Pakistan, H.E Chihiro Atsumi sent off the shipment.

On behalf of the Government and People of Pakistan, Acting Chairman NDMA, Brig. Sajid Naeem expressed grief on the over whelming loss to life and property. The Japanese Ambassador to Pakistan, H.E Chihiro Atsumi thanked the Government and People of Pakistan for the expression of humanitarian concern in these difficult times.



Acting Chairman NDMA, Brig Sajid Naeem along with the Japanese Ambassador, Chihiro Atsumi sending off two C-130 aircrafts carrying relief goods for the affectees of Tsunami in Japan

NDMA Jointly Arranges National Conference on Women



On 10th March 2011, to mark 100 years of International Women's Day, NDMA, in collaboration with Ministry of Environment and National Commission for the Status of Women (NCSW), supported by UNDP & Norwegian Embassy in Pakistan, arranged National Conference on 'Women as Change Agents for Coping with Climate Change'. The Chairman NDMA, Lt Gen (Retd) Nadeem Ahmed chaired the Conference, while Additional Secretary Ministry of Environment Kamran Ali Qureshi, Chairperson NCSW Ms Anis Haroon, Minister Councilor of Norwegian Embassy Terje Barstad, representatives of NGOs/INGOs and Women Organizations attended the meeting.

The Chairman NDMA, Lt Gen (Retd) Nadeem Ahmed, in his welcome address, said that the women folk should not be passive partners but should become active agents of change in society. The Chairman NDMA lauded Government of Pakistan for playing a commendable role in making gender a cross cutting theme in all its initiatives and taking ownership of all such programmes.

All the speakers emphasized that the climate change is a reality and its effects are being felt all over the globe. They said that the women are a catalyst of change and they should play a proactive role for mitigating the effects of disasters on society.



NDMA Hands Over Books to Humanitarian Organizations



As a part of international humanitarian assistance for the affectees, NDMA received considerable number of books (alongwith stationery items) which were handed over to Indus Resource Center, Karachi University, Zindagi Trust and Heritage Foundation in Karachi by Lt Col (Retd) Muhammad Ali Haider Kazi TI (M) on 9th March 2011.

Lt Col (Retd) Muhammad Ali Haider Kazi TI (M) informed that a total of 26035 books were received, including a wide range of books from the primary up to the University level, out of which 21709 have been given to Indus Resource Center, 317 to Karachi university, 1431 to Zindagi Trust, while large number of stationary items were given to Heritage Foundation. He also informed that a short number of left over academic books will be distributed in due course.

Chairman NDMA, in his message observed that NDMA is striving to extend all the possible support and this gesture will prove beneficial for the overall rehabilitation of education sector.



Chairman NDMA Chairs ERWG Meeting

On 11th February 2011, after the end of relief phase and for a smooth transition to restore community infrastructure and livelihood opportunities, NDMA and United Nations jointly launched the Early Recovery Working Group (ERWG) which will provide strategic and technical guidance during the implementation process till the end of this year. The ERWG will have representation from federal ministries, provincial and district line departments, international/ local NGOs and the UN agencies. UNDP will take lead on behalf of the humanitarian community. NDMA has already developed sectoral guidelines that will be fed into the ERWG for making informed decisions.

On 1st March 2011, the Chairman NDMA, Lt Gen (Retd) Nadeem Ahmed chaired a meeting of Early Recovery Working Group (ERWG). The UN Resident Coordinator Timo Pakkala, Director Generals of PDMAs,



representatives of UN agencies, Chairperson PHF Jack Brian and Chairperson NHN Ms Samina Khan also attended the meeting.

In his welcome address, Chairman NDMA, Lt Gen Nadeem Ahmed apprised the session about the current situation regarding rehabilitation in flood affected areas. The Co-Chairperson of the Meeting, UN Humanitarian Coordinator Timo Pakkala reiterated the resolve of the UN to continue support in the context of floods. The meeting unanimously assented to formulate ERWG on Federal, Provincial & District levels. The session also decided to constitute eight (8) Strategic Working Groups in the context of Food Security & Agriculture, Health & Nutrition, Education, Public Health, Housing, Governance, Off Farm Livelihood & Community Infrastructure and four (4) Cross Cutting Thematic Working Groups regarding Environment, Protection, Disaster Risk Reduction and Gender.

NDMA Briefs Media about Various Initiatives



On 12th February 2011, in order to apprise media about its humanitarian initiatives, NDMA held a Press Briefing in its Headquarters, Chairman NDMA, Lt Gen (Retd) Nadeem Ahmed conducted the briefing.

Chairman NDMA said that in a short span of time, situation has normalized as more than 96% of the affected population has already returned. He said that as far as Watan Cards were concerned, the situation was very encouraging as 1,475,247 Watan Cards were processed and Rs. 27,956,505,262 had been disbursed

among the flood affectees. He said that the Health situation in the flood hit areas was under control as there had been no out break of any epidemic. Chairman NDMA said that although torrential waters destroyed standing crops worth billions but in a short period more than 95% of the submerged cultivated land has already been re-cultivated which has eliminated the apprehension of a food shortage in the country.

Chairman NDMA said that after the end of flood relief phase in January 2011 and for a seamless transition to restore community infrastructure and livelihood opportunities, NDMA and United Nations jointly launched the Early Recovery Working Group (ERWG) which will provide strategic and technical guidance during the implementation process till the end of this year.

Kazakhstan Sends Relief Goods for Flood Affectees

On 10th February 2011, an IL-76 Aircraft of the Republic of Kazakhstan landed at Chaklala Airbase carrying relief items including 2.6 million Cans of Beef/Meat, 30 Tons of Rice and 2000 Family Tents donated by the Government of the Republic of Kazakhstan for Flood Affectees in Pakistan.

The relief items were handed over by H.E Bakhitbek Shabarbayev, the Ambassador of Kazakhstan in Pakistan and Mr. Ali Musa, Official Representative of Ministry of Emergencies of Kazakhstan to Mr. Idrees Mahsud, Director, NDMA and Lt. Col (R) Muhammad Ali Haider Kazi, Logistics Head, NDMA in a ceremony at Chaklala Airbase.



