



The Cabinet
Information and Decision Support Center
Crisis Management and Disaster
Reduction Sector

First Draft

EGYPT's REVIEW
In depth Assessment of Progress in Disaster Risk Reduction

September 2008

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Acronyms

ASRT	The Academy of Scientific Research and Technology
CBA	Cost Benefit Analysis
CEMA	Crisis Management Affairs
CMDRS	Crisis Management and Disaster Reduction Sector
CMIS	Crisis Management Information System
CPA	The Civil Protection Authority
DRR	Disaster Risk Reduction
EEAA	The Environmental Affairs Agency
EPF	The Environment Protection Fund
ERCA	The Egyptian Red Crescent Association
EWS	Early Warning System
HFA	The Hyogo Framework for Action
IDSC	Information and Decision Support Centre
IMS	Information Management System
ISDR	International Strategy for Disaster Reduction
MDG	Millennium Development Goals
MAP	Mediterranean Action Plan
MENA	The Middle East and North Africa Region
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
NCCMDRR	The National Committee for Crisis Management and Disaster Risk Reduction
NGO	Non Governmental Organization
SAB	Scientific Advisory Board

Background

The World Conference on Disaster Reduction was held from 18 to 22 January 2005 in Kobe, Hyogo, Japan, and adopted the Framework for Action "HFA" 2005-2015: Building the Resilience of Nations and Communities to Disasters

Egypt recognizes the challenges posed by disasters as disaster loss is on the rise with grave consequences for the survival, dignity and livelihood of individuals, particularly the poor and hard-won development gains. Disaster risk is increasingly of global concern and its impact and actions in one region can have an impact on risks in another, and vice versa. This, compounded by increasing vulnerabilities related to changing demographic, technological and socio-economic conditions, unplanned urbanization, development within high-risk zones, under-development, environmental degradation, climate variability, climate change, geological hazards, competition for scarce resources, and the impact of epidemics such as HIV/AIDS, points to a future where disasters could increasingly threaten the world's economy, and its population and the sustainable development of developing countries. On average more than 200 million people have been affected on annual bases during the past 20 years.

Disaster risk arises when hazards interact with physical, social, economic and environmental vulnerabilities. Events of hydro-meteorological origin constitute the large majority of disasters. Despite the growing understanding and acceptance of the importance of disaster risk reduction and increased disaster response capacities, disasters and in particular the management and reduction of risk continue to pose a global challenge.

The HFA requested the states to:

All States should Endeavour to undertake the following tasks at the national and local levels, with a strong sense of ownership and in collaboration with civil society and other stakeholders, within the bounds of their financial, human and material capacities, and taking into account their domestic legal requirements and existing international instruments related to disaster risk reduction:

- a) Prepare and publish national baseline assessments of the status of disaster risk reduction, according to the capabilities, needs and policies of each State, and, as appropriate, share this information with concerned regional and international bodies;
- b) Designate an appropriate national coordination mechanism for the implementation and follow up of this Framework for Action, and communicate the information to the secretariat of the International Strategy for Disaster Reduction;
- c) Publish and periodically update a summary of national programmes for disaster risk reduction related to this Framework for Action, including on international cooperation;
- d) Develop procedures for reviewing national progress against this Framework for Action, which should include systems for cost benefit analysis and ongoing

- monitoring and assessment of vulnerability and risk, in particular with regards to regions exposed to hydro-meteorological and seismic hazards, as appropriate;
- e) Include information on progress of disaster risk reduction in the reporting mechanisms of existing international and other frameworks concerning sustainable development, as appropriate;
 - f) Consider, as appropriate, acceding to, approving or ratifying relevant international legal instruments relating to disaster reduction, and, for State parties to those instruments, take measures for their effective implementation;
 - g) Promote the integration of risk reduction associated with existing climate variability and future climate change into strategies for the reduction of disaster risk and adaptation to climate change; ensure that the management of risks associated with geological hazards, such as earthquakes and landslides, are fully taken into account in disaster risk reduction programmes.

Egypt, being one of the states that adopted the HFA is implementing the HFA through national activities and actively participated in the process of monitoring and reporting. Monitoring and reporting on progress is an essential feature of the Hyogo Framework for Action (HFA), since it presents an indicator on the Monitoring Progress on implementation of the Hyogo Framework for Action (HFA). In this context Egypt has finalized the “HFA Monitor” in August 2008.

This ISDR system report will be a landmark assessment based on a global risk update, a progress review of key achievements and gaps in disaster risk reduction activity at all levels of implementation of the HFA, and an analysis of key linkages between disaster risk reduction and development issues.

Objectives

Egypt's review aims at providing in- depth Assessment of Progress and the current state of efforts in the area of Disaster Management and Risk Reduction.

This in-depth review will contribute to the analysis presented in the section on the HFA progress reviews of the 2009 GAR – which is being invited by territorial levels, and thematic areas.

1. Introduction (Egypt Country Profile and Context)

The Arab Republic of Egypt is located in the North-Eastern and South-Western corners of Africa and Asia respectively. It is bounded to the North by the Mediterranean Sea, from the East by Palestine, from the South by Sudan, and from the West by Libya.

Egypt's borders run about 1,085 km from North to South and about 1,255 km from east to west encompassing an almost square-shaped total area of about 1 million square km. The average altitude is 50 ft below sea level; the highest point being Mount St. Catherine at a high of 8,668 ft and the lowest the Qattara Depression at 436 ft below sea

level. The Nile Delta is the only delta in Egypt and is 100 miles long, 155 miles wide and triangular in shape. There are five major oases in Egypt: Farafra, Bahria, Dakhla, Kharga and Siwa oases.

The Nile Valley and Delta extends from north of the valley to the Mediterranean Sea and is divided into Upper Egypt and Lower Egypt: extending from Wadi Halfa to the south of Cairo and from North Cairo to the Mediterranean Sea. The River Nile in the North is divided into two branches, Dumiat (Damietta) and Rashid (Rosetta) which embrace the highly fertile agricultural lands of the Delta. The River Nile is the longest river in the world, stretching for around 4,187 miles. Egyptians depend primarily on the Nile as a source for water to drink and to irrigate their crops. The Western Desert Extends from the Nile Valley in the East to the Libyan borders in the west, and from the Mediterranean in the north to Egypt's Southern borders. It is divided into: The Northern section, which includes the coastal plane, the northern plateau and the Great Depression, Natroun Valley and Baharia Oasis; and the Southern section, which includes Farafra, Kharga, Dakhla, and El-Owainat in the far south.

The Eastern Desert extends from the Nile Valley in the West to the Red Sea, Gulf of Suez, and Suez Canal in the East, and from Lake Manzala on the Mediterranean in the North to Egypt's border with Sudan in the south. The Eastern Desert is marked with the Eastern Mountains that extend along the Red Sea with peaks that rise to about 3000 feet above sea level. This desert is rich with Egyptian natural resources; which include various ores such as gold, coal, and oil. The Sinai Peninsula is almost triangular in shape, with its base at the Mediterranean to the North and its tip southward at Ras Mohammed, the Gulf of Aqaba lies to the East and the Gulf of Suez and Suez Canal to the West. The Nile Valley and the Delta occupy about 33,000 square kilometers, which account to less than 4% of the total area. The Western Desert occupies an area of about 671,000 square kilometers, the Eastern Desert occupies about a quarter of the total area of Egypt at 225,000 square kilometers, and The Sinai Peninsula occupies about 61,000 square kilometers (www.undp.org).

Figure (1)
Egypt Map



Source: Egypt State Information Service.

1.1. Population and Social Indicators

On January 1, 2006, Egypt's total population was estimated at approximately 73,671,661 (2006 Census), as recent reports of the CAPMAS stated that the population reached 73,671,661 including the number of Egyptian citizens abroad (January 2006 EST.).

1.2. Development Progress

Over the last decades, Egypt has considerably improved the well-being of its people. Social indicators for health and education continue to improve. Between the early 1970s and 2005, life expectancy at birth increased from 53 to 70 years, the number of children dying in the first year of life declined from 110 to 26 (per 1,000 live births), and primary school enrollment increased from 63 percent to 101 percent. During the same period, Egypt's population increased from 36 million to 76 million. Yet, poverty remains an

issue with 17 percent of the population (mainly in Upper Egypt and rural areas) living with less than \$1 per day (www.worldbank.org).

1.3. Local Administrative (Governorates)

Administratively, Egypt is divided *recently* into 28 Governorates, each headed by a Governor. Within their districts, local government units establish and manage all public utilities, provide services, and designate industrial areas. Local popular councils are elected bodies that work closely with local government administrative units at various levels.

1.4. Economic Profile

The Egyptian economy continues to grow, real economic growth rose to 6.9 percent in FY06 and will be about 7 percent in FY07 (third quarter growth was an annualized 7.2%) after the anemic 3% during FY01-03. Total investment is around 18- 19% of GDP, but private investment has been rising to over 12 percent of GDP. FDI rose to \$6.1 billion in FY06 (5.7% of GDP) from \$3.9 billion (4.4% of GDP) in FY05 and may exceed \$10 billion in FY07. Large capital inflows helped build foreign exchange reserves to \$29.6 billion as of July 2007. Although employment is growing, unemployment rate remains around 10% because of mismatch between the education system and the domestic labor market (www.worldbank.org).

1.5. Human Development Index

The UNDP Human Development Index (2006) ranks Egypt 111 out of 177 countries. Egypt's growing population which, according some estimates, may exceed 100 million people by 2020 continues to place a burden on limited resources. Although Egypt is doing well in improving certain social and economic indicators and a recent report concluded that the country is potentially on track to meet the Millennium Development Goals, progress still needs to be made in many other areas.

1.6. Egypt and the Millennium Development Goals

In Egypt, UNDP is leading the effort to help the country reach the targets and commitments of the MDGs. UNDP will help monitor Egypt's progress towards the MDGs through regular reports and with other UN agencies. Egypt was one of 188 countries which embraced the MDGs and agreed to strive to meet these goals by 2015. In June 2002 the United Nations unveiled the first report on Egypt's progress towards meeting the Millennium Development Goals, which was followed by the second and

third reports in 2004 and 2005 respectively. The two reports indicated that Egypt remains on the right track to achieve the majority of MDG indicators; they also exposed the emergence of worrying gaps in income levels and living standards between Lower and Upper Egypt.

