



NATIONAL DISASTER MANAGEMENT AUTHORITY (NDMA)



REPORT OF
DISASTER RISK MANAGEMENT CONFERENCE
HELD ON 8TH OCT. 2008

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National Disaster Management Authority

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INAUGURAL CEREMONY

A National Conference on Disaster Risk Management was organized by the National Disaster Management Authority (NDMA) at Prime Minister's Secretariat on 8th October 2008.

Welcome Address by the Chairman, NDMA

The ceremony started with recitation of verses from the Holy Quran. After the recitation, Lt. General (R) Farooq Ahmad Khan, Chairman, NDMA warmly welcomed the Prime Minister of Pakistan, Federal Ministers, diplomats, other distinguished guests and learned participants of the conference. The Chairman, NDMA briefed the audience about objectives of the Conference. Lt. General (R) Farooq Ahmad Khan elucidated that the National Disaster Risk Management Conference was held to commemorate the 2nd National Disaster Awareness Day as the day was established in memory of the victims of Earthquake of 8th October, 2005. The Chairman explained that the purpose of the National Disaster Awareness Day was to provide an opportunity to decision makers, officials, development workers and the general public to pause for a moment in their busy schedules and remember those who lost their lives and to ponder how we can minimize the chances of such disastrous events in future.

Also, the Chairman, NDMA highlighted the priorities needed to be addressed immediately in order to deal with all types of disasters including those caused by terrorism. He emphasized the following points:

- ◆ Functional District Disaster Management Authorities (DDMAs) are critical in implementing effective strategies for dealing with catastrophes and disaster risks. Therefore, DDMAs must be made fully functional in 50 high disaster risk districts on priority. This would include provision of dedicated officers, separate office space, essential communication infrastructure, training and allocation of funds for preventive measures.

- ◆ To deal with the rising challenges of terrorist activities in urban centers, we must revamp our urban emergency services; including fire services and search and rescue services. This is particularly required to be done in the federal capital, in all provincial capitals and in major urban and commercial centers. The improvement of urban response services is also necessary for dealing with frequent urban flooding and fire incidents.
- ◆ The presence of effective Provincial Disaster Management Authorities (PDMAs) is strategically very important considering the federal nature of our polity. PDMAs have a critical role in formulating province specific strategies to deal with human induced and natural disasters. The PDMAs must be immediately made fully operational by providing them essential man-power, and technical, physical and financial resources. This would also include the operationalization of Provincial Disaster Management Funds with provision of sufficient seed money.
- ◆ National Disaster Management Fund (NDMF) as required by law must be made operational by allocation of necessary funds. The NDMF was notified as part of the new policy to equip NDMA with required financial resources for preventive measures and to organize emergency response and recovery after disasters. However, so far funds have not been allocated for making it a reality.
- ◆ As envisaged in law the establishment of National Institute of Disaster Management (NIDM) is a prerequisite to develop our human resources through appropriate training. The NIDM would also provide invaluable support in policy research with regards to preventive approaches for dealing with catastrophes. The construction of this institute therefore, must be considered as critical.
- ◆ For the Prime Minister to be abreast with the latest situation in case of National calamity and also to keep the Cabinet/ Commission briefed regularly for decision making, NDMA was envisaged to be part of Prime

Minister's Secretariat. It must be housed adequately and considered extension of PM Secretariat.

- ◆ Duality of responsibility of relief between Cabinet Division and NDMA is not conducive to one window fast track decision making in disaster situation. The rules of business need to be amended forthwith in line with the law.

Complete welcome address by the Chairman, NDMA is placed at Annexure "A".

The Prime Minister's Speech

After the welcome address by the Chairman, NDMA, the Prime Minister Syed Yousaf Raza Gillani formally inaugurated the Conference. In his inaugural speech, the Prime Minister of Pakistan dilated upon the importance of disaster management and pointed out that disasters threaten sustained economic growth of society and country. He cited that the earthquake of 2005 caused the loss of about 5.2 million US dollar which was staggering when compared to national budget for year 2006-2007 which was about USD 25 billion. The Prime Minister directed the Federal Ministries / Divisions / Organizations and other Stakeholders for making plans for Disaster Management with regard to their sectors and performing their obligations as laid down in the National Disaster Management Framework circulated in 2007.

The Prime Minister emphasized the fact that in order to minimize losses on account of disasters, Pakistan needed to strengthen its early warning capacity especially for droughts and flooding which occurred frequently and caused heavy losses. Prime Minister also elaborated the need for establishment of Early Warning System for Cyclones and Tsunami which although were low in frequency but could have higher damage. The Prime Minister appreciated the fact that the NDMA had already initiated a project for National Disaster Risk Assessment.

The Prime Minister acknowledged the fact that the newly established disaster management institutions needed to be made fully functional and their capacities needed to be enhanced at Federal, Provincial and District levels to realize the envisaged objectives. As Chairman of the NDMC, the Prime Minister urged the provincial governments to take urgent steps to make the Provincial Disaster Management Authorities fully operational through allocation of necessary funds, dedicated work force and other paraphernalia.

Syed Yousaf Raza Gillani also stressed on the need of building up of local capacities for timely response and rescue. The Prime Minister, therefore, directed that District Disaster Management Authorities were to be made functional and effective as first responders in the event of a disaster. The Prime Minister asked the Chief Ministers in their capacity as Chairman Provincial Disaster Management Commissions to take serious steps towards establishing and strengthening the DDMA's in the 50 high risk districts as identified by the NDMA. Full text of the Prime Minister's inaugural speech is placed at Annexure "B".

After inaugural speech by the honourable Prime Minister, Conference proceedings started. The conference concentrated on two themes, namely, one, disaster risk management, and two, contingency planning for preparedness.

SESSION-I

Session-I of the Conference deliberated on the theme of Disaster Risk Management. In this session, Mr. Shaukat N. Tahir, Senior Member (Planning), NDMA gave presentation on the existing National Disaster Management System in Pakistan. The contents of Presentation are placed at Annexure "C". Then Mr. Adil Akbar Khan, presented progress report of NDMA since its inception i.e. December 21, 2006. A copy of the report is placed at Annexure "D".

After the above two presentations, Mr. Zubair Murshed, Advisor to the NDMA on Disaster Risk Reduction explained Disaster Risk Management approach. In his

presentation, Mr. Zubair Murshed laid emphasis on the things to be done and which needed full attention of the concerned authorities. For instance, he elaborated that District authorities should focus on the following aspects while managing disaster risks:

- (i) Disaster issues should be regularly discussed.
- (ii) Sector-wise disaster impact analysis should be carried out.
- (iii) Mitigation actions should be identified.
- (iv) Actions in Annual Plan should be implemented in letter and spirit.

He added that Ministries, Divisions and Departments were required to concentrate on the following factors:

- (a) Disaster impact analysis.
- (b) Strategies for mitigation
- (c) Allocation of adequate resources
- (d) Implementation of Actions

The presentation by Mr. Zubair Murshed is placed at Annexure "E".

SESSION-II

In Session-II of the Conference, theme-II of the Conference was discussed which dealt with contingency planning for preparedness. In this session, Mr. Khuda B. Baloch, Mr. Rizwan Ullah Baig, Mr. Jamil Amjad and Mr. Ihtesham-ud-Din shared their experiences from Balochistan Flood 2007, Rajanpur Flood 2008, Peshawar Flood 2008 and Urban Fires in Karachi, respectively. These presentations are placed at Annexures "F" , "G" , "H" and "I" , respectively.

WAY FORWARD

In concluding remarks, Lt. General (R) Farooq Ahmad Khan, Chairman, NDMA expressed his vision about Disaster Risk Management and Disaster Risk Reduction. He stated that Disaster Risk Reduction requires a long term commitment from all.

The Chairman, NDMA assured that NDMA would focus on the follow up of the announcements made by the Prime Minister of Pakistan in his inaugural address to make the Disaster Risk Management System fully operational at all the levels. Furthermore, the Chairman made the following commitments, as way forward:

- (a) National Disaster Management Commission meeting would be proposed in December, 2008.
- (b) Action Plan to implement National Disaster Risk Management Framework would be framed.
- (c) Provincial Disaster Management Authorities(PDMAs) and District Disaster Management Authorities(DDMAs) would be sought to be operationalised.
- (d) Efforts would be made for operationalization of National Disaster Management Framework and Provincial Disaster Management Frameworks.
- (e) Integration of disaster risk reduction in curriculum with assistance from Ministry of Education would be passed.
- (f) Awareness Campaign through Mass Media would be follow up.
- (g) National Fire Policy would be finalized.
- (h) Capacity building / improvement of urban response and fire services would be ensured.

The Chairman, NDMA indicated the NDMA's resolve to implement capacity building programmes in 20 high disaster risk Districts with the help of United Nations during 2009-2010 which would include;-

- (i) Training of officers.
- (ii) Formation of District Response teams
- (iii) Setting up of District Emergency Operational Cell (EOC).
- (iv) Small Scale/Community Level mitigation projects.

For other 30 disaster risk prone Districts, Government would be asked to support / fund the following programmes:

- (i) Organize training programmes
- (ii) Help in preparation of District Disaster Risk Management Plans/Contingency Plans and
- (iii) Provide technical information and assistance.

The Chairman concluded the ceremony by expressing NDMA's expectations from District Disaster Management Authorities (DDMA) which are enumerated as follows:

- (i) Nomination of full time and dedicated focal points / focal persons.
- (ii) Develop Sector-wise mitigation strategies
- (iii) Contingency Planning for impending hazards.
- (iv) Develop local response teams.
- (v) Implement country awareness campaign
- (vi) Develop geographical information system (GIS) based on District Data Base regarding the base-line information.
- (vii) Develop inventory / stock position of District resources that can be used during emergency.

**National Disaster Awareness Day and National
Disaster Risk Management Conference
8th October 2008**

Welcome Address

By

**Lt. Gen (Retd) Farooq Ahmad Khan
Chairman, National Disaster Management Authority**

Mr. PM

**Excellencies, the Ambassadors and Diplomatic
Envoys**

The Service Chiefs

Honorable Ministers

Members of Parliaments

Federal Secretaries

DG PDMAs

District Coordination Officers

District Nazims

Distinguished guests and Ladies and Gentlemen

I am pleased to welcome you all in the National Disaster Risk Management Conference being held to commemorate the Second National Disaster Awareness Day. The Day was established in memory of the earthquake of 8th October 2005. Purpose of the National Disaster Awareness Day commemorations is to provide an opportunity to decision makers, officials, development workers and the general public to pause for a moment from their busy schedules and remember those who lost their lives and to ponder how we can minimize the chances of such disastrous events in future.

Ladies and gentlemen!

On that fateful day, over 73000 souls lost their lives in a matter of seconds. We lost a whole generation of children in that catastrophe killing over 18000 kids under the rubble of their schools. Over 3.5 million people got affected and took refuge in temporary shelters to save themselves from vagaries of the nature. The nation has tremendous resilience and has risen again and again from turmoils. It was created from ashes in 1947. It suffered excruciating amputation in 1971 but withstood that shock and faced the biggest catastrophe in 2005. I am one of

those who have seen the lost hope in the eyes of survivors, have seen empty gaze of those parents who would sit waiting for their children's dead bodies to be plucked from the active land slides, have heard the blood curdling cries of scores of children running in the wilderness of the devastated villages trying to find their parents, old parents crying on the graves of the dear ones. Asking only one question why did they meet this fate? Why was whole generation lost in the debris of schools, why had most of the public buildings collapsed and what future holds for them. Then the world witnessed the nation transforming from despair to a rejuvenated, determined and galvanized people ready to face the challenge. The nation swarmed the area alongwith the international community and with unprecedented spirit of caring and sharing embraced 3.5 million people. The world then saw the most successful joint relief, rescue and later rehabilitation phenomenon. It has become a role model of joint effort for others to emulate. However, the lessons learnt which needed to be capitalized upon are far from being realized due to many a reasons. Although the legislative provisions have been enacted; however, the

entities which have to implement the provisions and be accountable to the people for securing the safety of lives and properties are yet to be raised. There are still dualities of responsibility hindering response; capacity building is suffering due to administrative and bureaucratic hic ups. Case in point in raising of three S&R teams of international standard, with donors assistance. CDA's S&R team which was first one to be raised lacks officers' cadre for want of enrolment. Their fire fighters could have performed better in Marriott tragedy if fire officers had been enrolled in time. Disaster may not pre warn and scourge of terrorism can befall anytime which compels us to be always ready. Response in disaster has political cost too. If done well political stature rises and if it is messed up the people lose faith and despair over takes.

The disasters cause a serious blow to development of the country. Government has to spend hundred of millions of dollars to provide relief to survivors. It is spending USD 5.2 billion for the reconstruction and rehabilitation efforts in the earthquake affected areas at the cost of other developmental projects.

Ladies and Gentlemen!

The earthquake was not the only catastrophe that the nation has faced. Previously Pakistan has experienced frequent floods, earthquakes, droughts, cyclones, which have caused colossal economic losses. In post earthquake period, floods in 2007, flash floods in 2008 and the avalanches in 2008 in the NAs constantly remind of the threats we face.

The menace of terrorism which has rocked our cities in recent times, poses another grave threat to the social fabric and economic development of our society. Hundreds of innocent citizen's have lost their lives in the barbaric events of violence and thousands have got affected. Today, our people are forced to live in a state of constant fear and conduct of normal business has become a challenge.

Ladies and gentlemen!

The earthquake of 2005 taught us an important lesson, that if we were to avoid such catastrophes we must put in place more effective policies, institutions and capacities and we should take preventive action and better

preparedness to minimize disaster threats. This is fully in sync with global best practices. In line with this approach, the government passed a new law in the form of National Disaster Management Ordinance 2006 and it approved the establishment of a host of institutions; e.g. the National Disaster Management Commission headed by the Prime Minister, the National Disaster Management Authority and their replicas at the province and district levels. Disaster Management is a devolved subject as per the law, making district and provincial administration responsible to manage it by given all possible legal powers. On the part of NDMA it is to manage the national response and help building technical and intellectual capacities of provincial entities. It is a fallacy to expect NDMA to manage a local response therefore, to build local capacities NDMA is working on a five years donors assisted plan since 2007. It can only succeed if the provinces have raised the disaster management set ups quickly which are delayed by over a year.

However, ladies and gentlemen!

I must admit that the implementation of this new approach must receive more serious attention than it did in the past. In order to make the new system fully functional and effective, stronger political support and concerted efforts are required. However, the political turmoil in 2007-08, the civil unrest, the financial crunch and finally the operations against anti-state militant distracted the attention during the last year and a half.

Therefore, I must acknowledge here that the proposed new system for dealing with catastrophes more effectively, have not been made fully functional to this date. NDMA has been finally able to acquire necessary officers after going through a long and painstaking process. NDMA has also been able to attract some financial support from donor governments and from the UN system, particularly the UNDP. However, the situation remains demanding at the province and district levels. It is particularly unfortunate that the provincial decision-makers and local governments have not given any serious attention to the subject and they are far from being effective.

Excellencies, ladies and gentlemen!

Taking advantage of the presence of the Prime Minister and all other key stakeholders, I would like to highlight the priorities we must address immediately in order to deal with all types of disasters including those caused by terrorism.

