

Work Plan of SAPI (Strategic Analysis of Policy Implementation under Colombia Japan Cooperation)

	Dr.Baba	Jose Marie	UNGRD
1.1 Presentar la experiencia y progresos de Japón en los procesos de articulación, institucionalización y ejecución de la implementación de la política de la Gestión del Riesgo de Desastres incluyendo la adaptación al cambio climático, incluyendo sus leyes y sistemas.	○		
1.2 Realizar reuniones con miembros de las entidades del SNGRD, incluyendo por lo menos una entidad técnica, una operativa, una del nivel departamental y una del municipal con la finalidad de identificar debilidades y establecer prioridades.		○	
1.3 Recolectar información sobre las experiencias relevantes en la región de América Latina y el Caribe en materia de Gestión del Riesgo de desastres incluyendo la adaptación al cambio climático		○	
1.4 Recolectar información sobre las dinámicas de participación local y comunitaria en materia de GRD en los procesos de recuperación en el país.		○	
1.5 Consolidar y analizar la información.	Supervisor	○	
1.6 Formular recomendaciones que sirvan de base para la elaboración de una estrategia de implementación	Facilidad	○	○
2.1 Formular un Plan Operativo para la implementación de las recomendaciones (1.6), que se encuentre articulado con el Plan Nacional de Desarrollo, el Plan Nacional de Gestión del Riesgo de Desastres y el Plan Nacional de Adaptación al Cambio Climático donde la UNGRD será un facilitador de las discusiones.	Supervisor	○	○
2.2 Establecer recomendaciones en torno a la metodología de seguimiento y evaluación de las acciones de UGRD y adaptación al cambio climático en las entidades territoriales del país, priorizando los aspectos más necesarios y el rol de cada contraparte del SNGR.	Supervisor	○	○
2.3 Elaborar recomendaciones que orienten las acciones de implementación en torno a la dinámica sectorial, local y comunitaria, apuntando al desarrollo sostenible.	Supervisor	○	
3.1 Formular una plataforma regional para la difusión y retroalimentación entre los países de la región de América Latina y el Caribe en materia de gestión del riesgo de desastres incluyendo la adaptación al cambio climático, en línea con la Estrategia Nacional de Cooperación internacional y el Plan Estratégico de Cooperación Internacional para la Gestión del Riesgo de Desastres vigentes.	Supervisor	soporte	○
3.2 Realizar un seminario Internacional para compartir experiencias en la región de LAC	Ponente	soporte	○
4.1 Establecer una estrategia mediática (medios de comunicación y oficina de comunicación y relaciones públicas de la UNGRD que permitan la participación de todos los Colombianos.	Supervisor	○	○

Seminar series of SAPI

Target audience group: D = Decision maker, P = Practitioner of DRM, T = Technician of particular areas

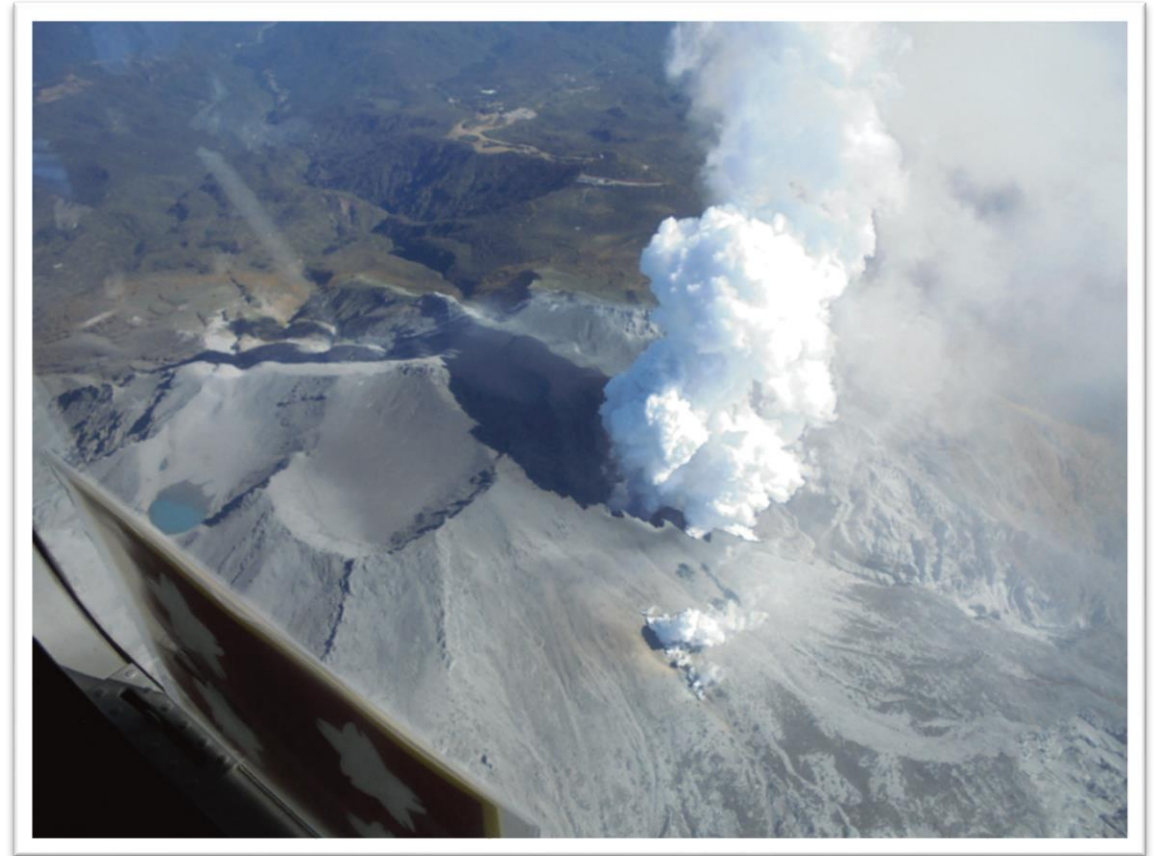
1. Seminar on Disaster Risk Management in Japan: Target = D, P
 - introduction of geological background, history of DRM, system, rolls and responsibilities of entities
 - discussion about advantages and disadvantages of the both systems in Japan and Colombia
2. Seminar on Disaster Risk Reduction in Japan: Target = D, P
 - Investment in measures to reduce various types of disaster risks
 - Emergency response and preparations
 - Rehabilitation and reconstruction
3. Seminar on Societal Resilience to Disaster: Target = D, P
 - Risk awareness raising
 - Civic participation on DRR
 - Private sector participation, BCM
 - Area BCM
4. Workshop on SFDRR: Target = D, P
 - Outline and difference from HFA
 - Target and Indicators
 - Implementation and challenges
5. Seminar on River Law of Japan: Target = D, P, T
 - Outlines of the law
 - Essential features
 - Relevant law on urban flood prevention
6. Seminar on climate change adaptation in Japan: Target = D, P, T
 - Basic concept of CCA
 - Technical guides
 - Case study of assisting developing countries, Indonesia
7. Workshop on flood risk assessment: Target = P, T
 - Introduction of Integrated Flood Management
 - Open source and open data
 - Process of flood risk assessment
 - Tutorial of the process
 - Scoping
 - DEM
 - Scenario flood hydrograph
 - Flood hazard simulation
 - Risk assessment
8. Seminar on construction regulation: Target = P, T
 - Building code
 - Restriction in disaster zones
9. Seminar on sediment disaster prevention law: Target = D, P
10. Seminar on active volcanic zones law: Target = D, P
11. Seminar on Space Technology for DRM: Target = P, T
12. Workshop on Open Data for Resilience Initiative: Target = P, T
- 13..and more

Disaster Risk Management in Japan

Cabinet Office, Government of Japan

How disaster prone the archipelago is!

- Volcanic eruption of Mt. Ontake (September 2014)



How disaster prone the archipelago is!

- Great East Japan Earthquake (March 2011)



How disaster prone the archipelago is!

- Heavy snowfall in Akita Prefecture (January 2014)
- Photo: Mainichi Newspapers



How disaster prone the archipelago is!

- International Rescue Team of Japan dispatched in the event of Sumatra Earthquake
- in Indonesia (September 2009)



How disaster prone the archipelago is!

- Great Hanshin-Awaji Earthquake (January 1995)
- Photo: Kobe Shimbun Co., Ltd



How disaster prone the archipelago is!