The MDG Reports show that the overall percentage of poor Egyptians will decrease from 25% in 1990 to 13% in 2015. The Reports also demonstrate how poverty especially affects female-headed households which count for 20 % of total households.

And while overall incomes in Egypt have increased from US\$ 639 in 1990 to \$US 1,390 in 1999, 40% of the poor only receive 22% of nation's wealth. The reports show that the Egyptian government continued to give attention to critical areas of development, such as health, education, access to water and sanitation as well as improving the livelihoods of the most deprived segments of the population.

However, the pace of progress varies among the goals: fast and sustained in some areas (child and maternal mortality, water and sanitation), at acceptable levels for others (education and poverty reduction), while somewhat slowly in others (women empowerment and the environment). (www.undp.org)

Egypt's Goal-by-Goal Progress towards Achieving the MDGs by 2015

Current status in accordance with national Government reporting:

Very likely to be achieved, on track

Goal 1: Eradicate extreme poverty and hunger

Population below PPP \$1 per day (%): 3.1

Children under 5 who are moderately or severely underweight (%): 6.2

Population living below the national poverty line (%): 16.7

Very likely to be achieved, on track

Goal 2: Achieve universal primary education

Net enrolment ratio in primary education (% both sexes): 97.2

Percentage of pupils starting Grade 1 and reach Grade 5 (% both sexes): 94.5

Possible to achieve if some changes are made

Goal 3: Promote gender equality and empower women

Gender parity Index in primary level enrolment (ratio of girls to boys): 0.9

Literacy rates of 15-24 years old (% both sexes): 84.9

Seats held by women in national parliament (%): 2.0

Very likely to be achieved, on track

Goal 4: Reduce child mortality

Mortality rate of children under 5 years old (per 1,000 live births): 33

1-year-old children immunized against measles (%): 98

Very likely to be achieved, on track

Goal 5: Improve maternal health

Maternal mortality ratio (per 100,000 births): 84

Very likely to be achieved, on track

Goal 6: Combat HIV/AIDS, malaria and other diseases

People living with HIV, 15-49 yrs old (%): 0.1

Prevalence of tuberculosis (per 100,000 people): 32

Insufficient information

Goal 7: Ensure environmental sustainability

Land area covered by forest (%): 0.1

Carbon dioxide emissions per capita (metric tons): 2.2116

Access to improved drinking water sources (% of total population): 98

Insufficient information

Goal 8: Develop a global partnership for development

Internet users (per 100 people): 8.0

Youth unemployment rate, ages 15-24, both sexes: 27.1 (www.undp.org).

1.7. Poverty Reduction

Through the Millennium Declaration and the Millennium Development Goals the world is addressing the many dimensions of human development, including halving by 2015 the proportion of people living in extreme poverty.

Egypt's national authorities are determined to combat poverty which according to different sources of information remains high. Recent estimates from the World Bank show that 23% of the population lives below the national poverty line with more than 12% of children under the age of 5 suffering from malnutrition.

However, reaching the ultra poor has proved difficult. Improved targeting of assistance is required to reach the most vulnerable groups in Egyptian society, such as women in rural areas. Many poor women do not have ID cards, which makes it difficult for them to access services. Although women are granted full constitutional rights on an equal basis with men, they still have difficulties in participating in the economic life, accessing education

and health services, while their active participation in politics is severely limited (www.worldbank.org).

1.8. Cooperation between UN agencies (UNDP and ISDR) and the IDSC on Crisis Management and Recovery

UNDP helps countries prevent and recover from armed conflicts and natural disasters through advocacy, capacity building, conflict sensitive development, development of tools and methodologies, gender equality, knowledge networking, strategic planning and programming, and policy and standard setting.

UNDP provided technical support to the Disaster Risk Reduction Programme in Egypt in convening two workshops in this context. In the future, UNDP will further support Egypt in areas related to disaster management and risk reduction (www.undp.org).

The ISDR is supporting Egypt in convening in the near future a Workshop on the National Platform.

1.9. Regional Context

National risk assessments take account of regional / transboundary risks, particularly for major natural and environmental risks.

Cooperation at regional and international levels have been initiated to assess and monitor regional and trans-boundary risks, However, the exchange of information and provide early warnings through appropriate arrangements is to be developed. This would imply, having standard and accessible information and data on regional disaster risks, impacts and losses.

Egypt is a cornerstone for regional cooperation, considering its geographical position at the northeastern side of Africa, central for the Arab region and sharing areas from the southern Mediterranean and Western Red Sea.

Cooperation with the Arab Countries

Egypt has actively participated in the process of developing the Draft Protocol on the Arab's Cooperation for the Prompt Responses in Cases of Natural Disasters, Crisis and Emergency, under the umbrella of the Arab League. Besides, there are bilateral cooperation between Egypt and other Arab countries for cooperation in cases of disasters and crisis. Also, Egypt will participate in the exercise of the implementation of the above protocol, once adopted; that will be followed by the monitoring process of implementation in accordance with HFA.

Egypt cooperates with the Arab States in the Red Sea and Gulf of Aden Region through its participation to the Protocol Concerning Cooperation in Combating Pollution of the Red Sea and Gulf of Aden Region by Oil and Other Harmful Substances in Cases of Emergency (1982).

Mediterranean Region

Egypt cooperates with the Mediterranean countries through the UNEP/MAP, since it is participated in the Protocol Concerning Cooperation in Combating Pollution of the Mediterranean Sea by Oil and Other Harmful Substances in Cases of Emergency (1976).

Euro-Mediterranean Cooperation

Egypt is one of the participating countries in the Euro-med initiative “Supports the development of Euro-Mediterranean system of mitigation, prevention and management of natural and man-made disasters, through technical assistance and capacity building.

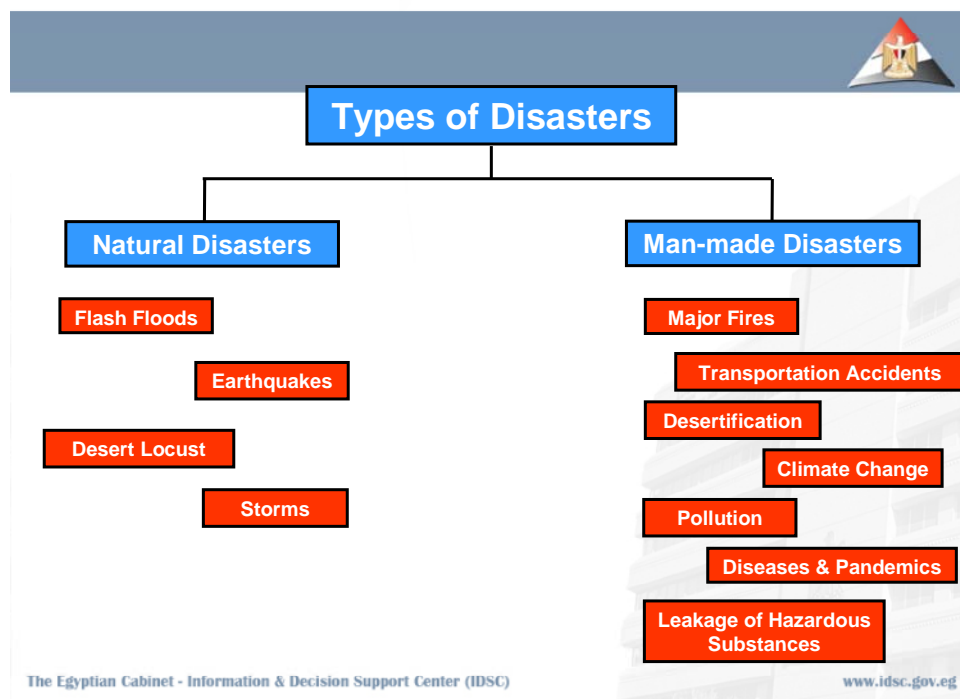
1.10. Crisis and Risks in Egypt

Types of Disasters in Egypt

The following diagram shows the most common types of man-made and natural disasters occurred in Egypt.

Figure (2)

The most common types of man-made and natural disasters occurred in Egypt



Source: The Egyptian Cabinet – Information and Decision Support Center (IDSC).

A. Country profile for Natural Disasters from 1926 – 2006 (Source: Egypt - Data and statistics; (Prevention Web)

Country profile of natural disasters from 1926 to 2006 is summarized in the following set of tables and diagrams.

Table (1)

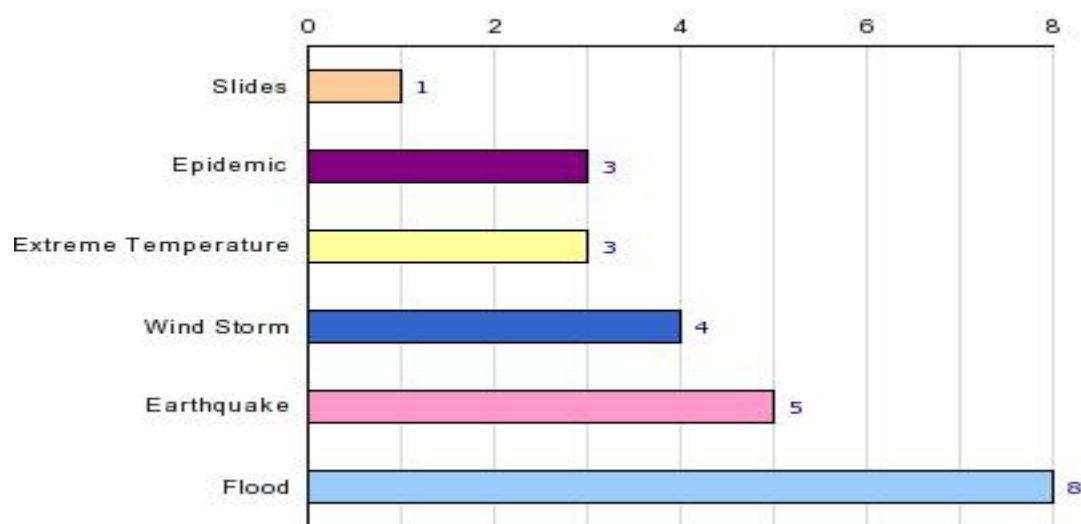
Egypt Profile of Natural Disasters from 1926 to 2006