At the city and district levels: -

- Functional District Disaster Management Authorities are critical in implementing effective strategies for dealing with catastrophes and disaster risks. Therefore, DDMAAs must be made fully functional in 50 high risk districts as a priority. This would include provision of dedicated officers, separate office space, essential communication infrastructure, training and allocation of funds for preventive measures.
- To deal with the rising challenges of terrorist activities in urban centers, we must revamp our urban emergency services; including fire services and search and rescue services. This is particularly required to be done in the federal capital, in all provincial capitals and in major urban and commercial centers. The improvement of urban response

services is also necessary for dealing with frequent urban flooding and fire incidents.

At the province levels:-

- The presence of effective Provincial Disaster Management Authorities (PDMAs) is strategically very important considering the federal nature of our polity. PDMAs have a critical role in formulating province specific strategies to deal with human induced and natural disasters. The PDMAs must be immediately made fully operational by providing them essential man-power, and technical, physical and financial resources. This would also include the operationalization of Provincial Disaster Management Funds with provision of sufficient seed money.

At the national level: -

- National Disaster Management Fund (NDMF) as required by law must be made operational by allocation of necessary funds. The NDMF was notified as part of the new policy to equip NDMA with required financial resources for preventive measures and to organize emergency response and recovery

after disasters. However, so far funds have not been allocated for making it a reality.

- As envisaged in law the establishment of National Institute of Disaster Management (NIDM) is a prerequisite to develop our human resources through appropriate training. The NIDM would also provide invaluable support in policy research with regards to preventive approaches for dealing with catastrophes. The construction of this institute therefore, must be considered as critical.
- For the Prime Minister to be abreast with the latest situation in case of National calamity and also to keep the Cabinet/ Commission briefed regularly for decision making, NDMA was envisaged to be part of Prime Minister's Secretariat. It must be housed adequately and considered extension of PM Secretariat.
- Duality of responsibility of relief between Cabinet Division and NDMA is not conducive to one window fast track decision making in disaster situation. The rules of business need to be amended forthwith in line with the law.

In the end, ladies and gentlemen, I would like to say that disaster risk management is a multi-stakeholder endeavor and all of us need to join hands to reduce the threats to lives and property of our people from natural and human induced catastrophes.

Pakistan faces multi hazard scenarios and needs to be taking strides and be ready to face any challenge which is only possible with political support without which nothing is assured. With time experienced people who were part of 2005 team have faded away. Soon a handful left may also be part of oblivion. It is time to raise the NDMA entities quickly before the posterity blames that we did not prove equal to the challenge.

I am confident that we will have a very productive conference today to discuss some of these issues. I am also grateful to the Prime Minister for sparing time to attend inaugural session which shows his commitment to disaster risk management. I am also thankful for all the participants for attending this conference.

Thank You

**Address at the Opening Ceremony of Annual National Disaster Risk Management
Conference and Disaster Awareness Day
on 8.10.2008**

Bismillah-ir-Rahma'n-ir-Raheem

The Federal Ministers

Deputy Chairman of Senate

Ambassadors and High Commissioners

Chairman, National Disaster Management Authority

Distinguished Guests

Representatives of Donor Agencies, NGOs

Ladies and Gentlemen

Assala'm-o-Alaikom!

Three years have passed, since the fate-full day of 8th October, 2005, when the nation faced the most traumatic and tragic event of its history. As a result of an Earthquake measuring 7.6 on Richter scale, the worst of its kind in our history, we lost 73000 of people while 3.5 million became homeless.

What was built in decades and generations was lost in seconds. The resilience of the nation, has however, enabled it to overcome the trauma caused by that unprecedented catastrophe. Through, its reconstruction and rehabilitation efforts the Government is committed to build back better what was lost as a consequence of the earthquake.

Ladies and Gentlemen

As mentioned by the Chairman NDMA, Pakistan is vulnerable to disasters from events like avalanches, cyclones, droughts, earthquakes, floods, flash floods, landslides, pest attacks, river erosion and tsunami etc. Certain human activities lead towards disasters in the form of transport and industrial accidents, oil spills, fires and terrorism.

We must realize the fact that disasters threaten sustained economic growth of the society and country. For example, the quake of 2005 caused a loss of over 5.2 billion US dollars which is staggering when compared to national budget for year 2006-2007 which was about USD 25 billion. Similarly the national economy has suffered losses of billions of dollars due to events like floods, droughts, landslides, cyclones, transport accidents and from the menace of terrorism in the recent years. Government has to divert precious resources from other development priorities in order to provide relief and response to the disaster survivors.

It is not a coincidence that areas which experience disasters frequently in the country are also amongst the poorest regions. In order to ensure continuity of economic growth in the medium to longer terms we must address risks posed by natural and human induced disasters.

Ladies and Gentlemen

Realizing the importance of disaster risk reduction for sustainable social, economic and environmental development, the Government has introduced a comprehensive system of disaster management which is supported by legal and institutional arrangements at the federal, provincial and district levels.

The National Disaster Management Ordinance 2007 provides the legal cover to the new system, under which the National Disaster Management Commission (NDMC) has been

established as the apex policy making and implementing body for disaster risk management.

The importance being given by the Government to disaster risk management can well be judged from the fact that the NDMC is headed by the Prime Minister and the other key political decision makers including provincial chief ministers, Prime Minister AJK, Chief Executive NAs and selected federal ministers are amongst its members. This arrangement would ensure that national policies and strategies for disaster risk reduction are implemented under the direct supervision of the highest executive offices as respective levels.

The National Disaster Management Authority is fully functional in the Prime Minister's Secretariat, as the lead Federal Agency, to implement, coordinate and monitor National Policies and strategies on disaster management and to conduct one window operations, in the event of a large scale disaster under the direct supervision of the Prime Minister. Like-wise Provincial Disaster Management Commissions (PDMCs) have been notified in the four provinces while similar provisions have been made for AJK and Northern Areas. District Disaster Management Authorities (DDMAs) have been notified at the District levels across the country which will act as first tier of response in case of any calamity.

However, I must acknowledge that the newly established disaster management institutions need to be made fully functional and their capacities need to be enhanced at Federal, Provincial and District levels to realize the envisaged objectives. As Chairman of the NDMC, I urge the provincial governments to take urgent steps to make the Provincial Disaster Management Authorities fully operational through allocation of necessary funds, dedicated work force and other paraphernalia.

Local capacities are extremely crucial to organize a timely response, therefore, District Disaster Management Authorities also need to be made functional as effective first responders in the event of a disaster. The Chief Ministers in their capacity as Chairman

Provincial Disaster Management Commissions need to take serious steps towards establishing and strengthening the DDMA's in the 50 high risk districts as identified by NDMA.

The Federal Government has also notified a National Disaster Management Fund (NDMF) under the NDMA to finance various mitigation projects and other activities in the field of disaster management.

We are committed to allocate reasonable funds to the NDMF to facilitate the implementation of Disaster Risk Management Programmes initiated by the NDMA. The Provincial Governments are also required to make identical efforts at the respective levels, which must include establishment of the Provincial Disaster Management Funds and allocation of substantial resources to the District Governments to make the District Disaster Management Authorities fully functional.

The Federal Ministries, Divisions, Organizations and other stake holders, must developed plans for disaster management with regards to their sectors and they must perform their respective obligations as envisaged in the National Disaster Management Framework issued in 2007, in close coordination with the NDMA.

Ladies and Gentlemen

In order to reduce disaster losses, Pakistan needs to strengthen its early warning capacities especially for droughts and flooding which occur frequently and cause high impact. Early warning systems will need to be developed for cyclones and tsunami, which although are low in frequency but could have higher impact. Strengthening of monitoring and analysis capabilities with relation to seismic risks and landslides should also be a priority. I appreciate that the NDMA has initiated a project for National Risk Assessment.

Establishment of an effective countrywide response system has become all the more important in the wake of recent spade of terrorist incidents. The Urban Search and Rescue Capacities at the local level need to be enhanced at the earliest. The provincial and district governments need to extend full support to the initiative taken by the National Disaster Management Authority for establishment of Urban Search and Rescue Teams in Karachi, Lahore and Islamabad as mentioned by the Chairman, National Disaster Management Authority.

I am glad to know that the NDMA has taken the initiative for the development of a comprehensive National Emergency Response Plan and establishment of National Emergency Operations Centre (NEOC).

Ladies and Gentlemen

The local communities, infrastructure and economy are directly affected by disasters while women, children and elderly are usually disproportionately effected. At the same time local communities and authorities are first responders to any disaster situation.

Historical analysis of disasters, demonstrate that most disasters are localized in their scale. Considering this characteristic of disaster risks, awareness raising at the community level is highly imperative. Involvement of common citizens is extremely important to reduce the risks to the lives and property of people. In this regard, the DDMA's must develop awareness raising campaigns to inform communities about the disaster risks they face and the actions individual citizens can take to deal with them. The Federal Ministry of Education in close collaboration with provincial education departments and NDMA shall make arrangements for including disaster reduction into the school, college and university level curriculum so as to create awareness amongst students and to encourage the spirit of volunteers for disaster preparedness and response.

I must highlight that the important role which media has in raising public awareness. I encourage Media to consider this as their national responsibility and develop Special programs and documentaries for improving the knowledge of general public about disaster management.

While appreciating the important role of the international community, united nations systems and the civil society organizations in relief and rehabilitation in the past, the government expects them to be partners in the implementation of disaster reduction initiatives in the country through support in making NDMA, PDMA's and DDMA's effective and through involving general public in these endeavors.

I agree with the Chairman NDMA that disaster risk reduction should be considered as a high priority in our national development agenda. Therefore, I would ask NDMA to put forward a National Plan of Action in this regard for consideration of the National Disaster Management Commission (NDMC) in its next meeting, which shall be held within this year.

In the end Ladies and Gentlemen !

I appreciate the efforts of the NDMA, in organizing the Second Disaster Awareness Day and the National Disaster Risk Management Conference. Such events provide effective avenues to enhance awareness of general public and that of decision makers about disaster management.

I am sure that the participants in this Conference on disaster management will have productive deliberations and cross fertilization of ideas to achieve the objectives set before it.

I pray that the Almighty may save us from calamities in the future, Ameen.

Pakistan Zindabad

DISASTER RISK MANAGEMENT SYSTEM IN PAKISTAN

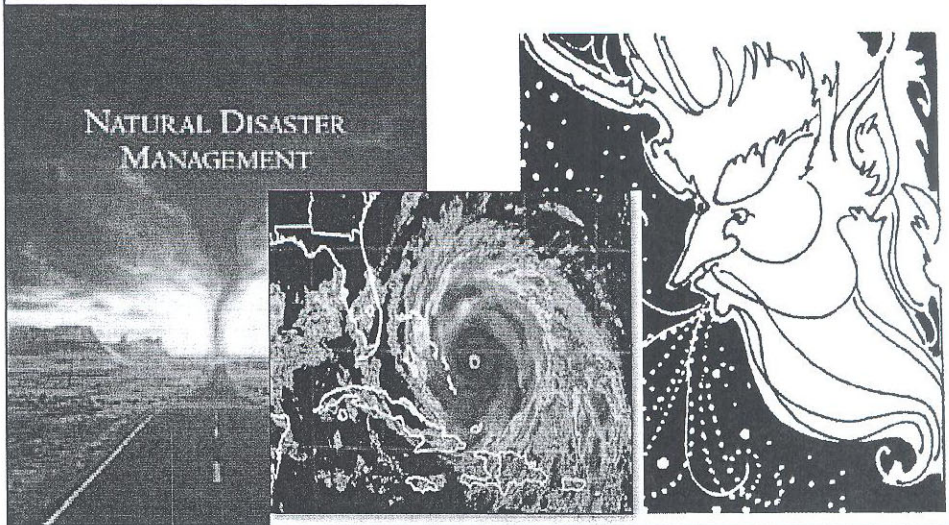


SHAUKAT N. TAHIR
SENIOR MEMBER, NDMA

OUTLINE

- Hazards in Pakistan
- National Disaster Management Ordinance
- Organizational Structure OF Disaster Management at Federal, Provincial & District levels in the Country
- National Disaster Risk Management Framework

DEFINING HAZARDS



TYPES OF HAZARDS

PREDICTABLE HAZARDS

- Floods
- Droughts
- Tsunami
- Cyclones/ Storms
- River Erosions

UN-PREDICTABLE HAZARDS

- Earthquake
- Avalanches
- Landslides
- Glacial Lake Outbursts
- Pest Attacks
- Epidemics
- Accidents of all types

HAZARDS IN PAKISTAN

NATURAL HAZARDS

- Earthquakes
- Floods
- Tsunami
- Avalanches
- Landslides
- Cyclones/Storms
- Glacial Lake Outbursts
- Droughts
- River Erosions
- Pest Attacks
- Epidemics

HUMAN INDUCED HAZARDS

- Transport Accidents
- Oil Spills
- Urban Fires
- Civil Conflicts
- Internal Displacements
- Chemical, Nuclear & Radiological (CNR) Accidents

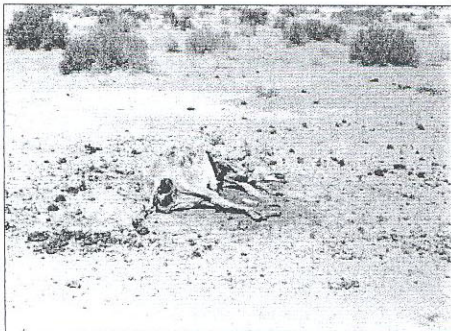
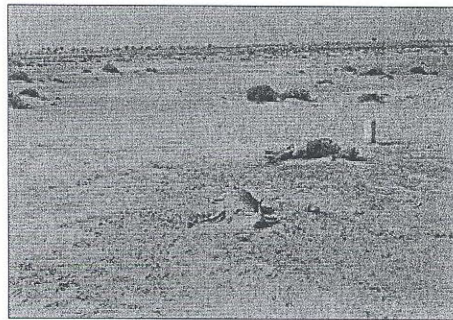
EARTHQUAKE (Margalla Tower)



EARTHQUAKE (Balakot)



DROUGHT



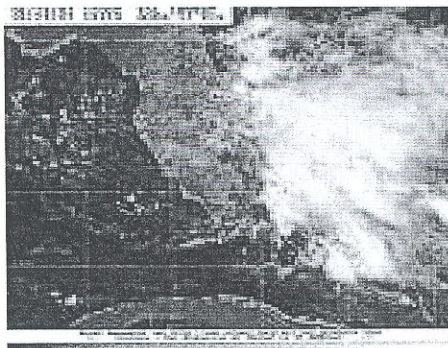
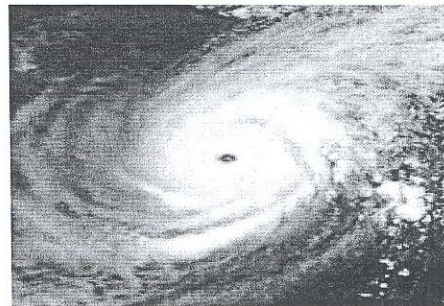
8

TSUNAMI



9

CYCLONES



(YEMYEN-2007)

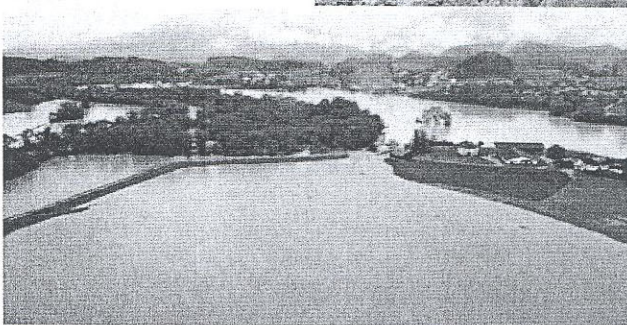
10

URBAN FIRE



11

FLOODS



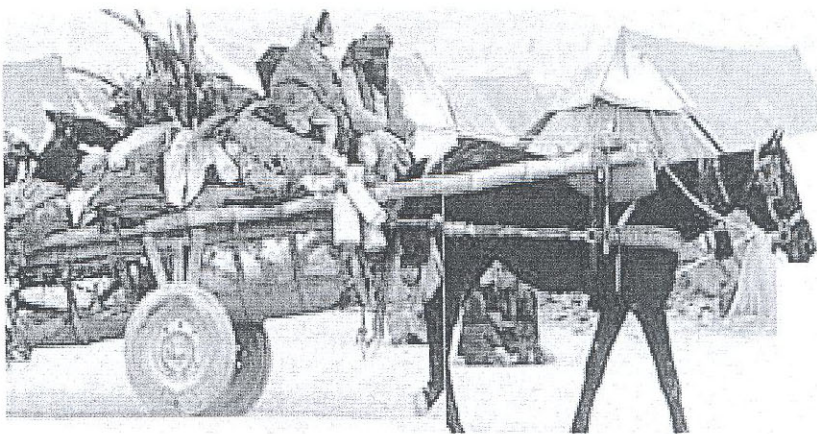
12

LAND SLIDES



13

INTERNAL DISPLACEMENTS



14

BACKGROUND

- Pakistan is vulnerable to a range of hazards- both natural as well as man-made.
- In terms of provisions of the Calamity Act of 1958, reactive emergency response approach has remained the predominant way of dealing with disasters in Pakistan, till recent past.
- The Earthquake, 2005 highlighted Pakistan's vulnerability to disaster risks, and exhibited the need for establishing appropriate policy and institutional arrangements to reduce losses from disasters in future on a proactive basis.
- The need was fulfilled through promulgation of National Disaster Management Ordinance, 2006.