Response to Shah Alam Market Inferno

On 8th February 2011, the fire which engulfed Shah Alam Market in Lahore for two days, took three(3) lives, injured more than thirty(30) and destroyed more than a dozen buildings including 3 Plazas, a mosque and a number of buildings worth Billions, was finally contained.

Acting upon the instructions of Prime Minister of Pakistan Syed Yousuf Raza Gilani, NDMA coordinated the relief and rescue activities in the fire ravaged area. Owing to the congested nature of the fire area all the efforts of concerned departments were unsuccessful. NDMA coordinated with 6 Squadron for the provision of one UH-2H helicopter which made 10 water drops in 2 sorties. In addition to this, NDMA also coordinated with Army Aviation and arranged one MI-17 helicopter which made 6 water drops on the fire in 2 sorties. The use of both the helicopters was extremely beneficial in the cramped area and played a pivotal role in putting out the inferno and saving invaluable lives and properties.



A building burning in Shah Alam market, Lahore. Inset: A helicopter dropping water on fire.

From Russia with Love

On 15th January 2011, as a gesture of goodwill and humanitarian concern for the affectees of recent floods in Pakistan, the Government of Russian Federation donated 107,185 Kgs of relief goods to NDMA. The humanitarian consignment was delivered through a cargo flight at the Chaklala Airbase, Rawalpindi. NDMA officials received the shipment from the First Secretary of the Russian Federation, Mr. Dmitry Melnik. The shipment consisted of 12000 Wound Healing Gels, 3500 Medical Gauzes, 400 Tents and 21,582 MREs (Meals Ready to Eat). The relief items were distributed in the flood hit areas of Pakistan which helped in mitigating health related issues in these areas.

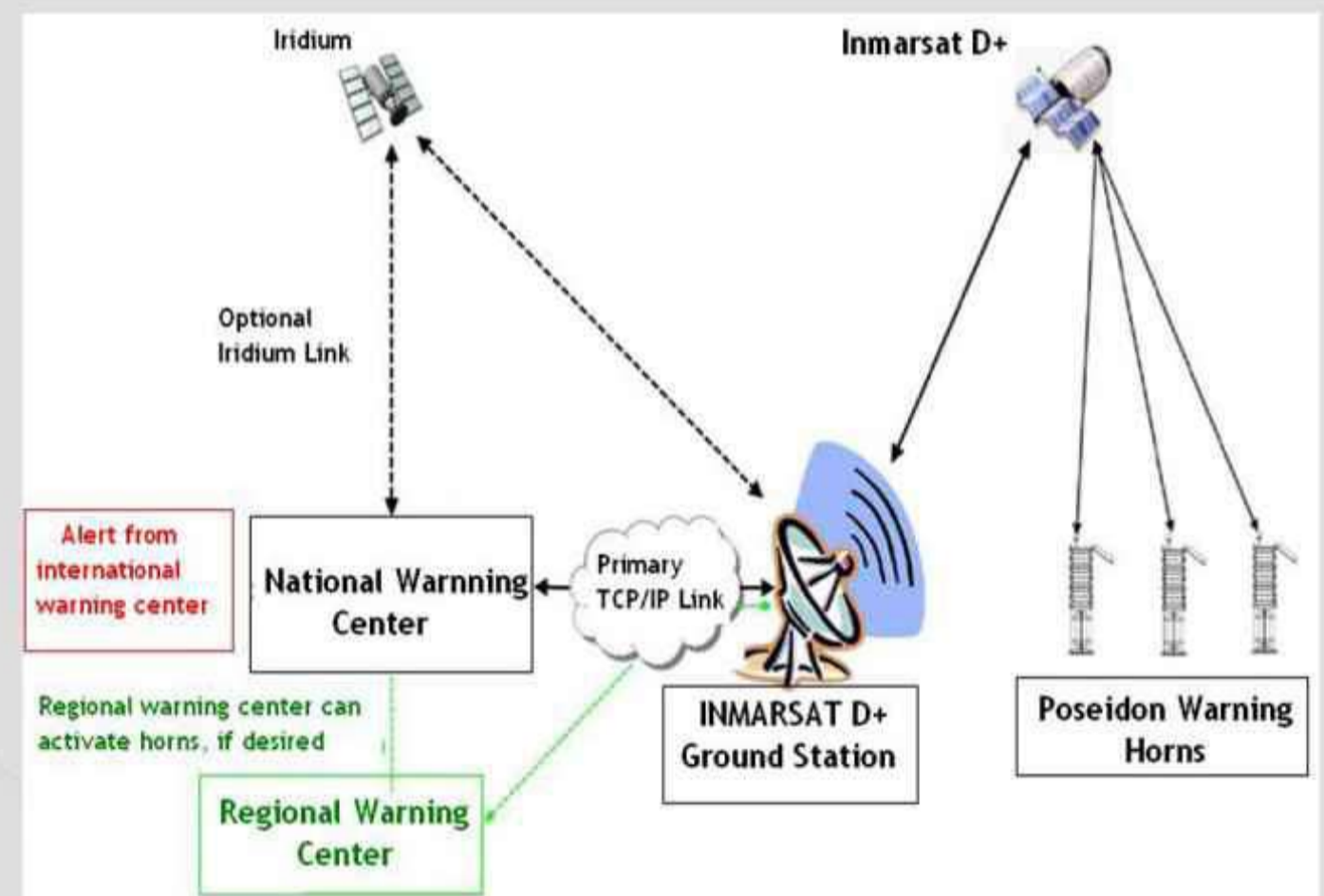


On 5th February 2011, another Russian cargo aircraft (Boeing 747), carrying 110 metric tons of relief items to cater for the needs of flood affectees landed at Chaklala Airbase, Rawalpindi, Pakistan. The humanitarian shipment included 10857 boxes of MREs (Meals Ready to Eat), containing vital food items. On behalf of the Government of Pakistan, NDMA Logistic Head, Lt Col (Retd) Muhammad Ali Haider Kazi received the humanitarian cargo from the representative of Russian Embassy Mr. Dmitry N. Melnik, Head of Consular Department.