No of events*	24 event
No of people killed*	11,716 killed
Average killed per year*	146 killed
No of people total affected*	339,572 affected
Average total affected per year*	4,245 affected
Economic Damage (US\$ X 1,000)*	306,200 US\$
Economic Damage per year (US\$ X 1,000)*	3,828 US\$

*: Reported

Source: Prevention Web: <http://www.preventionweb.net/english/countries/statistics/?cid=54>

Figure (3)
Natural Disaster Occurrence in Egypt from 1926 - 2006



Source: Prevention Web: <http://www.preventionweb.net/english/countries/statistics/?cid=54>

Table (2)
Average disaster per year*

Disaster	Average (%)
Drought	-
Earthquake	0.06
Epidemic	0.04
Extreme Temperature	0.04
Flood	0.10
Insect Infestation	-
Slides	0.01
Volcano	-
Wave/ Surge	-
Wildfires	-
Windstorm	0.05

*: Reported

Source: Prevention Web: <http://www.preventionweb.net/english/countries/statistics/?cid=54>

Table (3)
Top 10 Natural Disaster reported - Total affected

Disaster	Date	Total affected
Flood	1994	160,660
Earthquake	1992	92,649
Flood	1979	66,000
Wind Storm	1979	15,000
Flood	1995	3,000
Flood	2002	1,000
Slides	1993	300
Earthquake	2002	250
Flood	1991	208
Epidemic	2004	120

*: Reported

Source: Prevention Web: <http://www.preventionweb.net/english/countries/statistics/?cid=54>

Table (4)
Top 10 Natural Disaster reported – Killed

Disaster	Date	killed
Epidemic	1947	10,276
Flood	1994	600
Earthquake	1992	552
Flood	1979	50
Slides	1993	34
Extreme Temperature	1995	32
Wind Storm	1987	30
Extreme Temperature	1996	22
Earthquake	1955	20
Wind Storm	1997	18

*: Reported

Source: Prevention Web: <http://www.preventionweb.net/english/countries/statistics/?cid=54>

Table (5)
Top 10 Natural Disaster reported - Economic Damages

Disaster	Date	Cost
Earthquake	1992	151,200
Flood	1994	140,000
Flood	1979	14,000
Wind Storm	1997	1,000
Earthquake	1926	0
Epidemic	1947	0
Flood	1954	0
Earthquake	1955	0
Flood	1975	0
Wind Storm	1979	0

*: Reported

Source: Prevention Web: <http://www.preventionweb.net/english/countries/statistics/?cid=54>

Table (6)
Average People killed per Event*

Disaster	Average
Drought	-
Earthquake	118.80
Epidemic	3,425.33
Extreme Temperature	19.00
Flood	86.38
Insect Infestation	-
Slides	34.00
Volcano	-
Wave/ Surge	-
Wildfires	-
Windstorm	16.00

*: Reported

Source: Prevention Web: <http://www.preventionweb.net/english/countries/statistics/?cid=54>

Table (7)
Average People Total Affected per Event*

Disaster	Average
Drought	-
Earthquake	18,599.20
Epidemic	40.00
Extreme Temperature	35.00
Flood	28,867.25
Insect Infestation	-
Slides	300.00
Volcano	-
Wave/ Surge	-
Wildfires	-
Windstorm	3,778.25

*: Reported

Source: Prevention Web: <http://www.preventionweb.net/english/countries/statistics/?cid=54>

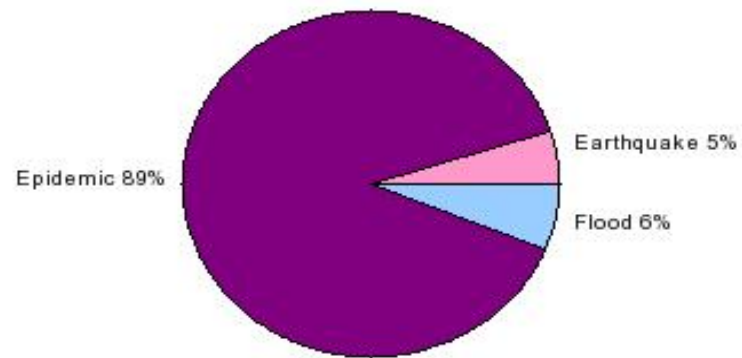
Table (8)
Reported Economic Damages per Event (US\$ X 1000)

Disaster	Average
Drought	-
Earthquake	30,240.00
Epidemic	-
Extreme Temperature	-
Flood	19,250.00
Insect Infestation	-
Slides	-
Volcano	-
Wave/ Surge	-
Wildfires	-
Windstorm	250.00

*: Reported

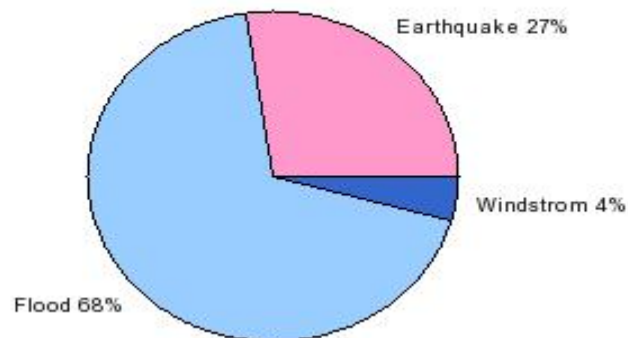
Source: Prevention Web: <http://www.preventionweb.net/english/countries/statistics/?cid=54>

Figure (4)
Percentage of Reported People Killed by Disaster Type



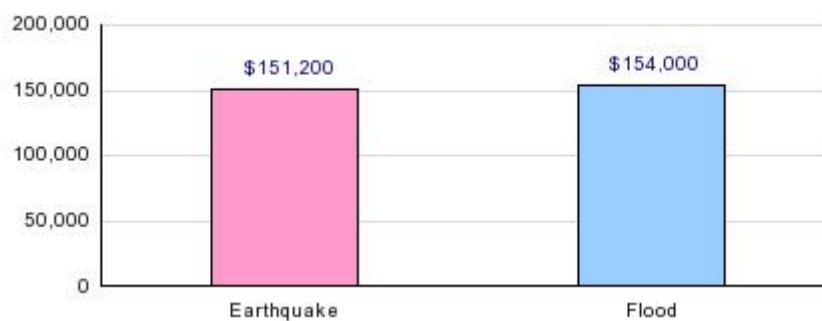
Source: Prevention Web: <http://www.preventionweb.net/english/countries/statistics/?cid=54>

Figure (5)
Percentage of Reported People Total Affected by Disaster Type



Source: Prevention Web: <http://www.preventionweb.net/english/countries/statistics/?cid=54>

Figure (6)
Reported Economic Damages by Disaster Type (US\$ X 1000)

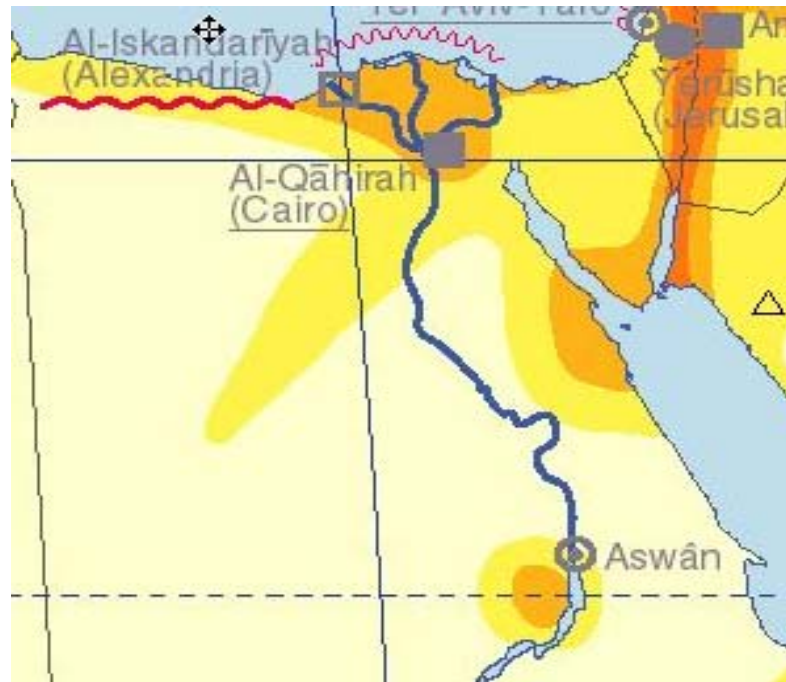


Source: Prevention Web: <http://www.preventionweb.net/english/countries/statistics/?cid=54>

More information and data on: <http://www.em-dat.net/>

B. Indicative Hazard Map of Egypt and Percentage of land area exposed to hazard: Exposure level Is shown in the figures below:

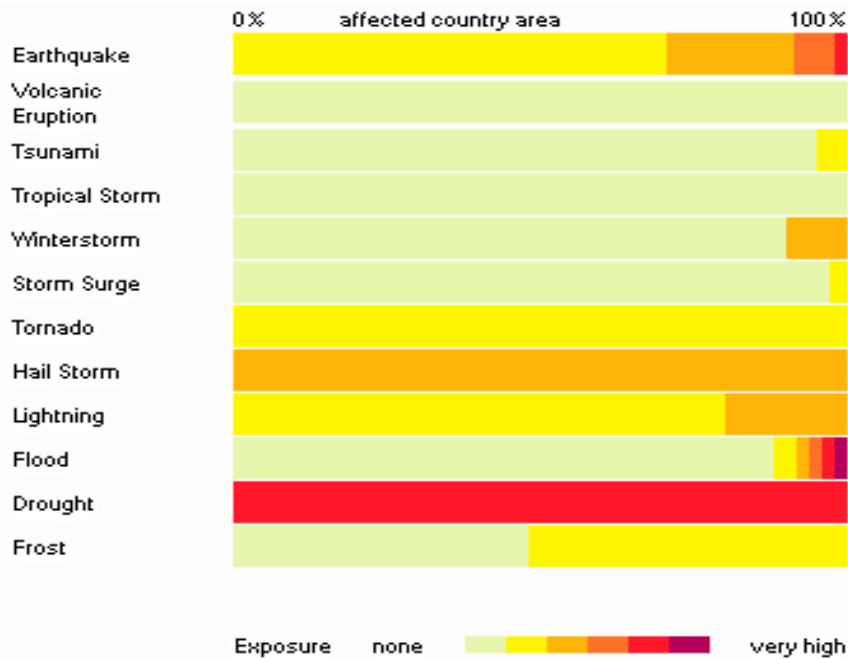
Figure (7)
Hazard Map of Egypt



Legend	
▽	Earthquakes
Yellow	Zone 0: MM V and below
Light Orange	Zone 1: MM VI
Orange	Zone 2: MM VII
Dark Orange	Zone 3: MM VIII
Red	Zone 4: MM IX and above
⊠	Large city with Mexico City effect
Probable maximum intensity (MM: modified Mercalli scale) with an exceedance probability of 10% in 50 years (equivalent to - return period- of 475 years) for medium subsoil conditions	

Source: Preliminary Regional Stocktaking of Natural Hazard Risk and Disaster Management Capacity: Middle East and North Africa, WB/UN International Strategy for Disaster Reduction “Building Partnerships for Disaster Risk Reduction and Natural Hazard Risk Management” Provisional Report 2007.

