COUNTRY REPORT

OF THE ISLAMIC REPUBLIC OF IRAN

ON

NATURAL DISASTER REDUCTION,

IDNDR-ESCAPE REGIONAL MEETING FOR ASIA,

23-26 FEBRUARY, 1999

BANGKOK- THAILAND

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Introduction

Background To Disasters:

Islamic Republic Of Iran with an area of 1,648,000 Square kilometers is situated in South- west Asia on the World dry belt of which 60 percent is covered with mountains and the remaining part is desert and arid lands, In addition , Iran is part of Alpe - Himalaya orogenic belt and last orogenic regions of the world The total population of the country is about 62 Million.

During the elapsing century, some devastating earthquakes have caused the death of almost 140,000 people and enormous damages. Recent earthquakes in Iran i.e. Manjil(June 1990), Sefidabeh (March 1994), Bojnoord February 1997), Ardebil (February 1997), have shown Iran's vulnerability to earthquakes.

The annual precipitation rate of the country is 250mm. compared With 860mm. annual global precipitation. It can be easily conceived that our country is among the countries with semi- arid to arid climate. A common characteristic of such climate is irregular temporal and special distribution of precipitation.

Based on these facts, a series of flooding in intermittent and permanent rivers in different parts of the country and their respective floods inflict heavy damages to fertile agricultural lands, rural and urban facilities during the rainy seasons.

In addition to flood, the fluctuation of sea water level in Caspian sea as the world's unique and the largest enclosed sea on the earth, has increased in recent years. As a result heavy damages have been inflicted on vital economic resources of the northern coastal line of the Caspian sea with its 26 coastal cities and a great number of villages and a total population of 2.5 million people in the region suffer great economic and social damages due to this phenomenon.

It is noteworthy to mention that due to political, social and economic stability of our country in the region, Iran has been the largest refugee host country for more than a decade and thus dealing with human complex emergencies on the top of all natural disasters. In general, according to the surveys we have made, among the 40 different natural disasters in different parts of the world, 31 types are affecting the country which are presented as follow:
1- Earthquake 2-Liquefaction 3-Tsunami 4-Ground surface upwelling 5-Mudflow 6-Landslides 7-Rockfalls 8-Slumps 9-soil erosion 10-Forest Fires 11-See Water level Fluctuation 12-Sedimentation 13-Coastal degradation 14-Marsh encroachment 15-Desertification 16- Cold and Frustration 17- Avalanche 18- Storms 19-Environmental and water Pollution 20-Vegetation infestation 21- Drought 22-Thunders 23-Geothermal hazards 24-Karstic Subsidence 25-Ground Subsidence due to mining and exploration 26-Underwater slumping 27-Underwater slides 28-Swawp encroachment 29-Floods 30-Volcanos 31-Fires of coal fields.

Disaster management strategy and implementation mechanism:

In the Government sector the disaster management mechanism is under the overall supervision of the Ministry of Interior. In 1991 the responsibilities and functions related to disasters were formally assigned to the Ministry by the virtue of the Budget Act of the same year. The Minister was delegated to deal with natural disasters which up to that time were discharged by a special disaster task force within the office of the President. The Minister was

already responsible for the affairs of the non Iranian residing in the country, including the affairs of the refugees. The new delegated authority gave it a pivotal role in disaster management in the country. The police force, gendarmerie and the revolutionary corps were united in form of Disciplinary Forces in 1992 and put under the command of the Ministry. This was quite important for the disaster management role of the Ministry given the traditional functions of disasters.

To discharge the assigned disaster management functions the Ministry formed The Bureau For Research and Coordination Of Safety and Reconstruction Affairs (BRCSR).

The BRCSR mandate was quite broad and included research in safety measures, formulation of preparedness and mitigation plans, disaster information collection, analysis and dissemination, provision of coordination services for relief, reconstruction and rehabilitation activities, monitoring activities including coordination of budget forecasting and disbursement and provision of logistic and procurement support services for provinces.

The BRSCR was also mandated to liaise with international and national centers to utilize their potentials to achieve its given mandate.

The Ministry also formed a National Disaster Task Force (NDTF).As the name suggests the NDTF is a coordinating inter- organizational body whose activities vary during different phases of disasters. When a sudden disaster strikes the NDTF assumes the major task of coordinating relief operations carried out by technical ministries and relief organizations.
At such times, if so required, the NDTF will be directed by Deputy Minister for coordination of development affair. At other times the NDTF is mostly concerned with coordination of preparedness and mitigation activities often with the cooperation of research organization. The NDTF is headquartered at the ministry of interior in Tehran and relies for its activities on the BRCSR whose director is also the manager for NDTF. A total of 4550 staff mostly dealing with administrative and logistic support services perform their duties at national, provincial and local levels.