NDMA & UNDP Jointly Install Pakistan's First Tsunami Early Warning System in Gwadar

On 3rd February 2011, NDMA, in collaboration with UNDP, successfully installed Pakistan's First Tsunami Early Warning System (TEWS) at Gwadar. Pakistan Meteorological Department (PMD, Karachi) has coordinated for the testing & activation of this system.

In January 2010, NDMA and UNDP Pakistan launched a pilot project and conducted a survey for the most vulnerable tsunami prone communities of District Gwadar in collaboration with stakeholders including NDMA, UNDP Pakistan, PMD Karachi, Coast Guards, District Police, District Government and RCDC Gwadar (NGO working in Gwadar since 1970). The initiative aimed at timely evacuation of potentially vulnerable population along coastal areas, once notification of Tsunami generation is confirmed at National Warning



Center, through an automated communication (warning) system.

The efforts from NDMA & UNDP were highly appreciated by district officials, local community and by print & electronic media including Geo News. They believed that through TEWS in place, the most populated vulnerable community is directly linked with national & international warning centers via fast & reliable satellite communication system. A need for the installation of similar high tech communication system in rest of the coastal areas is also highlighted by multi stakeholders.



NDMA Coordinates Reopening of Attabad Lake Orifice

On 26th Jan 2011, the lake which was created on the 4th of January 2010 near Attabad village in Hunza valley due to a massive landslide blocking Hunza River submerged a portion of KKH and caused considerable damage to life and property in the area.

NDMA, facilitated to lower the spillway bed by FWO. On the direction of NDMA, Government of Gilgit Baltistan and the District Administration of Hunza Nagar vacated the low lying areas downstream till the stabilization of water flow. Section 144 was also imposed along the river banks to restrict movement and activities. This initiative will further lower the lake level by 30 meters till the end of May 2011. This will help to retrieve 15 KM of submerged KKH and will substantially reduce the cost of rehabilitation/reconstruction work of KKH, to be undertaken by the National Highway Authority (NHA) as a separate project.

NDMA Sends Humanitarian Aid to Sri Lanka

On 26th Jan 2011, acting upon the instructions of Prime Minister of Pakistan, Syed Yousuf Raza Gilani, National Disaster Management Authority (NDMA) sent a C-130 aircraft to Sri Lanka with relief goods for the flood affectees.



The relief shipment included 300 Tents and 1000 Blankets. A team of senior NDMA officials was also onboard to handover the humanitarian cargo to their Sri Lankan counterparts. This expression of solidarity by the Government of Pakistan reflects the longstanding friendly relations between the two countries.

NDMA Arranges Donor Meeting

On 25th January 2011, to take the donor community on board regarding the planning in strengthening Disaster Risk Management System in the country during the next five years, National Disaster Management Authority (NDMA) arranged a Donor meeting in its headquarters; Chairman NDMA, Lt Gen (Retd) Nadeem Ahmed delivered a detailed briefing to the participants of the meeting.



Chairman NDMA informed the session that a paradigm shift is yet to take effect in our national Disaster Management System which is still response centric. He apprised the participants of the meeting that considerable progress has been achieved as Hazard, Livelihood, Vulnerability (HLV) Baseline Assessment has been completed in 10 districts while National Risk Assessment is expected to be completed by the mid 2012. The session formulated a NDMA Support Group for effective facilitation in all its humanitarian initiatives. The Chairman NDMA thanked the donors for extending positive assistance in all its humanitarian initiatives.

NDMA Takes On Balochistan Quake

On 19th January 2011, a massive Richter 7.3 quake shook Balochistan and some parts of Sindh and Punjab at 1:23 a.m. Tremors were also felt in Dubai to the west and New Delhi to the east. The epicentre of this quake was 55 km west of Dalbandin with a depth of 55 km.

Immediately after the jolts, the NDMA initiated coordinated activities in the affected areas. All the necessary relief including medical care, food, tents and blankets were dispatched to the affected areas through two C-130 Air Crafts of the PAF.

In addition, on 21st January 2011, NDMA dispatched a C-130 with relief cargo to Quetta for the affectees of Balochistan quake.

The relief shipment included 650 cartons of Meals Ready to Eat (MREs) and 10 cartons of much needed Medicines. A team of NDMA officials was also onboard to gather vital data about the quake and undertake need assessment to facilitate additional relief assistance to the quake hit areas.

Pakistan Air Force and Pakistan Army were kept on high alert and two air missions undertook the necessary assessments in the quake hit area. In addition, a Bell and MI-17 helicopter of Pakistan Army and a Cessna air craft stood by in Quetta with three medical teams ready to be deployed on short notice. NDMA remained in constant liaison with the Chief Secretary Balochistan and concerned DCOs. Local Administration was requested to provide a thorough damage assessment for initiation of additional support.



NATO Hands Over Logistic Support Bridge to NDMA

On 17th January 2011, for the restoration of basic infrastructure, which bears great significance to normalize life in the flood hit areas, North American Treaty Organization (NATO) donated common funded Logistic Support Bridge to Pakistan. The transportation of the bridge from Istanbul to Karachi was the courtesy of brotherly country of Turkey.



On behalf of the Government of Pakistan, NDMA Official, Lt Col (Retd) Muhammad Ali Haider Kazi, TI (M), received the bridge at Port Qasim in Karachi from Mr. Cenk Unal, Counsellor & Deputy Head of Mission, and Captain Levent Uca, Armed Force & Naval Attaché of Embassy of the Republic of Turkey in Islamabad.

The donated bridge can be configured to form, at least, four bridges, each measuring 50 meters in length, along with one set of Launching & Erection Equipment for bridge installation. Spanning a total length of 234 meters, the bridge stock weighs 615 metric tons. This bridge has been instrumental in the restoration of severed communication links in the flood ravaged district of Swat.