- Isewan Typhoon (September 1959)
- Photo: Mainichi Newspapers



How disaster prone the archipelago is!

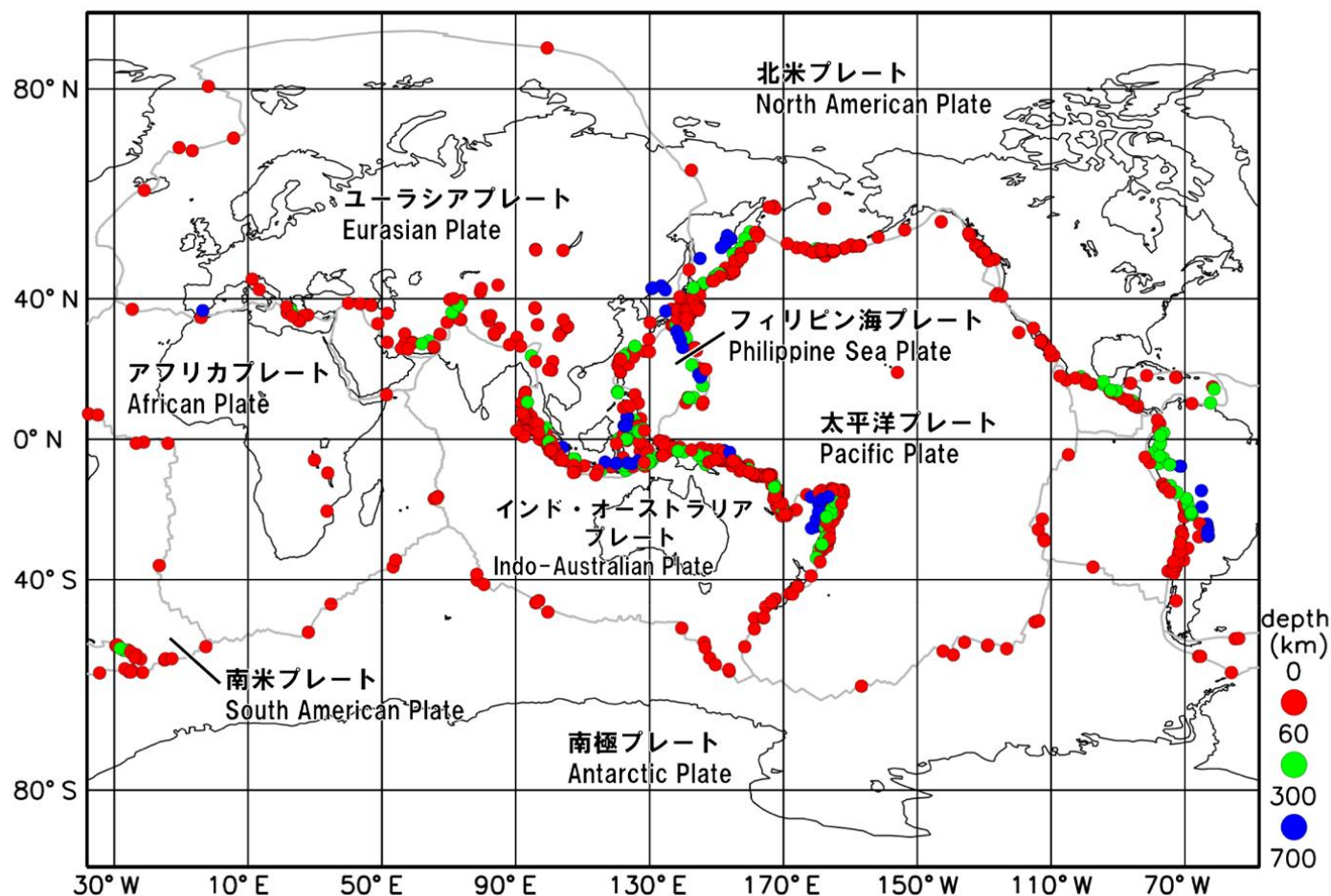
- Landslides in Hiroshima Prefecture (August 2014)



Introduction of Disaster Risk Management in Japan

1. The Nation and the Progress in Disaster Countermeasures
 - A Disaster-prone Country
 - Disasters in Japan
 - Progress in Disaster Risk Management Laws and Systems since 1945
2. The Disaster Risk Management System
 - Establishment of a Comprehensive Disaster Risk Management System: Disaster Countermeasures Laws and Acts
 - Mission of the Cabinet Office
 - Central Disaster Risk Management Council
 - Disaster Risk Management Plans
 - Emergency Response to Disasters

1. The Nation and the Progress in Disaster Countermeasures > A Disaster-prone Country

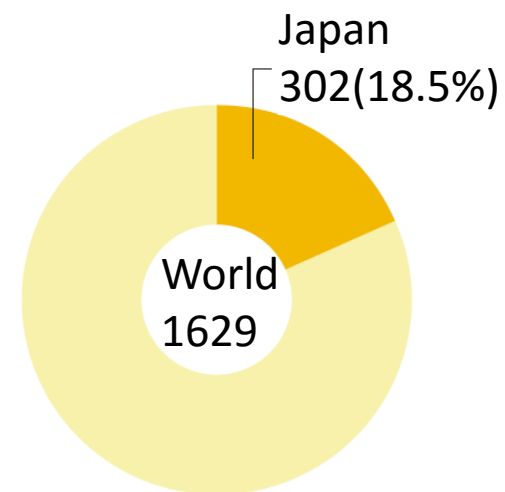


World Geographical Distribution of Hypocenters and Plates
(2004 ~ 2013, Magnitude ≥ 5.0)

Source: White Paper on Disaster Management

Note: Analysis of over magnitude 5.0 and greater earthquakes' hypocenters from 2004 to 2013.

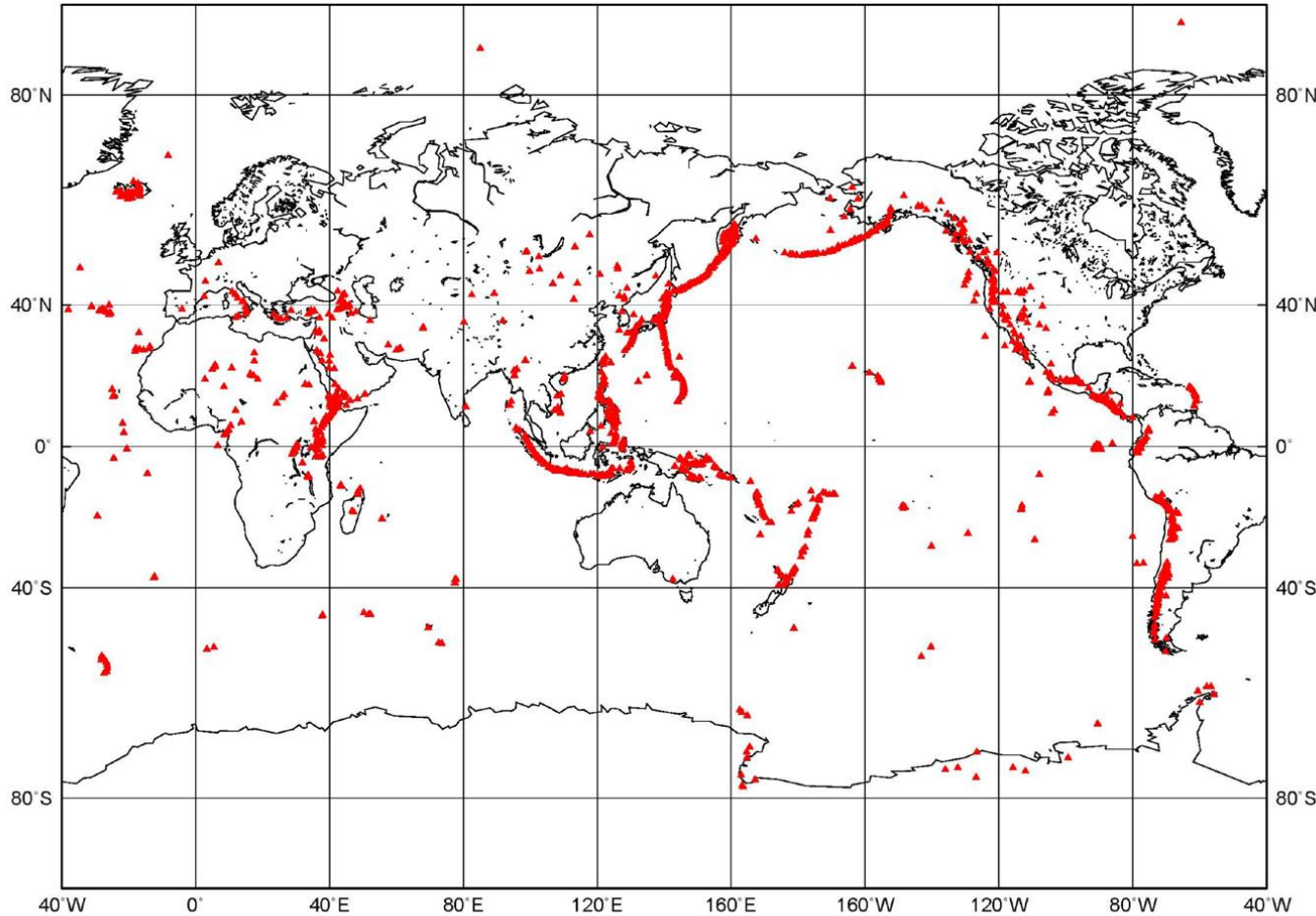
Japan is located in the Pacific Rim Mobile Belt where seismic and volcanic activities occur constantly. Although the country covers only 0.25% of the land area on the planet, the number of earthquakes and active volcanoes is quite high.



