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RESEARCH REPORT ON A COMPARATIVE STUDY OF DISASTER RISK REDUCTION AND POST DISASTER LIVELIHOOD RECOVERY PROGRAM IN JAPAN AND BANGLADESH

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SEQUENCES OF PRESENTATION

- ❑ Introduction
- ❑ Specific Aims of the Research
- ❑ Bangladesh National Disaster context
- ❑ Disaster Management System in Japan
- ❑ Main contents of Countermeasures Basic Acts
- ❑ Concept of recovery process, Principles and Pre-disaster Recovery Planning
- ❑ Definition of Livelihood
- ❑ Bangladesh Disaster Recovery Plan and Program
- ❑ A Case Study of Recovery Program in Bangladesh
- ❑ Bangladesh Disaster Recovery Act/ Guidelines
- ❑ Constraints and Challenges
- ❑ Disaster Victims Livelihood Support System in Japan
- ❑ The Japanese Disaster Relief Act
- ❑ Act on Support for livelihood Recovery of Disaster Victims 1998
- ❑ A Case Study for Recovery From Great Hanshin-Awaji Earthquake
- ❑ Comparison of Japan and Bangladesh DM System and Livelihood Recovery Program and Recommendations

BACKGROUND

Bangladesh is considered the most natural disaster prone country in Asia

Its coastal areas are periodically hit by floods, cyclone, storm surges, tornados, river bank erosion

Most of the households in that areas faces the hard times after loosing their livelihoods.

The livelihoods in the area and even the entire local economy severely affected. Natural, financial, physical, social and human assets are all eroded, markets are disrupted, and these adverse effects can lead to the virtual collapse of the economic and social environment

So, effective pre-disaster livelihood planning and post-disaster livelihood recovery programs are needed to address such risks

As livelihood security is strongly related to the disaster risk reduction (DRR), Government of Bangladesh needs effective pre-disaster recovery planning, capacity building and strong institutional support for implementing different short, medium and long term livelihood programs in post natural disaster recovery and reconstruction.

SPECIFIC AIMS OF THE RESEARCH

To compare the Disaster Management System in Bangladesh and Japan

To gather knowledge & skills from the DM system in Japan especially the techniques of pre-disaster livelihood recovery planning and post-disaster livelihood recovery program

To identify the sustainable recovery plan that leads to promote integrated livelihood management system of Bangladesh

To identify the main component of the Japanese livelihood recovery and relief act 1998 and replicating important components of Japans disaster victims livelihood recovery support system in Bangladesh

Replicating Japanese vast experience on DM in Bangladesh

Prepare recommendations for improvement of DRR in Bangladesh

RESEARCH METHODOLOGY

The methodology of the research activities based on both primary and secondary data, i.e. identifying and analyzing various governmental policy, plans, act, documents, guide books, journals, seminar paper, web materials etc.

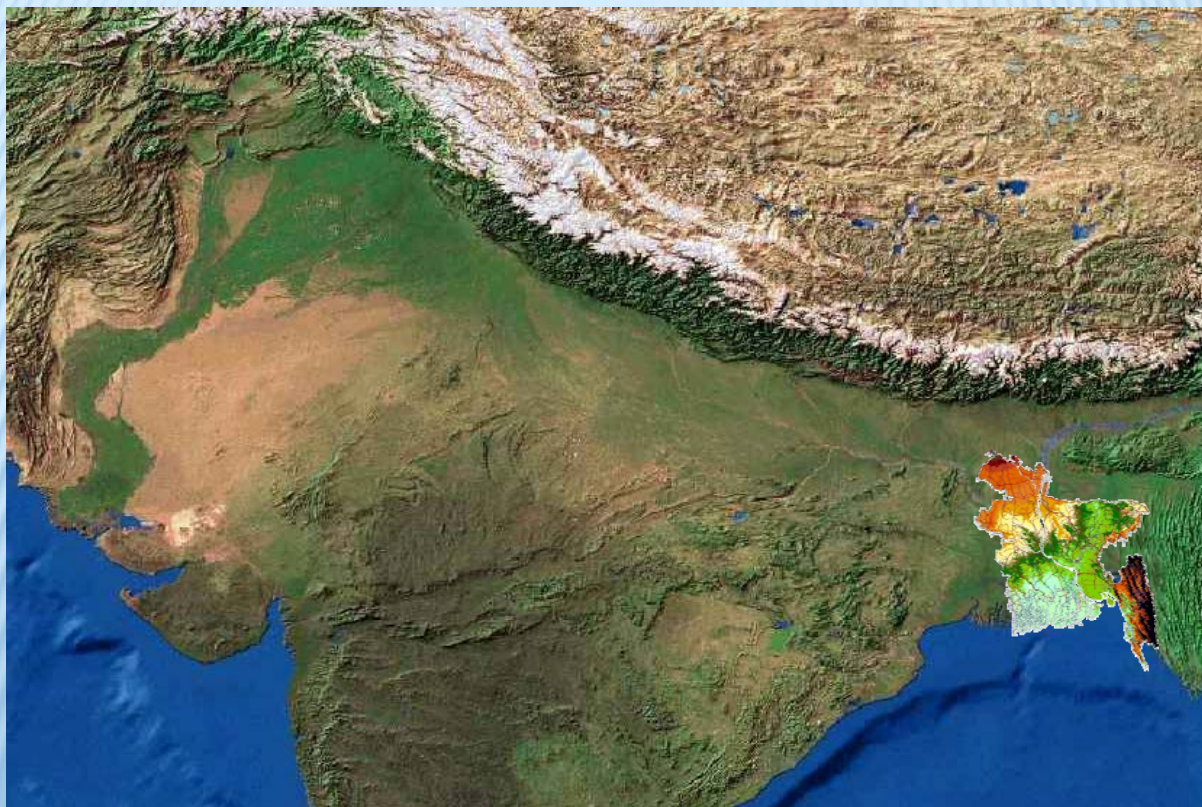
The study also enriched by various presentation organized by ADRC/ JICA/IRP, field visits, sharing of experiences with the Central Government and the Local Government officials.

After the completion of the research work a study report including the recommendation prepared.

EXPECTED RESULTS

Data and information on prevailing disaster management and post disaster livelihood recovery plan ,policies, act and practices of Bangladesh and Japan collected and compared between two countries. Some best practices of Japan which can be applicable for Bangladesh will be recommended to government of Bangladesh.

Location of Bangladesh in South Asia



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DISASTERS AND BANGLADESH

Major Hazards

- ◆ Flood
- ◆ Tropical Cyclone
- ◆ Storm Surge
- ◆ Tornado
- ◆ River Bank Erosion
- ◆ Drought
- ◆ Earthquake
- ◆ Arsenic
- ◆ Fire

Major Disasters

Year	Disaster	Death
1970	Cyclone	300,000
1988	Flood	2,373
1988	Cyclone	5,704
1991	Cyclone	138,868
1996	Tornado	545
1997	Cyclone	550
1998	Flood	918
2004	Flood	747
2007	Flood	1,071
2007	Cyclone(SIDR)	3,406
2009	Cyclone ('alia)	190 (as on 06/06/2009)

NATIONAL COMMITTEES

- **NATIONAL DISASTER MANAGEMENT COUNCIL (NDMC)**
- **INTER MINISTERIAL DISASTER MANAGEMENT COORDINATION COMMITTEE (IMDMCC)**

NATIONAL DISASTER MANAGEMENT COUNCIL (NDMC)

Total 34 Members

Chairperson: Hon'ble Prime Minister

Members: Key Ministers, Key Secretaries, Cabinet Secretary, Principal Secretary, Chiefs of Army, Navy and Air Force, Principal Staff Officer (AFD)