UNHAS Helicopters Conduct Massive Operations in Kohistan Valley

In Jan-Feb 2011, a massive helicopter airlift operation was conducted in Kohistan Valley by 4 x UNHAS helicopters. These helicopters were placed at Islamabad Airport, while a forward logistics base was established at Pattan from where the airlift operation of food and non-food items to different landlocked areas of Kohistan Valley was undertaken. Operations Wing NDMA carried out the entire coordination for this operation with Civil Aviation Authority for placing and operation of helicopters from Islamabad Airport, Pakistan Army for provision of safety pilots and refuelling facilities and District Administration of Kohistan for provision of security cover. A total of 331.24 MT of relief assistance was airlifted in the forward locations of the valley.

Churning Out Software Solutions

NDMA is playing a multi faceted role in the management of disasters in the country. NDMA activities get coverage by national and international media. To keep a record of all the coverage in order to get feedback regarding its humanitarian initiatives, media wing NDMA keeps a comprehensive record of all the coverage. To streamline the management of NDMA related media coverage, NDMA IT section has developed Print Media Coverage (PMC) Software which enables a sustainable and easily accessible data base.

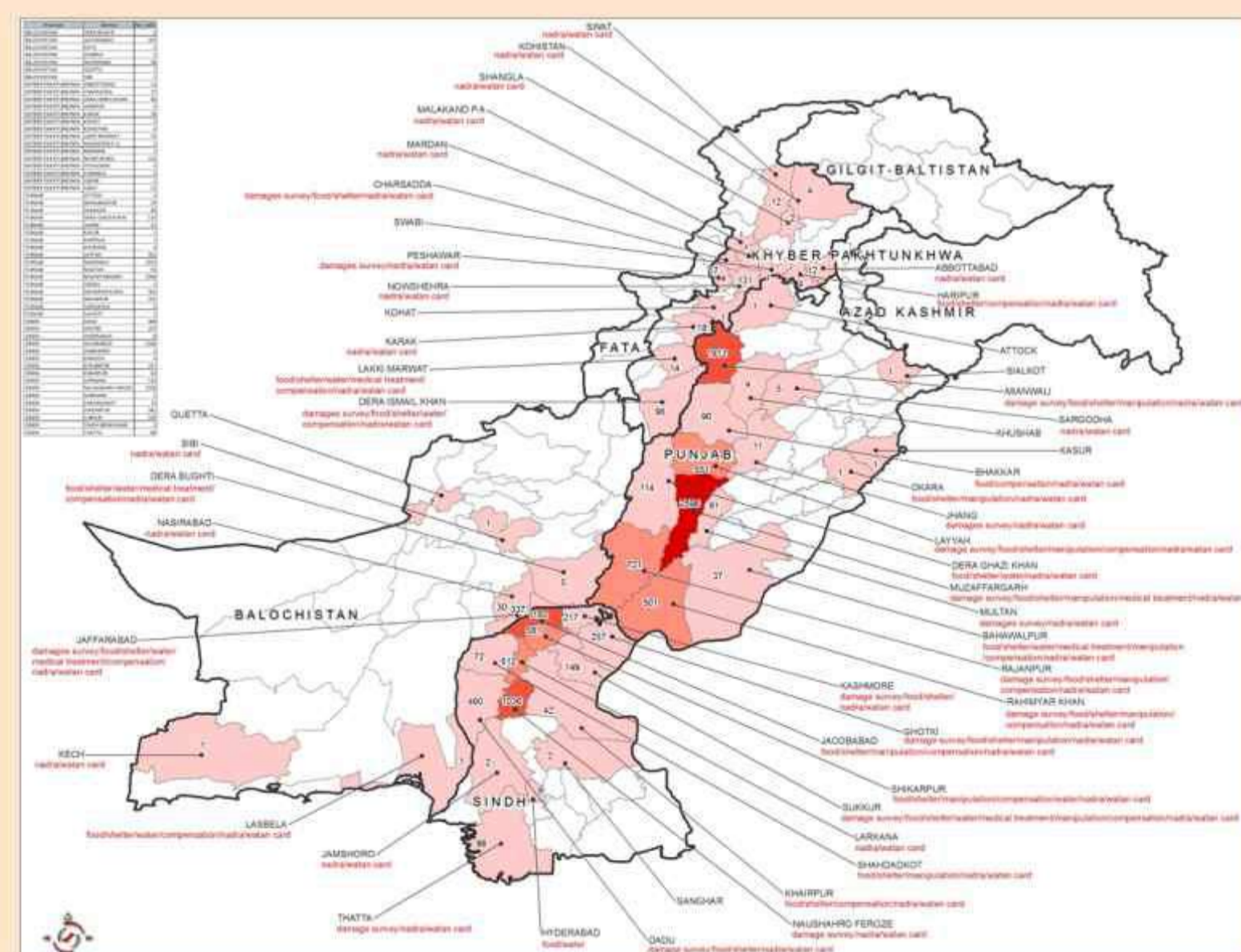
Another milestone in the journey is the development of NDMA Call Centre Information System (NCCI) Software. This is a generic software application which is equally useful for complaint

Call Centre NDMA – Mission Accomplished

The NDMA is the prime disaster management body in the country. It has been mandated to facilitate effective coordination among all the humanitarian actors and the concerned government departments in case of a disaster.

Call Center served as a vital component of NDMA. It was established to provide an opportunity to the victims of the disaster to convey their grievances to the concerned authorities for timely redressal. During its existence Call Center received a total of 11,965 calls from the flood affectees. When a call was received at the Call Center, the Call Center operator took complete details of the caller and entered them in the computer in a prescribed form & forwarded them to the concerned PDMAAs, DCOs, Military Operations and NADRA for necessary action. The Call Center staff managed a regular follow up of each case in order to ensure the resolution of all genuine issues. The important issues included food, shelter, compensation, damages survey and medical treatment etc. In case of an SOS call the call center staff immediately communicated the complaint to the Operation room for swift action.

Now as the flood water has receded and the situation has normalized, Call Center has been closed but it has left behind a legacy of care which will continue in case of any future calamity.



NDMA Logistic Cell – Reaching Out to the Needy



Logistic Cell is an extremely vital component of NDMA. In the wake of Pakistan Floods 2010, as national & international humanitarian assistance started pouring in the country Logistic Cell took the brunt of scheduled & unscheduled flights, land & rail cargo carrying tons of rescue and relief goods & stored them in warehouses. At present, a total of 9 NDMA warehouses, in association with other stakeholders / organizations, are maintained at different locations in the country.

