

Disaster Risk Reduction Policies in Japan

Cabinet Office for Disaster Management

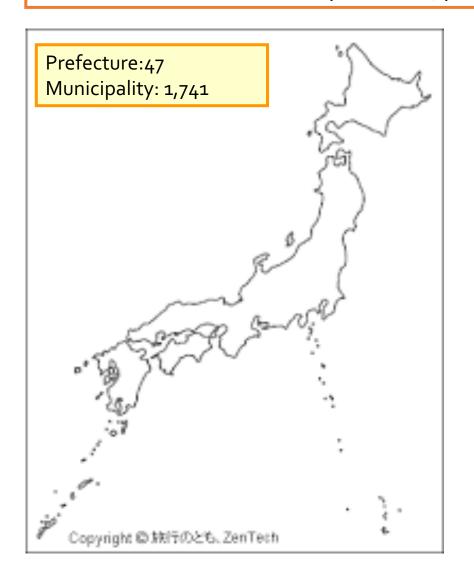
27 January, 2020

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Japan: Unitary State, Exposed to Diverse Natural Hazard 🚣 內閣府



High risk for a variety of disaster: earthquake, tsunami, flood, typhoon, landslide, volcano etc. Government structure: Unitary (national, prefecture, municipality)



Risk structure 5.9 6.2 Earthquake Wind 43.8 Storm Surge 15.5 Tsunami ■ Flood ■ Volcano 24.5

Source: UNISDR

The Great East Japan Earthquake (2011)

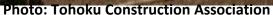


The return period is estimated to be 500 to 1000 years.