A plethora of technical ministries and organizations contribute to

disaster management in Iran.

The role of Ministry of Housing and Urban Development and its affiliated Housing Foundation is very important as these two are the major approving implementing organizations for special plans, housing projects and building codes including earthquake mandatory codes. Ministry of Energy, responsible for management of rivers and dams which is also directly involved in studying and applying mitigation measures against the rise of Caspian sea water level fluctuation. Ministry of Jihad Construction mandated to supervise watersheds, forests and rangelands. Ministry of Health, Ministry of Roads & Transportation and Ministry of Agriculture play substantive roles during the emergency phases of disasters and later during the rehabilitation and reconstruction phases. All these Ministries are members of NCNDR and NDTF. Plan and Budget Organization is the supreme approving body for all public sector major development plans, programmed and projects. PBO also controls the budget and thus has the power to direct investment funds to the management of disasters. PBO is also a member of NCNDR and the NDTF. Red Crescent Society of Iran, the first in its kind in the region, has information during the numerous emergencies which could be easily shared on a regional basis. It is by far the most important nongovernmental partner in disaster management in Iran. It is a member of NCNDR and NDTF Municipalities and in particular the Teheran Municipality, Mobilization organization commonly known as Basij is another important non governmental bodies that could play an important role in cases of disasters. Basij was founded as people army during the years of war with Iraq in the 80,s. After the war in 1988, attempts were made to enable the Basij to include amongst its functions activities of a civil defence organization. These attempts still contiue.

THE IRANIAN EMERGENCY RESPONSE SYSTEM:

Disasters are categorised as being of national,regional or local significance. Depending on the classification of an event, the respective authorities take control to direct relief efforts.

National Authorities:

Emergency relief operations in Iran are the responsibility of the ministry of interior through the national disaster task force (DTF), whilst emergency relief response across sectors are the responsibility of the appropriate ministries,coordinated by the DTF. If a disaster is classified as being of national significance, the national DTF takes control, if necessary ,it can call upon other government authorities such as the military to assist with relief operations.

Regional (provincial) structure:

The national structure of the Ministry of Interior is mirrored at provincial level. The Governor General and his heads of department comprise the provincial DTF, which coordinates disaster response and relief within the province. If of sufficient magnitude, there is a formal arrangement for neighbouring provinces to respond to assist the affected area. As soon as a disaster is notified, the neighbouring provinces are encouraged to respond as the auxiliary provinces.

Local (District) Structure:

Each district in Iran is headed by a governor who again has a number of sub-district governors reporting to him. The district- level DTFs play a key role in managing the immediate search and rescue operation, and the relief phase which follows,

IRANIAN NATIONAL COMMITTEE FOR NATURAL DISASTER REDUCTION(NCNDR):

The Islamic Republic of Iran was one of the first countries to set up its national committee through Legislative Branch.

In line with the International Decade For Natural Disaster Reduction (IDNDR), the Islamic Consultative Assembly has approved the formation of

National Committee For Natural Disaster Reduction in 1991(see the annex) headed by the Ministers of Energy, Agriculture, Health, Commerce, Jihad of Construction, Roads, and Transportation and Housing and Urban Development. The Directors of Plan and Budget Organization, Environment Protection Organization, Meteorology Organization, Forestry and ranglend Organization, Institute of Geophysics and Red Crescent Society of Iran are also included. Army and Displinary Forces and any other organizations that the Chair of the Committee deemes appropriate could also participate in the Committee. The committee was designed as a policy making body to provide for exchange of information and to allow the government to have the authority to support and follow up the related activities. The national committee has set up 9 specialized sub-committees presided by deputy ministers, 27 provincial committees presided by General Governors and also a coordination committee chaired by Under-Secretary of Minister of Interior are acting all under the presidency of the Minister of Interior himself. The 9 specialized Sub-Committees (SSC) of NCNDR are as follows:

1- SSC for earthquake and landslides
2- SSC for vegetation infestation, vegetation diseases and cold
3- SSc for rangeland revival and coping with drought
4- SSC for flood prevention, sea level rise and river overflow
5- SSC for reducing air pollution
6- SSC for storm and hurricane hazards
7- SSC for Rescue and relief
8- SSC for loss compensation
9- SSC for health and medical care

Proposals received from all above mentioned SSC will be studied and analyzed by coordination committee to be presented with its final evaluation to NCNDR for decision making

It is worthy to mention that by virtue of the act on formation of the Iranian NCNDR all the activities related to the committee have been envisaged to continue within the decade and beyond. So the elapse of the decade does not apply to the above act as far as the Iranian NCNDR is concerned.