Member Secretary: Cabinet Secretary, Cabinet Division

INTER-MINISTERIAL DISASTER MANAGEMENT COORDINATION COMMITTEE (IMDMCC)

Total 33 Members

Chairman: Hon'ble Minister, Ministry of Food and Disaster Management

Members: Cabinet Secretary, Principal Secretary,
Key Secretaries, Key Director Generals
Principal Staff Officer (AFD)

Member

Secretary: Secretary, Disaster Management & Relief Division

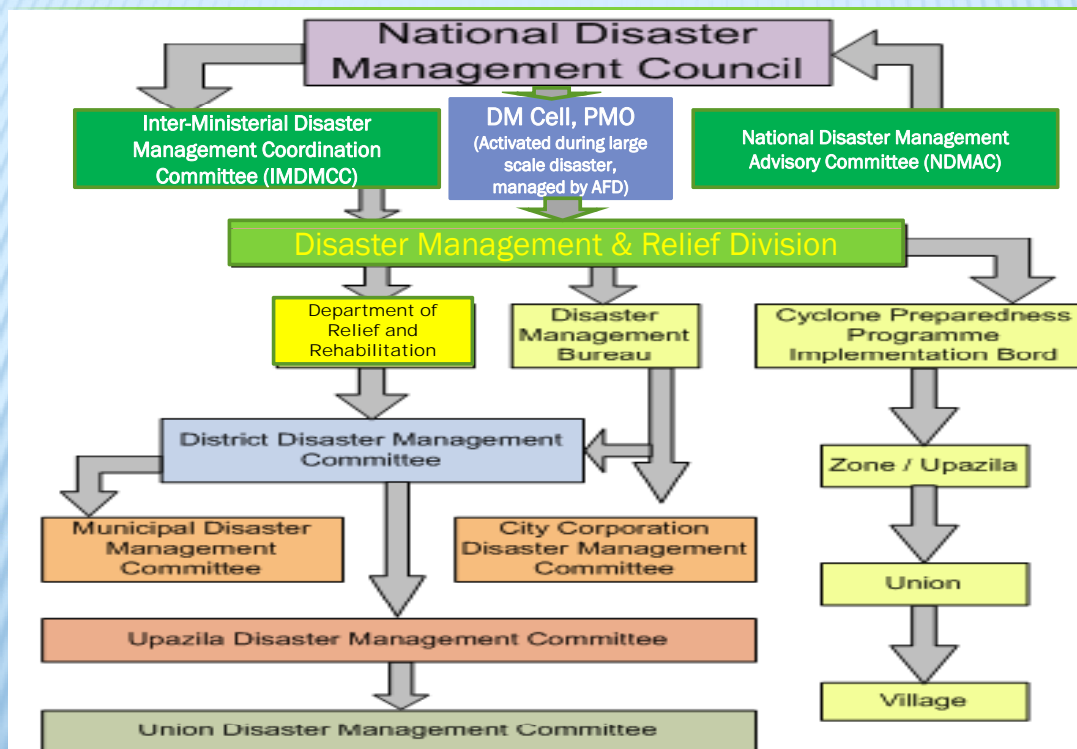
PRINCIPAL COORDINATING MINISTRY/AGENCY

- ❑ Ministry of Food and Disaster Management (MoFDM) is the lead Ministry
- ❑ Disaster Management and Relief Division under MoFDM is focal point
- ❑ Directorate of Relief and Rehabilitation (DRR) and Disaster Management Bureau (DMB) are two vital organ of MoFDM for Disaster Management

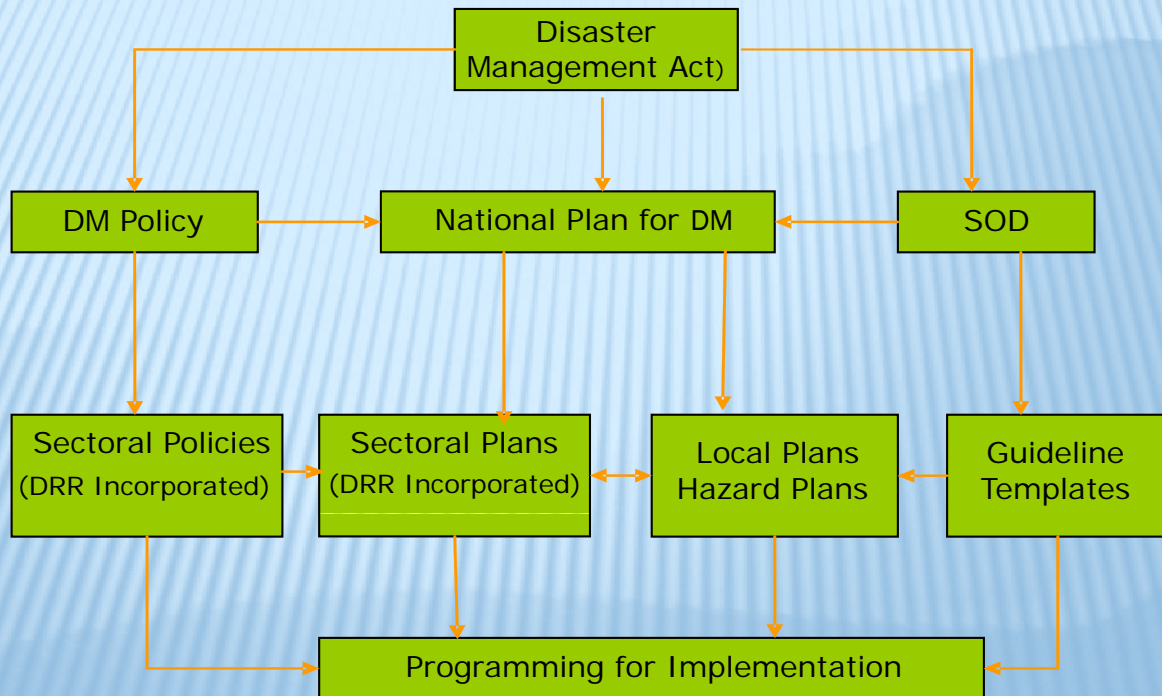
National Disaster Response Coordination Group (NDRCG)

Minister, Ministry of Food and Disaster Management	Chairman
Principal Staff Officer, Armed Forces Division	Member
Secretary, Ministry of Home Affairs	Member
Secretary, Ministry of Information	Member
Secretary, Ministry of Health	Member
Secretary, Ministry of Post and Telecommunications	Member
Secretary, Ministry of Water Resources	Member
Secretary, Ministry of Education	Member
Secretary, Ministry of Shipping	Member
Secretary, Disaster Management and Relief Division	Member Secretary