Logistic Cell received relief and rescue goods consignments through a total of 238 flights, 05 shipments through sea ships and 06 consignments via train. These flights / ships / trains include both 189 Cargo and 59 Commercial shipments. An aggregate of 15,965,948 pieces 69,335 cartons 24603, bags and 57570.25 metric tons of relief and rescue aid was received by NDMA.

A total of 318 air lifts were carried out through C-130 & C-17 cargo military air crafts while a total of 280 trucks/container shipments were dispatched by means of road to the affected areas.

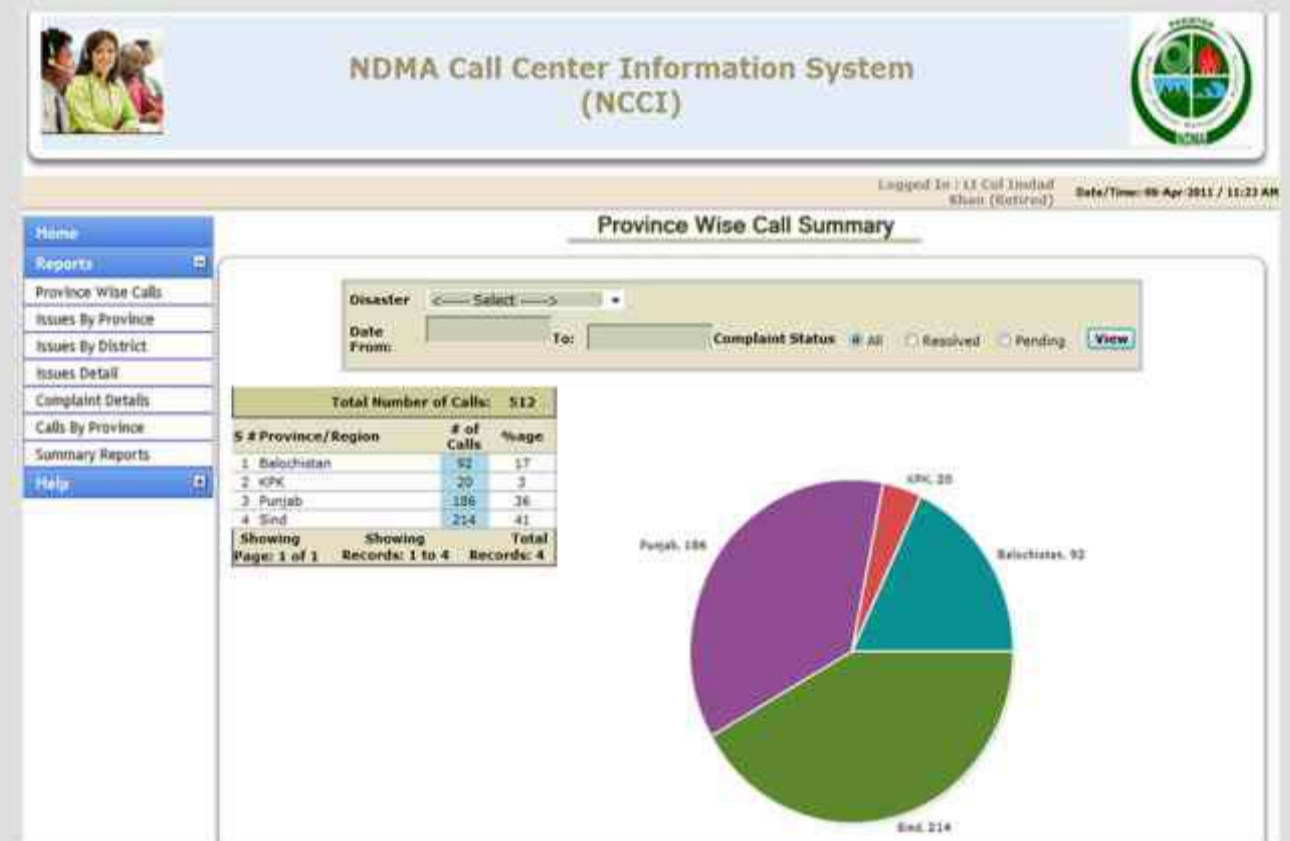


Chairman NDMA inspecting segregation process of relief goods in RGDO warehouse, Karachi.



registration in case of any disaster. It is a comprehensive data base of all the complaints.

For classification and cataloguing of books and publications according to international standards, a new library software NDMA Library Management System (NLMS), for its resource centre has been developed.



For easy access to the websites of all humanitarian partners of NDMA, Partners In Disaster Management (PIDM) Software has also been developed.



NDMA IT section is dedicatedly involved in providing enabling software solutions in the overall mandate of NDMA.

VISITS

Chairman NDMA Attends DRR Conference in Thailand



Prime Minister of Thailand H.E. Abhisit Vejjajiva meeting Chairman NDMA.

On 29th March 2011, to commemorate 25 years of Asian Disaster Preparedness Center (ADPC), a two day conference was held in Bangkok, Thailand. The Prime Minister of Thailand H.E. Abhisit Vejjajiva chaired the conference. The event was attended by high level officials from fifteen countries. On behalf of the Government of Pakistan, Chairman NDMA, Lt Gen (Retd) Nadeem Ahmed attended the

conference. Other important participants included Deputy Regional Director for the United Nations Development Programme for Asia & Pacific, Nicholas Rosellini, Executive Secretary of the United Nations Economic & Social Commission for the Asia Pacific, Noleen Hevzer and Norway's State Secretary, Ingrid Fiskaa.

Prime Minister of Thailand, H.E. Abhisit Vejjajiva, in his opening speech at the seminar stressed that the effective disaster risk reduction practices should be in tune with the fostering of a disaster safety culture in every part of society.

The Chairman, NDMA, Lt Gen (Retd) Nadeem Ahmed said that during the previous decades the frequency and magnitude of disasters has increased in Asia and climate change is making the situation worse. The situation is further compounded due to the fact that in some of our countries we have a huge population growth, unplanned urbanization, deforestation, poor land use management, inadequate enforcement of the building codes, and investment in high risk areas, he added.