Accomplishments in disaster Reduction during IDNDR

The Islamic Republic of Iran in line with the IDNDR has taken a wide range of activities in order to reduce the effects of Natural disasters during the decade. the main topics of these activities are listed als follow :

A : Legislation introduced and enacted in relation with NDR

1- Act on the formation of National Committee for NDR

2- Approval of the executive byláw for the above mentioned act by the cabinet of ministers.

3- Instructions for particular cases i.e.Technical standards for sand and gravel exploration in river channels, criteria setting for construction of along-the-coast & intersecting structures, parallel to or over the rivers, consideration of construction limit along river chanals and the like.

4- Act on the compensation of damages resulted from floods.

5- Regulation for general directors for NDR .

6- Enactment of building code under the standard no. 2800 as an obligatory standard for construction companies and institutions at national level.

7- Regulation concerning the resistance of buildings against earthquake.

8- Setting instruction Documents to be supervised by municipalities and other executive organizations for incorporation of technical & safety measures.

B : Main topics of projects undertaken during the recent years of IDNDR

1- Since the inception of the decade up to end of the year 1998 we have undertaken 19116 reconstruction projects and 4247 prevention projects in different parts of the country which are fully implemented . Simultaneously a series of 117 research projects on loss prevention and reduction of NDs have been planned and implemented by 9 specialized Sub-Comittees of NCNDR. Out of these projects, a number of 40 ones with a credit of 31 billion Rials have

been completed and the remaining 77 project with a credit of 7733.4 billion Rials are under implementation. The main topics of these projects are as follows :

1. Comprehensive seismicity potential and landslide studies in different provinces of the country.
2. Atlas of landslides in each province of the country.
3. Self-assistance Training Plan against Earthquake, Risks and Impacts.
4. Cloud seeding plan coping with drought .
5. Drought and General Guidelines.
6. Research plan on air pollution arising from natural disasters.
7. Project on establishment of disaster databank .
8. Feasibility study on some provinces of the country.
9. Project on reduction of plant frost-bite damages.
10. Climate studies and rural architecture.
11. Completion of seismological and accelerogram networks of the country.
12. Extention of public training and promotion of knowledge of seismology and its related fields.
13. Preparation of a comprehensive model for reconstruction, compatible with different geographical and seasonal conditions present in different parts of the country.
14. Basic studies on flood comprehensive plan for some main rivers in the country.
15. Continuation of a general master plan for flood monitoring and flood prevention .
16. Plans on combating desertification in central and south central parts of the country .
17. Vulnerability & Safety studies of building structures.
18. General & specialized Training.

19. Publication of papers, pamphlets, posters, lables, tapes etc. on public awareness concerning mitigation purposes.

20. Cooperation with UNDP in the following areas :

1. Formulating a National Preparedness & Mitigation plan for Natural Disasters, Projet No. (IRA/95/003/A/13/99)

2. Preparation of the comprehensive flood prevention study

3. Comprehensive seismological study undertaken by UNDP & International Institute of Earthquake Engineering and Seismology (IIEES) Public Education:

1. Establishing of M.A level studies in crisis management with the cooperation of Tehran University.

2. Establishing of M.A level studies in seismology with the cooperation of Mashhad University.

3. Conducting short-term courses on River Engineering Projects, Seismic Engineering, Climatological Zoning for Mayors, Employees of municipalities and Staff of technical bureau of provinces .

4. Preparation of Radio & TV programmes for improvement of public awairness.

The following studies have been undertaken to carry out land-use projects :

1. Coordination and concentration of technical potentials present in the country for reconstruction of regions damaged by recent earthquakes

2. Geological Hazard Potential Reconnaissance Study projects in provinces mostly liable to Earthquakes.

3. Various projects for Land, Flood, Earthquake management in different parts of the country.

Main meetings and conferences held :

1. The lst international conference of seismology & seismic

engineering by Iranian IIEES-27-29 May, 1992.

2. The first international conference on Natural Disaster in urban areas, by Tehran municipality 11-13 may 1991.

3. First Training Workshop for Disaster Management jointly organized by the Ministry of Interior, Ministry of foreign affairs, and UNDP 14-20 sept, 1992.

4. Conference on Data Evaluation and Earthquake organized by International Institute of Earthquake Engineering & Seismology. 22-27 Nov 1992.

5. The first national seminar of Flood Hazard Prevention Techniques, Ministry of Interior, Ministry of Foreign Affairs and ESCAP, Ahwas, Iran-10-12 April 1993.