Disaster Management Institutions in Bangladesh

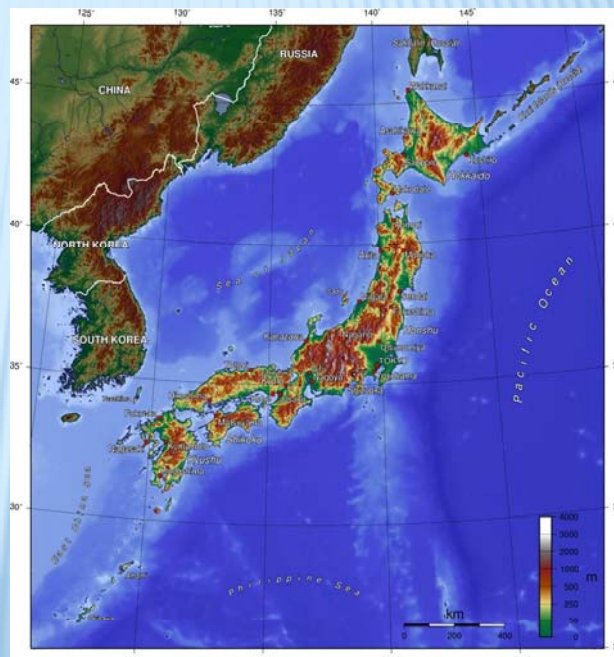


Disaster Management Regulative Framework



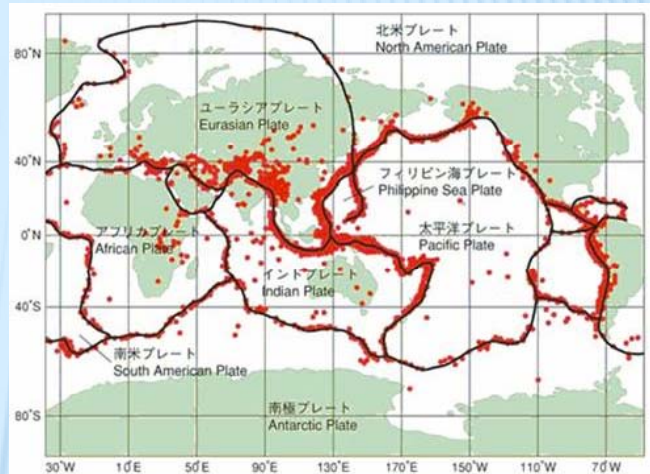
National Disasters in Japan

A Highly Developed country and a Country vulnerable to Disaster

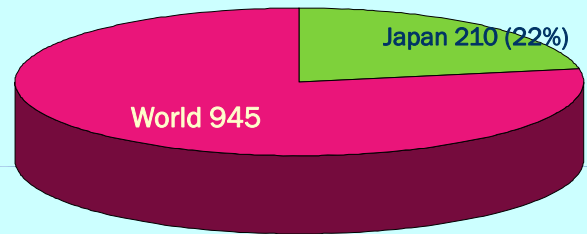


Natural Disasters in Japan

- Earthquake
- Tsunami
- Volcanic Eruption
- Typhoon
- Flood
- Landslide
- Snow Fall (Avalanche)

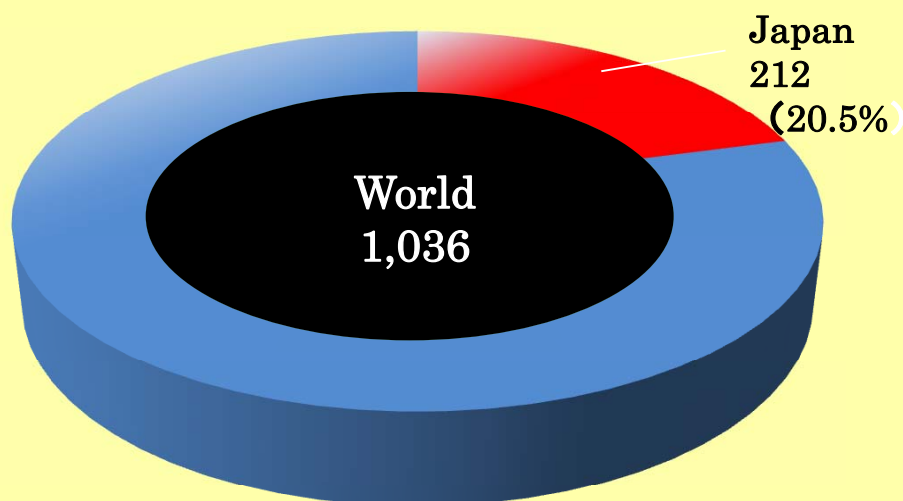


Number of earthquakes with magnitude of 6.0 or larger (1995-2011)



Comparison of Natural Disasters in Japan and Other Parts of the World

Number of earthquakes with magnitude of 6.0 or greater



Note : Total for 2000 to 2009.

Source : Prepared by the Cabinet Office based on data from the Japan Meteorological Agency and world data from USGS.

NATURAL DISASTERS

Flood damage (1938,1967)

Great Hanshin-Awaji earthquake (Jan 17, 1995)

Hit by many (ten) typhoons (2004)

Niigata Chuetsu Earthquake (Oct 23, 2004)

Niigata Chuetsu-oki Earthquake (Jul 16, 2007)

Great Sichuan Earthquake (May, 2008)

Iwate -Miyagi Inland Earthquake (June 14, 2008)

Great East Japan Earthquake (March 11, 2011)

Nankai Earthquake (Occurrence probability within 30 Years :
60 %)

x

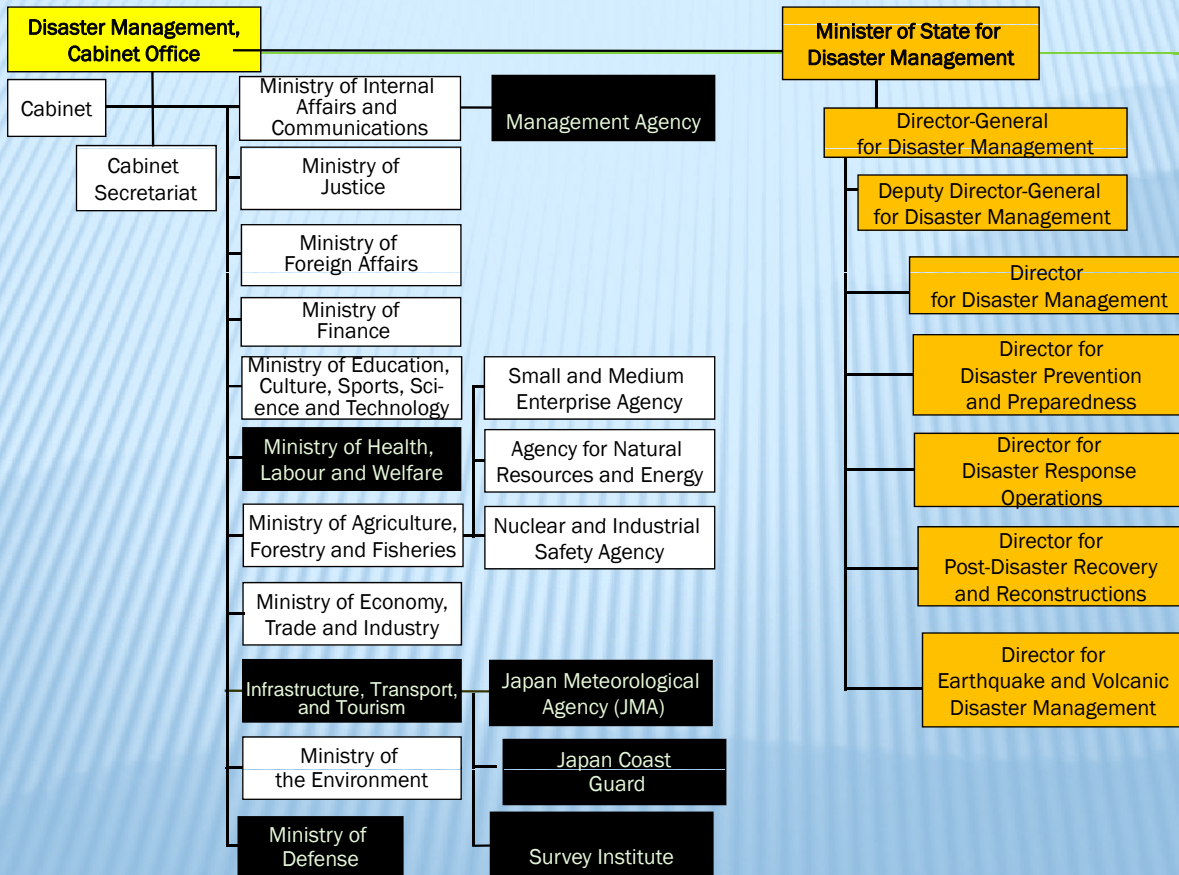
NATURAL DISASTER (CONTD.)