Number of earthquakes with magnitude of 6.0 or greater (2004-2013)

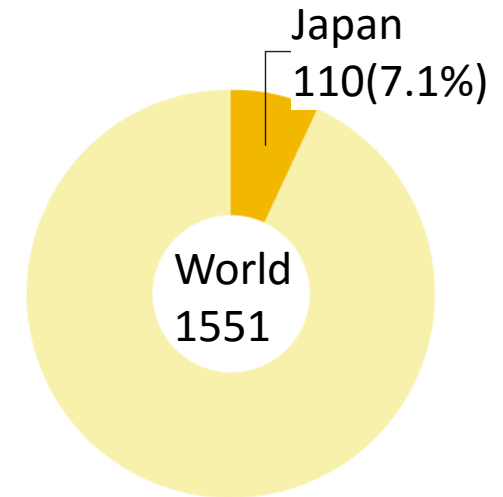
Source: White Paper on Disaster Management

1. The Nation and the Progress in Disaster Countermeasures > A Disaster-prone Country



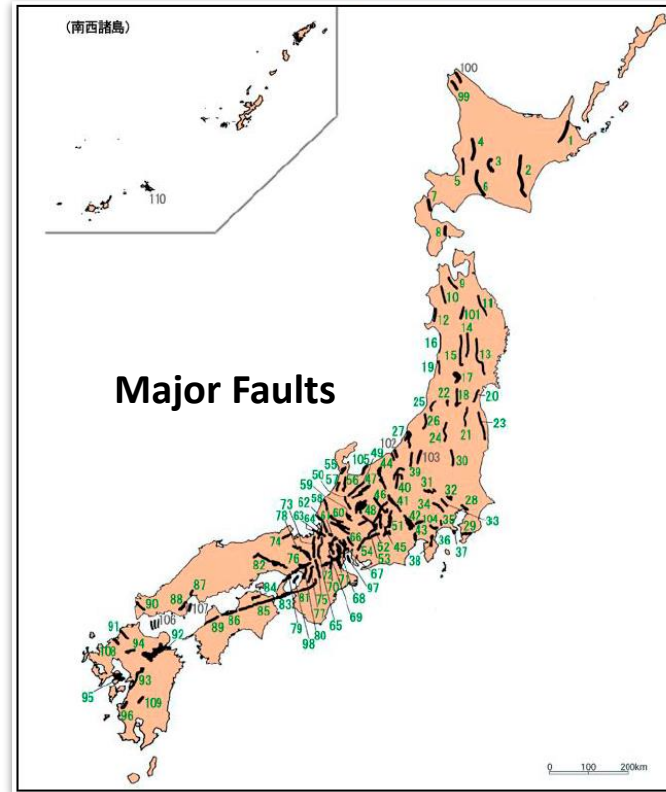
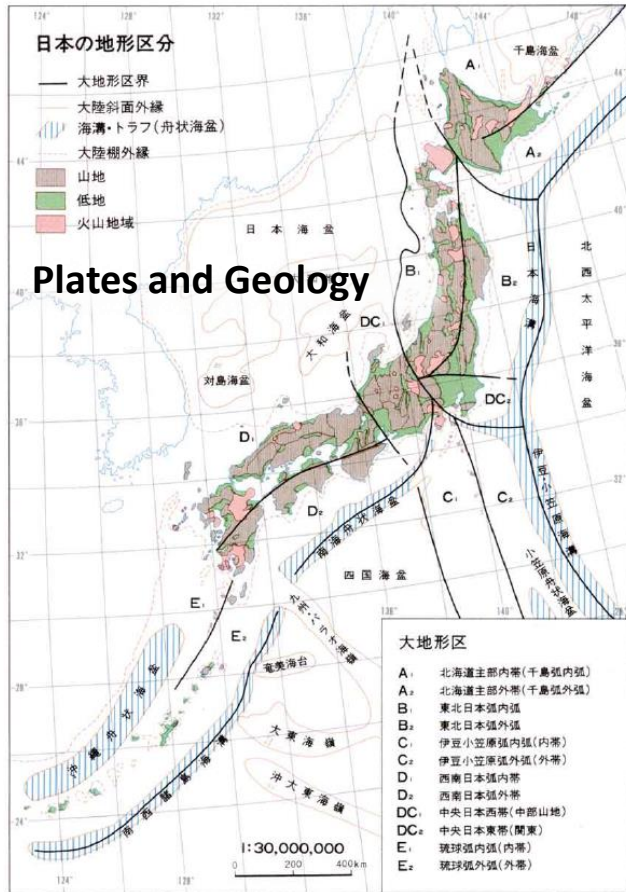
Principal Volcanoes in the World
Source: White Paper on Disaster Management

Japan is located in the Pacific Rim Mobile Belt where seismic and volcanic activities occur constantly. Although the country covers only 0.25% of the land area on the planet, the number of earthquakes and active volcanoes is quite high.