Figure (8)
Percentage of Land Area Exposed to Hazard: Exposure level



Source: Preliminary Regional Stocktaking of Natural Hazard Risk and Disaster Management Capacity: Middle East and North Africa, WB/UN International Strategy for Disaster Reduction “Building Partnerships for Disaster Risk Reduction and Natural Hazard Risk Management” Provisional Report 2007.

Lessons learnt from the earthquake of 1992 and the flash flood of 1994 resulted large numbers of deaths and casualties was the introduction and or enforcement of building codes and prevention of construction in hazard prone areas most affected by earthquakes or flash floods. In addition, EIA is considering natural disasters as one of the main issues to be addressed for any development project.

Based on the above, two success stories on natural and or man-made disasters (Flash flood management and risk reduction and Preparation for the Pandemic Influenza), are presented in Annexes I and II respectively.

2. Trends in country progress towards disaster risk reduction national objectives

Although integration of disaster risk management and reduction considerations into sustainable development policies, planning and programming was observed at sectoral bases (e.g. Civil defense, Health, Social affairs, Construction codes, Water resources, Environment...), consideration and actions are being taken to integrate the disaster risk reduction considerations at national level to cover all sectors.

2.1. Policy, Institutional arrangements and Legislations

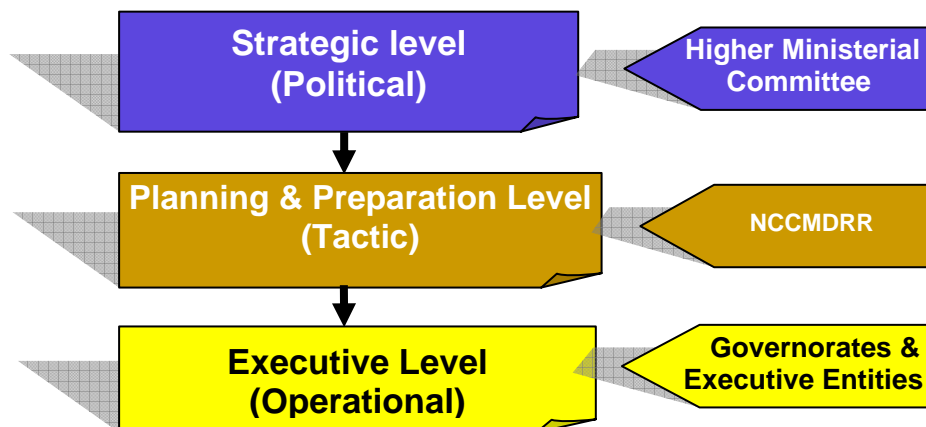
Egypt recognized the importance of developing disaster and environmental policies long time ago and further to the witnessing of large natural disasters (earthquake in 1992) and flash flood (in 1994), and several environmental risks related either to ecosystem degradation or to land based activities. Accordingly, a Crisis Management Affairs (CEMA) entity was established in 2000.

Recently, a Crisis Management and Disaster Reduction Sector "CMDRS" was established within the Information and Decision Support Centre (IDSC), Cabinet of Ministers. This sector was further upgraded as a national body to take responsibility of coordinating all issues related to Crises Management and Disaster Risk Reduction in close cooperation with all concerned authorities and, to act as a technical secretariat for the ministerial committee and to the national committee for crisis management and Disaster Risk Reduction.

Crisis Management Bodies/Entities were established in all Governorates (Local level) in Egypt, Ministries, agencies and institutions. Therefore, a chain or hierarchy mechanism is in place; however it needed capacity building and enhancement of their resources.

A National Institutional Framework has been recently revised and updated and is now under consideration for endorsement.

Figure (9)
Command and Control in Egypt



Source: The Egyptian Cabinet – Information and Decision Support Center (IDSC).

2.2. “The National Platform” The National Committee for Crisis Management and Disaster Risk Reduction “NCCMDRR”

The National Committee for Crisis Management and Disaster Risk Reduction (NCCMDRR) was established in April 2006. The NCCMDRR, a multi sectoral platform for disaster risk reduction and crisis management is functioning as the “National Platform”, having several mandates corresponding to the goals and priorities of actions outlined in the HFA 2005. Because DRR is a cross-cutting and complex issue, the NCCMDRR is a multi-stakeholder mechanism that provides coordination, develops a culture of prevention, and facilitating the integration of Disaster Management and Risk Reduction into national policies, planning and programmes. Main stakeholders of the committee are:

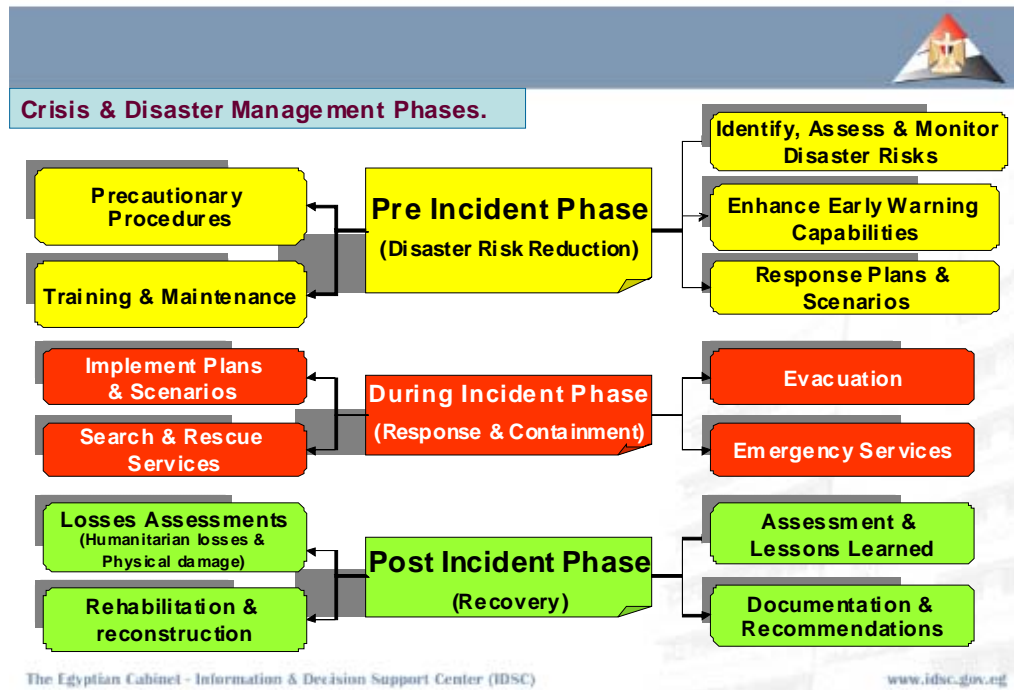
- The Cabinet Information and Decision Support Centre (IDSC) “Chair”.
- All Ministries Representatives.
- All Governorates Representatives.
- Public Authorities Representatives.
- Civil Society and NGOs.
- Private Sector.
- Specialized Experts (*ad hoc*).

Main Goals of the NCCMDRR:

- Planning and Preparedness.
- Coordination on the National Level in Emergencies and Disasters.
- Studying different Crises and Disasters towards minimizing their Destructive Impacts.
- Enhance inter-agency cooperation.

Highlights of main mandates of the NCCMDRR:

Figure (10)
Crisis and Disaster Management Phases



Source: The Egyptian Cabinet – Information and Decision Support Center (IDSC).

- Assist and Participate in the Crisis and Disaster Management and its risk reduction on the National Level by Coordinating with the concerned entities in the Country.
- Study the different Crises and their different Aspects to clearly define the Concerned and Involved Organizations and to agree on the necessary alternatives and measures.
- Exchange Experience and knowledge in Crises and Disaster Management and its risk reduction by Cooperating with the concerned entities to review and upgrade the procedures needed to deal with the different occurring Crises and Disasters and getting prepared for it.
- Reviewing National Policies and Strategies related to Crisis and Disaster Management and its risk reduction at the National Level.
- Developing/Updating mechanisms of monitoring and early warning in the field of crisis and disaster management and its risk reduction when possible, applying the best available technologies.
- Revising the Plans of all Ministries and Governorates Involving Crisis and Disaster Management and its risk reduction. In this context.
- Provide assistance in developing Response and Preparedness Plans, building on the experiences of other developed countries in this area.
- Participate in the process of developing the National Framework on Disaster management and risk reduction.

- Developing the Framework of the National Training Plan in the field of crisis and disaster management and its risk reduction.
- Supervising / assisting the ministries, governorates and other entities in preparing training on the simulation scenarios in the field of crisis and disaster management and its risk reduction.
- Reviewing and evaluating the training plans of different ministries and governorates in the field of crisis and disaster management.
- Raising awareness regarding crisis and disaster management and its risk reduction. This includes holding relevant capacity building workshops targeting concerned staff members of Ministries and Governorates.
- Collecting data, monitoring the implementation of the preventive and precautionary procedures by the concerned entities of the state, and prepare relevant reports.
- Ensure the more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, and preparedness and vulnerability reduction.
- Reviewing and integrating risk reduction associated with existing climate variability and future climate change into strategies for the reduction of disaster risk and adaptation to climate change; ensure that the management of risks associated with geological hazards, such as earthquakes and landslides, are fully taken into account in disaster risk reduction programmes.