After the Hanshin-Awaji Earthquake, along with a series of reforms of the central government system in 2001.

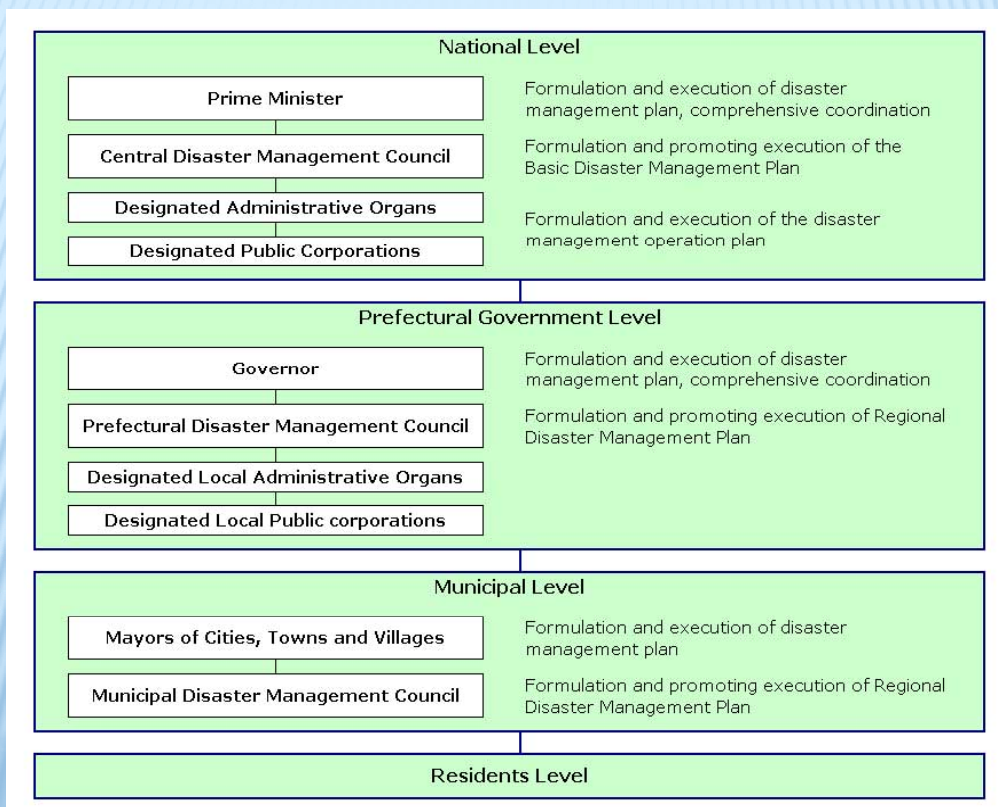
A position entitled "Minister of State for Disaster Management" was newly established to coordinate comprehensive disaster reduction measures throughout the whole government.

Furthermore, a Director-General for Disaster Management was placed in the Cabinet Office, whose role included planning basic disaster management policies and responding to large-scale disasters, as well as conducting comprehensive disaster-related coordination within the government.

DM & Organization of the national government of Japan



Disaster Management in 3 Layers



Prime Minister, Minister of State for Disaster Management

Inquiry ↓

Report ↑

Offer Opinion ↑

Central Disaster Management Council

Chair	Prime Minister		
Members	Minister of State for Disaster Management and all Cabinet Ministers (less than 17 persons)	Heads of Designated Public Corporations (4persons) <ul style="list-style-type: none">• Governor of the Bank of Japan• President of Japanese Red Cross Society• President of NHK (Japan Broadcasting Corporation)• President of NTT (Nippon Telegraph and Telephone Corporation)	Experts (4persons)

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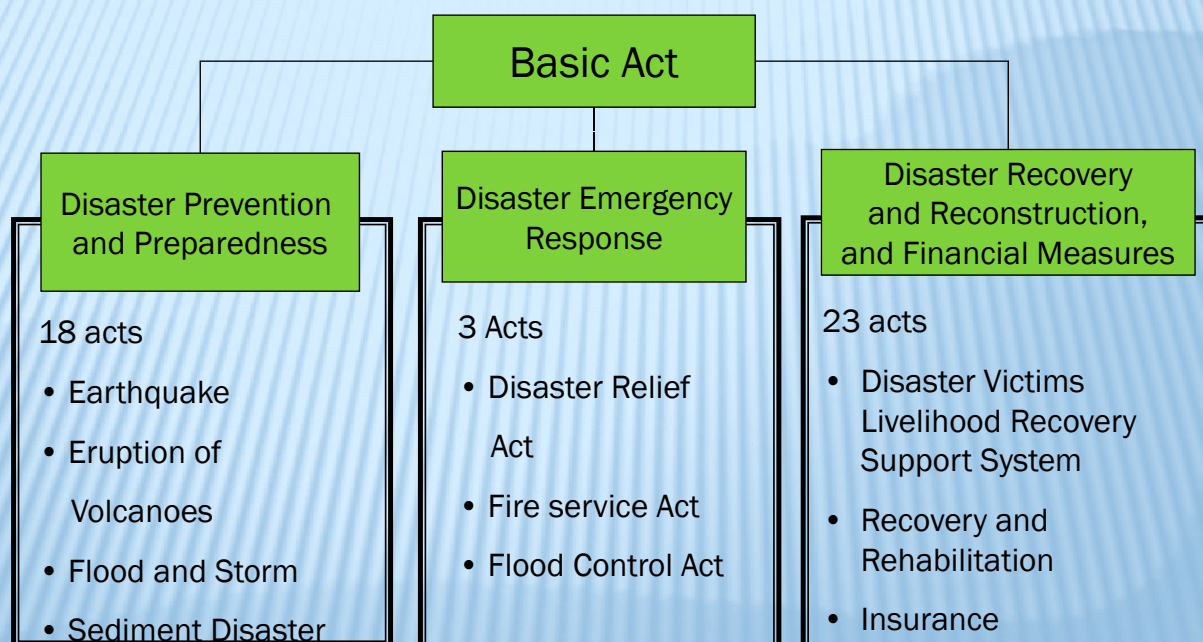
CENTRAL DISASTER MANAGEMENT COUNCIL (CONTD.)

The Central Disaster Management Council is one of the councils that deals with crucial policies of the Cabinet, and was established in the Cabinet Office of Japan.

The Council is chaired by the Prime Minister, and consists of all the Ministers of State including the Minister of State for Disaster Management, heads of major public institutions, and leading experts.

The Council promotes comprehensive disaster countermeasures, including deliberating important issues on disaster reduction according to requests from the Prime Minister or Minister of State for Disaster Management.

Disaster Management Related Laws



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MAIN CONTENTS OF THE DISASTER COUNTERMEASURES BASIC ACT

- ◆ Definition of responsibilities for disaster management
- ◆ Disaster management organizations
- ◆ Disaster management planning system
- ◆ Disaster prevention and preparedness
- ◆ Disaster emergency response
- ◆ Disaster recovery and rehabilitation
- ◆ Financial measures
- ◆ State of Disaster Emergency

THE CONCEPT OF RECOVERY PROCESS:

Three requisites for recovery” that are as following:

- ◆ Spirit/Hope/Faith of recovery
- ◆ Skills for recovery
- ◆ System for recovery

PRINCIPLES OF RECOVERY

- ◆ To sustain local society or community
- ◆ To carry on local culture of the community
- ◆ To utilize local resources.