Inundated area: 535km², Housing destruction: 128,801 units

Fatalities: around 15,882 Missing persons: around 2,668

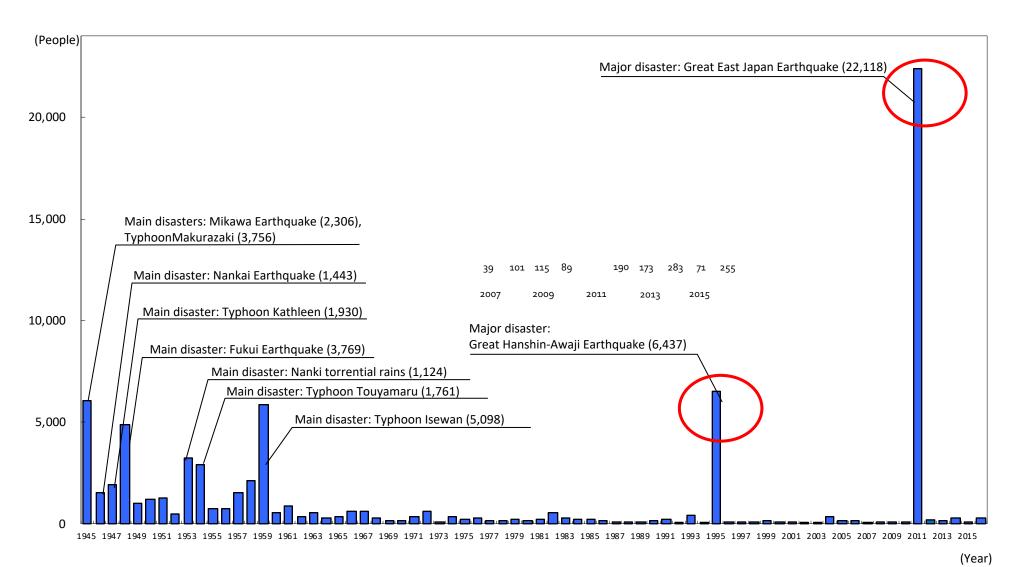






The Mortality Attributed to Natural Disaster

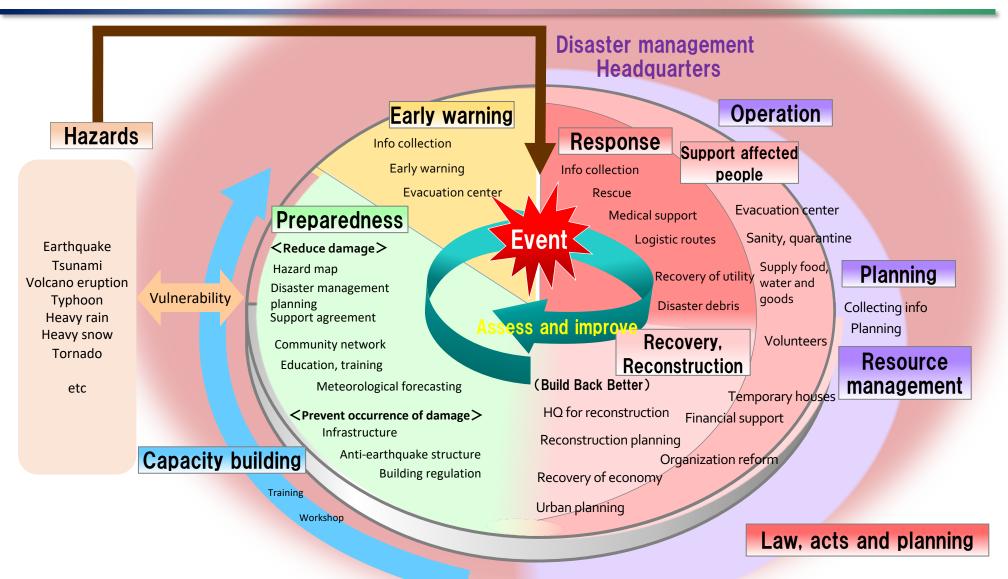




Source: 1945 year, the deaths / missing person due to major disasters (according to science chronology). 1946 to 52 year, annual report of Japan Meteorological Agency. 1953 to 1962 materials of the National Police Agency, and Since 1960, from material of Cabinet Office based on Fire and Disaster Management Agency

Process and Scope of Disaster Management Policies 🚅 內閣府





Progress in Laws



Disaster Events		Disaster Management Acts	
1959	Typhoon Ise-Wan	V	
		1961	 Basic Act on Disaster Risk Management
1964	Niigata Earthquake	¥	
		1966	 Act on Earthquake Insurance
1978	Miyagi-Ken-Oki Earthquake	¥	
		1981	 Amendment of Building Standard Law
1995	Great Hanshin-Awaji Earthquake	7	
		1995	 Amendment of BADRM Act on Promotion of Earthquake-proof Retrofit of Buildings
2011	Great East Japan Earthquake		
		7	
		2011	 Tsunami Resident City Development Act
		2012	 Amendment of BADRM
		2013	 Amendment of BADRM

Basic Act on Disaster Risk Management in Japan



Objectives: To protect people's lives and assets from disasters, and contribute to the societies' safety and well-being

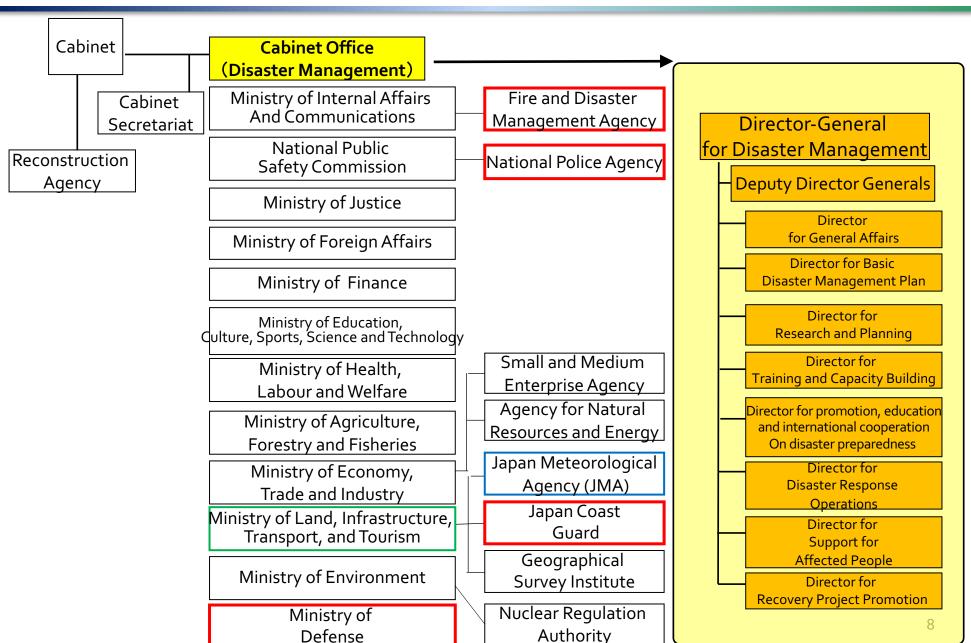
1. Goals and Responsibilities

oGoals of DRR policies — reduce damage oResponsibilities of the government oResponsibilities of residents

- 2. Organizations
- 3. Disaster Management Plans
- 4. Promotion of Disaster Countermeasures
- **5.** Measures to Support Affected People
- **6.** Financial Measures
- **7.** State of Disaster Emergency

Organization Chart of the National Government of Japan 🚅 內閣府





National Council on Disaster Risk Management 🚅 內閣府



- Established under the Basic Act on Disaster Management
- Chaired by the Prime Minister.
- Consists of Ministers, heads of public institutions and experts.