2.3. Roles and Responsibilities of IDSC / CMDRS

Roles and Responsibilities of IDSC / CMDRS in Crisis Management and Disaster Risk Reduction were phased as follows:

- Pre Incident (Planning and Preparedness).
- During Incident (Response and Containment).
- Post Incident (Recovery).

During Pre Incident (Planning and Preparedness):

1. Reviewing National Policies and Strategies related to Crisis Management and Disaster Risk Reduction on the National Level.
2. Developing mechanisms of monitoring and early warning in the field of Crisis Management and Disaster Risk Reduction when possible.
3. Revising the Plans of all Ministries and Governorates Involving Crisis Management and Disaster Risk Reduction. In this context, provide assistance in developing Response and Preparedness Plans, building on the experiences of other developed countries in this area.
4. Developing the Framework of the National Training Plan in the field of Crisis Management and Disaster Risk Reduction.

5. Supervising / assisting the ministries, governorates and other entities in preparing training on the simulation scenarios in the field of Crisis Management and Disaster Risk Reduction.
6. Reviewing and evaluating the training plans of different ministries and governorates in the field of Crisis Management and Disaster Risk Reduction.
7. Raising awareness regarding Crisis Management and Disaster Risk Reduction. This includes holding relevant capacity building workshops targeting concerned staff members of Ministries and Governorates.
8. Collecting data, monitoring the implementation of the preventive and precautionary procedures by the concerned entities of the state, and prepare relevant reports.

During Incident (Response and Containment):

1. Coordinating the formulation of the Central Operational Room in charge of managing the crisis. (Headed by the Leading Ministry and Membership of other Concerned Ministries and Entities).
2. Receiving regular reports from the concerned operational entities in charge of crisis / disaster management.
3. Monitoring the incident in order to keep a continuous update and evaluation of the situation during the Incident.
4. Collecting, Classifying and processing the information - collected from every possible source - about the affected / harmed areas.
5. Helping in Mobilizing and maneuvering Equipment and Facilities between the different Ministries / Governorates, when needed, toward effective response.

During Post Incident (Recovery):

1. Evaluating the actions taken by different entities in handling the crisis during the response phase.
2. Documenting the incident and derive the Lessons Learned in order to avoid the negative aspects (if any).
3. Revising and updating the plans according to the current situations after the incident.
4. Submit the final conclusion and recommendations to the respective entities.

2.4. The Scientific Advisory Board/ NCCMDRR

Considering the scientific and technical aspects related to the Disaster Management and Risk Reduction, a Scientific Advisory Board was established as a subsidiary body to the NCCMDRR in 2008

SAB main mandates are online with the NCCMDRR particularly in subjects related to scientific and technical areas. Amongst its mandates is to strengthen, through cooperation with scientific research institutions, academia, research centres of the concerned ministries and agencies, the technical and scientific capacities to develop, and apply methodologies, studies and models to assess vulnerabilities and impacts of hazards, including the improvement of regional monitoring capacities and assessments. Risk assessment, mapping, early warning system, research development and similar areas will be amongst the focus of the SAB.

The SAB main Objectives related to disaster management and risk reduction:

- Proposing and developing national policies and frameworks.
- Enhance the technical and scientific capabilities
- Enhance the use of advanced/ best available technology
- Enhance the cooperation between the scientific communities

NCCMDRR/SAB will develop plans to be implemented by concerned national research centres, academia and related research units to strengthen the technical and scientific capacities, in order to develop and apply methodologies, studies and models to assess vulnerabilities and impacts of hazards, including the improvement of the national monitoring capacities and assessments.

2.5. Legal Framework

Although a legal framework that consist several actions relevant to the Crisis Management and Disaster Risk Reduction exists in Egypt (more than 10 laws and decrees), there is a need for revised legislation and their enforcement and to institutionalize the legal structures.

The following is a summary of the most relevant legal instruments relevant to DRR in Egypt:

1. Law 148/1959: Article 3 gives CPA full responsibility for disaster risk reduction by protecting humans and both public and private properties. It also frees all financial transactions in times of disaster from all fiscal regulations stipulated by normal government practice (Article 9). Article 17 details the authority of the Minister of Interior to establish corps of volunteers, and Article 19 authorizes the Minister of Interior to implement a plan for civil protection and impose penalties on offenders against its provisions.
2. Law 30/1977 regulates the civil protection procedures inside industrial establishments to minimize human-induced risks, and means to protect workers and investments.

3. Decree of the Minister of Interior No 11/1966 formulating the Civil Protection Units in the Governorates; and a Ministerial decree No 382/1970 detailing the membership of these Units chaired by the Governorates.
4. Ministerial decree no 1182/1981 establishing the Civil Protection Units in industry and the same in certain Security departments within industrial establishments.
5. Ministerial Decrees No 1394/1981 and No 1395/1981 establishing the Civil Protection Units in certain industrial zones; and in factories, utilities, plants and establishments.
6. Ministerial Decree No 2092/1983 reorganizing the Civil Protection Authority.
7. The joint Decree of both the Ministries of Interior and Defense No 63/1983 concerning the cooperation of both ministries,
8. The Ministerial Decree No 142/1986 amended by the Decree No 902/1986 concerning control of village fires.
9. Decree of the Minister of Interior No 349/1986 regulating voluntary work in the field of Civil Protection.

Locally, there are several protocols between relevant agencies and institutions pertaining to Disaster Management and Risk Reduction including but not limited to the Ministry of Interior, the Egyptian Atomic Energy Authority, the Academy of Scientific Research and Technology (ASRT), the Ministry of Housing, Utilities and Urban Communities, the Egyptian Environmental Affairs Agency and the Armed Forces. These protocols intend to organize and coordinate the participation of these agencies in disaster management and reduction and elaborating codes and plans for protecting humans and facilities in case of disastrous accidents.

2.6. Capacity Building

Strengthening of the existing institutions is needed at all levels, particularly at the Governorates and executive Entities, since those are in charge of the operational level.

Capacity building, through the limited available resources is a continuous practice in Egypt, either at national or local (governorates) levels.

While considering financial constraints and sometimes limitation in human resources, enhanced capacities at all levels to monitor and respond to potential disaster and environmental risks is an ongoing practice. This kind of practice is provided from the relevant specialized authorities as for example:

The "CMDRS" of the IDSC offers training in several areas and to several levels, in flash floods, fires, Avian Flu...etc. The Civil Protection Authority

“CPA”/Ministry of Interior has training centres covering all Governorates, providing training to specialized personnel. The Centre for Crisis Management of the Military Forces is offering training on crisis management.

The Egyptian Environmental Affairs Agency (EEAA) is offering training in environmental crisis management. The Ministry of Health and Population is offering training in issues relevant to disaster risk reduction. The Crisis research Unit at Ain-Shams University organizes conferences and training programmes in crisis management. The Arab Academy for Science, Technology and Maritime Transport offered training in crisis management.

NGOs as the Egyptian Red Crescent and CARITAS participate in enhancing the capacity of the local communities through either training or awareness campaigns.

At present, Egypt is regarding safety, security, Disaster Management and Risk Reduction as elements of high considerations while approving development projects provided from the different ministries and governorates to be considered and integrated in the national plan for funding.

2.7. *Financing and Resources*

Some Egyptian Institutions or Agencies have specific budget lines for preparedness; these budgets are limited and sometimes are allocated in ad hoc bases to meet the need of the post incident impacts.

Some Ministries earmarked budget, although limited, for disaster management as the Ministry of Social Solidarity. The Environment Protection Fund (EPF) is allocated for the Egyptian Environmental Affairs Agency (EEAA), to enhance, among several activities, strategies for environmental disaster risk reduction. The Ministry of Health and Population has an annual budget for disaster risk reduction. Also CPA has similar budget.

The Social Fund for Development (SFD) has several success stories in alleviating the impacts of natural disasters, as for its role with the affected Governorates in Upper Egypt in the incident of the flash flood in 1996. Also SFD financed a Dam construction in Sinai to prevent the impact of flash flood.

Insurance Companies are amongst the financial mechanism raising the awareness of disaster and risk reduction and in securing funds to minimize the negative impacts of disasters.

2.8. Risk assessment

Risk assessment was developed for several issues, (earthquakes and flash floods for example). National and local risk assessments based on hazard data and vulnerability information are partially employed. However, ongoing efforts started to build the first comprehensive database on areas at risk (hazards maps). Standardized risk assessment methodologies for some sectors (earthquakes, floods, and fires) are being adapted and endorsed by the government and applied by local government as an integral part of the development planning process.

Research methods for risk assessment were developed in some sectors; yet, the integrated concept of developing research methods and tools for multi risk assessments and CBA analysis is not achieved.

The first significant step towards achieving this concept was the establishment of the Scientific Advisory Board. Amongst the mandates of this board is to strengthen, through cooperation with scientific research institutions, academia, research centres of the concerned ministries and agencies, the technical and scientific capacities to develop, and apply methodologies, studies and models to assess vulnerabilities and impacts of hazards, including the improvement of regional monitoring capacities and assessments.

2.9. Database and Information System

National Information Management System is in the process of building up within the Crisis Management and Disaster Reduction Sector "CMDRS" of the IDSC. The process has started by establishing of a Crisis Management Information System (CMIS), including:

- Integrated database (In the process of revision, development and update).
- Website*.

The website was designed with the objective of raising awareness regarding crisis management and disaster risk reduction; this includes relevant information and data regarding capacity building workshops targeting concerned staff members of Ministries and Governorates, organized by Crisis and Disaster Management Sector. The website also includes breaking news on disaster risk reduction, general information on crisis management, potential risks, and responsible ministries for each type of risk.

* www.crisismanagement.idsc.gov.eg

The Web will enable the accessibility on relevant information on disasters at all levels, to all stakeholders (through networks development of information sharing systems etc).

The database includes the following:

- General Procedures Manual for Crisis Management and Disaster risk reduction on the National Level.
- A number of models of Specific contingency and preparedness Plans/scenarios for crisis and disaster management and it's risk reduction for instance:
 - Emergency plan to address Nile related crises and its risk reduction.
 - Emergency plan to address major fires and its risk reduction.
 - The National Plan to manage disasters of Flash Floods in Egypt and its risk reduction.
 - The National Plan to manage disasters of Earthquakes in Egypt and its risk reduction.
 - National contingency plan for pandemic influenza.
 - Simulation scenarios in the field of crisis and disaster management and risk reduction.