PRE -DISASTER RECOVERY PLANNING(PDRP)

- ◆ Recovery Plan Before A Disaster Happens
- ◆ At Certain Scale Pre-planning Should Take Place
- ◆ PDRP Fit Within The Disaster Management Cycle
- ◆ Collecting Preliminary Information
- ◆ Establishing The Post Disaster Recovery Organization
- ◆ Formulating Recovery Principles And Goals
- ◆ Defining Strategies And Actions
- ◆ Assessing And Maintaining The Plan

BENEFITS OF PDRP

- ◆ Expedites Recovery
- ◆ Reduces Risk of Future Disasters
- ◆ Enables demand-driven and inclusive recovery
- ◆ Minimizes development deficits
- ◆ Reduces Recovery Costs

CONCEPTS OF LIVELIHOOD

- ◆ The term livelihood comes to light when governments, civil society, and external organizations attempt to assist people whose means of making a living is threatened, damaged, or destroyed.
- ◆ In order to better understand how people develop and maintain livelihoods, practitioners and academics, developed the Sustainable Livelihoods Framework (SLF).
- ◆ The SLF views livelihoods as systems and provides a way to understand:
 1. the assets people draw upon
 2. the strategies they develop to make a living
 3. the context within which a livelihood is developed, and
 4. those factors that make a livelihood more or less vulnerable to shocks and stresses



WHY CONSIDER LIVELIHOODS IN RECOVERY PROCESS

- ◆ The livelihoods of disaster affected populations and, where possible, protecting and developing them, has been increasingly recognized and addressed by all key actors within disaster recovery processes.
- ◆ More importantly, disaster affected populations have overwhelmingly identified livelihoods as their greatest recovery priority.
- ◆ In order to improve understanding of the impact of disasters on livelihoods, FAO and the ILO have jointly developed the Livelihood Assessment Tool-kit (LAT). The LAT consists of three main technical elements:
 1. Livelihood Baseline Assessment (which is undertaken pre-disaster);
 2. Immediate Livelihood Impact Appraisal (undertaken immediately after the disaster); and
 3. Detailed Livelihood Assessment (undertaken up to 90 days after the disaster).

EMPLOYMENT AND LIVELIHOODS

Agriculture and livestock production, through the provision of seeds, tools, micro- credits, and other means

Small business through the provision of credits or other means

Recovery of and improvement of productive social infrastructure such as roads, markets, etc. which will support the economic activities

The reconstruction of the housing sector using local technologies, construction materials, local know-how, to ensure that construction activities will have a direct positive impact upon the local economy.

Consideration of short-term gender sensitive alternative employment generation to compensate lost livelihoods in the immediate post-disaster period

BANGLADESH DISASTER RECOVERY PLAN AND PROGRAM

POVERTY DISASTER INTERFACE

- ◆ Adverse long-term impact on economic and social activities
- ◆ The poor are more vulnerable to any kind of disaster
- ◆ Depletion of assets
- ◆ Income reduction due to loss of employment
- ◆ Increase indebtedness
- ◆ Increase migration
- ◆ Cost to cope with disaster disproportionately higher for the poor

Government's Vision: To reduce the vulnerability of people, especially the poor, to the effects of natural, environmental and human induced hazards to a manageable and acceptable humanitarian level.

IMMEDIATE ASSISTANCE NEEDS

- ◆ Search and rescue operation
- ◆ Supply of instant food
- ◆ Medicare
- ◆ Water and sanitation
- ◆ Temporary shelter for displaced people
- ◆ Restoration of livelihoods

AREAS OF SOCIAL PROTECTION

- ◆ Social Safety Net
- ◆ Food Security
- ◆ Micro Micro-Credit
- ◆ Rural Employment
- ◆ Disaster Management
- ◆ Basic health service
- ◆ Access to public schools

MINISTRY OF FOOD & DISASTER MANAGEMENT (DMRD)

Social Safety Nets in Bangladesh

Government has allocated 15% of the total national budget against social protection program of the country which is 2.5% of the GDP in 2011-12 FY:

Vulnerable Group Feeding (VGF)

The program is aimed at extending assistance in the form of food and basic necessities to selected households in the months following a disaster when agricultural production has been severely disrupted.

Test Relief

Test Relief (TR), a food transfer program for those of working age to create employment for the poor in the rainy season to construct, develop and maintain rural infrastructure

Gratuitous Relief (GR)

GR provides emergency food and other necessities to the victims of natural calamities.

SOCIAL SAFETY NETS (CONTD)

Food For Work (FFW)/Cash for Work (CFW)

These programs have two major objectives, namely.

- i) employment generation for the affected people in the slack season, and
- ii) development and maintenance of rural infrastructures

Employment Guarantee Programme (formerly 100 Days Programme)

REOPA (LGRD)

Rural Employment Opportunities for Public assets (REOPA) is a EU/UNDP supported 5 year project (2007-12) aimed at creating self-employment opportunities of the women, providing training covering various issues of life still management, and, creation and maintenance of public assets.

NGO

Grameen Insurance Programs

IMPACTS OF SOCIAL SAFETY NET:

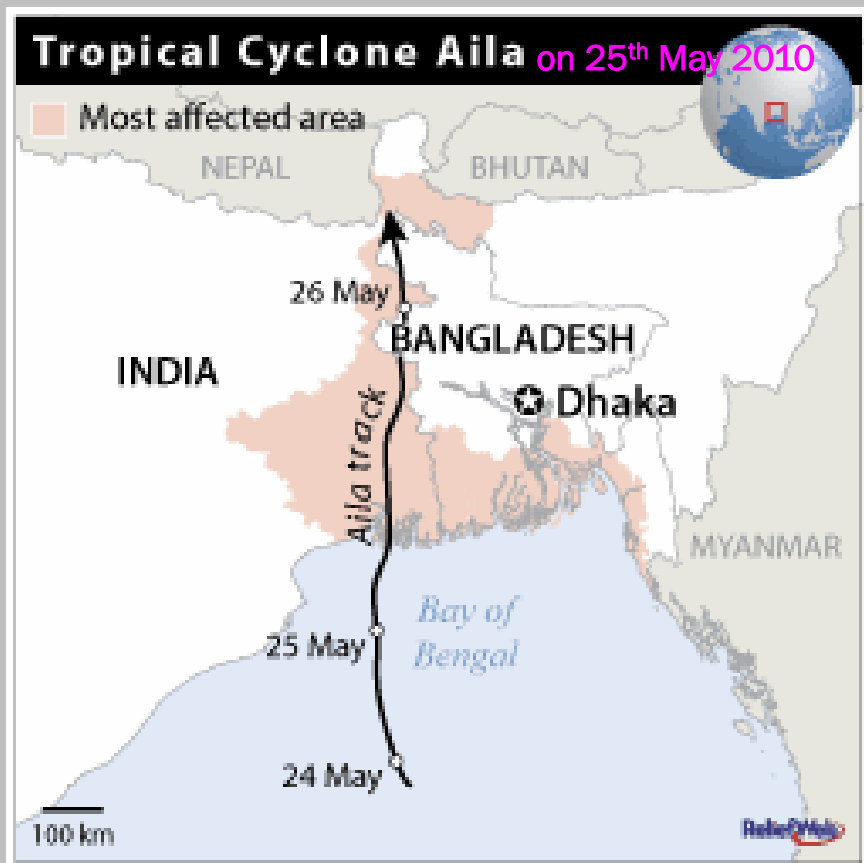
The majority of the households benefiting from the safety net programs based on cash transfer have been able to increase household income and recover their livelihood.

Programs targeted at women have (a) increased women's participation in household decision-making; (b) improved health conditions of women and their family members; (c) encouraged small investment for income generation in the future; and (d) revived the traditional system of in-family care.

VGD, TR and EGP also have a development impact.