A group photo of the participants of DRR conference in Thailand.

Chairman NDMA Visits Flood Affected Areas of Sindh

On 20th February 2011, to get first hand knowledge of the current situation, Chairman NDMA, Lt Gen (Retd) Nadeem Ahmed had an aerial visit of flood hit areas of tehsil Khairpur Nathan Shah in district Dadu. A UNDP delegation, headed by UN Administrator Helen Clark, also accompanied.

The Chairman NDMA, after the visit, observed that the situation in these areas had fairly normalized as the water receded from the province except for the few pockets of Daddu, Khairpur, Sehwan and Manchar Lake. The health

sector showed signs of early recovery as 86% of health facilities are functional. Most of the schools are functional and people started sending their children to schools. The Chairman NDMA said that Early Recovery Phase had been launched and reconstruction in the flood affected areas was under way. He said that "Food for Work" and "Cash for Work" programmes had been initiated in these areas.

Dignitary Visits to NDMA

National Disaster Management Authority (NDMA), being the lead disaster management body in the country, is pro-actively involved in reducing the consequent risks of disaster in the country. In this context, NDMA is in contact with the international humanitarian fraternity and related organizations.

Various high profile dignitaries paid a visit to the headquarters in Islamabad. The long list of honourable guests included the UN Secretary General's Special Representative for Disaster Risk Reduction Ms Margareta Wahlstrom, the Special Envoy of the UN Secretary General for Assistance to Pakistan H.E Rauf Engin Soysal, Cabinet Minister of the British Government Baroness Saeeda Warsi, Assistant Professor from Center for Peace & Security Studies within Georgetown University's Edmand A, Walsh School of Foreign Service, Uzbek scholar Mr. Tashmirza

Khalmirzaev, Student delegation from Harvard University, USA and a delegation of leading Myanmar media personnel.

All the dignitaries were apprised about NDMA's humanitarian initiatives in the field of disaster risk reduction in the country.



Chairman NDMA in a meeting with UN Secretary General's Special Representative for Disaster Risk Reduction Ms Margareta Wahlstrom



Cabinet Minister of the British Government, Saeeda Warsi alongwith British High Commissioner, Adam Thomson being briefed by Director Operations NDMA at Headquarters.



Chairman NDMA in a meeting with UN Special Envoy Rauf Engin Soysal.

DRR INITIATIVES

NDMA Pioneers CBDRM Initiative

On 8th March 2011, in a pioneer effort to promote a culture of prevention and create safer communities by building the capacity of local authorities and communities to manage risks and effectively respond to disaster at the grass root level, NDMA arranged a meeting of Community Based Disaster Risk Management (CBDRM) programme across Pakistan.

The Chairman NDMA, Lt Gen (Retd) Nadeem Ahmed chaired the meeting while the World Bank Lead Operation Officer Raja Rehan, WFP Technical Advisor on DRM Sajidin Hussain, DG Civil Defense Muhammad Hanif Khattak, Deputy Secretary EAD Mumtaz Hussain Shah, representatives of all PDMAs and partner organizations also attended the meeting.



Chairman NDMA with the participants of Community Based Disaster Risk Management (CBDRM) Programme.

In his opening remarks, the Chairman NDMA, Lt Gen (Retd) Nadeem Ahmed appreciated World Bank's assent to fund the initiative.

Briefing the session, Director Programme CBDRM, Air Com Naunehal Shah said that CBDRM programme will have two components including establishment of Union Council Disaster Management Committees and Union Council Emergency Response Team. Director Programme CBDRM said that it is also proposed to provide stockpiles of essential tools and equipments for immediate response in union councils.

The representatives of UNDP and WFP appreciated the efforts of NDMA regarding CBDRM programme and expressed the hope that this pre-emptive investment in DRR apparatus at the grass root level will safe guard against future disasters.

On 31st March 2011, NDMA arranged a Workshop to sensitize the key stakeholders about the importance of building the capacities of communities to reduce the effects of disasters. The Chairman NDMA, Lt Gen (Retd) Nadeem Ahmed, Lead Operations Officer of the

World Bank, Raja Rehan Arshad, Country Director UNDP, Toshihiro Tanaka, along with the senior management of NDMA, DGs of all PDMAs, representatives of PRCS, Partner Organizations, Universities and Member of DRR Core Group adorned the session with their presence.

The Chairman NDMA, in his opening remarks observed that over the years we have learned that top-down approach to disaster risk management fail to address the local needs of vulnerable communities. He said that the world is progressively acknowledging a bottoms-up approach in combating the effects of a disaster. He said that as there is no limit to disasters, there is no limit to preparedness as well.

Addressing the session, Raja Rehan Arshad of the World Bank and Toshihiro Tanaka of UNDP commended NDMA's initiative to promote a community based approach to effectively respond to emergency situations/disasters. The representatives of prominent international organizations assured their support for the programme.



A group photo of Chairman NDMA Lt Gen Nadeem Ahmad (Retd) with the participants of Community Based Disaster Risk Management (CBDRM) Programme.

NDMA Arranges Shake Table Demo in Murree

On 16th March 2011, NDMA arranged a shake table demonstration to raise awareness among people of Murree on earthquake safer construction. The demonstration was held at Amphi Theater, Bank Road Murree, which attracted engineers, architects, masons, government servants, general public, and a large number of students and teachers from different schools and colleges of Murree. Due to its geographical positioning between the Jhelum fault and the Main Boundary Thrust (MBT) of the Himalayan range, Murree lies in zone 4 of the seismic zonation map of Pakistan. Being one of the largest tourist attractions in the country, limited





infrastructure unable to cater for the needs of such heavy tourist influx gave way to haphazard and rapid construction which, coupled with the use of poor construction material, lack of professional supervision and non adherence to building codes has further exacerbated the situation.

The objective of the demonstration was to impress upon people the consequences of living in seismically unsafe houses and to build peoples' confidence in earthquake-resistant building technologies, including the retrofitting of existing houses.