The Government established an information database for each Governorate, including socio-economic information, administrative information, resources and physical infrastructure. The database includes information on vulnerable and exposed places to hazards and risk. These databases are updated regularly. Presently, the preparation of both local and national Risk maps (GIS) is progressing. Database is considered for development with the focus of man-made hazards.

The Government has also established the National Centre for Planning State Land Use. Amongst its mandate is to identify hazard prone areas and develop codes of practice and conditions for the development in such areas.

Systems are being developed at sectoral level, to monitor, archive and disseminate data on key hazards (as earthquakes and flash floods) and vulnerabilities. However, archiving and dissemination of data on key hazards at the national level is within the mandate of the NCCMDRR. Supported by Crisis Management and Disaster Reduction Sector "CMDRS" and relevant institutions. However, the system is to be supported to enable the timely dissemination of information to allow decision makers and communities to take effective action to reduce risk.

Ongoing efforts to build the first comprehensive database on areas at risk (hazards maps), but updating of the information not yet considered; problems remain with quality and information resolution.

2.10. Developed Management and Contingency Plans

Some contingency plans are being developed, however disaster preparedness plans are in the process of development at all administrative levels.

Examples of developed emergency and contingency plans are as follows:

- Emergency plan to address major fires and its risk reduction.
- The National Plan to manage disasters of Flash Floods in Egypt and its risk reduction.
- The National Plan to manage disasters of Earthquakes in Egypt and its risk reduction.
- National contingency plan for pandemic influenza.
- Simulation scenarios in the field of crisis and disaster management and risk reduction.
- A national contingency plan for environmental disasters has been drafted by the Ministry of Environment and is being revised by the National Committee for Crisis Management and Disaster Risk Reduction.
- The National Oil Spill Contingency Plan (NOSCP) was developed by the Ministry of Environment.

The disaster preparedness and response planning for recovery and rehabilitation efforts will be established and benefited from lessons learned from previous disasters.

2.11. Early Warning System

Early warning systems linked to some major hazards (earthquakes and floods) are in place, with outreach to communities. This warning system links mostly with the media and employs a variety of communications processes, with a structure of hierarchical relations through which communication flow.

Currently the Crisis Management and Disaster Reduction Sector "CMDRS" of the IDSC has initiated and developed a mechanism, to be further

improved and enhanced, to enhance the communication, to enable exchange relevant information during hazard events and disasters and serve at present as a focal point for national grid of communication, through the following provisional mechanism:

- Establishing a Central Operational Room for crisis Management in The Cabinet information and decision support center (Focal Point).
- Supporting Ministries and Governorates to establish operational rooms and enhancing communications with the Central Operational Room.
- Setting up an Emergency and Communication System connecting all ministries and governorates with the main operational room.

Media broadcasts programs for raising community awareness with regard to disaster impacts and risk reduction, particularly on the following up of world wide disasters and impacts.

Post-event review is one of the mandates of the CMDRS/NCCMDRR that is regularly exercised further to any large event in the country.

2.12. Capacity Building/Training

The Crisis Management and Disaster Reduction Sector “CMDRS” of the IDSC is organizing quarterly workshops on different issues related to crisis and disaster management. Similarly, Ministries and relevant agencies organized workshops and developed their information systems.

Development of a national training and capacity building programme including:

- Multi- agency trainings,
- Local, National joint exercises
- Training on risk assessment

Incorporation of DRR elements in basic curricula will be considered by the Ministry of Education to ensure continuous learning and reinforces knowledge for disaster risk reduction. The Ministry was requested to develop and incorporate DRR in the school curricula. Presently, schools received, on ad hoc bases, pamphlets and simple informal educational materials including information on risk, hazards, disasters and related issues.

Training is however developed in this domain, where training programmes for professionals and technicians are conducted and promoted by the institutions at some levels and/or in some areas.

Regular training drills and rehearsals are held to test and develop disaster response programmes, a success story of this issue is proved by the Pandemic Influenza, as the CMDRS/IDSC initiated the following activities:

- a) At National Level:
 - A Simulation Training Exercise was conducted at the Ministry of Health and Population in order to test Reporting Track, and the procedures taken by the health directorates to validate detection of the Pandemic Influenza. The training was held with 3 Governorates (El-Beheira, Red Sea and Menia Governorate).
- b) At Local Level:
 - Reviewed, developed, and evaluated Menofiyah Governorate plan aiming at encountering the Pandemic Influenza to be used as a model for the other Governorates.
- c) A Simulation Training Exercise (using Desktop Exercise) was held in Menofiyah and Sharkia Governorates in order to test and revise the procedures set to encounter the Pandemic Influenza, test the Reporting Track, Soundness of the procedures, different roles of the directorates and ensure comprehensiveness of the plan.
- d) Preparation of a Pandemic Response Chain of Command on the Local Level (Governorate Level).
- e) Preparation of a Manual on how to set up Governorates Response Plans to the Pandemic Influenza.

However, criteria have not yet been developed to monitor the benefit of the society from training, awareness and education and signs of cultural changes.

Egypt signed an agreement with the International Organization for Civil Protection; accordingly a Regional Centre for Training was established in Cairo to provide service to the countries of the Middle East and North Africa (MENA Region). Among the responsibilities of this Centre is to support communication between different countries and organizations; exchange of information and expertise; delivering training courses, organizing conferences and workshops related to the field of civil defense and disaster reduction issues; in addition to raise awareness of the local communities with regard to contingency planning to reduce human losses. This centre is one of the five established centres worldwide.

2.13. Public Awareness

Presently, the Crisis Management and Disaster Reduction Sector “CMDRS”/ NCCMDRR are developing a national strategy for the public awareness to stimulate a culture of disaster resilience, with outreach to urban and rural communities. This strategy will be a long-term plan of action with specific goals. Meanwhile, the CMDRS has developed a national training and capacity building programme including:

- Multi- agency trainings,
- Local, National joint exercises
- Training on risk assessment

2.14. Significance of national development policies and plans (on environment, women) which relate to/ impact on disaster risk reduction and recovery objectives.

Egypt recognizes Gender balance as a core factor to be considered in the implementation of disaster risk reduction measures, and continuous efforts are paid to narrow the gender gap, accentuated by poverty, that has been generally improved from 1990 until present. Despite some good success indicators, the country is working towards the gender empowerment to rank highly then at present.

Economic opportunities through small project fund are offered through the SFD to assist in the openings of more work opportunities and benefits for gender. Economic participation continuously increasing and show remarkable progress in the country. On the other hand, educational attainment has sharply increased.

Therefore, the National Policy Framework, to be developed, will target at the most vulnerable groups and will be effectively implemented through the roles of both women and men.

Meanwhile, Gender workshops are usually considered and targeted the least developed environment communities. There are some workshops activities directed to the women in the rural areas in particular as “the Raedat/Pioneers Rural workshop”.

Egypt adopted its National Environmental Action Plan (NEAP) 2002 – 2017 to Ensure Environmental Sustainability.

2.15. Key instances from Programme Activities

The following summarizes the key instances from programme activities:

1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

- Formulation of the Ministerial committee for crises Management headed by H.E. the Prime Minister and the membership of concerned ministers.
- Initiation of the National Committee for Crisis Management and Disaster Risk Reduction (NCCMDRR) with new mandate.
- Formulation of the Scientific Advisory Board (SAB) for National Committee for Crisis Management and Disaster Risk Reduction.
- Upgrading the Crises Management and Disaster Risk Reduction Sector (CMDRS) at the Cabinet Information and Decision Support Center (IDSC) as a national body to take responsibility of coordinating all issues related to Crises, Disaster Management and Risk Reduction in close cooperation with all concerned authorities and, to act as a secretariat for the ministerial committee and the National Committee for Crisis Management and Disaster Risk Reduction.

2. Identify, assess and monitor disaster risks and enhance early warning

- The GOE recognized the importance of supporting a national platform by taking the following initiatives:
 - Establishing a Central Operational Room for crisis Management in The Cabinet information and decision support center (Focal Point).
 - Supporting Ministries and Governorates to establish operational rooms and enhancing communications with the Central Operational Room.
 - Setting up an Emergency and Communication System connecting all ministries and governorates with the main operational room.
 - Preparation of Local and National Risk maps (GIS).

3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels.

- Establishing an information infrastructure for crisis management and disaster reduction including:
 - Developing a crisis Management Information System (CMIS)
 - web portal
- Organizing quarterly workshops on different issues related to crisis and disaster management.
- Classification for the potential crisis and disasters in Egypt.
- Development of a national training and capacity building programme including:
 - Multi- agency trainings,
 - Local, National joint exercises
 - Training on risk assessment

4. Reduce the underlying risk factors

- Recognizing the importance of this priority which shall need future actions on the national and local level, we feel that the following existing legislations and institutional arrangement could be considered as major steps towards achieving sustainable use and sound management of natural resources.
- The National law for the environment no.4 for 1994 which includes among other articles:
 - Article 19: Requiring An Environmental Impact Assessment for new establishments (EIA).
 - Article 25: Concerning the preparation of the National Environmental Disaster Contingency plan.
- The Establishment of the National Authority for land-use planning (2001)

5. Strengthen disaster preparedness for effective response at all levels

- Development / Revising of Emergency and crisis management Plans for all ministries and governorates.
- Developing of the general procedures manual for the cooperation with civil society in crisis and Disaster management.
- A national contingency plan for environmental disasters has been drafted by the Ministry of Environment and is being revised by the National Committee for Crisis Management and Disaster Risk Reduction.
- Development of the National oil spill contingency plan, by the Ministry of Environment.
- Developing an integrated national training and capacity building program for crisis and disaster management.
- Establishment of bilateral cooperation with potential financing agencies and donors, for providing technical assistance in developing the national arrangements.

2.16. *Towards the development of the National Policy Framework on Crisis Management and Disaster Risk Reduction*

Further to the establishment and functioning of the NCCMDRR; some sectoral plans and policies relevant to Disaster Management and Risk Reduction have been recently developed. Currently, “A National Policy Framework on Crisis Management and Disaster Risk Reduction” is in the process of preparation. This framework will incorporate a well-designed and mutually-reinforcing set of plans by the government to reduce the risk of disasters, including legislation, planning and resource allocation.