Safety net programs in Bangladesh have also become successful to a certain extent in DRR

Evidence on the impact of conditional transfer programs indicates positive impacts on human capital accumulation.



CASE STUDY OF RECOVERY PROGRAM OF CYCLONE AILA

Death Toll	190
Total Affected Districts	11
Affected Upazila	64
Affected UP/Municipality	529
Affected Family (1m)	948,621
Affected People (4m)	3,928,238
Injured Persons	7,103
Embankment damaged	1,742 Km
Crop loss	77,486 acre Fully, 245,968 Partly
Educational Institute Damaged	445 Partly, 4588 Partly
Road Damaged	2,233 Km Fully, 6,622 Partly
Bridges 7 culverts	157

MAJOR EMERGENCY RELIEF BY DMRD

Gratuitous Relief (Rice): US\$ 12.15 million, 27951 MT

Gratuitous Relief (Cash): US\$ 1.9 million

House Building : US\$ 4.28 million

Total: US\$ 18.33 million Restoration of livelihood

Sector (Estimated Loss / Rehabilitation Cost)

Agriculture: US\$ 106.44 million / US\$ 50 million

Livestock: US\$ 1.93 million / US\$ 1 million

Fisheries: US\$ 46.93 million / US\$ 5.02million

Total: US\$ 155.30 m / US\$ 56.02 million

INTERNATIONAL DONOR ASSISTANCE

ECHO	11.93 m	Food Assistance, Health & Wash
EU	6.63 m	Shelters
DFID	1.58 m	NFIs, Settlement Support (through IOM)
SDC	1.31 m	Livelihoods & WASH
Govt. of Spain	0.66 m	Food Assistance (through WFP)
WFP	18.5 m	Food Assistance
UNICEF	1.5 m/0.54 m /0.75 m	WASH/Education/Health /Nutrition
FAO	0.5 m	Agriculture
UNDP	0.25 m	Livelihood
WHO	0.10 m	Emergency Medicine & Wash
Total	44.25 m	

PRESENT SITUATION OF AFFECTED AREAS

Out of 64 affected upazilla 60 upazilla have been recovered from devastation.

Remaining 4 upazillas not yet recovered as embankment could not be repaired.

For this reason 48000 families are homeless and living on the embankments or other places

SUPPORT TO WORST AFFECTED 4 UPAZILLAS FROM DMRD

District	Upazila	Grant for Housing (in million US Dollars)	Blanket (in thousand units)	Income generating activities for ultra poor (in million US Dollars)
Khulna	Koira	US\$ 0.36 (BDT 2.50 crore)	2.5	US\$ 0.21 (BDT 14102400)
	Dacope	US\$ 0.36 (BDT 2.50 crore)	2.5	US\$ 0.66 (BDT 46417600)
Sathkhira	Ashashuni	US\$ 0.36 (BDT 2.50 crore)	2.5	US\$ 0.48 (BDT 46417600)
	Shyamnagar	US\$ 0.47 (BDT 3.29 crore)	2.5	US\$ 1.42 (BDT 100454400)

NEEDS AND PRIORITIES (SHORT-TERM)

1. Restoration of livelihood
2. Construction of cluster houses for landless people
3. Reconstruction of houses for affected people
4. Ensure safe drinking water
 - a. Desalination plant
 - b. Re-excavation & digging new ponds
 - c. Installation of deep tube well
 - d. Rain water harvesting

NEEDS AND PRIORITIES (LONG-TERM)

1. Construction of cyclone shelters with killas (elevated land for shelter of livestock)
2. Reconstruction/Construction of embankment with modified design
3. Disaster resistant housing
4. Disaster resilient cluster village
5. Reconstruction of educational institutions
6. Reconstruction/Construction of roads

EMERGENCY LIVELIHOOD PROGRAMS TAKEN BY NGOS

No. of NGOs: 51

Total no of projects: 64

Total Approved Fund: US\$ 6.35 million

Total Beneficiaries (Family): 374,284

DISASTER RECOVERY ACT / GUIDELINES

Specific Relief Act 1877

Voluntary Social Welfare Agencies Act 1961

The Foreign Donations (Voluntary Activities) Regulation Ordinance, 1978.

Standing Orders on Disasters 2010

Disaster Management & Relief Act 2011

Guidelines of CFW, FFW, EGPP, REOPA, VGD, VGF etc

CONSTRAINTS AND CHALLENGES

The Bangladesh government has implemented a range of social protection program but there is no national strategy paper. There should be a National Policy on Social protection. The Integrated Safety Nets Policy Guidelines are also needed for development of a multi-year livelihood recovery programme

There is no Social Protection Act/ Law including the livelihood recovery act. Though the DM act has been approved by the cabinet , but there should be separate Social Protection Counter measure law

Bangladesh has an elaborate system of social safety nets operated by 13 different ministries and some NGOs covering various target group . Some of these programmes are food based, some are cash based, and some are both food and case based. Consolidate, coordinate and linkage with all safety nets are difficult task.

Targeting effectiveness needs to be improved to ensure that the benefits of the programmes reach the real effected people

CONSTRAINTS AND CHALLENGES (CONT-)

The livelihood recovery programme should also include capacity building at various levels to improve the management of these safety net programmes.

Need to establishing the database for the affected people for victim registration and tracking.

A key challenges for effective livelihood program is design innovations based on ground realities including the pre-disaster recovery plan

Coverage of all the affected people specially for constructing houses is a great challenges.

DISASTER VICTIMS LIVELIHOOD RECOVERY SUPPORT SYSTEM IN JAPAN

- ◆ The Disaster Victims Livelihood Recovery Support System is based on the Act on Support for Livelihood Recovery of Disaster Victims, which was enacted in 1998 following the Great Hanshin-Awaji Earthquake of 1995.
- ◆ Under this system, a “livelihood recovery support payment for disaster victims” is disbursed to persons whose livelihoods are severely damaged by disasters.
- ◆ The purpose of this system is to support victims in recovering their normal lives, bring stability to the lives of residents, and facilitate the quick recovery of disaster-stricken areas.
- ◆ Specifically, the livelihood recovery support payment for disaster victims is disbursed to households whose homes are completely destroyed in disasters of a certain scale or greater, up to a maximum of three million yen.

CONTENTS OF DISASTER RECOVERY AND REHABILITATION MEASURES

1. Disaster Recovery Project

The recovery of damaged public infrastructure facilities, educational facilities, welfare facilities and agricultural, forestry and fishery facilities is either conducted directly by the national government or put into practice by the local government with subsidies from the national government.

2. Disaster Relief Loans

3. Disaster Compensation and Insurance

4. Tax Reduction or Exemption

5. Tax Allocation to Local Governments and Local Bonds

6. Designation of Extremely Severe Disaster

7. Assistance for the Rehabilitation Plan

8. Support for the Livelihood Recovery of Disaster Victims

THE JAPANESE DISASTER RELIEF ACT

- ◆ Emergency relief
- ◆ Emergency or temporary relief following a disaster, distinct from restoration activities
- ◆ Protecting victims and maintaining social order
- ◆ Measures taken according to the scale of the disaster
- ◆ Central government provides services in cooperation with local public entities
- ◆ Relief personnel and resources provided as necessary in cooperation with local public entities
- ◆ Places designated as disaster areas by declaration of the prefectural governor
- ◆ Activities administered by municipal governments (some relief work may be entrusted to other agencies)
- ◆ Damage to homes or other essential facilities
- ◆ Risk of injury or loss of life

TYPES OF RELIEF ACTIVITIES

- ◆ Provision of accommodation including emergency temporary housing
- ◆ Distribution of food and drinking water
- ◆ Distribution of clothing, bedding and other necessities
- ◆ Medical and natal care
- ◆ Rescue of disaster victims
- ◆ Emergency repairs of housing
- ◆ Distribution of school supplies
- ◆ Financial support to restoration of livelihood .