The shake-table essentially had two identical buildings of the same shape and size. One of the buildings was built using earthquake resistant techniques and the other was done traditionally – or without taking any special

measures. Both the buildings were placed on the same shaking platform (table) and thus exposed to forces, similar to that buildings have to endure during earthquakes. The weaker one, made without earthquake-resistant elements, subsequently collapsed. The shake table was used to demonstrate how earthquake resilient techniques in construction can help buildings withstand the forces during an earthquake and convince them of the simplicity of integrating earthquake-resistance into the buildings.

The event was keenly participated and many questions were asked from the team conducting the test. The ownership of the local authorities was the highlight of the event but the most important achievement was the promotion of culture of safety in the area.



JICA Activities

On 10th February 2011, JICA, in collaboration with NDMA, conducted CBDRM training Workshops in five districts of Rawalpindi, Bhakkar, Muzaffargarh, Karachi and Thatta, as a component of JICA project for National Disaster Management Plan in Pakistan. The Chairman NDMA, Lt Gen (Retd) Nadeem Ahmed was given a detailed briefing about the initiative by the JICA team. FOCUS Humanitarian Assistance is the implementing partner for the activities.



As part of the activities, Community Disaster Management Committees were established in each locality. The JICA team has also conducted Hazard & Risk Assessment and developed Hazard & Risk Maps. In addition, JICA team has been developing plans & guidelines for DRM in Pakistan, including National Disaster Management Plan, Multi-Hazard Early Warning Plan, Human Resource Development Plan and guidelines and materials for CBDRM activities.

NDMA GALLERIA



Senior Member NDMA Mr. Ahmad Kamal chairing a Post Flood Coordination/Review meeting in NDMA Headquarters.



Chairman NDMA Lt Gen Nadeem Ahmad (Retd.) in meeting with Egyptian Foreign Minister, Dr. Muhammad Changezi.



Chairman NDMA Lt Gen Nadeem Ahmad (Retd.) in a meeting with His Excellency Mr. Alfredo Leoni, Ambassador of Brazil in Pakistan.



A group photo of Chairman NDMA with the visiting 8 members delegation of students from the Harvard University, USA.



Chairman NDMA in a Presentation on Emergency Disaster Management System in Japan by Japanese Experts.



Chairman NDMA Lt Gen Nadeem Ahmad (Retd.) in a meeting of Pakistan Humanitarian Forum.



Chairman NDMA in a meeting with Joint Delegation of UNDP/ UN-OCHA regarding initiation of Early Recovery Activities.



WFP delegation briefing Chairman NDMA on "Pakistan Flood Recovery Assessment Survey" and "Operational Issues".

WORLD at a GLANCE

Japan Devastated – March 2011



On 11th March 2011, a massive earthquake measuring 8.9 on the Richter scale occurred off the coast of Japan at 14:46 JST (05:46 UTC). The epicentre was 130 kilometres from Sendai, with the hypocenter at a depth of 32 km. the shaking continued for around 6 minutes whereas the Peak Ground Acceleration (PGA) was 2.99g.

A deadly 33-foot high tsunami wave was triggered by the earthquake which travelled up to 10 km inland along the northern coastline. The giant waves deluged cities and rural areas alike, sweeping away cars, homes, buildings, a train, and boats, leaving a path of death and devastation in its wake apart from paralyzing two nuclear plants at the coast of Fukushima.

The 9.0-magnitude (MW) megathrust earthquake was preceded a large number of foreshocks and multiple aftershocks reported afterwards. The first major foreshock was a 7.2 MW event on 9 March, approximately 40 km (25 mi) from the 11 March quake, with another three on the same day in excess of 6.0 MW. The total energy released by this earthquake was slightly less than the 2004 earthquake (9.1 magnitude) that killed 230,000 people.

The Japanese National Police Agency has officially confirmed more than 13,000 deaths and close to 28,000

missing across eighteen prefectures. The government has reported that 2,852 buildings were destroyed and over 40,000 damaged either by earthquakes, tsunami or fire. In addition, 5000 houses in Iwate and 2,700 houses in Sendai have been washed away. Moreover, 1800 houses have been destroyed in Fukushima. According to the latest assessment 47 bridges and seven railways have been damaged apart from several hundred kilometres of road network.

The Japanese government declared a nuclear power emergency due to the failure of a reactor cooling systems among one of the reactors of Fukushima I and evacuated thousands of residents living in the adjacent areas of the reactor. Later due to the possibility of core damage, the evacuation zone was extended to 20 km, affecting 170,000–200,000 people and residents within a further 10 km have been advised to stay indoors. The release of fission products from the damaged nuclear reactor core, notably radioactive iodine-131, led Japanese officials to distribute prophylactic iodine to the people living around Fukushima I and Fukushima II.

Japan is an island nation located along the Pacific coast of Asia where several continental and oceanic plates meet. The region commonly known as “Pacific Ring of Fire”; about 90% of the world's earthquakes and 80% of the world's largest earthquakes occur along the Ring of Fire.



Tremors Shake New Zealand



On 22nd February 2011, a 6.3 magnitude earthquake struck Canterbury region in New Zealand's south Island at 12.51 pm local time, causing widespread destruction and multiple fatalities. The quake was centered 5

kilometer west of the town of Lyttelton and 10 kilometer south east of the center of Christchurch, New Zealand's second most populous city with a head count of approximately 500,000. The tremors were felt as far as Wellington and Dunedin.