6. The 8th seminar on Earthquake Prediction by joint cooperation of the Center for Natural Disasters of Iran, Ministry of Housing & Urban development, Earthquake Prediction Research Group of Berlin (Germany) Minstry of Regional Planning .

7. Regional Training Workshop on Natural Disaster Reduction, case study : Floods and Earthquakes, sept 1998-Gilan-Iran, jointly organized by Ministry of Interior and UNESCO.

In addition to above mentiond conferences, seminars and workshops, a number of National, and Internationl events were also held in I.R.IRAN which Willbe presented in later reports.

Commeration of the un international day

As it has been recommended in yokohama Strategy and Plan of Action, and in line with activities taken by IDNDR,s secretariate, upon being provided with related information, guidelines, and recommendations about the compaign by the secretariate, we have actively participated in the Annual World Disaster Campaign based on each year's theme. The steps taken in this regard have

extensively contributed to enhancement of public awareness which in turn we take it as a promissing presage for our future efforts to attract public participation in reduction and mitigation of the impacts of natural disasters. the Iranian Government in comformity with UN International Day for NDR. In this connection we would like to draw your attention to the following efforts made by NCNDR and 28 Provincial Comittees concerning the International Day for natural disaster reduction.

Public awareness

- Preparing T.V and radio programms during a week ending to the 12th of the october in each year as the Iranian National Day for Natural Disaster Reduction in order to introduce IDNDR initiative and 9 sub-committees of NDR Committee of Iran on central and Local T.V channels. These programs include interviews with related ministers and their deputies, the national authorities, provincial authorities, scientists, scholars, specialists, policy-makers, disaster management directors, general governors, etc.
- Producing various materials about the theme of each year,s compaign.
- Presentation of T.V and radio programms on various types of disasters in the country and providing neceesary information to public on ways of disaster reduction
- Presentation of short messages about NDR by T.V and radio as well as newspapers and magazines for public use.
- Contribution of whole countries Media and Press in reflecting the different aspects of NDs during a week ending to 12th October of each year as Iranian National Day for NDR to enhance Public Awareness.

Painting competition

NCNDR has launched a number of painting competitions among the children and young adults at country level and similar competition have been

launched by provincial committees and sub-committees in 28 provinces of the country.

Publications

Preparation and distribution of posters, pamphlets, books, labels and tapes etc. on public awareness concerning the theme of each year,s campaign.

- Preparing and publishing special issues of Nivar Journal, under the title of, Natural Disaster reduction.

  Trainings for children. The publisher is the Iranian Meteorological Organization which also chairs the sub-comittee. for counteractiong the impacts of storms and climatic disasters in 10000 volumes.
- Preparating and distributing of 15000 posters under the title of "Safety in Schools".
- Preparation and distribution of 43500 posters on "What to do when an earthquaic happens".
- Preparation and distribution of 3000 posters on "Take the Risk of Flood for Serious".
- Distribution of 10000 copies of the book "E as Earthquake" for children form 7 to 12 years old.
- Preparation and distribution of 200 copies of a book under the title of "Behaviour Evaluation of Structures of Ghaenat Earthquake of 10 May 1997".
- Preparation and distribution of a book on title of "Let's learn to gether", published by the Red Crescent Society of I.R. of Iran.
- Preparation and distribution of a great number of Various Posters by 9 SSCs of NCNDR and Provincial Committees on different types of disasters conveying messages to warn public of the Risks of Disasters.

Meetings

- A large scale relief & rescue maneuvers have been carried out by the Red Crescent Society of I.R of Iran, demonstrating 3 phases of a disaster (befor, after and at

the time of occourance). Similar activities have been carried out in 28 provinces of the country.

- A number of Seminars on "Disaster and Health, during the occurrance of Natural Disasters, were held by NDR Sub-Committee for Health, Treatment and Medical Training .
- A week ending to 12 Oct 1997 as (National Week for Natural Disaster Reduction), and a number of 27500 students at primary, secondary and high school levels have been provided with a General Training Course on relief and rescue and first aid assistances. 240 branches of the Red Crescent Society in the cities throughout the country contributed to this course.
- A number of 12000 short- term training courses were held with the participation of Governmental offices staff and workers of the factories and various strata of society, getting familliar with relif matters.
- A number of 3430 short Training courses have been counducted for prayers at mosques after eveining prayer throughout the country.
- A one day seminar on "principles and Methods of NDR" was held in the capital city of 28 provinces of the coutry.
- A series of painting competitions, as well as paper writng and composition on NDR have been held in 28 provinces of the country.
- Roundtables on Socio-Economic Impact of Natural Disasters have been held to give ncecssary information to the public and elaborate more on the issue by university professors and related experts.