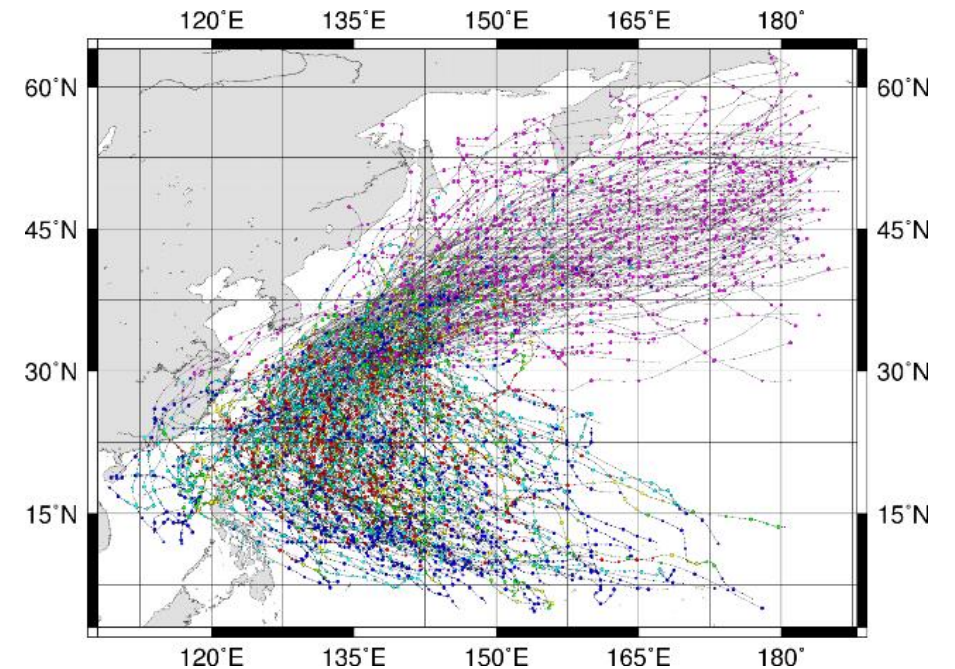


Number of active volcanos (2014)
Source: White Paper on Disaster Management

1. The Nation and the Progress in Disaster Countermeasures > A Disaster-prone Country

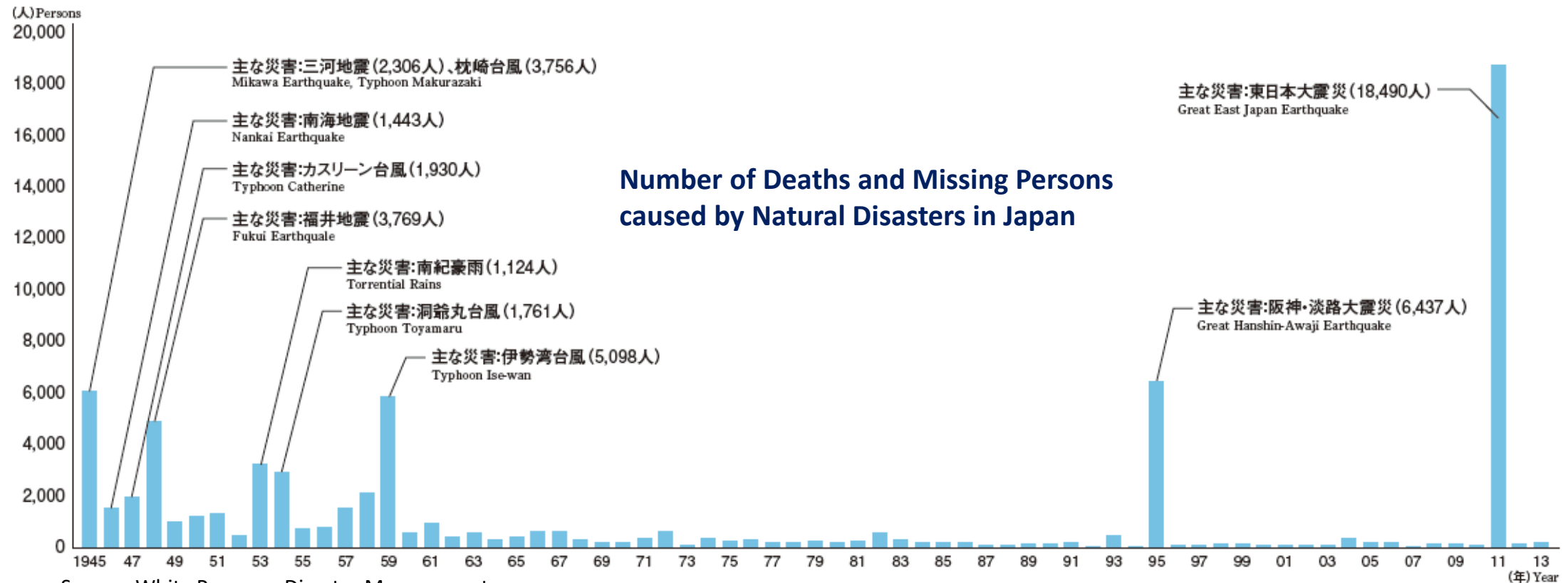


Because of geographical, topographical and meteorological conditions, the country is subject to frequent natural disaster such as typhoons, torrential rains and heavy snowfalls, as well as earthquakes and tsunamis.



1. The Nation and the Progress in Disaster Countermeasures > Disasters in Japan

Every year there is a great loss of people's lives and property in Japan due to natural disasters. Until the second half of 1950s, large-scale typhoons with earthquakes caused extensive damage and thousands of casualties. Thereafter, with the progress of society's capabilities to respond to disasters and mitigate vulnerabilities to disasters by developing disaster risk management systems, promoting national land conservation, improving weather forecasting technologies, and upgrading disaster risk information communications systems, disaster damage has shown a declining tendency.

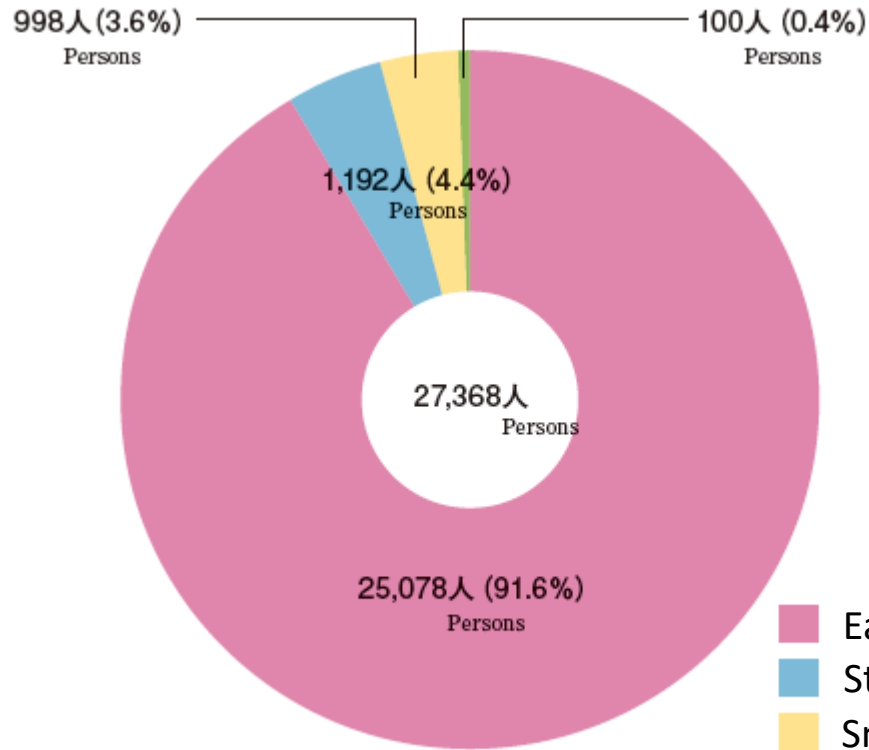


Source: White Paper on Disaster Management

Note: With regard to the Great East Japan Earthquake, the figure is set as of September 11, 2014 compiled by the Extreme Disaster Management Headquarters

1. The Nation and the Progress in Disaster Countermeasures > Disasters in Japan

In spite of many years of efforts, in 1995, more than 6,400 people died of the Great Hanshin-Awaji Earthquake. Also, in 2011, more than 18,000 people died or went missing due to the Great East Japan Earthquake. There is also a high probability of the occurrence of large-scale earthquakes in the near future including impending possibilities of Nankai Trough Earthquake and Tokyo Inland Earthquake. As such, natural disasters remain a menacing threat to the safety and security of the country.