The Roles of the National Council is...

- to formulate and promote major disaster management policies, including deciding

the Basic Plan for Disaster Risk Management



Basic Plan for Disaster Risk Management



-Stipulated in the Basic Act on Disaster Risk Management

National Basic Plan for Disaster Management

(since 1963, last update in 2019)

 Approved by the National Council on Disaster Management (Chair: Prime Minister)

Prefecture Basic Plan for DM (47 prefectures)

 Approved by the Prefecture Council on Disaster Management (Chair: Governor)

Municipality Basic Plan for DM

(all municipalities; 1,718)

 Approved by the Municipality Council on Disaster Management (Chair: Mayor)

Community Disaster Management Plan

- Draft prepared by citizens
- Propose the draft to the municipality to be include in the Municipality Basic Plan

Objectives:

- Improve preparedness
- Response efficiently in case of emergency
- Facilitate recovery and reconstruction processes

Actions in DRR phases

- 1. Prevention/preparation
- 2. Response
- 3. Recovery and reconstruction

Specific actions for each type of disasters

- Earthquake
- Tsunami
- Water related (floods)
- Volcano
- Snow
- Maritime accidents
- Railroad accidents
- Road accidents
- Nuclear accident etc

Comprehensive Disaster Reduction Drills "Disaster Reduction Day (1 Sep)"



- -Exercise by Central Government Headquarter (at PM's Office)-
- <u>Target</u>: Simulating response to the Major Nankai Trough Earthquake, conducted drill with Prime Minister and his Cabinet
- <u>Contents</u>: Holding a meeting of Extreme Disaster Management Headquarters, extraordinary Cabinet meeting, report from Governors of affected prefecture, press conference by Prime Minister and Minister of State for Disaster Management





Government's Role-playing Simulation Exercise



Conduct exercise of operating Extreme Disaster Management Headquarters simulating 15 hours after the Tokyo Inland Earthquake, and review the coordination of relevant local governments and designated public corporations





- Legal responsibilities of municipalities and prefectures



Municipality

- Municipalities have responsibilities to implement disaster risk reduction policies and disaster response policies.
- To achieve the responsibilities of municipalities, mayors have a lot of legal authority.

<Examples>

- Evacuation recommendation and direction
- Setting alert area and restriction of entrance to the area
- Temporal use of private properties and facilities
- Work order to residents for disaster management





Prefeccture

- Prefectures have responsibilities to implement disaster risk reduction policies and disaster response policies, and to support policy implementation of municipalities and coordinate the policies of municipalities under the prefercture.
- To achieve the responsibilities of prefectures, governors have a lot of legal authority.

<Examples>

- Work order for doctors, other experts and residents, storage order to private companies
- Use and management of hospitals
- Direction for mayors to implement disatser management and support other municipalities.
- Implement responsibiliteis of mayors when when mayors cannot fulfill all or part of responsibilities.
- When mayors request the support, governors cannot neglect the request.

When large scale disaster occurs...



Large scale disaster

National (HQ for Emergency Management)

Chief: Minister of Disaster Management

Can be hanged into

National (HQ for Very Urgent Emergency Management) Chief: Prime Minister

Direction

Direction

Inform situation and disaster management policy implementation

Municipalities (Emergency Management Headquarters)

- ✓ Work order to the fire, police and water protection group
- Ecacuation direction, alert area designation and entry ristriction to such area
- Temporal use of real estate and private buildings
- Designation of evacuation sites
- Provision of the list of people who require special support for evacuation
- Issuance of disaster damage certificate
- Request for support to other municipalities and prefecture

Direction

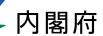
Prefectures (Emergency Management headquarters)

- Work order for related entities
- Traffic control
- Request support to designated local semi-public authorieis
- ✓ Resuet dispatch of Self Defense Force and others
- Request support to Prime Minister (for affected municipalities)



Inform situation and disaster management policy implementation





- Low awareness of hazard level information such as evacuation recommendation and evacuation direction.
- Many and difficult information leads to the no utilization of such information by citizens.