Exhibitions

- The Institute for Intellectual Development of Children and Young Adults has been a venue for exhibition of 12000 paintings at country level. The exhibition hall with an area covering 3000 square meters was witnessing a large number of people visiting the exhibition. One hundred competitors whos works were selected as the best were given prizes.

E2:23 larg tableaus (3 by 5 meters) displaying safety recommendations and messages were put up in major squares and public places to provide necessary and concise information to citizens for observing them in constructing new buildings.

E3 : A number of 132 Relief Equinpment Exhibitions as well as Workshops were held in public places, parks, and cultural houses and centers for one week. The aim of these exhibitions was to increase public knowledge about natural Disaster Reduction. The Red Crescent Society of the Islamic Republic Of Iran handled these exhibitons.

E4 : Adjacent to painting exhibition in the Institute for Intellectual Development of Children and Young Adults, another exhibition displaying the activities of 9 NDR Sub-Comittees was open for bublic visit and a collection of damigng insects and vectors of plant and animal diseases a well as the ways in which their impacts could be reduced, were presented and Other SSCs also Presented their Findings due to the Researches and Studies conducted by them.

Activities in provinces :

Most of aformentioned activities in Tehran have been similarly undrtaken in 28 provinces of Iran. Some additional activities were carried out as follows.

1. Local T.V and radio networks broadcasted special programms on NDR.
2. Friday prayer speakers in their speeches draw the public's attention to NDR that the country is greatly concerned with.
3. Preparation and distribution of posters and pamplets, etc. On NDR objectives.
4. Provincial press as well as local newspapers have published articles and papers on Natural Disaster Reduction Problems during a week .

Owing to the activities mentioned above, damages arising from Natural Disasters mainly from Earthquakes, Floods and Environmental Disasters have been relatively reduced, so that it has attracted the publics attention and people,s tendency to observe the technical regulations, recipies as well as

mangagement and city planning standards. It is worthy of saying that the Death Toll in the country due to NDs in comparison with similar past disasters is some provinces have been reduced to one fifth which it can be attributed to people,s awareness and timely issuance of warnings as well as mitigation projects.

Future requirements for disaster reduction :

According to the global estimations, the Islamic Republic of Iran is placed in the top Ten disastrous countreis among the developing countries.Iran is one of the Tenth countries with the high earthquake hazard. That is the principle reason that the I.R of Iran has so much welcomed the International Initiative to declare the 1990s as the International Decade for Natural Disaster Reduction (IDNDR). Iran has found IDNDR as a opportunity to converge, coordinate and consolidate Regional and global strategies.In this regard we can mention the yokohama strategy and plan of action which aime at approach natural disaster reduction in a comprehensive manner and in the contium from relief to sustainable development.In recent years, the Iranian National Committee for NDR has found its proper place in the community and at a time when the implementation of a number of large scale projects, plans and programms are underway. there is a strong need NCNDR to continue its works into 21st century. In this process the IDNDR secretariate could play an important role to support our National Comittee for NDR. It is worthy of mention that the act on formation of our NCNDR has not limited the functions of this comittee even beyond the decade. As we are approaching the end of the IDNDR, We believe that the role of a dynamic successor to IDNDR as a global point within the United Nations will be vital to assist ongoing activities of NCNDRs in the coming years.

The international assistances would be wellcomed in following areas:

1. Iran has the plane to establish and develope Disaster Information System, Accordingly it would be vital to have immediate access to Information for

natural disaster monitoring and management throug the satellites information.

2. Accessability to advanced warning systems in the areas of Natural Disaster Reduction and Transfer of Technology in these areas.
3. Accesing to advanced and successful informations and techniques in the areas of of early-warning prevention, relief and reconstruction and advanced methods of integration of Disaster Prevention through educational programmes and financial resources.
4. Establishing a regional network for exchange of information on Natural Disasters.
5. There is a need for further international assistance to strengthen the national prevention and preparedness activities in Iran.
6. At the internatinal level, more attention should be given to potential risks of environmental emergencies and industrial accidents in Iran, which may be caused by Natural Disasters.
7. Thers is a need for specialized in-kind contributions, in particular, for such items as heavy-lifting equipment.In other areas, to make a proper diccision on international assistance, it would be more adequate to recive cash contribution for local procurement of goods,thus providing a quicker and cost-efficient alternative to in-kind contributions.
8. Prevention and preparedness programms need to be further supported and developed, through access to modern technology and training approaches.
9. The UN contingency plan for Iran should be developed, tested and made ready as soon as possible.