15

NATIONAL DISASTER MANAGEMENT ORDINANCE, 2006/2007

16

NATIONAL DISASTER MANAGEMENT ORDINANCE, 2006/2007

- To enable the Federal Government to put in place a comprehensive system of disaster management in the Country, under Article 144 of the Constitution, the Provincial Assemblies of the four Provinces passed resolutions authorizing the Federal Government to make legislation on the subject.
- The National Disaster Management Ordinance was promulgated in December 2006, and then re-promulgated in 2007.
- The Ordinance provides for legal and institutional arrangements for disaster management at Federal, Provincial and District Levels.
- The Ordinance has attained permanency under the PCO.

17

INSTITUTIONAL ARRANGEMENTS FOR DISASTER RISK MANAGEMENT IN THE COUNTRY

- Under the Ordinance, following institutional arrangements are required to be made for disaster risk management at National, Provincial and District levels;
- National Disaster Management Commission (NDMC)
- National Disaster Management Authority (NDMA)
- Provincial Disaster Management Commission (PDMC)
- Provincial Disaster Management Authority (PDMA)

Conf&d.....

CONTD...INSTITUTIONAL ARRANGEMENTS

- District Disaster Management Authority (DDMA)
- National Institute of Disaster Management (NIDM)
- National Disaster Response Force (NDRF)
- National Disaster Management Fund (NDMF)
- Provincial Disaster Management Fund (PDMF)

19

NATIONAL DISASTER MANAGEMENT COMMISSION (NDMC)

COMPOSITION

- The Prime Minister will be the Chairman, *ex-officio*.
- The Members include Leaders of the Opposition in Senate and National Assembly, Federal Ministers for Defence, Health, Foreign Affairs, Social Welfare & Special Education, Communication, Finance and Interior.
- Membership also includes Governor NWFP (for FATA), Chief Ministers of 4 Provinces, Prime Minister of AJ&K, Chief Executive of NAs, Chairman JCSC, and representatives of Civil Society or any other person appointed by the Prime Minister.
- The Director General / Chairman of the NDMA shall act as *ex-officio* Secretary of the Commission.

20

NATIONAL DISASTER MANAGEMENT COMMISSION (NDMC)

POWERS AND FUNCTIONS

The NDMC-

- Lays down policies on disaster management.
- Approves the National Plan on Disaster Risk Management.
- Approves Plans prepared by the Ministries / Divisions of the Federal Government in accordance with the National Plan.
- Lays down Guidelines for disaster risk reduction to be followed by the Federal Government and Provincial Authorities.

Contd.....

21

Cont.....NDMC

- Arranges for, and oversee provision of funds for the purpose of mitigation measures, preparedness and response.
- The Commission is empowered to provide support to other Countries affected by major disasters; and
- Takes other necessary measures for prevention of disaster, mitigation, preparedness and capacity building for dealing with disaster situations.

22

NATIONAL DISASTER MANAGEMENT AUTHORITY (NDMA)

COMPOSITION

- The NDMA shall consist of a prescribed number of Members.
- The NDMA shall have a Chairman/Director General, to be appointed by the Federal Government, on prescribed terms and conditions.

23

NATIONAL DISASTER MANAGEMENT AUTHORITY (NDMA)

POWERS AND FUNCTIONS

- Acts as the implementing, coordinating and monitoring body for disaster management at national level.
- Prepares the National Plan to be approved by the NDMC.
- Implements, coordinates, and monitors implementation of the National Policy.
- Lays down guidelines for preparing disaster management plans by various Ministries/Departments and Provincial Authorities.
- Provides technical assistance to the Provincial Governments/Authorities for preparing Provincial Disaster Management Plans.

Contd.....

Cont.....NDMA

- Coordinates response in the event of threatening disaster situations / disasters.
- Lays down Guidelines / gives directions to the concerned Ministries / Provincial Governments / Authorities for response to the threatening disaster situations / disasters.
- Can requisition services of any person as a Co-opted Member for any specific purpose or for general assistance.
- Promotes general education and awareness in the context of disaster management; and
- Performs such other functions as the NDMC may require it to perform.

25

PROVINCIAL DISASTER MANAGEMENT COMMISSION (PDMC)

COMPOSITION

- The Chief Minister of the Province is the Chairperson, *ex-officio* of the Provincial Commission.
- The Leader of the Opposition and one Member to be nominated by him are the Members of the Commission.
- Other Members are nominated by the Chief Minister.
- The Chairperson of the Provincial Commission may designate one of the Members as Vice-Chairperson.

26

Cont....PDMC

POWERS AND FUNCTIONS

- Formulates the Provincial Disaster Management Policy.
- Prepares the Provincial Plan in accordance with the Guidelines provided by the National Commission.
- Approves the Disaster Management Plans prepared by the Provincial Departments.
- Reviews the implementation of the Provincial Plan.

Contd.....
27

Cont....PDMC

POWERS AND FUNCTIONS

- Oversees provision of funds for mitigation and preparedness measures.
- Reviews development plans of Provincial Departments and ensures that prevention and mitigation measures are integrated therein; and
- Reviews the measures being taken by the Provincial Departments for mitigation, capacity building and preparedness, and issues necessary guidelines/directions for disaster management.

28

PROVINCIAL DISASTER MANAGEMENT AUTHORITY (PDMA)

COMPOSITION

- Under the Ordinance, each Provincial Government shall establish a Provincial Disaster Management Authority (PDMA), consisting of prescribed number of Members, with Provincial Director General or Provincial Relief Commissioner as its Chairperson.
- The Director General of the PDMA shall be appointed by the Provincial Government.

29

PROVINCIAL DISASTER MANAGEMENT AUTHORITY (PDMA)

POWERS & FUNCTIONS

- Formulates the Provincial Disaster Management Policy with the approval of the Provincial Commission.
- Coordinates and monitors implementation of the National Policy, National Plan and Provincial Plan.
- Examines vulnerability of different parts of the Province to various disasters, and specifies prevention or mitigation measures for such disasters.
- Lays down Guidelines for Disaster Management Plans to be prepared by the Provincial Departments and District Authorities.

Contd.....

Cont.... POWERS & FUNCTIONS- PDMA

- Evaluates preparedness at all Government / Non-Government levels to respond to disaster and to enhance preparedness level.
- Coordinates response measures in the event of disasters.
- Gives directions to the Provincial Departments / Authorities regarding actions to be taken in response to disasters.
- Promotes general education, awareness and community training in this regard.

Contd.....
31

Cont.... POWERS & FUNCTIONS- PDMA

- Provides technical assistance / gives advice on disaster management to the District and the local authorities.
- Advises the Provincial Government regarding financial matters in relation to disaster management.
- Ensures that the prescribed construction standards are adhered to in the Province.
- Ensures that communication systems are in order and disaster management drills are carried out regularly; and
- Performs any other functions that may be assigned to it by the NDMA or the Provincial authorities.

32

DISTRICT DISASTER MANAGEMENT AUTHORITY (DDMA)

COMPOSITION

- (a) Nazim of the District shall be the Chairperson, *ex-officio* of the DDMA;
- (b) the District Coordination Officer;
- (c) the District Police Officer;
- (d) the Executive District Officer Health; and
- (e) such other district level officers, as the District Government may appoint.

33

DISTRICT DISASTER MANAGEMENT AUTHORITY (DDMA)

POWERS & FUNCTIONS

- Prepares District Disaster Management Plan, including District Response Plan.
- Coordinates and monitors implementation of the National Policy, Provincial Policy, National Plan, Provincial Plan and District Plan.
- Identifies vulnerable areas to disasters in the District and ensures that measures for prevention of disasters and measures for mitigation of its effects are undertaken by the respective Departments.
- Ensures that the Guidelines for prevention, mitigation, preparedness and response measures as laid down by the NDMA and the PDMA are followed by all Departments.

Contd.....

34

Cont.... POWER & FUNCTIONS-DDMA

- Gives directions to the authorities at the District level to take necessary measures for prevention or mitigation of disasters.
- Lays down Guidelines for preparation of Disaster Management Plans by the Departments and local authorities in the District.
- Monitors implementation of District Disaster Management Plans.
- Lays down Guidelines to be followed by the District Departments.
- Organizes and coordinates specialized training programmes for District level officers, employees and voluntary rescue workers.
- Facilitates community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, Governmental and Non-Governmental Organizations.

Contd.....

35

Cont.... Power & Functions-DDMA

- Sets up, maintains, reviews and upgrades the mechanism for early warnings and dissemination of proper information to public.
- Prepares, reviews and updates District level Response Plan and Guidelines.
- Coordinates with local authorities, and gives them Guidelines to ensure that pre-disaster and post-disaster management activities in the District are carried out promptly and effectively.
- Reviews development plans prepared by the District Departments, statutory authorities / local authorities to make necessary provisions for prevention of disasters, or mitigation arrangements.

Contd.....

Cont.... Power & Functions-DDMA

- Identifies buildings / places that could be used as Relief Centres or Camps in disaster situations.
- Establishes stockpiles of relief & rescue materials and makes such materials available at a short notice.
- Provides information to the PDMA regarding different aspects of Disaster Management.
- Encourages involvement of NGOs & voluntary social-welfare organizations at the grassroots level in the District for disaster management.
- Ensures that communication systems are in order, and disaster management drills are carried out periodically; and
- Performs such other functions of disaster management in the District as assigned to it by the Provincial Government/PDMA.

NATIONAL INSTITUTE OF DISASTER MANAGEMENT (NIDM)

- The Federal Government shall establish the National Institute of Disaster Management (NIDM) for planning and promoting training and research and developing core competencies in the area of disaster management.
- The NIDM shall be tasked for development of national level information base and documentation relating to disaster management policies, prevention mechanisms and mitigation measures.
- The Institute may be tasked to develop training modules and organize training programmes.
- The Institute may formulate and implement a comprehensive Human Resource Development Plan, covering all aspects of Disaster Management.

Contd.....
38

Cont....NIDM

- The NIDM may provide assistance in national level policy formulation in the field of Disaster Management.
- The Institute may provide required assistance to the training and research institutes for development of training and research programmes for stakeholders including Government functionaries.
- The NIDM may provide assistance to the Provincial Governments in the formulation of provincial level policies, strategies, and disaster management framework.
- It may develop educational materials for Disaster Management, including academic and professional courses.
- The institute may promote awareness among stakeholders, including college or school teachers and students, technical personnel and others associated with multi-hazard mitigation, preparedness and response measures.

39

NATIONAL DISASTER RESPONSE FORCE (NDRF)

- The NDRF shall be established for the purpose of specialist response to a threatening disaster situation or disaster.
- the Force shall be constituted in a prescribed manner, and the terms and conditions of service of the members of the Force shall be laid down.
- The general superintendence, direction and control of the NDRF shall vest in the NDMA.

40

NATIONAL DISASTER MANAGEMENT FUND (NDMF)

- The Federal Government shall constitute a National Disaster Management Fund through notification, for meeting any threatening disaster situation or disaster.
- The Fund shall be financed from the following sources :-
 - (a) grants made by the Federal Government.
 - (b) loans, aid and donations from the national or international agencies; and
 - (c) donations received from any other source.

Contd.....

Cont....NATIONAL DISASTER MANAGEMENT FUND (NDMF)

- The National Fund (NDMF) shall be kept in one or more Accounts maintained in local or foreign currency, in scheduled banks in Pakistan and shall be operated in accordance with the directions of the NDMA.
- the Fund shall be administered by the NDMA towards meeting the expenses for emergency preparedness, response, mitigation, relief and reconstruction.

42

PROVINCIAL DISASTER MANAGEMENT FUND (PDMF)

- Each Provincial Government shall establish Provincial Disaster Management Fund, which shall be financed through grants made by the Federal Government / Provincial Government, loans, aid and donations from the national /international agencies.
- This Fund shall be used for meeting the expenses for emergency preparedness, response, mitigation, relief and reconstruction in the Province.

43

NATIONAL DISASTER RISK MANAGEMENT FRAMEWORK (NDRMF)

- The National Disaster Risk Management Framework (NDRMF) has been formulated with the objective to guide the work of entire system of disaster risk management as envisaged under the Ordinance.
- It sets out priority areas in disaster risk management, identifies roles and responsibilities of various government and private sector organizations in the field of disaster management.
- The Framework serves as a policy document for mobilization of resources from donors and prescribes development partners to implement strategic activities during the next five years.

44

Contd

Contd.. NDRMF

Formulation Process of NDRMF

- Oct 06 --- Draft Prepared By the NDMA
- Nov 06 --- Comments from National/Provincial Departments
- Nov 06 --- Consultations With Fed / Provincial Departments
- Dec 06 --- Consultations with NGOs & Donors
- Jan 07 --- Framework Finalised
- Mar 07 --- Framework Approved by the NDMC

45

Cont.... NDRMF

VISION

To achieve sustainable social, economic and environmental development in Pakistan through reducing risks and vulnerabilities, particularly those of the poor and marginalized groups, and by effectively responding to and recovering from all types of disaster events.

46

Cont.... NDRMF

MISSION

To manage complete spectrum of disasters through a paradigm shift by moving away from response and relief oriented approaches and by adopting a disaster risk reduction perspective from local government level upwards.

47

Cont.... NDRMF

GUIDING PRINCIPLES

- The Framework focuses upon most vulnerable groups (children, women, disabled, elderly, minorities).
- Suggests to promote community and local level disaster preparedness.
- Prescribes to follow multi-disciplinary and multi-sectoral approaches towards disaster management.
- Recommends combining scientific knowledge with social knowledge in the area of disaster management.
- Seeks to make development process as disaster risk-sensitive.
- Prescribes development of locally relevant technologies (in cultural, economical & environmental context).