Evacuation information

Evacuation direction (urgent), evacuation recommendation, evacuation preparation / those needing time start evacuation: Municipality

Major meteorological and other hazard information

Flood information: Ministry of Infrastructure (MLIT), prefecture, Japan Meteorological Agency (JMA)

Water Level information: MLIT, prefecture

Rainfall estimates, hazard distribution of flood: JMA

Sediment Disaster Alert Information: Prefecture, JMA

Small grid information of sediment disaster: prefecture, JMA

Intensive Rainfall information: JMA

Several alerts: JMA

Rainfall information, water level information: MLIT, JMA and others



Necessary to deliver information that facilitate evacuation of residents in accordance with the increasing disaster risk

New 5-level Alert Level



- Classify actions to take into 5 levels and clarify the link between meteorological and other hazard information and action that residents should take.
 - Clarify the timing of evacuation: In level 3 those needing time (e.g. aged, disabled) should start evacuation, In level 4 everyone should start evacuation.
 - In level 5, extremely hazardous event is occurring and residents should take best possible action wherever they are.

Alert level	Action to take	Information to facilitate action
LEVEL 5	Best possible action	Disaster occurrence information
LEVEL 4	All evacuate	Evacuation recommendation Evacuation direction
LEVEL 3	Those needing time evacuate	Those needing time start evacuation
LEVEL 2	Check how to evacuate	Alert
LEVEL 1	Be prepared	Possibility to issue alert

Meteorological and other hazard information

- Flood information
- Sediment disaster alert information
- Hazard distribution

And so on...

Japan International Public-Private Association for Disaster Risk Reduction (JIPAD)



Overview

[Goals] Promote disaster risk reduction (DRR) policies and technologies abroad and build DRR capacity around the world with the aim of contributing to the achievement of Sendai Framework for DRR 2015-2030 and SDGs

[Participating Companies] 182 private companies/organizations engaged/interested in promoting their DRR technology (as of 11 December)

Cabinet Secretariat, Cabinet Office (Science and Technology), Ministry of Internal Affairs,
Fire Department Office, Ministry of Foreign Affairs, Ministry of Economy and Trade, Ministry of Infrastructure (MLIT),
Japan Meteorological Agency, Ministry of Environment, Ministry of Defense, JICA, JETRO, Japan Bosai Platform (JBP),
Asian Disaster Reduction Center

【Secretariat】 Cabinet Office for Disaster Management

[Established] 23 August 2019

Main Activities

A. Holding the JIPAD Meeting

Participating companies and cooperating organizations share information and exchange opinions.

The JIPAD 1st General Meeting > Date: 23 August, 2019
Venue: Main Hall,
Government Offices No. 8

<The JIPAD 2nd General Meeting

(Inviting embassies in Tokyo) >

- H. E. Mr. Taira, State Minister:

Date and Time: 4.30pm to 6.00pm, 11 December, 2019

Venue: Mita Conference Hall in Tokyo

B. Organizing the Public-Private Conference for DRR

to introduce Japanese policy, technology and know-how and build public-private network with partner countries.

Overseas:

- Turkey (25 November 2019)
- Ecuador and Colombia (20-24 January 2020)

Tokyo:

- Bulgaria (2 October 2019)
- African countries (23 October 2019)
- ASEAN countries (23 October 2019)
- Mozambique (8 November 2019)
- Island counties (11 November 2019)
- Maldives (12 February 2020)



Japan-Africa Public-Private DRR Seminar in Tokyo (Oct, 2019)



Japan-ASEAN Public-Private DRR Seminar in Tokyo (Oct, 2019)

The JIPAD 2nd General Meeting (11 Dec.2019)

- Participants: H. E. Mr. Taira, State Minister, Mr. Aoyagi, Director General, Mr. Murate, Assistant Vice-Minister, other cooperative ministries and organizations, Ambassadors of Turkey, Malawi, Ecuador, Nicaragua, Bulgaria, Minister of Colombia, Embassies in 14 countries, 53 member companies. Total 123 members.
 - We aim at applying the latest science and technologies into disaster risk reduction in cooperation with JIPAD member companies.
- Opening Remark, Mr. Aoyagi, Director General:
 - Given the expected rise of disaster risk due to climate change, disaster risk reduction is a globally important challenge. Toward the promotion of the Sendai Framework for Disaster Risk Reduction and SDGs, the Cabinet Office for Disaster Management will discuss with colleagues of Disaster management agencies around the world and JIPAD members, and continue the activities through public private partnership.



The JIPAD 2nd General Meeting