COMPENSATION PAYMENTS

Compensation for Death

- Administration: Municipal government
- Disaster situation: Natural disaster
- Destruction of at least five households in a single municipality
- Designation of at least one municipality within the prefecture as a disaster area
- Eligible relatives: Spouse, children, parents, grandchildren, grandparents
- Amounts:
Death of household provider: 5 million yen / Other death: 2.5 million yen

DISASTER RELIEF LOANS

Loans for Disaster Relief

- Administration: Municipal government
- Disaster situation: Designation of at least one municipality within the prefecture as a disaster area
- Eligibility: Persons injured or suffering damage to home or possessions in the disaster
- Maximum loan: 3.5 million yen
- Repayment period: 10 years (payments deferred for 3 or 5 years)

ACT ON SUPPORT FOR LIVELIHOOD RECOVERY OF DISASTER VICTIMS 1998

General Provisions:

This Act shall be determined measures to grant financial assistance to victims of life reconstruction fund to take advantage of remarkable person who has suffered the damage to their livelihood by natural disasters, the prefecture had contributed in terms of mutual aid by, to support the reconstruction of their lives, and thereby to contribute to the rapid reconstruction of the affected areas and the stabilization of life of residents have.

The damage caused natural disasters, storms, heavy rain, heavy snow, flood, storm surge, earthquake, tsunami, volcanic eruption by other unusual natural phenomena, household affected by natural disaster shall be specified by a Cabinet Order.

A CASE STUDY- GREAT HANSHIN-AWAJI EARTHQUAKE

At 5: 46 a.m on January 17, 1995 the Great Hanshin-Awaji earthquake, which struck right under the city of Kobe in Western Japan, caused heavy damage. More than 240,000 buildings were completely or partially destroyed, and more than 6,400 people lost their lives.

Over 80% of those who died were crushed or suffocated by damaged structures.

Most of the damaged buildings had been built before the building code standards were upgraded in 1981.

Following the Great Hanshin-Awaji earthquake, the Government of Japan developed and strengthened disaster management systems. In 1995, the government amended the "Disaster Countermeasure Basic Act" and enacted the "Special Measure for Earthquake Disaster Countermeasure Act."

Great Hanshin-Awaji
Earthquake (1995)



OVERVIEW OF DAMAGES

Death and Missing toll 6,437

Death toll 4,571

Damage of building and structure 67,421 fully, 55,145 partly

Gross area of structure totally burnt 819,108 sq.m

Electricity- disconnected city wide

Telephone -25% disconnected

Water -failure almost citywide

Gas about – about 80% disconnected

Small and medium enterprise—50% completely destroyed

Shopping arcade- 50% severely damaged

Number of fire incidents : 175

RECOVERY PROCESS

Organization of search and rescue teams

Setup of evacuation shelters

Provision of hot meal

Provision of safe drinking water

Construction temporary housing

FORMULATION OF KOBE CITY RECOVERY PLAN

Recover Citizens Life

Recover Industry

Recover Livelihood (Life Recovery)

Strengthen Disaster Response Capacity

Promote Collaborative Community Development

Life Recovery from the Great Hanshin-Awaji Earthquake

Formulation of Kobe Recovery Plan

Jan. 17, 1995 Earthquake Occurred

Jan. 26, The Mayor announced the recovery vision

Feb. 07, Committee and sub-committee for recovery Planning

Mar. 27 Kobe city Restoration guidelines published

June. 30 Recovery Plan Formulated (After 05 months)

04 Goals for Livelihood of Kobe City Recovery Plan

Appeal (Better Living Condition)

Working Together (People+Community+Govt.)

Security (Housing+ Environment)

Vitality (Industry + Infrastructure)

THE PDCA CYCLE

Plan (Target Year 2005)

Do (The 5th Year comprehensive Assessment)

Check (5 Year Promotion Program)

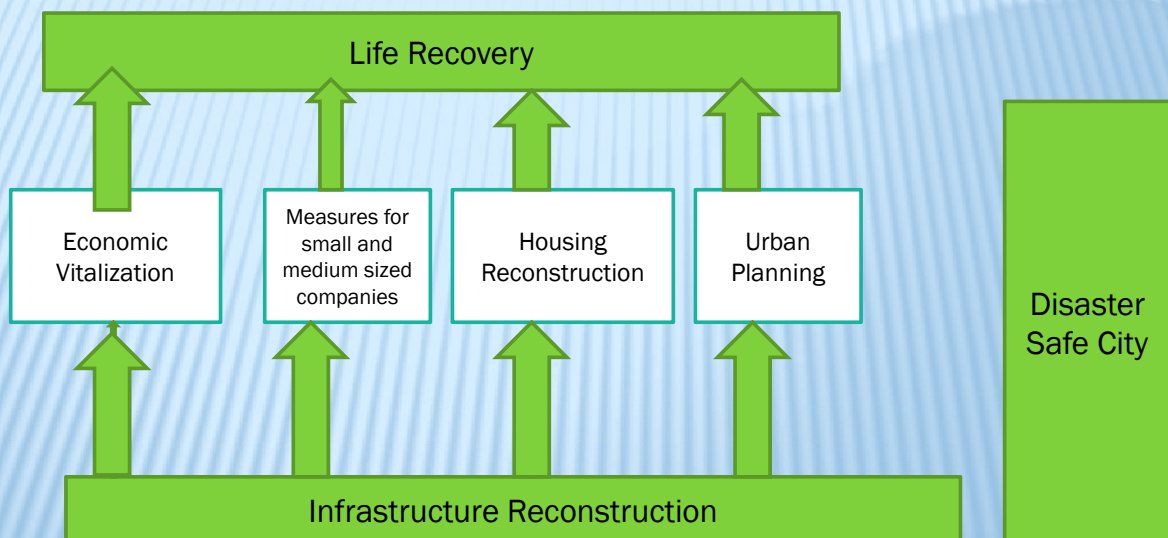
Action (Revised Plan for next 05 Year)

07 Elements of life recovery (5 Yrs after EQ)

Workshop on life recovery hold (Ideas from 1623 victims)

- Housing (No. 1 Priority -30.1%)
- Social Ties (Mutual Support and support for Elderly- 25.1%))
- Community Rebuilding (Better Living Condition-12.1%)
- Physical & Mental health (9.5%)
- Preparedness (alert for future disaster-9.5%)
- Economic and Financial Situation (Employment- 8.5%)
- Relation to Government (support the Area not the individual-5.2%)

Basic structure of the recovery projects



Kobe City Recovery Project (1000)

Infrastructure Reconstruction

Housing Reconstruction/ Restoration/

City Planning/ Urban Renewal

Economic vitalization

Measures of SMEs

Livelihood recovery (Life Recovery)

Disaster -Safe City

Recovery project (contd.)

Support for Housing: (1995-2000) (Public, rental, redevelopment, private)

No. of units planned 82,000 (public, rental, redevelopment)

Kobe City Special housing loans for recovery from the disaster (Interest rate 2.8%)

Housing Reconstruction loans for Hyogo Prefecture Residents (Interest rate 1.5%)

Financing system for elderly people (16,000)

Support for large scale repair by GOVT.

ECONOMIC VITALIZATION

The economic blow caused by the earthquake is estimated to be around 2 trillion 540 billion yen and the opportunity loss in economic activities over 5 trillion yen.