The National Policy Framework of the Crisis Management and DRR is to be developed in full partnership and involvement of stakeholders from

different institutions, NGOs and public sectors. This framework will incorporate sectoral plans and policy into the design and implementation of emergency preparedness, response and recovery programmes in the corresponding ministries. The Disaster Management and Risk Reduction will be incorporated in the national policy framework and will be considered in the design and implementation of emergency response, recovery and rehabilitation processes. Lessons learned from previous disasters will be included into pre-disaster planning in order to avoid past mistakes and address the underlying causes of risk.

Although policies on crisis management followed a sequence of changes, and mostly were developed on reactionary bases, the national policy framework on crisis management and disaster risk reduction to be formulated, will take into consideration the preparedness concept. However, it should be emphasized that the process will be faced by the coordination challenge between the various concerned institutions and from the central to local level.

The framework will benefit from the Post-disaster reviews that are routinely undertaken to evaluate the responses and actions taken further to any incident and to learn lessons on risk reduction; these lessons are incorporated into plans and preparedness for response (sectoral). Mechanisms and tools are being adopted for the implementation of environmental management and post-disaster recovery programmes for frequent events.

3. *'Drivers' of Progress and Challenges*

3.1. *Institutional and Legal mechanisms*

On line with the HFA, the Government has developed the National Committee for Crisis Management and Disaster Risk Reduction (NCCMDRR) The NCCMDRR, a multi sectoral platform for disaster risk reduction and crisis management is functioning as the "National Platform", having several mandates corresponding to the goals and priorities of actions outlined in the HFA 2005. Because DRR is a cross-cutting and complex issue, the NCCMDRR is a multi-stakeholder mechanism that provides coordination, develops a culture of prevention, and facilitating the integration of DRR into national policies, planning and programmes.

National Policy Framework for Disaster Management and Risk Reduction is developed at present to complement the Disaster Management System in Egypt. The country will fully consider the integration of the risk reduction into sustainable development policies, planning and programming at all levels.

Besides, there is positive indicator for a shift from the reactionary approach to mitigation and preparedness approach. Mandates for the respective institutions in relation to disaster management and reduction, and legal aspects will be revised and coordinated through the NCCMDRR.

The Government is strongly committed to enhance the institutional arrangements for the disaster management, this was manifested by a series of events started in 2000 by establishing a Crisis and Management Affairs (CEMA), This was followed by the establishment of a Crisis Management and Disaster Reduction Sector "CMDRS" within the Information and Decision Support Centre (IDSC), Cabinet of Ministers, the NCCMDRR (corresponding to the National Platform) in 2006, and finally a Scientific Advisory Committee was established in 2008 as a subsidiary body to the NCCMDRR.

As a crucial step toward raising public awareness, the Ministry of Education will incorporate the disaster management as part of the schools Curricula.

At present, Disaster management and Risk Reduction are considered at Sectoral Level, where the concerned Ministries have incorporated the principle of disaster management and reduction in their planning and development policies as the Ministry of Housing, Ministry of Water and Irrigation, Ministry of Industries, Ministry of Social Insurance....

3.2. Capacities and Human Resource development at all levels

At present, capacity development focuses mostly on training and specialized technical assistance (Short term), however, the strengthening of the capacities of communities and individuals to recognize and reduce risks in their localities is a medium-term objective that is running parallel to the training and technical assistance activities.

However, and as appropriate, information exchange, network development, management skills are being developed and implemented.

The Crisis Management and Disaster Reduction Sector “CMDRS”/IDSC, is committed to sustain capacity development needs through institutions that support capacity development and capacity maintenance as dedicated ongoing objectives.

The “CMDRS”/IDSC developed a Framework National Plan for Training on Crisis Management and Disaster Risk Reduction, including directives, guidelines...etc. Institutions will benefit from the framework in developing their sectoral plans.

Institutions at the local level are in the way to develop and strengthening their capacities to meet the requirements of the disaster management and risk reduction.

Local institutions, governorate and communities are being trained according to the training package in disaster including response when appropriate (The Pandemic Influenza training was a success in this regard, taking into consideration the small villages, gender and social dimensions, level of preparedness and response.)

Representatives of all Governorates “Local level”, Civil Societies, NGOs and Private Sector are represented in the NCCMDRR. Besides, at operational levels, decentralization is ensured according to the designated level of intervention based on the type and magnitude of the disasters, as shown below.

Crisis Management Bodies/Entities were established in all Governorates (Local level), Ministries, agencies and institutions; however their capacity and resources are to be enhanced.

Promotion of knowledge is regularly practiced through capacity building programmes, although limited for funding reasons.

3.3. *Partnerships – civil society, communities, private sector*

Civil society organizations are deeply embedded in Egypt, grounded in historic philanthropic practices, frequently exercised through faith-based “Wakf” or Endowment Funds. Such charity work has exhibited continuity over the years.

The Egypt Human Development for 2008 argues that greater civic participation led by a body of civil society organizations will not only result in a more engaged citizenry but will also meet the developmental goals of improved public goods and their delivery in Egypt.

It is clear that civil society, whether in its philanthropic, advocacy, or interest group manifestation has become critical to any integrated and sustainable process of development. This is evident in the proliferation of registered non-profit and government organizations in Egypt over the past decade, now estimated at over 21,000 and growing. This figure does not include the thousands of community development associations, many of which are being revitalized to better serve local needs.

All civil society organizations under Egypt's Association Law 84/2002 must have several features in evidence. These are that they occupy the public space between the family, the market and the state; that they are not-for-profit; that they seek to achieve the ‘collective benefit’ of society; and that they operate under a legal framework.

Community participation is ensured through the participation of the local level and representative of the Egyptian Red Crescent Association (ERCA) and the National Union of NGOs (about 22,000 NGO) in the NCCMDRR as well as local bodies/entities for disaster and crisis management.

In Egypt there is effective (historical) community engagement and participatory approach that proved to realize effective disaster management and risk reduction. Voluntary association as the Egyptian Red Crescent Association (ERCA) started in 1912 is recognized as the main NGO dealing with disaster, and is joining governmental efforts in cases of crisis and disasters. The ERCA was involved in disaster rescue relief in 1992 earthquake in Egypt, and 1996 flash flood. ERCA contribute in offering temporary shelters, resettlement and rehabilitation.

CARITAS Egypt is another NGO mandated to deal with crisis and disasters, and joined the efforts in the relief and rehabilitation further to the major disasters events in Egypt.

Presently, public-private partnerships “PPP” are considering the social and economic contributions to offer opportunities to combine resources and expertise to act jointly to reduce risks and potential losses.

Local relevance, community experience or traditional knowledge in disaster risk reduction will be integrated within the National Policy Framework (in preparation).

4. Contextual Challenges

The NCCMDRR, the functioning multi-sector National platform, will require further development to streamline the cooperation for ensuring better interagency, sectoral, central – local level cooperation. The mandate and responsibilities of the NCCMDRR is to be further developed to encompass the identified goals and priority actions of the HFA. Resources are to be made available in sustainable manner; more efficient role is to be considered further to national commitments and political will.

Although policies on crisis management followed a sequence of changes, and mostly were developed on reactionary bases, at present a national policy framework on crisis management and disaster risk reduction is in the process to be formulated, taken into consideration preparedness concept. However, it should be emphasized that the process will be faced by the coordination challenge between the various concerned institutions and from the central to local level. To overcome this challenge capacity building and resources are to be enhanced particularly at local level.

Resources are one of the great challenges that face the development of the DRR concept. Resources are not adequate at national or local levels; neither is dedicated to the preparedness level.

Human resources although are available at all level but are not well trained to cope with the needs of the Disaster management and Risk Reduction.

Sectoral database and GIS with adequate information exists. Ongoing efforts are directed to build the first comprehensive database on areas at risk (hazards maps) and to build the first vulnerability database relevant to the climate change are to be maintained and developed in a short period. The quality of information and data is to be revised, standardized and updated. Identical efforts are to be provided for the local levels, this will require the establishment of efficient local system with adequate resources. Meantime building the capacity and technical infrastructure is to be a continuous exercise covering all levels and sectors.

The NCCMDRR/CMDRS and the envisaged National Policy Frame work have looked at developing a countrywide public awareness national strategy. Implementable strategy will require mechanisms supported by trained personnel to enable its efficiency.

The role of the private sector and the adoption of the PPP will ensure the protection of a state's most vulnerable economic activities and productive sectors, and will be an efficient strategy to help reduce the overall impacts of disasters. This will require the set of public hearing sessions, vitalizing the role of investors to participate with the government in the protection of the most vulnerable activities.

Although construction codes were developed and the law required for their implementation, violation of these codes happens and the results are catastrophic. Therefore enforcement of the Construction Codes will remain as a challenge. Disaster risk reduction elements are incorporated in land-use plans particularly for the newly expanding human settlements.

The envisaged National Policy Framework will advise on the inclusion of the disaster risk reduction principles by the relevant authorities in their operational plans when designing post disaster recovery and rehabilitation processes. The Housing, Utilities and Urban Communities will be encouraged to implement international post disaster recovery and reconstruction norms and standards.

The NCCMDRR/CMDRS will put on track the modalities to institutionalise procedures to integrate disaster management and risk reduction measures into national sustainable development strategies, plans and programmes in key areas such as poverty reduction, housing, water, sanitation, energy, health, agriculture, infrastructure and environment to ensure that development does not create disasters. In this regard the Ministries of Planning, Social Solidarity and relevant institutions will lead the integration process.

Although Egypt is facing several social and economic challenges; the government has set priorities to alleviate poverty and subsidize the living standards for the majority of people. Therefore, financial reserves and contingency mechanisms are in place, but very limited, and sometimes on ad hoc bases to support effective response and recovery when required. The government, however, committed resources for early recovery programmes, including quick assessment of damage, needs and capacities, restoration of critical infrastructure and livelihood, following major disaster events to support the resilience of affected communities, until long term reconstruction of assets takes place.

Conclusions and recommendations

Egypt recognizes the challenges posed by disasters as disaster loss is on the rise with grave consequences for the survival, dignity and livelihood of individuals, particularly the poor and hard-won development gains. Disaster risk is increasingly of global concern and its impact and actions in one region can have an impact on risks in another, and vice versa.

Responding to its commitment to the various tasks outline in HFA, Egypt has strengthened and developed its national institutions and policy to meet these tasks.

At present, Egypt is developing its National Policy Framework on Crisis Management and Disaster Risk Reduction.