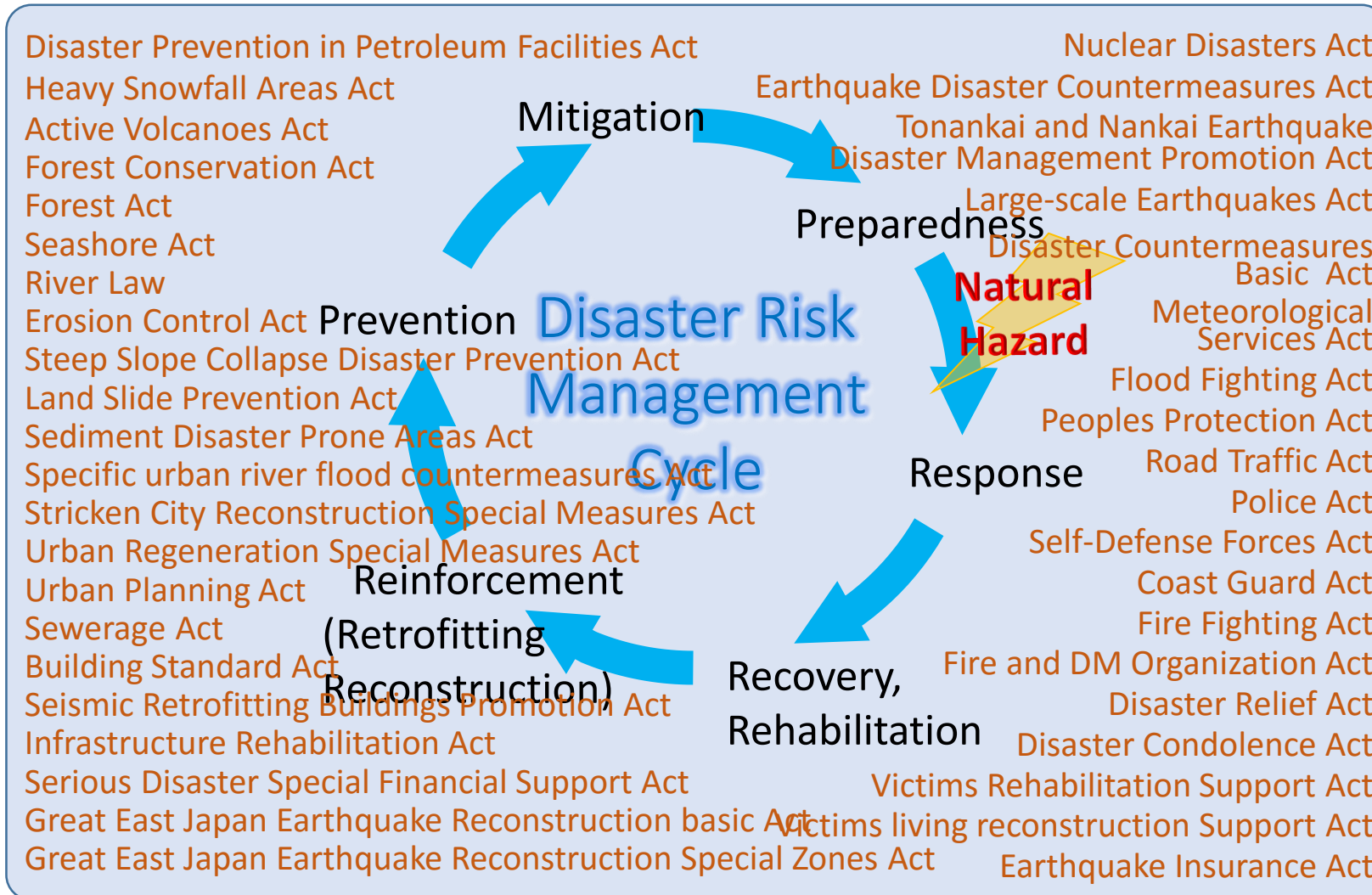
**Number of Deaths and Missing Persons by Type of Disaster
(Past 20 years: 1994-2013)**

- Earthquake, Tsunami
- Storm, Floods
- Snow, Ice
- Volcanic eruption, etc.

Source: White Paper on Disaster Management

1. The Nation and the Progress in Disaster Countermeasures > Progress in Disaster Risk Management Laws and Systems

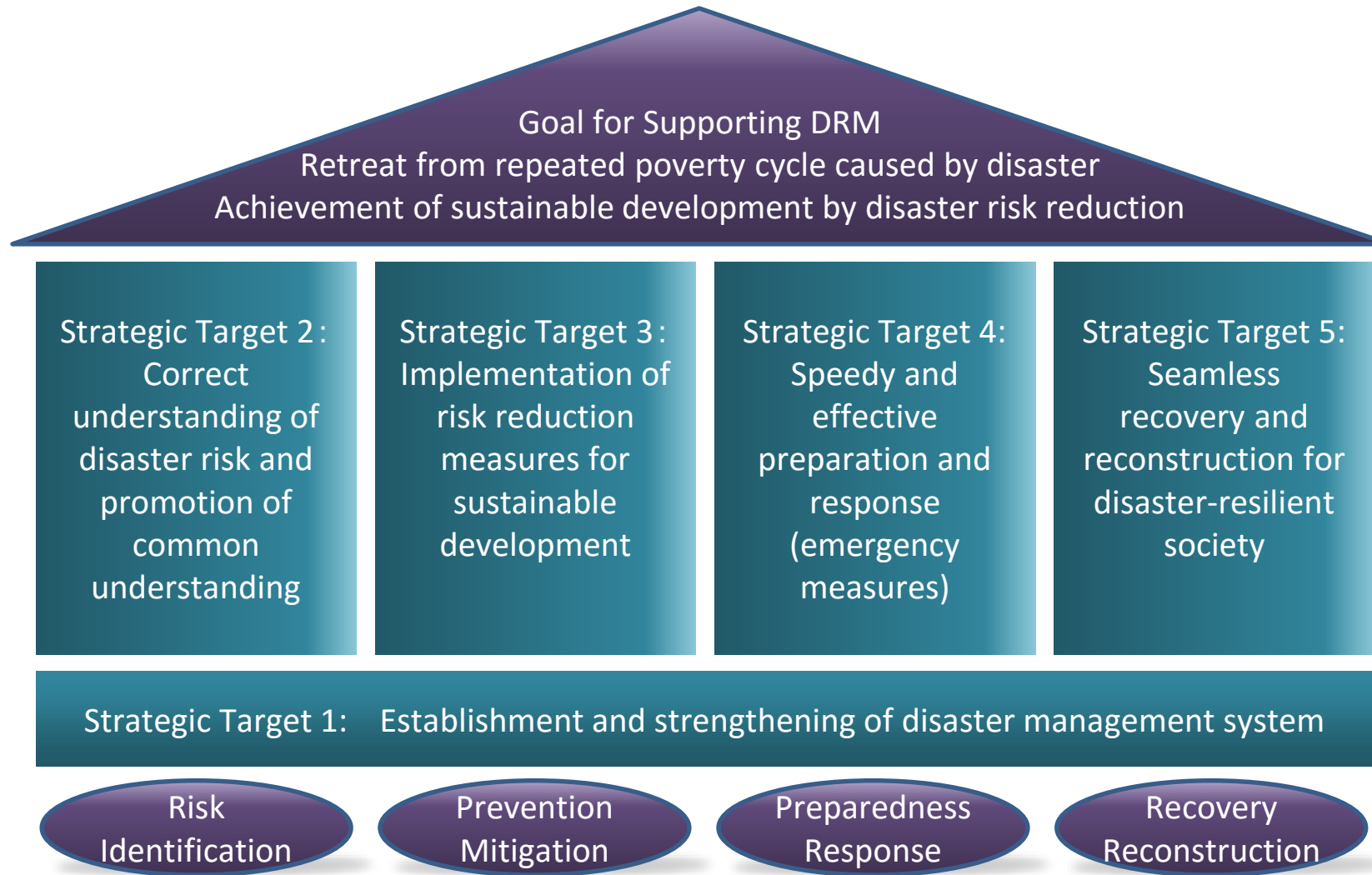
Legal and institutional fundamentals for supporting activities of DRMC
Examples of Japanese Disaster Risk Management relating National Laws



It is a national priority to protect citizens' lives, livelihoods, property as well as **national land** from natural disasters. The turning point for strengthening the disaster risk management system came into effect in response to the immense damage caused by the Typhoon Ise-wan in 1959, and led to the enactment of the **Disaster Countermeasures Basic Act** in 1961, which formulates a comprehensive and strategic disaster risk management system. Thereafter, the disaster risk management system has been continuously reviewed and revised following the lessons learned from large-scale disasters.

1. The Nation and the Progress in Disaster Countermeasures > Progress in Disaster Risk Management Laws and Systems

JICA's Development Strategy focusing on Disaster Risk Reduction



The national priority also reflects to the international cooperation strategy. The JICA's Development Strategy on Disaster Risk Reduction is structured as it comprehensively improve the capacity of disaster risk management and to make positive contribution to the international community, through such as SFDRR.

Japan holds abundant experience and technology, having coped with natural disasters over years. With these experience and technology, Japan has contributed to improvement of disaster risk management practices in developing countries.

Summary of the SFDRR 2015-2030

(Sendai Framework for Disaster Risk Reduction) WCDRR, 18 March 2015, Sendai

Expected outcome over the next 15 years

The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.

Goal

The prevention of new risk and the reduction of existing risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthens resilience.