48

Cont.... NDRMF

GUIDING PRINCIPLES (Cont.)

- Suggests to promote sustainable livelihood practices in areas at high risk from multiple hazards.
- Recommends to establish and strengthen partnerships among multiple sectors (Govt., Private Sector, Media, NGOs, CBOs, UN/Donors).
- Encourages to work with other countries to promote disaster risk reduction.
- Seeks to develop Disaster Risk Management (DRM) Plans from District level, upwards.

49

Cont.... NDRMF

PRIORITIES IDENTIFIED

1. To establish institutional & legal arrangements (setting up of NDMC, NDMA, PDMCs, PDMAAs, DDMAAs, NIDM, NDMF, PDMFs).
2. To conduct national hazard and vulnerability assessment.
3. To promote training, education and awareness.
4. To promote disaster risk management planning.
5. To promote community and local level risk reduction programming in 50 high risk district.

50

Cont.... NDRMF

6. To establish multi-hazard early warning system in the Country.
7. To mainstream DRR into development processes.
8. To establish emergency response system (including Emergency Operations Centre at national, provincial & district levels).
9. To develop post disaster recovery capacity.

51

Cont.... NDRMF

INSTITUTIONS COVERED

- Federal Ministries /Divisions/Departments and Provincial Departments.
- Technical agencies and research institutions.
- Media, Banks, Insurance and other organizations in private sector.
- UN & international agencies/ donors.
- INGOs & NGOs.

52

Thank you ...

53

NDMA REPORT

October 8, 2008

Adil A. Khan
Director, NDMA

Introduction

- National Disaster Management Authority (NDMA) set up on March 5, 2007.
- Focus of presentation on activities undertaken by NDMA since then.

Institutional Status

National Capacity Building for Disaster Risk Management Project (NCBDRM)

- This is an overarching project, which has been signed by NDMA with the UNDP.
- The duration of the project is four and a half years - 2007-2011.
- The total budget estimate is about USD 46.5 million dollars.

Institutional Status-Federal

National Institute of Disaster Management (NIDM)

- 50 canals of land has been allocated by Capital Development Authority Islamabad to NDMA
- A PC-1 for acquiring of land has been approved by the Planning Commission.
- GOP has allocated around Rs. 160 million for purchase of land.

Institutional Status-Federal

National Disaster Management Fund (NDMF)

- NDMF approved by the National Disaster Management Commission (NDMC) in March 2007.
- The scope of the Fund covers the areas of mitigation, preparedness, response and recovery as indicated in the National Disaster Management Ordinance, 2006.

Institutional Status-Provincial

- | | |
|--------------------|--------------|
| ■ PDMA-Balochistan | Functional |
| ■ PDMA-Sind | DG Appointed |
| ■ SDMA-AJK | DG Appointed |
| ■ PDMA-Punjab | DG Appointed |
| ■ PDMA-NWFP | Nothing yet |
| ■ NADMA | Nothing yet |
| ■ DMA-FATA | Nothing yet |

Institutional Status-District

- Orientation given to DCO's of 50 high risk districts on setting up of DDMA's (June 3, 2008)
- Disaster management law, framework and district DRM plan guidelines provided to 134 district governments

DRM Training

- Target groups are government officials, civil society & communities
- Achievements:
 - Training manuals developed for district officials & communities
 - 120 district, provincial & federal level officers trained
 - 150 more officers to be trained by the end of 2008

DRM Planning

- Provincial & Regional plans of Punjab, Balochistan, Sind, Northern Areas & AJK developed (currently being printed)
- District plans for Thatta, Badin, Gwadar, Sialkot, Kech & Quetta prepared (currently being finalized)
- District plans of 30 more high risk districts to be prepared by 2009
- Ministerial & Departmental plans to be prepared by 2010

Mainstreaming DRR in Development

- | | |
|-------------------------------|--------------------------|
| ■ Target sectors: | ■ Donors: |
| ■ Planning Commission | ■ World Bank |
| ■ M/o Housing & Works | ■ European Union |
| ■ M/o Defence | ■ JICA |
| ■ M/o Water & Power | ■ Asian Development Bank |
| ■ M/o Industries & Production | ■ USAID |
| | ■ DFID |

Local/Community Projects

- Earthquake Mitigation in Mansehra, Muzaffarabad & Quetta
- Floods & cyclone mitigation in Kech, Thatta & Badin
- Flash floods (GLOF) mitigation in Gilgit & Hunza river basin (Passu & Gulkin)

Local/Community Projects

- Key activities:
 - Community based trainings
 - Organizing communities
 - Organizing rallies, walks & TV shows
 - Establishing cyclone shelters
 - Mangroove plantation
 - Flood warning systems
 - Safer construction guidelines
 - Model retro-fitting

Projects and Activities of NDMA

Programme for Enhancement of Emergency Response (PEER)

- Goal:
 - To reduce mortality in mass casualty & increase the survival rate of disaster victims

- Target Group:
 - M/o Health
 - Armed Forces
 - Police & Rangers
 - Provincial Health Departments
 - Private Health Institutions
 - NGO's
 - Government Fire Departments

Projects and Activities of NDMA

Programme for Enhancement of Emergency Response (PEER)

- Courses:
 - Medical First Responders (MFR)
 - Collapsed Structure Search & Rescue (CSSR)
 - Hospital Operational Preparedness for Emergency (HOPE)

- Financial support by USAID & NSET Nepal

Projects and Activities of NDMA

Programme for Enhancement of Emergency Response (PEER)

- 22 courses have so far been conducted:
 - MFR 130 Experts 13 Full Instructors 42 Asst Instructors
 - CSSR 95 Experts 8 Full Instructors 39 Asst Instructors
 - HOPE 92 Experts 6 Full Instructors 18 Asst Instructors

Projects and Activities of NDMA

Urban Search and Rescue Teams (USAR)

- Goal:
 - To save lives & reduce mortality rate in emergencies & disasters, particularly in accidents involving collapsed buildings & structures in Pakistan and the whole region
- Purpose:
 - Creation of three INSARAG standard USAR teams
 - Islamabad Heavy 86 Men
 - Lahore Heavy 86 Men
 - Karachi Medium 52 Men

Projects and Activities of NDMA

Urban Search and Rescue Teams (USAR)

- Financial support by Govt of Sweden, Switzerland & UK
- Achievements:
 - Islamabad: First round of training conducted. Site for construction of training area identified
 - Karachi: Site for construction of training area identified. Trainings will start from Nov 2008
 - Canine Search Training: Training commenced at Army Dog Center with 10 dog handlers & 10 dogs

Projects and Activities of NDMA

National Risk Assessment & Response System Development

- Funding from the World Bank (US\$ 4 million credit allocated to NDMA from the Earthquake Recovery Credit programme of the Bank)
- NDMA has embarked upon conduct of the first comprehensive National Risk Assessment with regards to Geological, Hydro-Meteorological and Technological Hazards
- NDMA is working on development of a National Disaster Response Plan (NDRP), Standard Operating Procedures (SOPs), National Emergency Operations system.

Projects and Activities of NDMA

Contingency Planning

- In order to organize more effective and coordinated response NDMA has initiated the process of contingency planning on a regular basis.
- Three contingency planning exercises have been organized so far by NDMA
- These include National Winter Contingency Plan of 2007-2008, National Flood Contingency Plan 2008 and Cyclone Contingency Plan 2008 for Karachi City

Projects and Activities of NDMA

Tsunami Early Warning Systems

- One project which is in the pipeline is about development of tsunami warning systems in the coastal regions of Balochistan and Sindh provinces
- Financial support is being provided for this by ISDR, ADRC, UNESCO & UNDP. The project would start in a couple of months.

Projects and Activities of NDMA

Knowledge Development And Management

- NDMA published the National Disaster Risk Management Framework, which provides strategic direction and technical guidelines for involvement of all stakeholders in disaster risk management
- In order to document the lessons learnt from earthquake response by the Federal Relief Commissioner, NDMA has produced and published the book, Earthquake 8/10: Lessons Learnt from Pakistan's Experience.

Response, Recovery & Rehabilitation

- Floods (Sind & Balochistan) 2007
- Floods (NWFP & South Punjab) 2008
- IDP's NWFP 2008
- Floods (Bangladesh) 2007
- Earthquake (China) 2008

Future Outlook of Disaster Risk Management in Pakistan

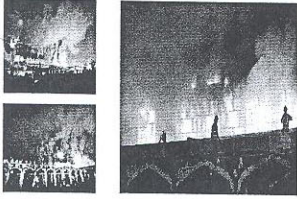
- By the end of this year Government of Pakistan will ensure to ensure the fully functional disaster management institutions at all levels of the governance
- By the next Academic year starting April-May 2009 Disaster management would be part of the Curricula of the Schools from level I-XII. Disaster management has also been included into the curricula of literacy programs (Non formal education)
- By the end of 2009 DRR would be made integral part of the Planning process of the developmental projects and all proposals for the infrastructure projects would be required to have a statement on DRR

Challenges & Issues

- Administrative problems for the establishment and full operationalisation of PDMA's and DDMA's are being faced.
- Initiation of mitigation projects.
- Awareness in Government system about disaster risk reduction needs to be enhanced.
- Community level participations for disaster risk reduction are not up to the mark.
- Dissemination mechanisms of the early warning to the community level are yet to be achieved.
- Funds availability for Disaster management.
- Implementation of the Building Codes.

THANK YOU

Disaster Risk Reduction



Zubair Murshed
National Disaster Reduction Advisor

1

Disasters

- o Marriot 2008
- o Karachi Revenue Fire 2008
- o Cyclone 2007, 1991
- o Earthquake 2005, 1974,1935
- o Drought 1998-2002
- o 53 Floods

2

Disaster losses

✓ USD 30 billion + +

✓ 2 % of annual budget

3

Disaster losses

- Food
- Shelter
- Health
- Education
- Employment
- Infrastructure

4

Disaster losses

- Freedom
- Country's image
- Investments

5

Option 1

Business As Usual

6

Implications Option 1

Disaster events;

- Kill more People
- Destroy property
- Damage infrastructure
- Harm economy
- Worsen poverty

7

Option 2

**Use knowledge and Capacities
to minimize losses**

8

Implications Option 2

Hazards Occur but;

- Living Safer
- Losses Minimized
- Economy Stronger

Due to Preventive Actions by;

- Individuals,
- Communities,
- Departments,

9



What Can be Done

11

Individual Actions

- Build in safer locations
- Build Better
- Learn personal safety; e.g. swimming
- Save environment
- Listen to warning
- Evacuate

12

Community Actions

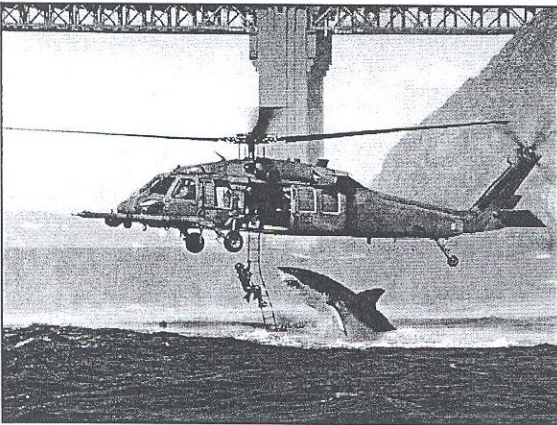
- Build small protective infrastructure
- Stop damage to forests
- Protect water ways
- Develop local warning systems
- Make local response teams
- Conduct drills; e.g. fire fighting, first aid

13

Governmental Actions

- Implement codes
- Train masons
- Develop response teams
- Build flood safety dams
- Build cyclone safety shelters
- Plans for crop and livestock safety
- Plans for industrial disaster safety
- Warning equipment
- Warn people in time

14



What Needs to be Done

16

Provincial Disaster Management Authorities



17

District Authorities

1. Discuss disaster issues regularly
2. Sector-wise Disaster Impact Analysis
3. Identify mitigation actions
4. Implement actions in annual plans

- ❖ Disaster Preparedness Budget
- ❖ Response Teams
- ❖ Community Awareness
- ❖ Regular Contingency Planning

18

Ministries and Departments

1. Disaster Impact Analysis
2. Strategy for mitigation
3. Allocate Resources
4. Implement actions

Contingency Plan

- To Rehabilitate Department's Infrastructure
- To Provide services to affected communities
- Mock Drills

19



Challenges ???

Excuses

- Work load
- Lack of information
- Financial crunch
- Political Instability

21

Will

to

Do

22

Way Out

1 Action per year

23

Monitor Your Self

- Set Indicators
- Assess progress

24

Start Now

25

Entry Points

- Next house construction
- Next development project
- Next year's budget

26

Sources of Information

- NDMA
- Asian Disaster Preparedness Centre
- Asian Disaster Reduction Centre
- International Strategy for Disaster Reduction
- Red Cross and Red Crescent
- FEMA

27

zm@ndma.gov.pk

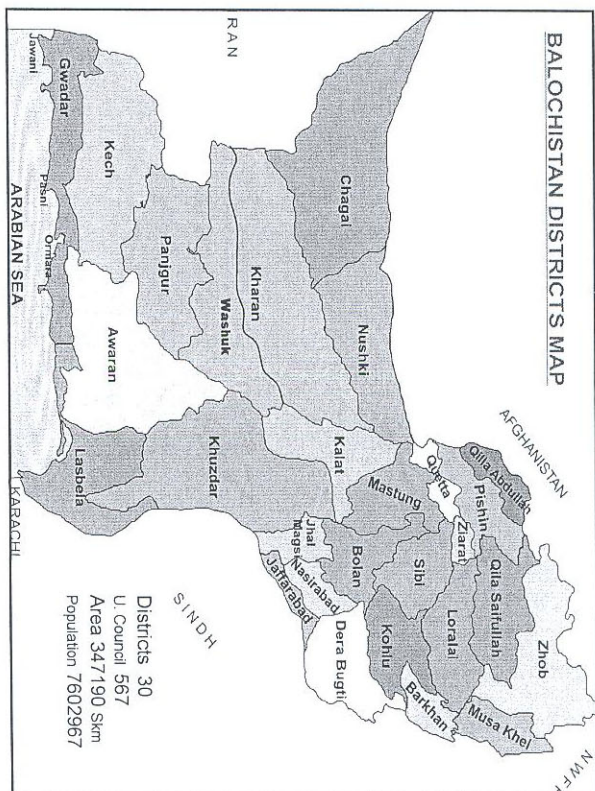
28

THANK YOU

29

Lessons Learnt From June 2007 Flood Response in Balochistan

Khuda Bakhsh Baloch
Former DG PDMA Balochistan

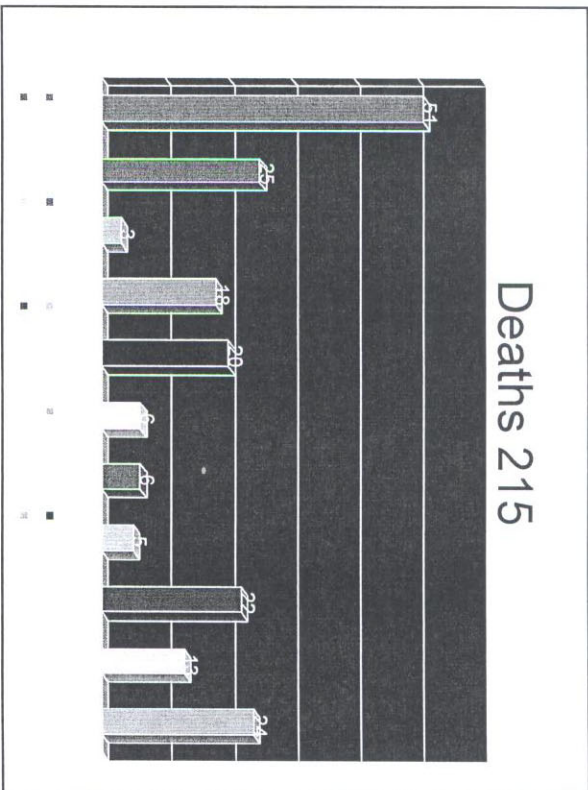


**TROPICAL CYCLONE
GUNO & 03B(YEMYINE)
BALOCHISTAN
2007**

Impact of Cyclone

Tropical Cyclone Guno & 03B (YEMYINE) in the Arabian Sea hit the coastal belt of Balochistan started from the first week of June 2007 and caused torrential rains and heavy flood water in rivers and low-lying areas of Kech, Gwadar, Lasbella, Jhal Magsi, Sibi, Nasirabad, Jaffarabad, Bolan, Chaghi and heavy flood waters damaged all structures in Khاران, Awaran, Chaghi & Washuk