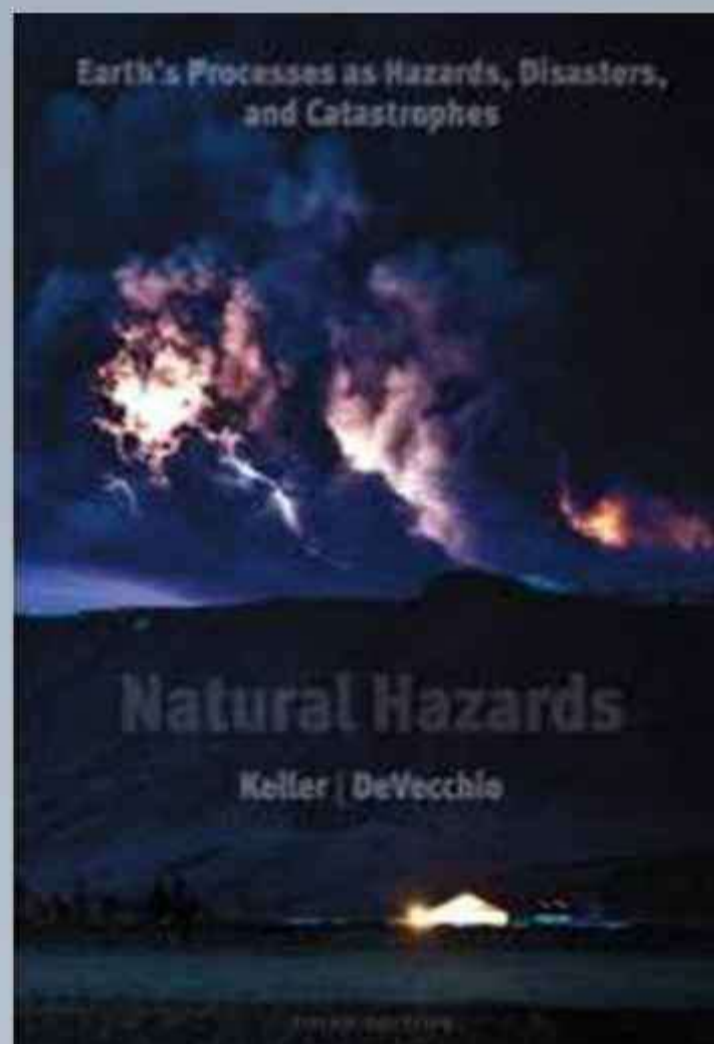
This quake followed nearly six months after the 7.1 magnitude 2010, Canterbury quake that caused significant damage to the region but no direct fatalities. The death toll reached 182, making it the second deadliest natural disaster recorded in New Zealand after the 1931 Hawke's Bay earthquake.

The New Zealand government declared a state of emergency after the quake. The Prime Minister John Key termed 22nd February as the Darkest Day of the country.

BOOKS & PUBLICATIONS

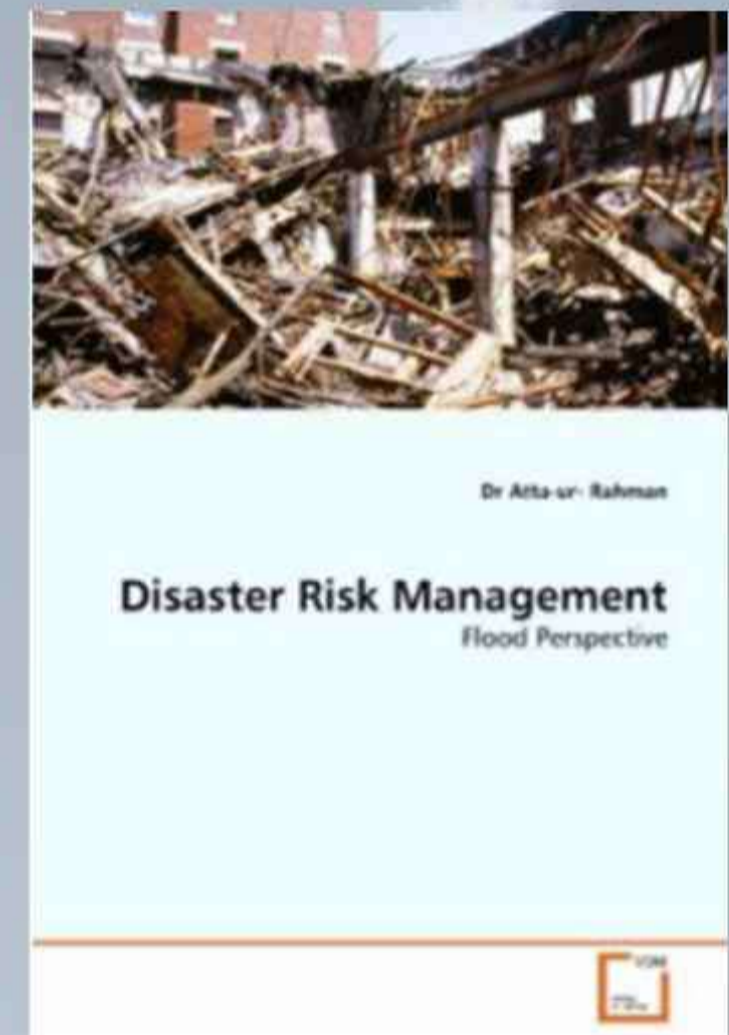
Natural Hazards:

This masterpiece is the joint creation of two well known authors, Edward Keller and Duane De Vecchio. This exquisite piece of research literature contains 528 pages and comes in Paperback form. This is the Third edition and was published by Prentice Hall on 6 January, 2011. Ideal for courses on natural hazards or on earthquakes and volcanoes, *Natural Hazards* uses real-life examples of hazards and disasters to explore how and why they happen—and what we can do to limit their effects. The Third Edition of this text provides fully up-to-date coverage of recent disasters, and significantly revises the visual program throughout. Included with every copy of this text is access to Hazard City, an online media resource which gives instructors meaningful, easy-to-assign, and easy-to-grade assignments where students investigate virtual disasters in the fictional town of Hazard City.



Disaster Risk Management: Flood Perspective:

Dr. Atta Ur Rehman, an Assistant Professor in Department of Geography at the University of Peshawar, has this book on his credit. Published by VDM Verlag Dr. Muller on 1 October, 2010, it comes in Paperback form and has 192 pages. It describes and analyses the spatial variations of disasters in general and floods in particular. Disasters are either natural or man-made. Some disasters are slow onset like drought, while others have rapid onset in the form of earthquake. The objective of this book is to provide readers with an integrated approach of understanding various disasters. It also attempts to analyse the factors of causing various disasters, adverse impacts, human responses and perceptions, forecasting and warning, emergency response, early recovery and Disaster Risk Management. Similarly, for Damage assessment and DRM, various interdisciplinary techniques have also been applied.





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