7 global targets, 13 Guiding principles

Priorities for Action

**Priority 1:
Understanding
disaster risk**

**Priority 2:
Strengthening disaster risk
governance to manage
disaster risk**

**Priority 3:
Investing in disaster risk
reduction for resilience**

**Priority 4: Enhancing disaster
preparedness for effective response, and
to “Build Back Better” in recovery,
rehabilitation and reconstruction**

Role of stakeholders

**Civil society, volunteers, organized
voluntary work organizations and
community-based organizations**

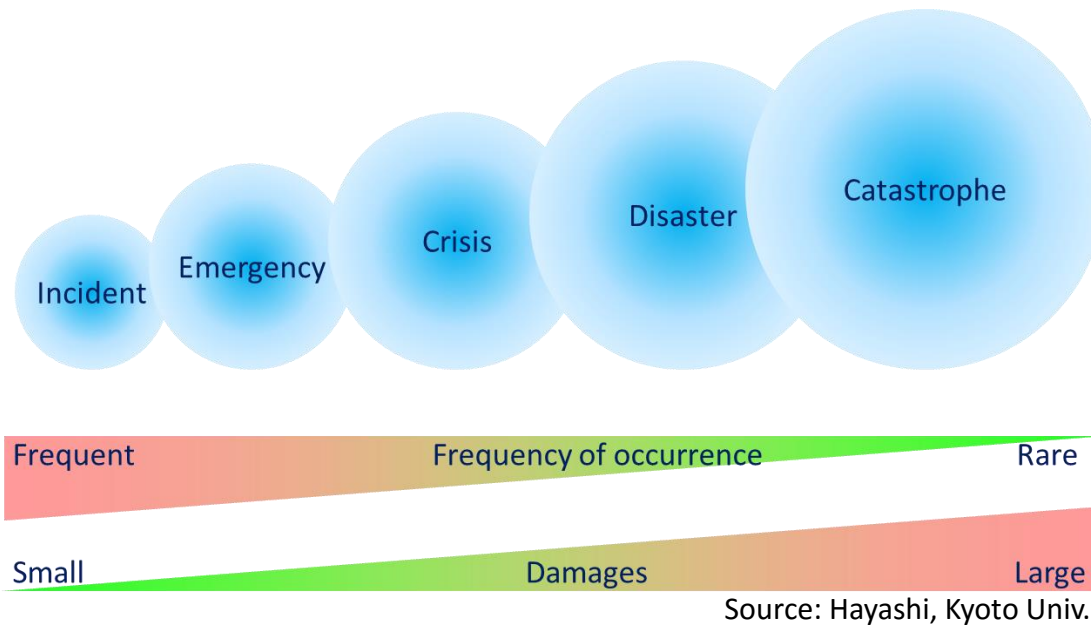
**Academia, scientific
and research entities
and networks**

**Business, professional associations and private
sector financial institutions, including financial
regulators and accounting bodies, as well as
philanthropic foundations**

Media

International cooperation and global partnership

Incident, Emergency, Crisis, Disaster and Catastrophe



Incident, Emergency: An occurrence or event, natural or human-caused, that requires an emergency response to protect life or property. Incidents can, for example, include major disasters, emergencies, terrorist attacks, terrorist threats, wildland and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response. (ICS)

Crisis: Any incidents(s), human-caused or natural, that require(s) urgent attention and action to protect life, property, or environment. (ISO 22399:2007)

Disaster: A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceeds the ability of the affected community or society to cope using its own resources. (UNISDR) (IFRC)

Catastrophe: An event causing destructive and often sudden damage or suffering

Management of

Crisis management, Emergency Management: The organization and management of resources and responsibilities for addressing all aspects of emergencies, in particular preparedness, response and initial recovery steps. (UNISDR)

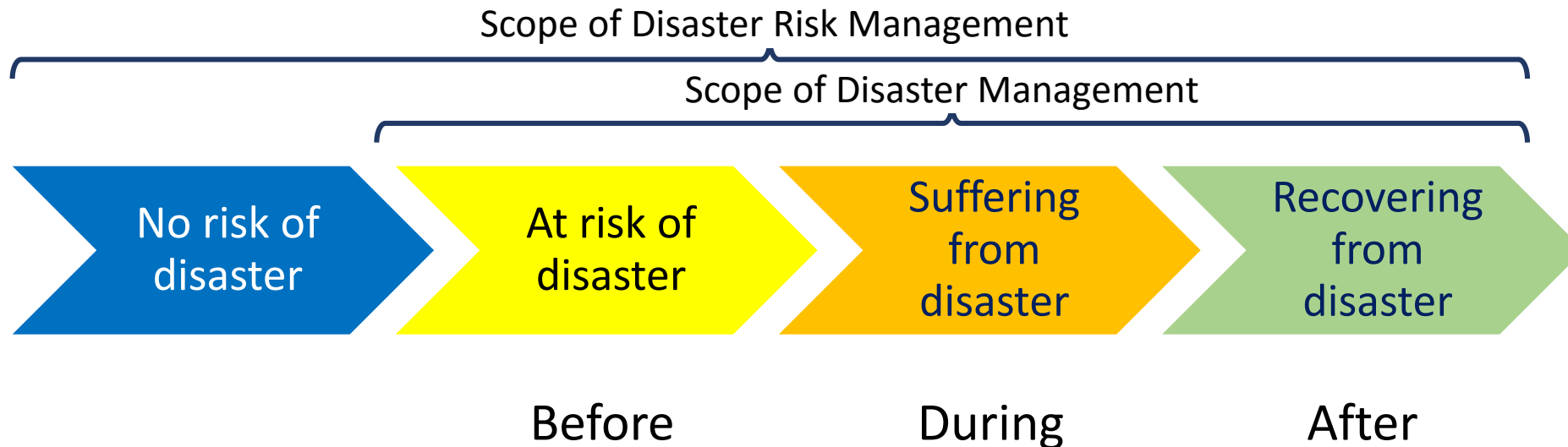
Disaster Management is the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters. (IFRC)



Disaster Risk...

Disaster Risk: The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period.

Disaster Risk Management: The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster. (UNISDR)



Disaster Risk Management Cycle



Disaster Risk Reduction, Disaster Risk Governance

Disaster Risk Reduction: The concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events. (UNISDR)

Disaster Risk Governance: Systematic approach of risk management processes through identification, assessment, risk reduction and impact mitigation, based on the principles of cooperation and participation by public, private, community and academy, incorporating such criteria as accountability and transparency within the procedures. (Baba, H.)

Descriptions on this presentation is based on the above terminology and therefore may differ from the original pamphlet of “Disaster Management in Japan”.

Disaster Countermeasures Laws and Acts

Japan's legislation for disaster risk management system, including **the Disaster Countermeasures Basic Act**, addresses all of the disaster phases of prevention, mitigation and preparedness, emergency response as well as recovery and reconstruction with roles and responsibilities among the national and local governments clearly defined, it is stipulated that the relevant entities of the public and private sectors are to cooperate in implementing various disaster countermeasures.

The Disaster Countermeasures Basic Act has **constantly been reviewed** and amended since its first enactment, and with lessons learned from the Great East Japan Earthquake, provisions were added including enhancement of the measures concerning support activities mutually done by local governments in 2012 and the measures for ensuring smooth and safe evacuation of residents and improving protection of affected people in 2013. In 2014, provisions were added for strengthening measures against abandoned vehicles in order to promptly clear them from the roads for emergency vehicles.

Outline of the Disaster Countermeasures Basic Act

1. Clearer definition of the philosophy and the responsibilities for disaster risk management

- Basic idea of disaster countermeasures: Clarification of basic policies including the concept of disaster reduction
- Responsibilities of the government, prefectures, municipalities, and designated public institutions: Formulation and implementation of the philosophy and plan for disaster risk management, mutual cooperation
- Responsibilities of residents: Self-preparedness for disaster, stockpiling of basic necessities, voluntary participation in disaster preparedness activities

2. Organization: Development and promotion of comprehensive disaster risk management administration

- National government: Central Disaster Risk Management Council, major (extreme) disaster risk management headquarters
- Prefectural and municipal governments: Local disaster risk management headquarters

3. Planning system: Development and promotion of systematic disaster risk management measures

- Central Disaster Risk Management Council: Disaster Risk Management Basic Plan
- Designated local government organizations and public institutions: Disaster risk management operation plan
- Prefectures and municipalities: Local disaster risk management plan
- Residents: Community disaster risk management plan

4. Promotion of Disaster Countermeasures

- Definition of the roles and responsibilities to be performed by each actor in each stage of prevention, preparedness, response and recovery
- Primary disaster response procedures including evacuation order by the head of municipalities taking over emergency measures by prefectures or designated administrations in case of the large-scale disaster

5. Protection of affected people and their livelihood

- Prior preparation of lists of the people requiring assistance in case of disaster
- Clarification of the standards for evacuation centers and facilities in case of disaster
- Improvement and expansion of protection measures for affected people through preparation of the certificates and list of affected people
- Stipulation of the framework for wide-scale evacuation and goods transportation