Deaths 215



Macro Level Damages

Private Damages

Public Damages

Population affected	2.00 M	Districts Affected	23
Population Displaced	0.15 M	Roads	5581 Km
Persons misplaced	215	Bridges	02
Villages Affected	5000	Dams, schemes	14
Persons Rescued	50000	Electric Towers	636
Houses affected	148322	Water Supply Schemes	363
Cattle Heads Lost	167021	Health Facility building	215
Crops damaged	401046 ac	Telephone Exchanges	02
Financial Losses	11 Billion	Financial Losses	4 Billion

Rescue Operations

Persons Rescued 50000 person

- 6000 by Helis
- 10000 by FC
- 30000 by District Govt
- 5000 by Police

Relief Operations

- | | |
|------------------|------------|
| ■ C-130 Sorties | 101 |
| ■ Heli Sorties | 354 |
| ■ Relief by Sea | 04 Ships |
| ■ Relief by Rail | 18 Wagons |
| ■ Relief by Road | 284 Trucks |

Relief Goods Dispatched

District	<p>❖ Food Items Provided Around 7,852 Tons.</p> <p>❖ Shelter (Tents) Provided 46,036 #.</p>
Jhal Magsi	
Kharan	
Khuzdar	
Lasbella	
Turbat	
Sibi	
Washuk	
Gwadar	
Mastung	
Quetta	
Awaran	

Source of Relief Goods

- Purchased by PDMA from Open Market
- Received from Iran, Dubai and Japan
- Received from Local Donors
- Provision from Utility Stores by NDMA
- Received from UN Agencies
- Provided by Pakistan Red Crescent Society
- Government of Punjab
- UNHCR

Relief items contain: Flour, Sugar, Dal, Tea, Dry Milk, Dates, Soaps, blankets, tents, Match Box, baby food, biscuits.

Health Initiatives

- 25 Medical Camps were working
- 28 Mobile Teams were dispatched
- 153 Doctors deputed
- 347598 Patients attended
- 17.00 Million medicines purchased
- 9.00 Million medicines distributed

Patients Treated Disease-wise

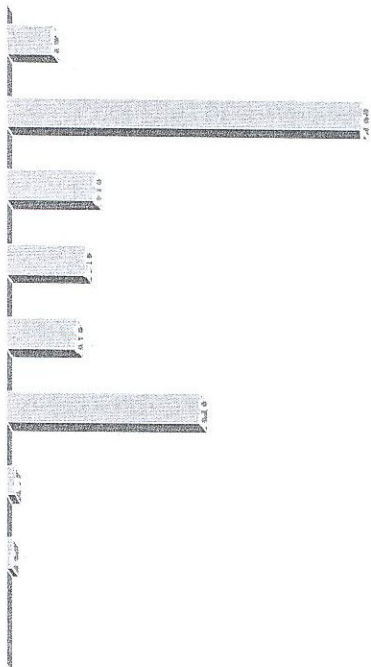
- ARI 11448
- Diarrhea 2552
- Malaria 9041
- Scabies 18993
- Snake Bite 258
- Heat Stroke 1691

Funds Released For Relief Rs. In Million

Rs. 415.50 Million released by the GOB for purchase of commodities and flow of vehicular traffic.

Presidential grant provided by Federal Govt. @ Rs. 15,000 per family = Rs. 600 million

Funds Released by GOB For Households



Position of Tents

Provided: 46036 #s.

Tents Distributed by

■ Military / FC	20004
■ NGOs /Others	4865
■ PDMA Balochistan	3986
■ Federal Government	15000

Relief Donations

■ UNICEF	Food, Blankets, Fiber Glass WCs etc
■ Pakistan Red Crescent	Tents, Stoves, Lamps, Sheets etc
■ Wonder Breads Quetta	Breads and Biscuits.
■ Pakistan Railways Police	Mineral Water
■ University of Balochistan	2 Pickup food and used cloths etc
■ Houbara Foundation Dubhai	Tents, Food Packs
■ Ch: of Commerce Faisalabd	Food items
■ Japan	Food items
■ Iran Red Crescent Society	tents, Carpets, sheets, fish etc
■ Ralla Durranl MPA	Mineral Water
■ Yousafzai Welfare Org	Flour and used cloths
■ Government of Punjab	Food items
■ PTY Quetta	Food items, Mineral water etc
■ MCB	Rs. 2.00 Million Cheque
■ Supreme Court	Rs. 0.10 Million Cheque

Assessment of Damages

- A Joint assessment committee including UN representatives had a two days aerial and land survey to assess the flood affected losses.
- An other assessment committee comprising on World Bank and ADB members was engaged in assessment process in Balochistan since 26th July 2007.
- PDMA constituted District Assessment Committees to assess the damages and submit their report in the first week of August 2007

Response Provided

- Three days before warning issued
- Phone, Cell and Drum beat used for warning
- Early warning worked about 40%
- GOB immediately released funds to DDMA
- Daily meetings held by Chief Secretary
- Rail, Road, Electric & Gas restoration prioritized
- Army, FC & Police rescued trapped people
- PDMA coordinated all stakeholders
- NDMA provided food and shelter support

Challenges Faced

- Stagnant water hampered the way
- Lack of rescue team with PDMA Balochistan
- No techniques of rapid assessment
- Law and Order situation
- Transportation of relief goods due to distances
- Lack of communication facilities with DDMA's
- Non availability of boats for rescue purposes.
- Lack of search and rescue equipments
- Non capacity building of PDMA Balochistan

Lessens learnt

- Weak early Warning System
- Lack of IT communication and facilities
- Lack of permanent trained staff at Districts
- No proper training for the staff
- Establishment of Provincial Rescue Team
- Vastness of area in Balochistan.
- Availability of Drinking Water during disaster
- Shelter to the affected people

Recommendations

- Capacity Building of PDMA Balochistan
 - Provision of Disaster Relief Fund
 - Establishment of Search & Rescue Team
 - Provision of Search & Rescue equipments
 - IT Support & trained manpower
 - Fleet of relief vehicles and machinery
 - Permanent Officers and Staff
- Capacity building of Regional DMAs
- Network with all the DDMAAs

Recommendations

- Immediate Preparedness Actions
 - Revival of building code
 - Assessment of seismic vulnerable buildings
 - Erection of Flood Protection Walls
 - Reforestation to mitigate effects of drought
 - Supply of gas to avoid uprooting of bushes/trees.
- Establishment of training centre at Gwadar for prevention from coastal disasters
- Awareness campaign in masses

Recommendations

- Long Term Mitigation Actions
 - Construction of Dams to avoid population from floods and store water to save people from drought
 - Establishment of townships at higher and safe points instead of spotted population in the course of water
 - Promotion of agriculture, livestock and industrialization in Balochistan

Last but not the least

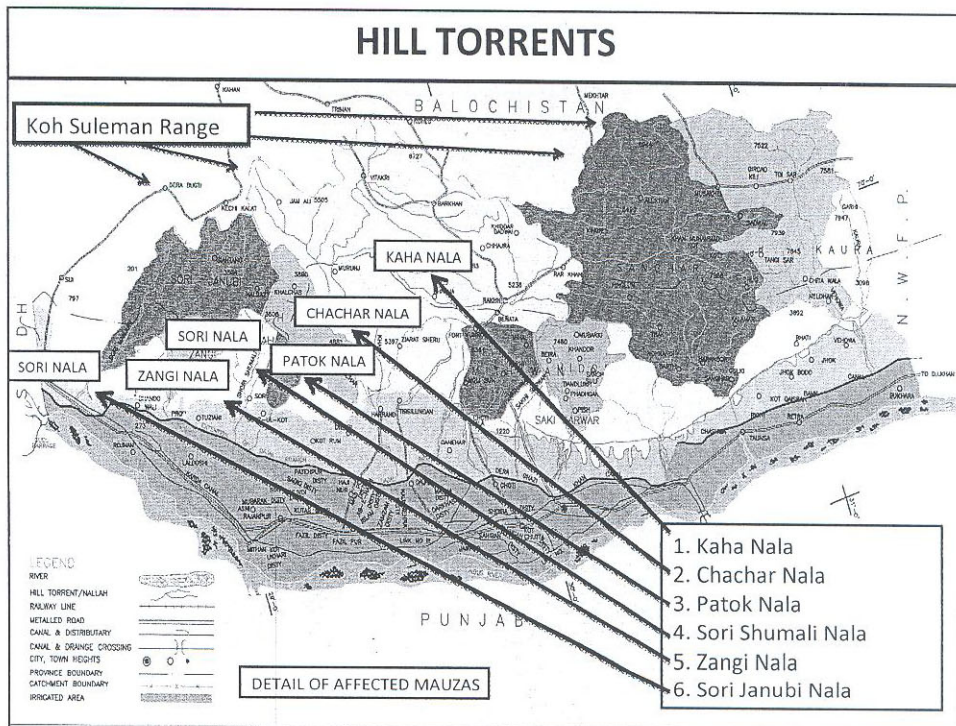
“We must above all, shift from a culture of reaction to a culture of prevention.

Prevention is not only more humane than cure; it is also much cheaper.

Above all, let us not forget that disaster prevention is a moral imperative, no less than reducing the risks of war.”
(Kofi Annan)

THANKS

HILL TORRENTS IN RAJANPUR-2008



DISTRICT RAJANPUR

- Rajapur is the Southern-most district of Punjab Province. It has a total population of about 1,533,000 and is comprised of three tehsils: Jampur, Rajanpur and Rojhan. In addition, the tribal area (the so-called "de-excluded area") lies in the Suleman range.
- Being close to the river bed, the eastern part of the district (Katcha zone) is frequently hit by flooding from the Indus river due to heavy monsoon rains in July/August and snow melt in the Himalayas.

4

DISTRICT RAJANPUR

- This reverine flooding inundates a large part of the low lying areas along the river belt in all three Tehsils (sub-districts), namely Jampur, Rajanpur, Rojhan.
- The upper part of the district (locally called Pachadh) is frequently affected by hill torrents which develop in the Kohi Suleiman mountain range. Both these hazards cause heavy losses in two areas that cover roughly about 80% of the land mass about 60% of the population, damaging mud houses, standing crops, livestock and other property.

5

DISTRICT RAJANPUR

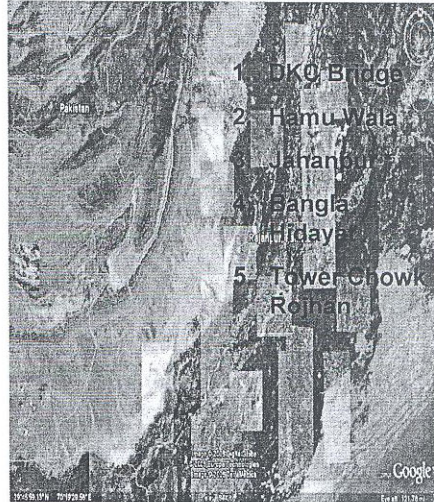
- Laghari, Mazari and Chochani are dominant clans of the area. These clans have large areas of land which is cultivated mainly through tenants with 1/8 or 1/10 share of produce.
- The main sources of livelihood for the 80% poor (and very poor) in all the three zones are farming (crops growing and livestock rearing) and labour in the village, other cities and abroad. Overall 50-55% are landless in the district and farming is done on 1/8-1/10 share basis.

6



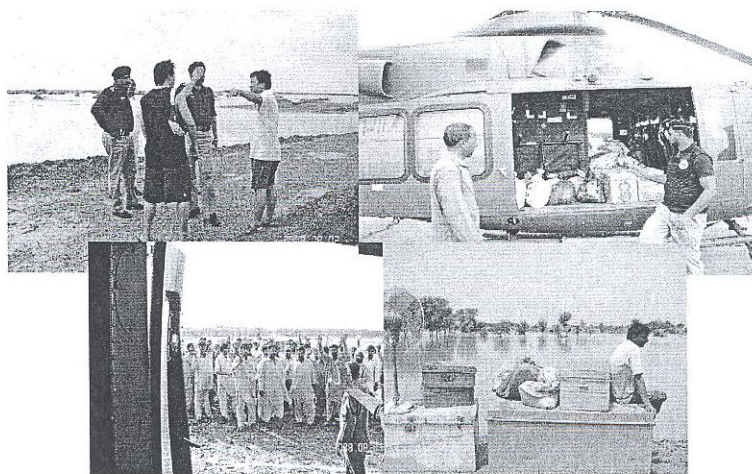
INITIAL RESPONSE (DAY 1 & 2)

- Establishment of Temporary Rescue/ Relief Camps
- Mobilization of Resources (Vehicle/ Personnel) to Flood Affected Areas
- Shifting of People to safer /relief camps sites
- Provision of Cooked Food & *Ration* by District Administration
- (water started receding on 4th August)



8

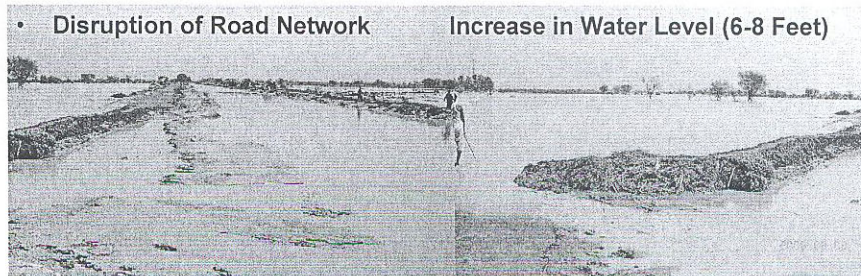
- Rescue operation-Foreigners Trapped at Kachhi Canal Site. (02 August, 2008)



9

5th August, Second Torrential Flood

(Increase in Magnitude of Crisis)



• Disruption of Road Network

Increase in Water Level (6-8 Feet)

1. Rescued 650 persons stranded in marooned areas with the help of rescue Boats of Civil Defence / private Boats.
2. Relief work immediately started by establishing relief camps.
3. A large number of Villages/mouzas got disconnected from the District HQ/ Indus Highway & got water locked
4. Cooked food provided to all shelterless people in relief camps by District Administration and philanthropists.