Some good signs of progress have been made along several areas and sectors; this has been manifested in the major outlines major achievements as follows:

- Enhancing the institutional arrangements by the strengthening and assigned new mandates to the NCCMDRR (national platform), empower the CMDRS and establish the SAB.
- Enhancing National Coordination through the NCCMDRR in the area of crisis and disaster management and its risk reduction, including the harmonization of the relevant national efforts in Crisis Management.
- Developing an integrated related information system.
- Preparation of the General Procedures Manual for Crisis and Disaster Management and its risk reduction on the National Level.
- Preparation and development of a number of models of Specific Plans in the area of crisis and disaster management and its risk reduction (flash floods, earthquakes, fires....).
- Enhancing the role of Civil Society organizations to activate their role in the area of crisis and disaster management on the national and local levels.
- Capacity building and strengthening of the capabilities at the local level.
- Strengthening the international cooperation capabilities with the concerned international entities in the area of crisis and disaster management in addition to bilateral cooperation with Potential Donor Countries in this field.
- Preparation of the Country to encounter the Pandemic Influenza.

However, to complement the above achievements and to ensure a successful development in the area of disaster management and risk reduction, the following recommendations are to be considered.

Recommendations:

A. Policy and Legal aspects

The current Crises and Disaster management mechanisms and structure in Egypt are to be further strengthened and supported to meet the envisaged emergent requirements of the country's rapidly developing economy associated with increasing population, and to encounter the broad categories of new risks and hazards including threats to sustainable development.

Egypt is to fully consider the integration of the risk reduction into sustainable development policies, planning and programming at all levels.

The NCCMDRR, the functioning multi-sector National platform, will require further development to streamline the cooperation for ensuring better interagency, sectoral, central – local level cooperation. The mandate and responsibilities of the NCCMDRR is to be further developed to encompass the identified goals and priority actions of the HFA.

Strengthening and coordination of the inter-agencies relations took place through the NCCMDRR and the CMDRS. Legal aspects are to be revised through the NCCMDRR in order to integrate environment related policies and plans, including for land use, natural resource management and adaptation to climate change, since the existing modalities are not fully integrated although existing, and to meet the requirements of the Disaster management and Risk Reduction.

The multi-sectoral approach is to be adopted and operationalized to ensure the full integration and harmony.

B. Development of the National Policy Framework on Crisis Management and DRR

The National Policy Framework on Crisis Management and Disaster Risk Reduction is in the process of preparation. This framework is to incorporate a well-designed and mutually-reinforcing set of plans by the government to reduce the risk of disasters, including legislation, planning and resource allocation.

The National Policy Framework of the Crisis Management and DRR is to be developed in full partnership and involvement of stakeholders from different institutions, NGOs and public sectors. The DRR is to be incorporated in the national policy framework and will be considered in the design and implementation of emergency response, recovery and rehabilitation processes. Lessons learned from previous disasters is to be included into pre-disaster planning in order to avoid past mistakes and address the underlying causes of risk.

C. Resources

Resources are to be made available in sustainable manner; more efficient role is to be considered further to national commitments and political will. Appropriate funding mechanism is to be mobilized and dedicated in sustainable manner. Capacity building for national specialists and experts, mutual cooperation in regional and international bases is to be considered. Adequate resources (both financial and human) will enable the increase in readiness for managing disaster impacts, and improves response measures.

Local authorities and community should be empowered to reduce risks by having a proper access to the “Awareness Materials”, to enable the development of a prevention culture. Training and capacity building will be required.

Governmental and NGOs are to mobilize and empower resources either from national sources through PPP or international funds to implement disaster risk reduction plans and activities at all administrative levels

D. Capacity Building and Public Participation

The envisaged National Policy Framework is to highlight the role of the private sector and the adoption of the PPP and to recommend means for mobilizing resources and encouraging the society participation at all levels.

Training of national experts in International Institutions that have early considered, or have recognized experience on related matters deemed necessary.

NGOs and gender participation and role are to be strengthened at all levels.

E. Information and dissemination

The National Information Management System (IMS) to be launched soon has to consider developing parallel terminals points at the local level. These terminals are to ensure the flow of information on disaster risks and protection options, especially to citizens and local authorities in high risk areas. The availability of resources (both financial and human) would facilitate the establishment of the network.

The existing mechanism developed by the CMDRS/IDSC to enable exchange relevant information during hazard events and disasters is to be improved and empowered. Capacity building and technical support will be needed to ensure the development of efficient mechanism.

F. Monitoring and EWS

Systems for monitoring and archiving at local levels are to be considered and functioning. This will be subject to resources availability, and decentralization. These systems are to be linked to the national system once established. Meanwhile, the existing sectoral system is to be enhanced.

Areas of weakness are to be identified prior to the establishment of a national early warning system, in particular monitoring and response capabilities. The envisaged National Policy Framework for Crisis Management and Risk Reduction has to incorporate this urgent issue. The Scientific Advisory Board of the NCCMDRR is to continue its efforts and contribute to the identification of gaps and provide the necessary recommendations and plan of action to develop the EWS.

Appropriate funding mechanism is to be mobilized and dedicated in sustainable manner. Capacity building for national specialists and experts, mutual cooperation in regional and international bases is to be considered.

Annexes

Annex I

Flash Floods in Egypt

Flash floods are the result of short periods of heavy storms that occur sporadically along the mountainous range of the Red Sea area (including parts of Upper Egypt), and South Sinai. Velocity of flood depends mainly on the basin topography and its soil characteristics. Some of these flash floods cause severe damage to people and infrastructure. In 1979, a flash flood over Quseir and Marsa Alam led to the destruction of the Red Sea Coastal Road and Qena-Quseir road. Flash floods with lower losses occurred in 1972, 1979, 1991 and 1998.

Based on the importance to manage the flash flood, earthquake, fire...etc and their risk reduction, the IDSC/CMDRS initiated the development of an action plan to each of the above mentioned disaster. Consequently the National Plan to manage disasters of Flash Floods in Egypt and its risk reduction was developed and adopted in 2007.

The following is the outlines of the National Plan to manage disasters of Flash Floods in Egypt and its risk reduction, as an example representing the various developed plans in the area of disaster management and risk reduction in Egypt:

Outlines of the National Plan to manage disasters of Flash Floods in Egypt and its risk reduction:

Section 1: General Outlines and Methodology for the Plan Development.

Phases of the flash flood management and risk reduction:

- Pre Incident (Planning and Preparedness).
- During Incident (Response and Containment).
- Post Incident (Recovery).

Objectives

Responsible Institution/Entity and Supporting Entities

Application of the Plan

Plan Design

Section 2: Flash Floods Risks in Egypt

Review of studies on flash flood and generated risks in Egypt

Flash flood Risk Magnitude (Reporting and Chain of Commands)

Matrix of the risks magnitude

Warning and Notification

Section 3: Preparedness and Response

Notification and chain of command

Role of Responsible Entity

Role of Supporting Entities

Section 4: Modalities and of coordination at different levels

- Strategic level (Political)
- Planning and Preparation Level (Tactic)
- Executive Level (Operational)

Section 5: Legislations and National Laws

Section 6: Conclusions and Recommendations

Planning and Preparedness
Monitoring and Early Warning System
Research, training and awareness
Structural and Field Operations

Annex II

Preparation for the Pandemic Influenza

- Preparation of the Country to encounter the Pandemic Influenza by taking the following actions:
 - Continuing the current national policy and local procedures in applying strict preventive measurements against the Avian Flu.
 - Establishing simulation sub-committee to organize the Pandemic Simulations and Exercises.
 - IDSC has developed three Notification and Response chains of Command, in order to help ministries and concerned entities in developing their plans as follows:
 - Notification for Verification of the Pandemic Influenza.
 - Notification during the spread of the Pandemic Influenza.
 - Response for the Pandemic Influenza on the National Level.
 - The three Chains of Command were endorsed by the Cabinet Secretary General and circulated to all concerned parties.
- As the National Plan for Preparedness and Response to encounter the Pandemic Influenza requires the following three components:
 - Preparation of the National Scenario for the Pandemic Influenza Management (Prepared by Ministry of Defense).
 - Development of the National Plan of the Lead Ministry to encounter the Pandemic Influenza (Prepared by the Ministry of Health and Population and delivered to all Governorates).
 - Development of Governorates' Response Plans to encounter the Pandemic Influenza (Prepared by Governorates presenting the Local Operational Level).
- IDSC initiated the following activities:
 - a) On the National Level:
 - A Simulation Training Exercise was conducted at the Ministry of Health and Population in order to test Reporting Track, and the procedures taken by the health directorates to validate detection of the Pandemic Influenza. The training was held with 3 Governorates (El-Beheira, Red Sea and Menia Governorate).
 - b) On the Local Level:
 - Reviewed, developed, and evaluated Menofiyah Governorate plan aiming at encountering the Pandemic Influenza to be used as a model for the other Governorates.
 - A Simulation Training Exercise (using Desktop Exercise) was held in Menofiyah and Sharkia Governorates in order to test and revise the procedures set to encounter the Pandemic Influenza, test the Reporting Track, Soundness of the procedures, different roles of the directorates and ensure comprehensiveness of the plan.
 - Preparation of a Response Chain of Command for the Pandemic Influenza on the Local Level (Governorate Level).

- Preparation of a Manual on how to develop Governorates Response Plans to the Pandemic Influenza.
- Holding a meeting for all Governorates General Secretaries to discuss how governorates could prepare their integrated preparedness plans to face the Pandemic Influenza. The meeting aimed at presenting the following:
 - The Manual of Developing Governorates' Response and Preparedness Plans to encounter the Pandemic Influenza.
 - Menofiyah Governorate plan to encounter the Pandemic Influenza.
 - Ministry of Health and Population plan to encounter Pandemic Influenza.
- The IDSC / CMDRS received all Governorates' Response and Preparedness plans.
- All Plans have been revised and validated.
- Accordingly, the Egyptian National Plan for Preparedness and Response to the Pandemic Influenza has been completed by finalizing its 3 above mentioned components.
- The next step is to continue organizing Simulation Training Exercises in all Governorates in order to test and revise the procedures set to encounter the Pandemic Influenza, test the Reporting Track, Soundness of the procedures, different roles of all participants at the plan and ensure comprehensiveness of the plan.