Economic vitalization means job securement. This means protect SMEs that produce local job opportunities

Recovery Industry/Employment

1. Special Loan without collateral for the SME and farmers/Fishermen.
2. Provide temporary space for factories, retail market, industry
3. Construction of temporary rental factory
4. Joint temporary shop
5. Development enterprise zone

LIFE RECOVERY

Support for volunteers

Support for communities

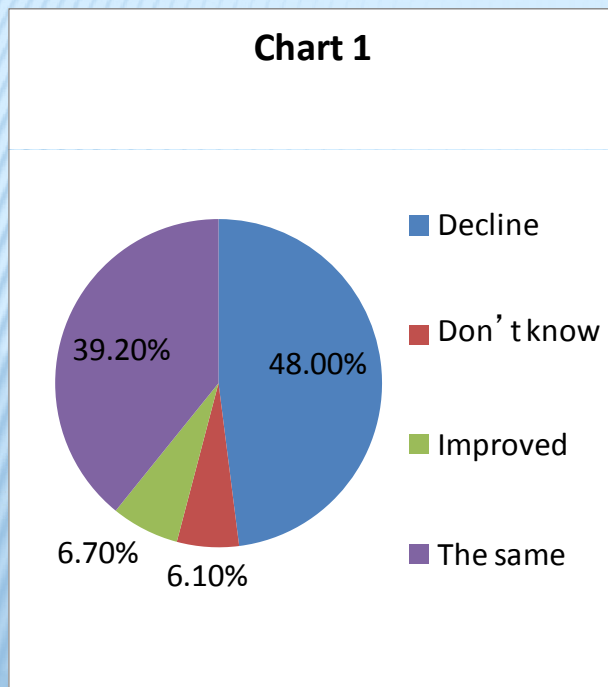
Friendly Visit program and life support at temporary housing.

Support after relocating to permanent housing

Act on support for livelihood Recovery of Disaster Victims 1998 needs to be revised for Independent live recovery aid for victims

RECOVERY OF CIVIC LIFE ASSESSMENT (2003)

Chart 1



Reasons

Effect of recession-57.6%

Personal reason such as illness and retirement- 22.4%

Effect of the earthquake- 15.1%

Other reason- 4.9%

LESSONS LEARNED AND CHALLENGES

- ◆ As the recovery process varies according to the location and nature of disaster -Need to decide what kind of livelihood recovery process should be carried out (Need Based)
- ◆ Basic concept of Support System (Community or Individual)
- ◆ What kind of arrangement are needed to fulfill the individual need (Can't not support all the individual need of shelter and employment)
- ◆ Identify the individual's basic need during normal time
- ◆ Public support is not enough , mutual help/aid is needed
- ◆ Reconstruction of Housing requires huge budget (donation from the prefectures are not sufficient)

LESSONS LEARNED AND CHALLENGES (CONTD.)

Employment and Job creation for all the victims is a difficult task.

Pre-disaster planning of one experiences may not be applicable for other upcoming disaster as the nature, magnitude, area/location, social or economic system are different (for example of great Hanshin-Awaji disaster and Tohoku disaster)

Relocation of victims with different community

Municipality or Prefecture needs special fund to address the individual needs

Revision of Livelihood Recovery Act 1998

External economic recession

Earthquake Insurance system- Difficult to measure risks

Due to the absence of victim registration, data base profile of the victims or tracking system their previous livelihood status or change of profession after disaster can not be identified

Livelihood baseline assessment is necessary

LESSONS LEARNED AND CHALLENGES (CONTD.)

Benefits according to the income level is not rational

3 system for providing a Safe City- i) Disaster-preventive management, ii) Disaster -preventive living zone, and iii) Disaster-preventive city infrastructure

PDCA cycle is a continuous process

Don't have any information how many people became disabled after disaster - Survey is required

Establishment of life recovery HQ (shelter, temporary/ permanent housing, employment, health etc)

Mutual help, self help, neighborhood help and community help is necessary for disaster mitigation

DM requires coordinated by individuals, communities and governments

New way of living with community businesses

COMPARATIVE STUDY OF DM SYSTEM AND LIVELIHOOD RECOVERY PROGRAM IN JAPAN & BANGLADESH

Japan

Disaster Prone-Earthquake, volcanoes, Tsunami

Pioneer in DM & DRR since 1959

Strong DM Basic Countermeasure Act (formulated in 1961).Updated regularly

Reform in the Central Govt. system in 2001, a position of Minister of State for DM was newly established. Furthermore a DG for DM was placed in Cabinet Office

Bangladesh

Disaster Prone-Cyclone, flood, tidal surge, tornados, river erosion

Paradigm shift in 1991 from relief to comprehensive DM & DRR

DM Countermeasure Act yet not crystallized (DM Act 2011)

A new division established in 2009 to deal with DM affairs exclusively named "Disaster Management and Relief division"

COMPARATIVE ANALYSIS (CONTINUED)

Disaster Management in 03 Layer(National, Prefecture and Municipal level)

Community mobilization and strong community to response against any kind of disaster. Every citizen knows the concept of self help, mutual help/ neighbor help and community help during disaster

Specific Act on Support for Livelihood Recovery of Disaster Victims 1998 and revised in 2007.

Formulated Pre-disaster and post disaster recovery plan

Disaster Management in 04 Layer (National, District, Upazila and Union level)

Govt. play major role after disaster. Community mobilization and community volunteers expanding gradually.

No specific Livelihood Recovery Act/ Law, but guidelines are present

National Plan for Disaster Management present

COMPARATIVE ANALYSIS (CONTINUED)

Central Govt. plays major role for damage assessment and technical support after disaster

Sufficient Budget for DRR

Efficient DM system for Earthquake and other disaster

More emphasis on Life Line Recovery (Road, gas, electricity, housing, employment etc)- holistic approach which has direct link with livelihood recovery

No tracking system for the victims

Disaster relief loan, community business activities, employment, insurance, low interest housing fund,

Local Bodies plays major role for damage assessment

Insufficient budget allocation of DRR

Efficient DM system for Cyclone, but Urban DM system (Earthquake) yet not crystallized

Specific emphasis on livelihood recovery program, but not an integrated approach

Short term tracking system for the victim present

Different DRR projects including cyclone resistance housing facilities present

COMPARATIVE ANALYSIS (CONTINUED)

Shelter/housing construction is the main basis for livelihood

Un-employment allowances for 06 months

With respect to DRR equal distribution of prefecture's contribution money to all prefecture

Food Security, shelter and employment are the main basis for livelihood

No provision for Un-employment allowances

Money are distributed measuring the risk of the specific region

CONCLUSION

- ◆ When comparing between two region or countries there is no guarantees that same activities will generate similar results because of nature, magnitude, area, social, economic factors are different
- ◆ But there are some commonalities across the region or nation
- ◆ A single person or government alone can not carried out whole recovery process
- ◆ It is necessary to co-operate each other-citizen, community, local and national govt.
- ◆ This kind of co-operation framework kind be adopted by the other countries
- ◆ In this regard community empowerment (social, political & economical) is needed

RECOMMENDATIONS

- ◆ Establishment of Life Recovery Head Quarters for Shelter, Temporary/ Permanent housing, employment, health etc. after a big disaster
- ◆ Besides the government help, mutual help, self help, neighboured help and community help are the main components for recovery
- ◆ New way of living with community business
- ◆ Specific Act on Support for livelihood Recovery and Disaster victims need to be formulated
- ◆ Self sustained recovery required
- ◆ Improving the livelihood promotion

RECOMMENDATIONS CONTD.)

- ◆ Pre-disaster recovery plan need to be formulated
- ◆ More emphasis on life line recovery (road and other infrastructure, housing, employment, social ties) – a holistic approach which has direct link with livelihood recovery
- ◆ For long term recovery program life assessment is needed after five years period of time and in this aspect the PDCA cycle can be followed.
- ◆ Workshop in grassroots level assessment is needed to identify the opinion of the affected citizen as well as their livelihood options
- ◆ Establishment of Museum for the preservation of past disaster history

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