10

MAX DISCHARGE FROM HILL TORRENTS OUTLETS

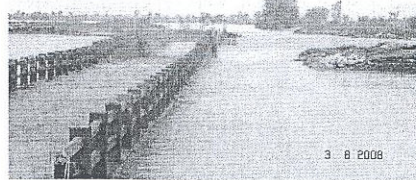
SR	HILL TORRENTS	MAX DISCHARGE (CUSECS)	
		DATED ON 02-08-08	DATED ON 05-08-08
1	KAHA NALA	65000	85000
2	CHACHAR NALA	28000	22000
3	PATOK NALA	4300	6200
4	SORI SHUMALI NALA	12000	8000
5	ZANGI NALA	5500	7300
6	SORI JANUBI NALA	22000	14000

11

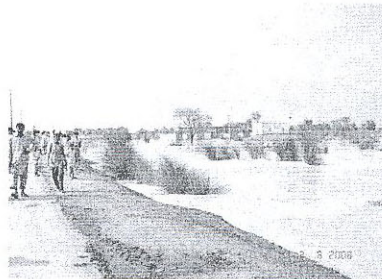
DAMAGE ASSESMENT



12



FLOOD WATER IN KC SYPHON

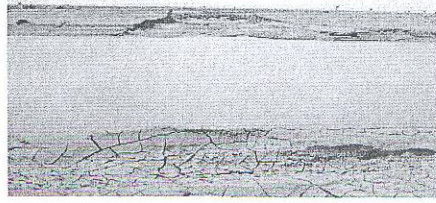


CROPS & HOUSES IN FLOOD WATER

13



FLOOD WATER ENTERING IN TO KC AFTER BREACHING



BREACH AT RD 609+100



BREACH IN APPROACH ROAD

14

HILL TORRENTS 2008

- The flashing flood water of hill torrents breached Kachhi Canal at five points and the extent of breach at each point ranged between 36 feet to 130 feet wide.
- Similarly Kachhi Canal also got submerged under flood water at 5 points and the total length which remained under flood water was 81.5 RDs (river distance).
- The flood water after breaching the Kachhi Canal entered into Dajal Canal ruthlessly / violently and breached both banks of the canal at 9 locations and the length of the breach at each point / location ranged between 25 feet to 600 feet wide.

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HILL TORRENTS 2008

- Likewise the Dajal Canal also submerged under the flood water at 5 locations and the total length which remained submerged under water was 109 RDs (33 Km).
- The entire hill torrents flood water after crossing the Kachhi and Dajal Canals through breaches and also passing through cross drainage works played havoc in the district Rajanpur and destroyed thousands of houses and also inundated and totally damaged standing crops on thousands of acres of land. Besides over 80,000 people became homeless/ shelterless. Most of the roads and communication network were also severely damaged.

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HILL TORRENTS 2008

- Although the number of casualties were much less as compared to the magnitude of hill torrents which flow with tremendous velocity / speed as early warning had already been conveyed well in time on both the occasions (48 hours warning time) to general public as soon as the same had been conveyed to District Administration.
- At some points breaches / cuts were made in Dajal Canal to avoid damages to structures and major abadies. Hardly 50% of design discharge passed through cross drainage works provided on Dajal Canal whereas the remaining flood water after breaching the canal due to pressure of huge volume of furious flood water entered and badly damaged more than 50% of the populated area of District Rajanpur.

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HISTORY OF HILL TORRENTS IN DISTRICT RAJANPUR

SR. #	NAME OF HLL TORRENTS	CATCHMENT AREA (Sq Mile)	PEAK FLOOD RECORDED/ YEAR (Cs)	PEAK FLOOD DURING 2008 (Cs)
1	Kaha	2050	118500/1978	85000/5.8.2008
2	Chachar	256	85500/1984	28000/2.8.2008
3	Pitoke	82	23323/1978	17000/2.8.2008
4	Sori Shumali	108	7713/1983	12000/2.8.2008
5	Zangi	341	60216/1984	18200/2.8.2008
6	Sori Janoobi	641	45787/1983	22000/2.8.2008

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DAMAGES BY HILL TORRENTS IN DISTRICT RAJANPUR

LOSS OF LIVES	09
KACHA / MUD HOUSES COMPLETELY DAMAGED	9373
KACHA / MUD HOUSES PARTIALLY DAMAGED	1661
PACCA HOUSES PARTIALLY/COMPLETELY DAMAGED	290
TOTAL AREA AFFECTED	5,23,600 ACRES
TOTAL AREA UNDER CROPS AFFECTED	1,99,894 ACRES
PEOPLE AFFECTED	90,000
TOTAL MAUZAS AFFECTED	176

ISSUES / SHORT-TERM MEASURES

- Establishment of Relief Camps and Provision of Shelter/Tentage for the homeless
- “Centralized & Coordinated” Effort for Provision of Food/ Ration for the displaced/ marooned people for at least 4-5 days by Helicopters.
- Restoration of communication network (road).
- Provision of clean drinking water.
- Out reach

20

RELIEF STRATEGY

- Reaching out for distribution of food, water and tents.
- Active consultation with MNAs/MPAs.
- Activation of Mobile Relief Teams.
- Restoration of road links.

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DISTRICT COMMITTEES FOR RELIEF WORK

- District Committee supervised distribution of food materials and water.
- District Health Committee ensured establishment of relief camps/health cover in all flood affected areas including health Mobile Teams.
- Tents distributed through District Committee.
- MNAs/MPAs were members of these committees
- These committees ensured active consultation with MNAs/MPAs and their workers

22

TARGET ACHIEVED

- | | |
|-------------------------------|-------------------------|
| ➤ Food Packets distributed ** | 14143 |
| ➤ Wheat Flour Distributed ** | 28690 Bags (20 Kg) |
| | 17500 Bags (10 Kg) |
| ➤ Tents Distributed | 4600 |
| ➤ Bottled water distributed | 6699 bottles (1.5 Lit.) |
| ➤ Cooked Food | 500 "Daigs" |

** Distribution points and contact persons selected in consultation with MNAs/MPAs

23

➤ Number of Patients treated		85,927
➤ Specialist Health Cover		05 Specialists from Nishtar Hospital 08 Specialists from Bahawalpur arrived on 09.08.2008
➤ PRSP Health Teams		23,070 Patients treated.
06 Mobile Teams		
➤ 15 Mobile Teams of Health Department provided health cover.		
➤ Red Crescent, Punjab also covered some areas.		
➤ A few other Mobile Health Teams of NGOs also functioned.		

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➤ Live Stock Vaccinated	
18,318	Large animals
14,375	Sheep/Goats
16,500	Poultry
➤ Fodder for Live stock	
06 Truck Loads per day for 30 days.	

25

- Helicopter “Sorties” for distribution of food packets & water. **111**
- MNAs/MPAs accompanied these “Heli Sorties”.
- Destinations for “Sorties” decided in consultation with MPAs/MNAs.
- Road Links Restored **30 Roads**
(50 Km)
- Helicopter fuel made available at Rajanpur. (This saved time and increased the number of sorties)

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DETAILS OF FOOD ITEMS PER PACKET

SR	DETAILS	QUANTITY
1	ATTA	10 KG
2	COOKING OIL	02 KG
3	DAAL CHANNA	01 KG
4	DAAL MONG	01 KG
5	TEA	01 Packet (1/2 Kg)
6	SUGAR	01 KG
7	RICE	02KG
8	WATER BOTTLE	1.5 Ltr
9	CANDLE	01

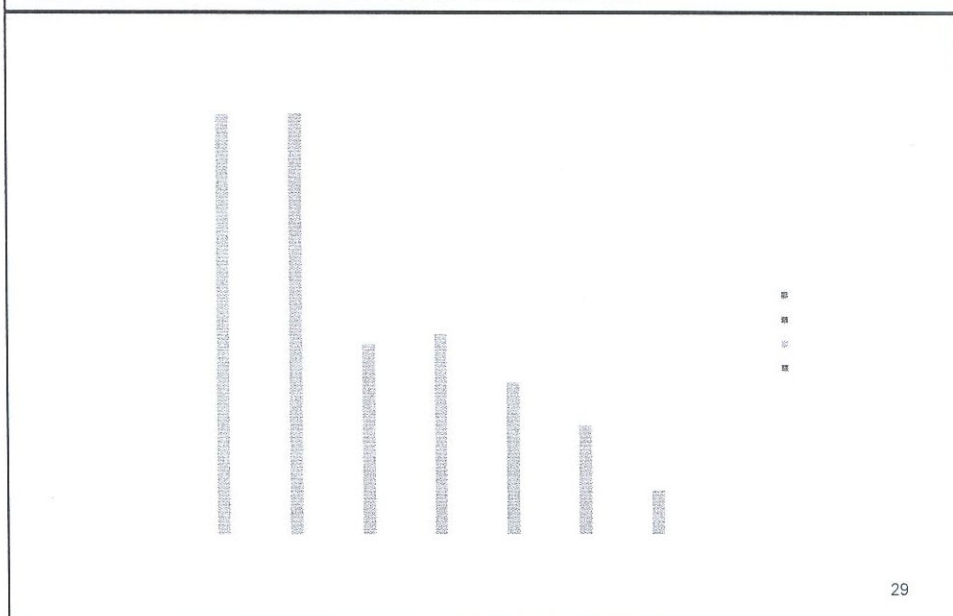
27

No. OF PATIENTS TREATED BY MEDICAL CAMPS

1	RTI	33498
2	SKIN DISEASES	36793
3	DIAROHHEA	20712
4	PUO	16607
5	EYE / EAR INFECTION	15804
6	CHORONIC DISEASE	13046
7	ANXIETY DISORDER	3655
8	SNAKE BITE	36
GRAND TOTAL		140151

28

DIESEASE WISE PATIENTS IN DISTRICT RAJANPUR



29

RELIEF GOODS RECEIVED FROM OTHER SOURCES

- | | |
|---|------|
| ➤ Tents received from NDMA | 3000 |
| ➤ Tents contributed by UNICEF, Punjab. | 200 |
| ➤ NEROX water Filter provided
by UNICEF. | 200 |
| ➤ Tentage distributed by Red Crescent
and NGOs | 400 |

30

RELIEF GOODS RECEIVED FROM OTHER SOURCES

- | | |
|--|------|
| ➤ Blanket received from
Cabinet Division | 2000 |
| ➤ Plastic Mats received from
Cabinet Division | 4000 |

31

**RESOURCES PROVIDED
PUNJAB GOVERNMENT**

1.	FUNDS FOR RELIEF ACTIVITIES	Rs. 14.00 Million
2.	COMPENSATION PAID DEATH CASES	Rs. 0.9 Million
3.	TENTS	600 TENTS
4.	FOOD ITEMS/ PACKETS RECEIVED FROM OTHER DISTRICTS	70 Trucks

32

REHABILITATION MEASURES

- The Chief Minister, Punjab, announced Waving/ writing off Agriculture loans of the farmers with land holding up to 12.5 acres for Kharif 2008. Member, Board of Revenue Punjab, along-with District administration conducted survey and written information was collected from all commercial Banks in Rajanpur.
- The net amount of Agriculture loans come to Rs. 659,152,451/- of 7348 borrowers of farmers owning upto 12.5 acres of land for Kharif 2008. The case is presently under process with Provincial and Federal Governments.

33

REHABILITATION MEASURES

- On the direction of Chief Minister, Punjab, free of cost seeds have been distributed amongst the flood affected farmers owning upto 12.5 acres of land. The seeds have been purchased by Government of Punjab amounting to Rs. 8.7 Million which includes Jawaar, Sarsoun and Toria (Oil Seeds). This will enable the affectees to harvest the Kharif crops in a relatively short period of time.

34

REHABILITATION MEASURES

- A survey of completely / partially damaged mud / pacca houses has been conducted and case for payment pf compensation to both the category is under process with the Provincial Government.
- An effective mechanism is being developed for payment of compensation to the affectees.
- The Government released an amount of Rs 8.00 Million for rehabilitation / restoration of all damaged roads in the District. However, most of the damaged roads were temporarily restored within one week.

35

REHABILITATION MEASURES

- The Government immediately released an amount of Rs 3.5 Million for temporary restoration of Dajal Canal and the Canal was temporarily restored in order to ensure availability of water for irrigation purposes within 15 days. However, the work on its permanent restoration will start after 15th October on the closure of the canal water.

36

CAUSE OF DAMAGES / HEAVY FLOODING

- I&P Department had made no pre-flood inspection of cross drainage points on Dajal Canal, therefore, they could not examine the existing capacity. Probably most of these drainages were silted up, which resulted in breaching of the canal at a number of places instead of passing through the drainages
- Project Authorities of Kachhi Canal despite of being sensitized on the issue of necessity of cross drainage structures in Kachhi Canal did not adopt transitional measures to combat the flood water which consequently further spoiled the situation. Kachhi Canal Authorities dumped the excavated spoil on the western bank of the canal which caused the water to be ponded up.

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CAUSE OF DAMAGES / HEAVY FLOODING

- The water drainage structures proposed at Kachhi Canal are of same capacity and directions as provided at Dajal Canal. Since these structures are of less capacity, therefore, Hill Torrents flood water accumulated at the western side gained more momentum and speed and by surpassing / breaching the portions of both the Kachhi and Dajal Canals had devastating effect.
- As per Irrigation Department's version the cross drainage structures on Dajal Canal are supported by only one drain Escape Channel i.e. Bukhari Drain which can take only 900 Cusec water to River Indus. As a result, flood water instead of flowing to River Indus enters into the populated area and plays havoc.

38

RECOMMENDATIONS

39

RECOMMENDATIONS

- The Kachhi Canal is still under construction. Its remodeling of cross drainage works must be updated / upgraded by taking into consideration the worst ever generated discharge history of hill torrents along Kohi Suleiman range along with the capacity building of existing super passage over Dajal Canal branch by WAPDA authorities.

40

RECOMMENDATIONS

- The only solution to avoid losses to life and property in District Rajanpur is by ensuring proper and efficient management of both Kachhi and Dajal Canals that can help minimize panic situation in all times to come.
- The drainage structure may be remodeled to enhance their discharge capacity for combating high flow of Hill Torrent water.
- Removal of illegally constructed dwellings / structures and encroachments all along the nullah beds of the historical routes of hill torrents to minimize the loss of property and human lives.