6. Financial measures

- Implementation of laws are funded by each responsible party
- Financial measures for extreme disasters by the government

7. State of Disaster Emergency

- Declaration of disaster emergency state → Cabinet decision of government's policy (basic policy for countermeasures)
- Emergency measures (restriction on distribution of basic necessities, moratorium on financial obligation, urgent enactment of Cabinet Order related to acceptance of international support, automatic enforcement of the Act on Special Measures concerning Preservation of Rights and Interests of Victims of Specified Disaster)

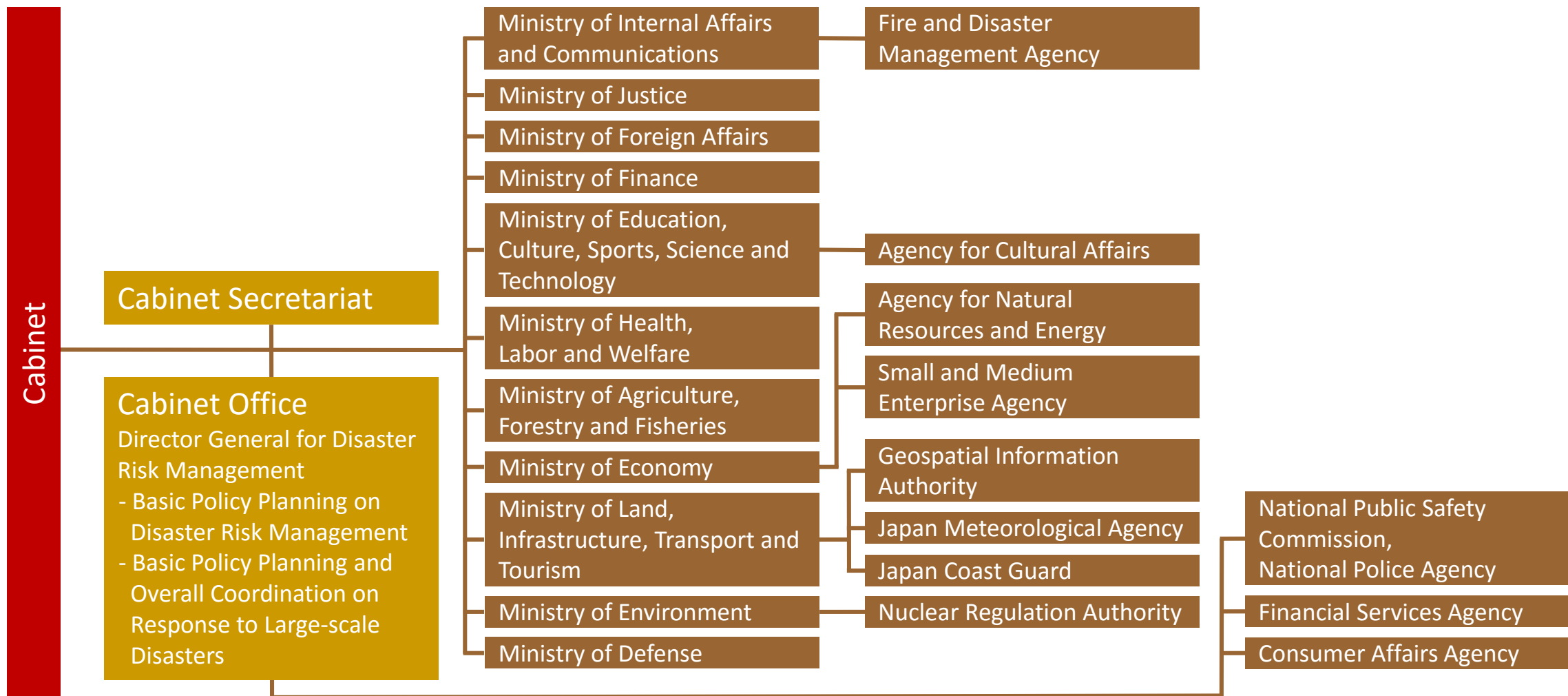
Mission of the Cabinet Office

Along with a series of reforms of the central government system in 2001, the post of Minister of State for Disaster Risk Management was newly established to integrate and coordinate disaster risk management policies and measures of ministries and agencies. In the Cabinet Office, which is responsible for securing cooperation and collaboration among related government organizations in wide-ranging issues, the Director-General for Disaster Risk Management is mandated to undertake the planning of basic disaster risk management policies and response to large-scale disasters, as well as conduct overall coordination.

To prepare for disasters, the Central Disaster Risk Management Council with the Prime Minister as the Chair and all Cabinet members decides the national government's Disaster Risk Management policies. Such decisions are carried out by respective ministries and agencies, accordingly.

In the event of a large-scale disaster, the Cabinet Office is engaged in collection and dissemination of accurate information, reporting to the Prime Minister, establishment of the emergency activities system including the Government's Disaster Risk Management Headquarters, overall wide area coordination concerning disaster response measures.

Cabinet Office and Related Ministries and Agencies



This chart conceptually represents the relationship of ministries and agencies related to Disaster Risk Management. The reconstruction from the Great East Japan Earthquake is led and managed by the Reconstruction Agency.

Central Disaster Risk Management Council

The Central Disaster Risk Management Council is one of the councils that deal with crucial **policies** of the Cabinet, and is established in the Cabinet Office based on the Disaster Countermeasures Basic Act. The Council consists of the Prime Minister as the chairperson, all members of the Cabinet, heads of major public corporations and experts.

The Council develops the Basic Disaster Risk Management Plan and establishes basic disaster risk management **policies**, and plays a role of promoting **comprehensive disaster risk management actions** including deliberating important issues on disaster risk management upon requests from the Prime Minister or Minister of State for Disaster Risk Management.

Central Disaster Risk Management Council



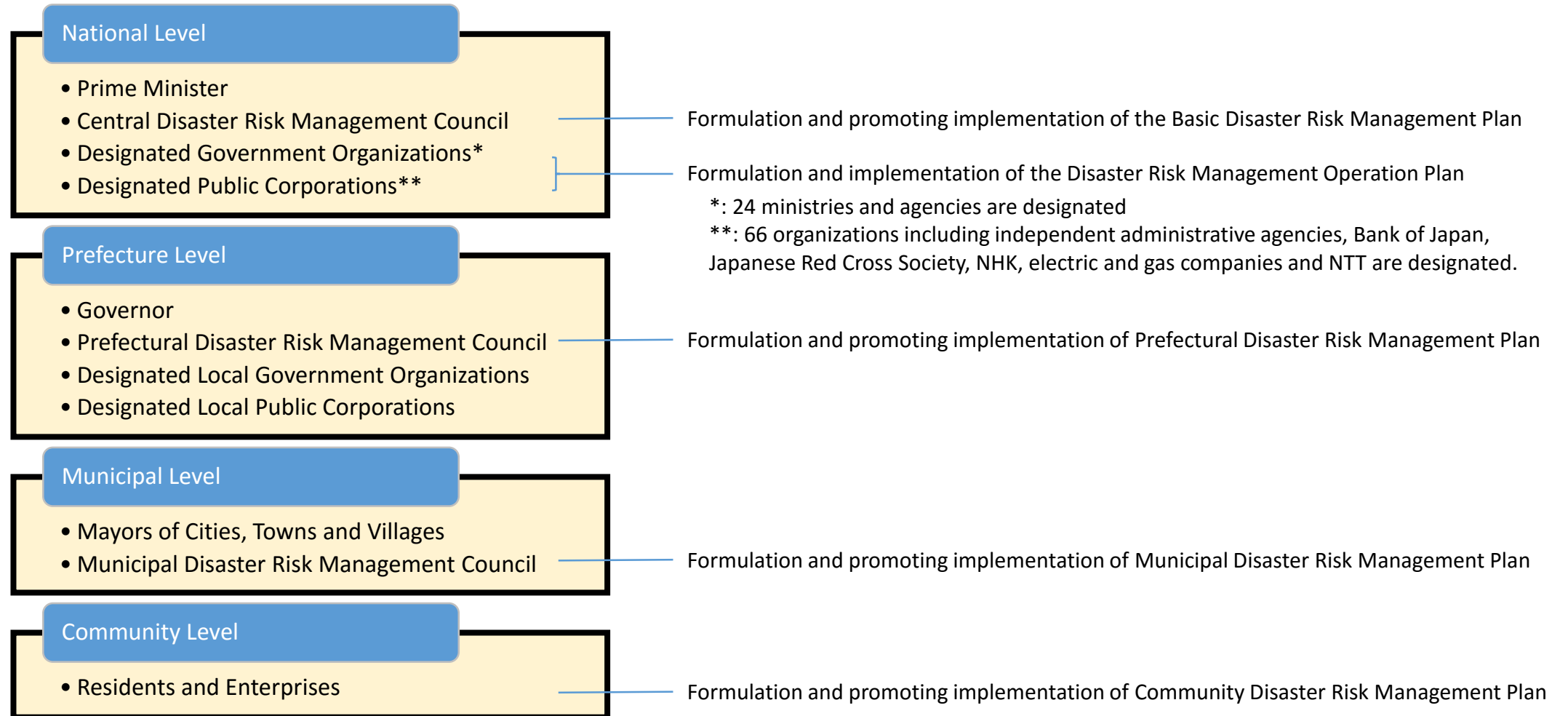
Organization of Central Disaster Risk Management Council