**UNPRECEDENTED FLOOD
IN PESHAWAR
3RD / 4TH AUGUST 2008**

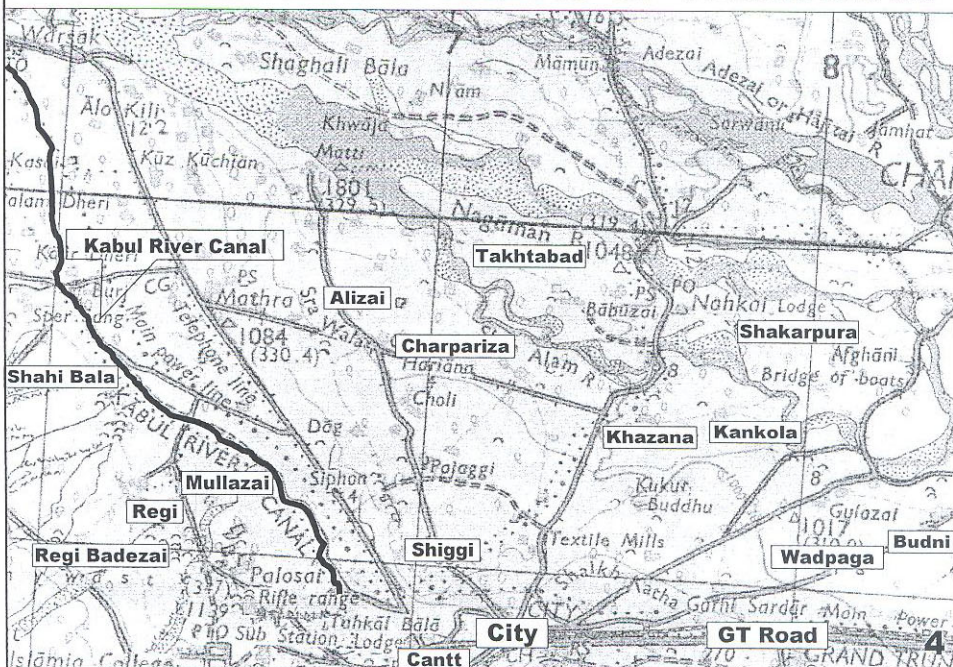
2

SEQUENCE OF PRESENTATION

- Causes of recent flooding
- Response / rescue / relief provided by the Provincial Govt.
- Initial estimates of damages
- Revised / re-valuated estimates of damages
- Final draft estimates of damages
- Recommendations

3

FLOOD AFFECTED AREAS OF PESHAWAR



CAUSES OF FLOODING

- **Reportedly because of torrential rains/snow melting in Tirah and Jamrud Areas of adjoining Khyber Agency, heavy flooding occurred in the Takhta Baig Khwar (Nullah) (Khyber Agency).**
- **This Khwar (Nullah) trifurcates adjacent to Regi Lalma Township.**
- **However, water concentrated on passing through the Nullah adjacent to Regi Lalma Township.**
- **The other two Khwars (Nullahs) remained dry, because of silting & encroachments (only one branch is providing passage to flood water).**

5

Causes of flooding ...Contd

- **The concentration of flood flow created widespread damages to life and property.**
- **Illegal and unplanned encroachment construction of houses/other built up areas in these Nullahs.**
- **This concentration added to flows in other Nullahs like Shahi Khwar, Dallas Drain and Budhni Nullah etc.**
- **Inadequate water drainage planning.**
- **The irrigation canals i.e. Warsak Gravity Canal, Lift Canal, Kabul River Canal etc acted as flood carrier channels, resulting in sheet flow of high magnitude.**

6

RESPONSE / RESCUE / RELIEF PROVIDED BY THE PROVINCIAL GOVERNMENT

- **All the low lying areas starting from Regi to Charsadda Road were badly affected**
- **12000 houses destroyed.**
- **Agricultural crops / orchards destroyed over large areas.**
- **Losses to human lives.**
- **Scores of Live stock killed.**
- **Infrastructure (roads, bridges, electric installations, schools & hospitals) damaged**

7

RESPONSE / RESCUE / RELIEF ... Contd

RESCUE

- **Police/ civilian/ Revenue/ City Govt responded immediately.**
- **Army called in to assist. The administration and police / local Razakaars played an active role in rescuing people.**
- **Some of the stranded people were also rescued through army helicopters/boats.**

8

RESPONSE / RESCUE / RELIEF ... Contd

RELIEF

- **The District Government alongwith officers of Home Department and Relief Commissionerate visited the affected areas in the morning.**
- **The Chief Minister alongwith public representatives also undertook an extensive visit of the affected areas.**
- **5 Relief camps set up initially.**
- **500 tents & 500 blankets were immediately provided to the District Govt. for instant relief.**
- **Cooked food was provided to some affected areas.**
- **Medical camps set up and mobile medical teams deployed.**
- **Water tankers were sent to provide clean drinking water.**
- **The NDMA was requested for immediate help who have provided 4000 tents, 6000 plastic sheets so far.**

9

RESPONSE / RESCUE / RELIEF ... Contd

- **Crisis Management Centre was activated in Home Department as focal point for coordination of relief efforts.**
- **Daily meetings of all senior officers plus Army/Police was being held at 03:00 p.m in the CMC.**
- **Senior officers of all relevant departments were available in the CMC x 24 hours.**
- **Besides tents / blankets, food packages also provided to affectees. 34 thousand food packages (dry rations) supplied so far.**
- **In addition cooked food, 500 (Degs) provided daily. (1700 degs provided so far).**

10

RESPONSE / RESCUE / RELIEF ... Contd

- **Medical facilities through all health outlets re-vitalized. Stationing of medical officers in distribution points + coverage through mobile teams. More than 50 thousand patients treated so far.**
- **Dewatering of stagnant pools.**
- **Immediate & authentic assessment of damage by the District Administration. A survey to be conducted by Irrigation Department as well as CDMD to ascertain the causes of the flood and recommending remedial measures to obviate / prevent recurrence of such disasters.**
- **Removal of encroachments etc.**

11

INITIAL ESTIMATES OF DAMAGES

- **Initially it was estimated that about 4 to 5 thousand families had been affected, and about 2 thousand houses destroyed.**
- **Moreover, the following casualties were reported:-**

Deaths – 5

Injured – 11

- **Most of the crops and orchards were very badly affected.**
- **The infrastructure like roads, irrigation channels, culverts, government buildings like schools/hospitals etc. were damaged.**

12

REVISED / RE-VALUATED ESTIMATES OF DAMAGES

- **On the 5th of August, 2008 i.e. a day after the occurrence, the real magnitude of the problem came to fore.**
- **About 100 villages, big and small/hamlets were affected.**
- **About 25 thousand families had been rendered homeless.**
- **12 thousand houses had been destroyed: out of these 8 thousand totally, whereas 4 thousand partially.**
- **Scores of cattle killed.**

13

Revised / re-valuated estimates of damages ...Contd

- **After considering the gravity of the situation, the Chief Minister, NWFP requested the Prime Minister of Pakistan for help Rs.1.5 billion requested as Emergency Assistance.**
- **A formal request was placed with the NDMA for the following:-**
 - a. **Provision of 23000 Tents.**
 - b. **Provision of 23000 Blankets.**
 - c. **Provision of 23000 Mattresses.**
 - d. **Emergency Medicines costing about Rs.200 million.**
 - e. **Food packages for 25000 families for initial three weeks. The package consist of:-**
 - i. **Atta 10 KGs.**
 - ii. **Rice 02 KGs.**
 - iii. **Ghee 01 KG.**
 - iv. **Daal 01 KG.**
 - v. **Sugar 01 KG.**
 - vi. **Tea 500 Grams.**

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- **Rs.200 million would be required to compensate 8000 fully damaged houses @ Rs.25000 per house.**
- **Rs.40 million would be required to compensate 4000 partially damaged houses @ Rs.10000 per house.**
- **Rs.50 million would be required to compensate the loss of 5000 big animals @ Rs.10000 per animal.**
- **Rs.30 million would be required to compensate the loss of 10000 small animals @ Rs.3000 per animal.**

Note:-

- a. **The approximate cost of the above items works out to Rs.1.5 billion.**
- b. **To restore the damages caused to the infrastructure like roads, bridges, water channels, schools, hospitals etc. would require approximately Rs.5 billion.**

15

- **18 Relief Camps/ distribution points were established.**
- **Relief camps had the following facilities:-**
 - a. **Managed by professional staff of the Afghan Commissionerate.**
 - b. **Each camp had 04 doctors, both male and female with medicines and supporting staff.**
 - c. **Preventive inoculations against diarrhea and other epidemics.**
 - d. **Water purification tablets provided.**
 - e. **Food packages and cooked food distributed.**
 - f. **Livestock Department provided preventive treatment to animals.**
 - g. **25000 families had to be provided 1 tent x 1 blanket x 1 plastic mattress.**
 - h. **Electricity and water supply system damaged in 100 villages; Re-established in almost all the areas.**

16

Dated	Name of Agency.	Tents	Blnks	Sleeping mattress	Jerry Cans.	Plastic sheets	Med.	Mat/Foam etc.	Food pkg	Kitchen Sets.	H. over to DCO Pesh.
4-9/8/08	NDMA	4000	3000	Nil	Nil	8200		Nil		Nil	3000 Tents 710 Blks.
4/8/08	PRC's Store	500	500	Nil	Nil	Nil		2180		Nil	DCO Pesh
6/8/08.	Haripur.	Nil-	Nil	Nil	Nil	Nil		2180 Nos.		Nil	DCO Pesh
7/8/08	A/Abad.	1497	6040	Nil	Nil	Nil		Nil		Nil	
8-11/8/08	UNHCR.	1984	10000	10000	5000	15000		Nil		5000	DCO Pesh
10/08/2008	Hazara Univ.	120	2000	Nil	Nil	120		Nil		Nil	
10/08/08	Sindh Govt	Nil	Nil	Nil	Nil	Nil		Nil	5800 pkgs	Nil	
11.8.08	UNICEF	Nil	500	Nil	Nil	Nil		Nil		Nil	DCO Pesh.
11.8.08	Pak-Red Cr. Society.	1710	4230	Nil	1810	1710 (Tarpaulin sheets)		Nil		300 stoves	
11.8.08.	W.F.P.								2677 pkgs		
DCO Pesh.									16000		
	Total	9811	17270	10000	6810	25030		2180	24477 Pkgs	5300	DCO Pesh.

Actual Damage Report submitted by D.C.O Peshawar.

- A committee of the following was constituted to assess damages.
 - a) MNAs/ MPAs of affected areas
 - b) Nazims of affected areas
 - c) Revenue staff
- The following damages has been reported

No. of persons died	No. of persons injured	No. of houses completely damaged	No. of houses partially damaged	No. of cattle perished
10	32	6916	2449	582

RECOMMENDATIONS

- **Tentative requirements of Rs.1.5 billions as emergency relief for shelter and food submitted to NDMA.**
- **Initial requirements for reconstruction of roads, bridges, schools, BHUS/RHCs, water supply schemes, irrigation / flood control works = 5 billions.**
- **We will appreciate immediate response in kind for both food/nonfood items. However, cash funding would be required for compensating losses to life and property/ rehabilitation.**
- **Adequate funds would be required for carrying out preventive flood schemes to be recommended by the irrigation department/CDMD to prevent future losses.**
- **This will also be useful for the Regi Model Town.**
- **The demands of NWFP Irrigation department lying pending in Federal Flood Commission may be met on priority; based on susceptibility to disasters like floods etc.**

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Recommendations ...Contd

- **International Donor Agencies/ Organizations/ NGOs have also started to assist the relief efforts in a substantive way. The Provincial Government has allowed them in view of understanding with NDMA.**
- **No radar based early warning system exists in NWFP, despite the fact that we are the most flood prone Province. The meteorological department has already submitted PC-1s for the same to Federal Flood Commission. May kindly be approved and funded.**
- **The capacities of the Provincial and District Management Institutions need to be enhanced adequately. The Federal Government would need to support this effort substantively.**

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URBAN FIRE INCIDENTS IN KARACHI 2008

10/14/2008

1

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1. Events and Its Impact

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FIRE INCIDENT AT BERGER PAINTS

- a) 23rd January, 2008
- b) at 14.40 hrs.
- c) Plot No.D-31, SITE, Area, Karachi.
Ground + 2, RCC, godowns, open and temporary sheds.

10/14/2008

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a) **Loss of Life.**

Two Nos.

b). **Injured.**

Nil

c). **Losses in Financial Terms**

In Millions

d). **Damage to building/ installations/ infrastructure**

Half of the Building, installation and production portion were damaged by the Fire.

a) The Incident was reported through Mr. Shahrukh on telephone at SITE Fire Station.

b) The call was received at 14:40 and the turn out time of the Fire Fighting Vehicle is 14:41.

c) The Berger Paint Factory is very well known and near to the SITE Fire Station as such the Fire Vehicles responded immediately.

FIRE INCIDENT AT BERGER PAINT



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FIRE INCIDENT AT BERGER PAINT



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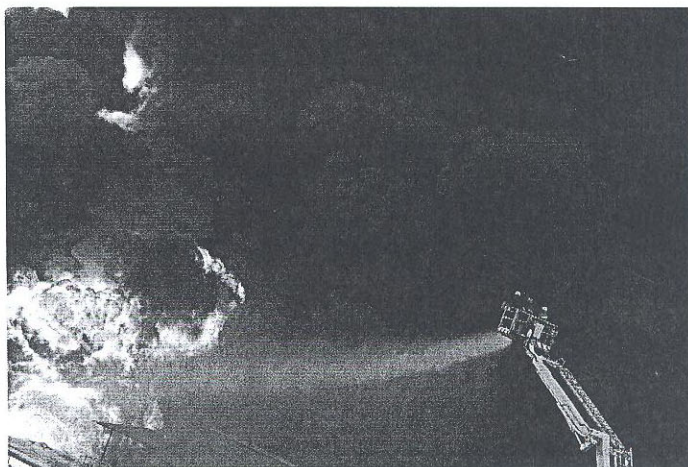
FIRE INCIDENT AT BERGER PAINTS



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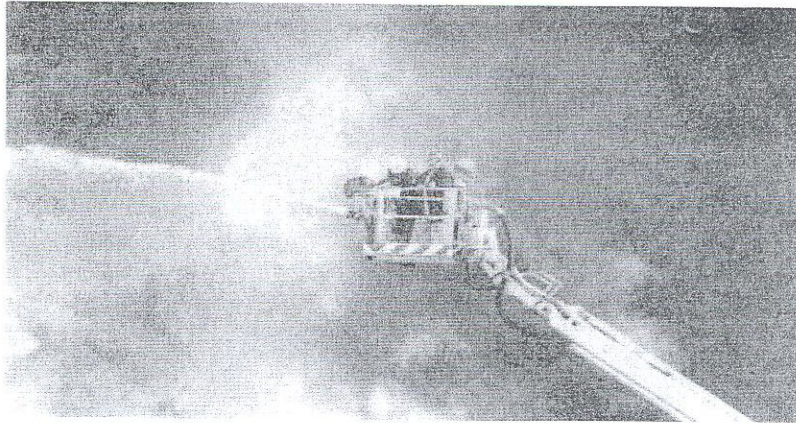
FIRE INCIDENT AT BERGER PAINTS



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FIRE INCIDENT AT BERGER PAINTS



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2. RESPONSE PROVIDED BY THE KARACHI FIRE SERVICES

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c). *Scene Commander of the incident*

Mr. Masood Alam, EDO (Municipal Services), CDGK was the over all In-charge while Mr. Ahteshammuddin, Chief Fire Officer, CDGK was the scene commander of the Fire Incident.

d). *Nos. of Fire Tenders and Other Machinery deployed at incident*

13 (*Thirteen*) Fire Tenders and 3 (*Three*) Snorkels of Karachi Fire Service while one Fire Tender from Pak Navy, KPT and DHA making a total of 19 Fire Tenders participated in the Fire Fighting Operation.

e). **Nos. of People deployed at Fire Fighting Operation.**

Near about 100 Fire Fighters participated in Fire Fighting Operation at Berger Paints.

f). **Type of Services provided during the Fire Incident**

- Rescue
- Evacuation
- Fire Fighting

g). **Participation of other Agencies in Fire Fighting Operation**

- Navy Fire Service.
- KPT Fire Service.
- DHA Fire Service.
- Town Administration.
- Community Police, CDGK.
- Rangers.
- Area Police.
- Ambulance Services. (KKF, Edhi, Cheepa)

h). *How the Coordination with other Agencies was made?*

- Better coordination and corporation was made by all agencies at scene of Fire Incident.

i). *Time taken to Extinguish the Fire completely?*

- Due to the proper coordination between all agencies such a huge Fire was completely extinguished with in 20 hours.

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j). *How the surrounding infrastructure/ buildings/installations were saved?*

- By evacuation, shifting of the goods at safe side and by cooling, smothering and starvation method.
- Huge quantity of foam compound was also applied.

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● 3. *Challenges and Gaps in Response*

a). Coordination

- There is a need to improve inter departmental coordination between different agencies to improve efficiency in responding to emergencies in a minimum time. This can best be achieved by reviewing SOPs etc.
- In case of any disaster/emergency. In order to safeguard the life and property in a shortest possible time, it is essential to periodically review SOP between all emergency/utility service departments.

b). Whether the available trained human resources were sufficient?

- No, there is an acute shortage of Fire Fighting Staff. At present 965 personals are working on 21 Fire Stations in Karachi.
- Induction of 14000 new Fire Fighting Staff with proper training are required for 178 Union Councils on the basis of 01 Fire Station for each UC.

c). Any shortage of machinery and other equipments?

For such a large thickly populated city having 18 Towns, 178 Union Councils there is a need of 178 Fire Stations 534 Fire Tenders (on the basis of 3 for each) with 18 Snorkels, 18 Rescue Vehicles (on the basis 01 for each town) and latest/ modern Fire Fighting, Rescue and Personal Protective Equipments for each Fire Station.

d). Availability of water for the Fire Trucks/Special Material to extinguish the Fire.

- There is an acute shortage of water for Fire Fighting Purposes at Fire Stations as well as no water reservoir available with the small and huge industrial units.
- It is recommended that all residential/ commercial and industrial units should have their own resources in shape of bulk water reservoir/sufficient quantity of foam compound and dry chemical powder, Fire Preventive and basic Fire Fighting Arrangements in their premise.

e). TORs/Jobs and description of responsibilities at different levels.

Fire orders are enclosed at flag "A".

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4. LESSON LEARNED / RECOMMENDATIONS

10/14/2008

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a. Capacity buildings needs of the Karachi Fire Service

Fire Station

Existing:

21 Fire Stations Established in different vicinity of Karachi are providing Fire Fighting & Rescue Service and (including Emergency Response Center, Hawks Bay)

Additionally Required / Recommended:

▪The total area of Karachi is 3527 Sq.Km while the population is near about 1,75,00,000.

▪There are 18 Towns and 178 Union Councils in Karachi and the population of 01 Union Council is approximately 1 Lac.

▪In accordance with the international rules one Fire Station on the population of 1 Lac is necessary.

▪Therefore 178 Fire Stations on the basis 01 for each Union Council in Karachi is necessary.

Fire Fighting Fleet

Existing:

a) Snorkel 103 FT height	01 Unit.
b) Hydraulic Aerial Ladder (Platform) 148 feet height Units.	02
c) Rescue Unit	01 Nos.
d) Mobile Radio Unit	01 No.
e) Fire Tender	30 Nos.
f) Ambulance	02 Nos.
g) Hazmat Units	(Nil)

Additionally Required / Recommended:

Hydraulic Aerial Ladder (Platform) of different heights for 18 Town. 18 Nos.

Rescue Units complete in all respect with latest Rescue tools. 18 Nos.

Fire Fighting Vehicles of different capacity with necessary Fire Fighting and Personal Protective Equipments. 534 Nos.

Ambulance complete in all respect 534 Nos. (one for each Fire Station). 178 Nos.

Hazmat Units complete in all respect hazmat equipments. 178 Nos.

Equipments / Instruments

<u>Existing:</u>	<u>Additionally Required / Recommended:</u>
a) Fire Fighting Equipment / Instruments.	List Attached.
b) Rescue Equipments	List Attached.
c) Personal Protective Equipments.	List Attached.
d) Disaster Management Equipments.	List Attached.

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Schedule of Establishment

<u>Existing:</u>		<u>Additionally Required / Recommended:</u>
Budgetary Strength for 21 Fire Stations.	1299	13000 personals are required to be appointed/hired for remaining 157 fire stations
Working Strength in different categories.	965	

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Recommendation on Roles and Responsibility of Different Stake holders

All the stakeholders should be made responsible to extend coordination and cooperation to the Fire Brigade Department in case of any incident. A policy decision in this regard is recommended.

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Requirements of New Legislation or Amendments

There is no legislation in respect of Fire safety and Fire Fighting, as such A high powered technical committee may be constituted for the preparation of Fire Legislation/Fire Act

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Preparedness and Mitigation

Immediate Preparedness

- Refurbished 25 Fire Tenders .
- One old Snorkel of 103 feet Height is in working condition.
- Purchase 02 Nos. New Snorkels of 148 feet heights.
- Purchased 05 new Fire Tenders.
- Established 10 New Fire Stations in different areas of Karachi City.
- Inducted manpower for Urban Search & Rescue, CDGK.
- Training Process of Urban Search and Rescue is goin on.

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Long Term Mitigation Actions

1. The Existing 21 Fire Stations and proposed 157 new fire stations making a total of 178 on the basis of 01 for each Union Council.
2. Purchase of 18 Hydraulic Aerial Ladder of different heights
3. Purchase of 18 Rescue Units.
4. Purchase of 534 Fire Fighting Vehicles of different capacity.
5. Purchase of 178 Ambulances
6. Purchase of 18 Hazmat Units
7. Training of USAR Personals.
8. Establishment of Fire & Rescue Training Academy
9. Purchase of modern Fire Fighting, Rescue, Hazmat, water rescue equipments and personal protective equipments for 178 Fire Stations.

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FIRE INCIDENT AT NOVATEX LIMITED

- a). 7th February, 2008
- b). at 14.14 hrs.
- c). Landhi Industrial Area, Karachi.

10/14/2008

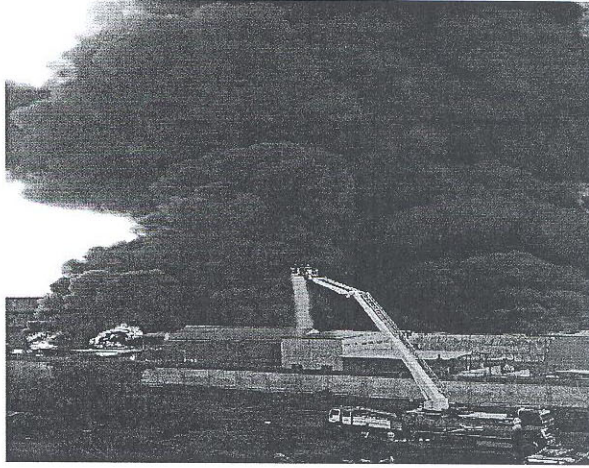
33

- a) **Loss of Life.**
Nil
- b). **Injured.**
Nil
- c). **Losses in Financial Terms**
In Millions
- d). **Damage to building/ installations/
infrastructure**
The Fire in chemicals in open ground.

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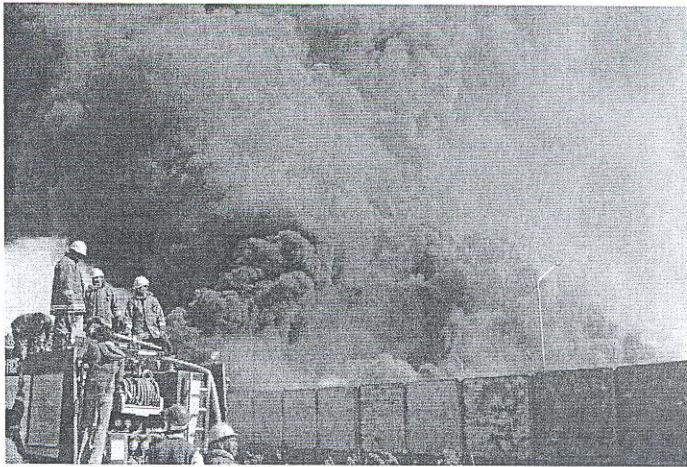
FIRE INCIDENT AT NOVATEX



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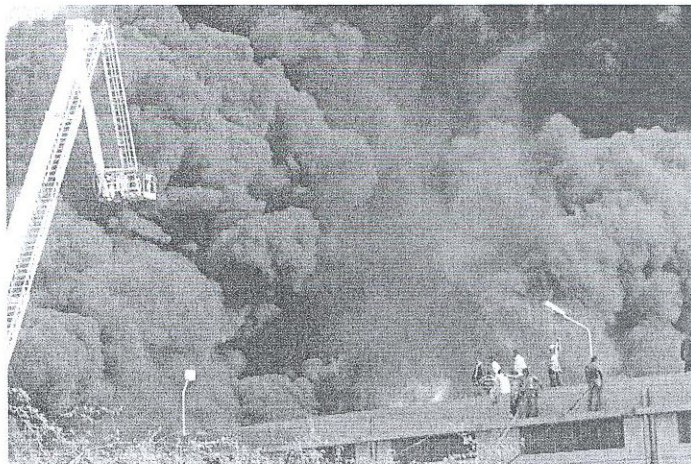
FIRE INCIDENT AT NOVATEX



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FIRE INCIDENT AT NOVATEX



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FIRE INCIDENT AT NOVATEX



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FIRE INCIDENT AT UNIVERSAL RAGS
E P ZONE LANDHI

- 1) February 8th 2008.
- 2) At 09:30 a.m.
- 3) Export Processing Zone, Landhi, Karachi.
- 4) RCC Ground + 01 structure.

10/14/2008

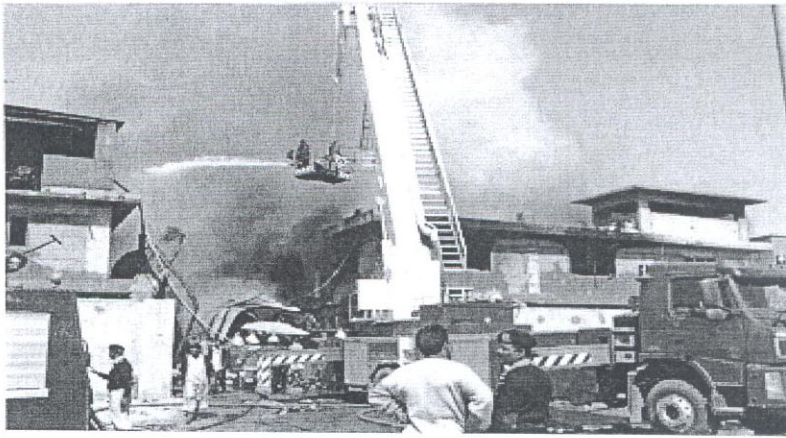
39

- a). **Loss of Life.**
 Nil
- b). **Injured.**
 Nil
- c). **Losses in Financial Terms**
 In Millions
- d). **Damage to building/ installations/
infrastructure**
 The building and installation were badly
 damaged.

10/14/2008

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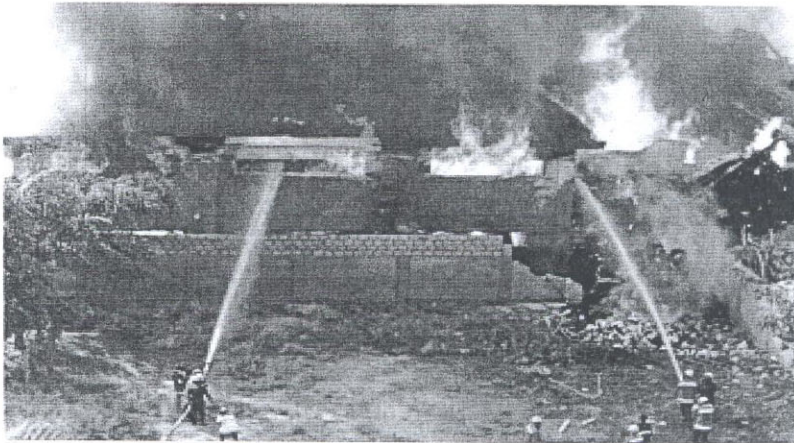
FIRE INCIDENT AT UNIVERSAL RAGS
E P ZONE LANDHI



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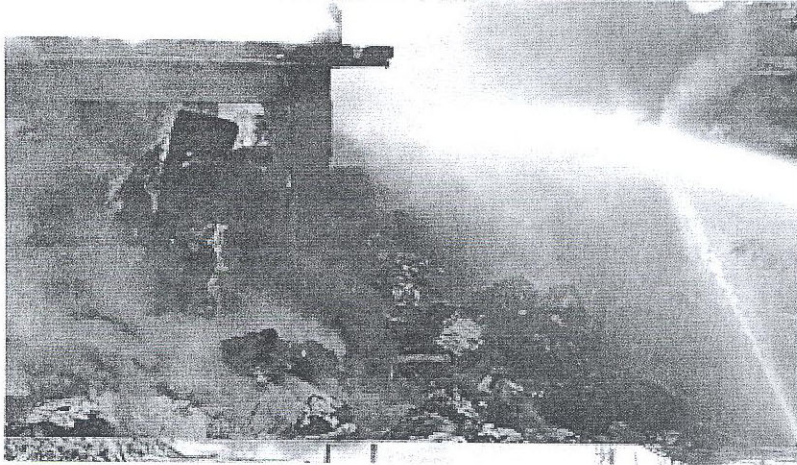
FIRE INCIDENT AT UNIVERSAL RAGS
E P ZONE LANDHI



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FIRE INCIDENT AT UNIVERSAL RAGS
E P ZONE LANDHI



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FIRE INCIDENT AT PNSC BUILDING MOULVI
TAMEEZUDDIN KHAN ROAD KARACHI

- August 19th 2007.
- 14:32. p.m.
- PNSC Building near Nety Jety Bridge,
Moulvi Tameezuddin Khan Road, Karachi.
- Basement + Ground + 16, RCC Structure.
- Commercial Building.

10/14/2008

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**FIRE INCIDENT AT PNSC BUILDING MOULVI
TAMEEZUDDIN KHAN ROAD KARACHI**

- No. of Fire Tenders of CDGK participated in the operation. 15
- Snorkels of CDGK. 03
- Reinforcement from KPT, Pakistan Navy, DHA, Cantonment Board. 08

10/14/2008

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**FIRE INCIDENT AT PNSC BUILDING MOULVI
TAMEEZUDDIN KHAN ROAD KARACHI**

- **Loss of Life.**
Nil
- **Injured.**
Nil
- **Losses in Financial Terms**
In Millions
- **Damage to building / installations / infrastructure.**
Furniture, fixture, record and interior decoration of 5th to 16th floor were totally damaged and the effected floors of the building were partially damaged.

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**FIRE INCIDENT AT PNSC BUILDING MOULVI
TAMEEZUDDIN KHAN ROAD KARACHI**



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**FIRE INCIDENT AT PNSC BUILDING MOULVI
TAMEEZUDDIN KHAN ROAD KARACHI**



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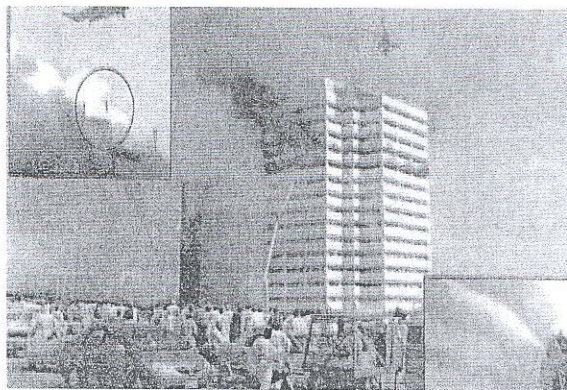
**FIRE INCIDENT AT PNSC BUILDING MOULVI
TAMEEZUDDIN KHAN ROAD KARACHI**



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**FIRE INCIDENT AT PNSC BUILDING MOULVI
TAMEEZUDDIN KHAN ROAD KARACHI**



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