*:Governor of the Bank of Japan, Japanese Red Cross Society President, Japan Broadcasting Association President, President of Nippon Telegraph and Telephone Corporation (NTT)

** :Professor emeritus of Tokyo University, Professor of Tokyo International University, President of Fire fighting Association, Head of National Governors' Association

Outline of the Disaster Risk Management System



Disaster Risk Management Plans

Disaster Risk Management Planning System

1. Basic Disaster Risk Management Plan: This plan is the highest-level plan and constitutes the basis for disaster risk management activities prepared by the Central Disaster Risk Management Council based on the Disaster Countermeasures Basic Act.
2. Disaster Risk Management Operation Plan: This is a plan made by each designated government organization and designated public corporation based on the Basic Disaster Risk Management Plan.
3. Local Disaster Risk Management Plan: This is a plan made by each Prefectural and Municipal Disaster Risk Management Council, subject to local circumstances and based on the Basic Disaster Risk Management Plan.
4. Community Disaster Risk Management Plan: This is a disaster risk management activities plan at the community level which is established by residents and businesses jointly on a voluntary basis.

Basic Disaster Risk Management Plan

The Basic Disaster Risk Management Plan is a **comprehensive and long-term disaster risk management plan** forming a **foundation** for the Disaster Risk Management Operations Plan and Local Disaster Risk Management Plan. It stipulates provisions for the establishment of the disaster risk management system, promotion of disaster risk management measures, acceleration of post-disaster recovery and reconstruction measures, and promotion of scientific and technological research on disaster risk management.

The plan was revised entirely in 1995 based on the experiences of the Great Hanshin-Awaji Earthquake. It defines **responsibilities of each entity** such as the national and local governments, public corporations and other entities. It consists of **various plans for each type of disaster**, where specific countermeasures to be taken by each entity are described according to the **disaster risk management phases of prevention and preparedness, emergency response, as well as recovery and reconstruction**.

Basic Disaster Risk Management Plan

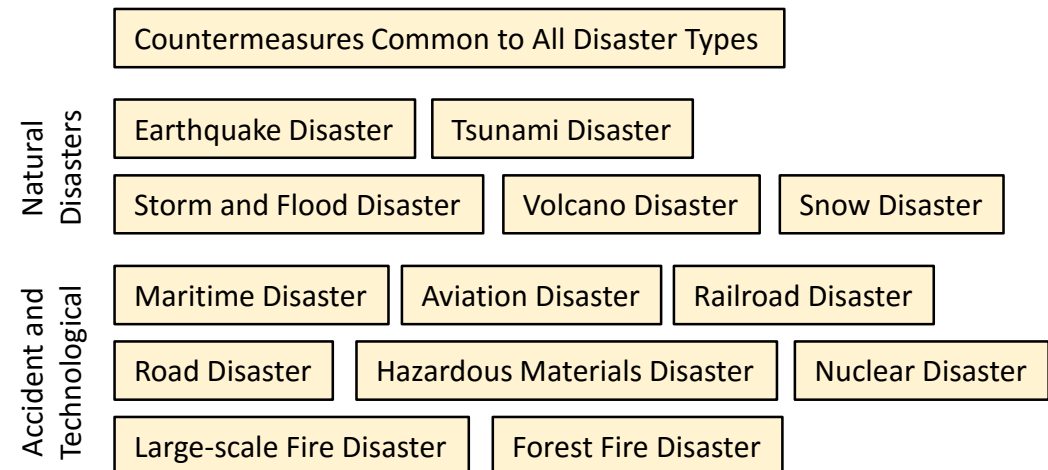
Further, based on the lessons learned from the Great East Japan Earthquake, a new chapter was created in December 2011, for Tsunami Disaster Countermeasures and changes were made in September 2012 and January 2014, reflecting amendment of the Disaster Countermeasures Basic Act and reflecting the study results by the Nuclear Regulation Authority (NRA) respectively. In November 2014, another change was made to reinforce the measures for removing abandoned vehicles in case of emergency. A further change was made in March 2015, to enhance the nuclear disaster risk management system.

Structure of Basic Disaster Risk Management Plan

- Addressing all the disaster phases
 1. Disaster Prevention and Preparedness
 2. Disaster Emergency Response
 3. Disaster Recovery and Reconstruction
- Concrete countermeasures to be taken by each stakeholder
 1. National Government
 2. Local Government
 3. Community



Various plans for each type of disaster



Outline of Emergency Response to Disasters

In the event of a disaster, the national and local governments quickly collect and share disaster and damage information, and secure communications to carry out effective emergency activities such as emergency rescue and medical operations.

Based on such information, local governments set up disaster management headquarters and related organizations establish their own operation mechanisms.

The national government collects disaster information at the Cabinet Information Collection Center 24 hours a day. When a large-scale disaster strikes, an emergency team composed of the directors-general of the respective ministries and agencies gathers immediately at the Crisis Management Center in the Prime Minister's Official Residence to grasp and analyze the disaster situation, and report the results to the Prime Minister.

Disaster Management meetings at the ministerial or high-ranking senior official level are held, as necessary. According to the level of damage, the government may establish the Headquarters for Major Disaster Management (headed by the Minister of State for Disaster Management) or the Extreme Disaster Management Headquarters (headed by the Prime Minister), to establish the policies for the disaster countermeasures, and to coordinate various emergency measures to be taken by various organizations.

Outline of Emergency Response to Disasters

Further, in order to grasp the situation in the disaster area, a government investigation team headed by the Minister of State for Disaster Management may be dispatched, or if quick and swift actions are needed to be taken with overall coordination of emergency activities on site, the government may establish the onsite headquarters for disaster management.



Government Investigation Team for the Landslides in Hiroshima Prefecture



On-site Headquarters for Major Disaster Management

Wide-area Support System

In case of large-scale disasters that exceed the response capabilities of the affected local government, various wide-area support mechanisms are mobilized by the Ministry of Land Infrastructure Transport and Tourism (Tec-Force), National Police Agency (Disaster Response Units), Fire and Disaster Management Agency (Emergency Fire Rescue Team), and Japan Coast Guard.

Furthermore, the Self-Defense Forces can be dispatched for emergency response activities upon request from the governor of the affected prefecture. Also, the Disaster Medical Assistance Teams (DMATs) are dispatched to provide wide-area medical services. These teams transport severely injured persons via Self-Defense Forces vehicles and aircrafts to hospitals outside the disaster stricken zone.

Tec-Force, on-site consultation
at Hiroshima Landslide, 2014



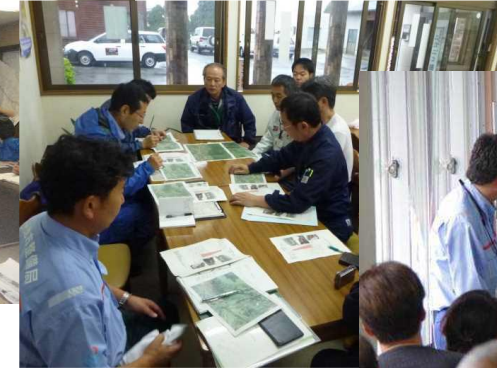
Tech-Force deployment



Damage estimation, survey, site control



Liaison to EOC



Quick rehabilitation planning



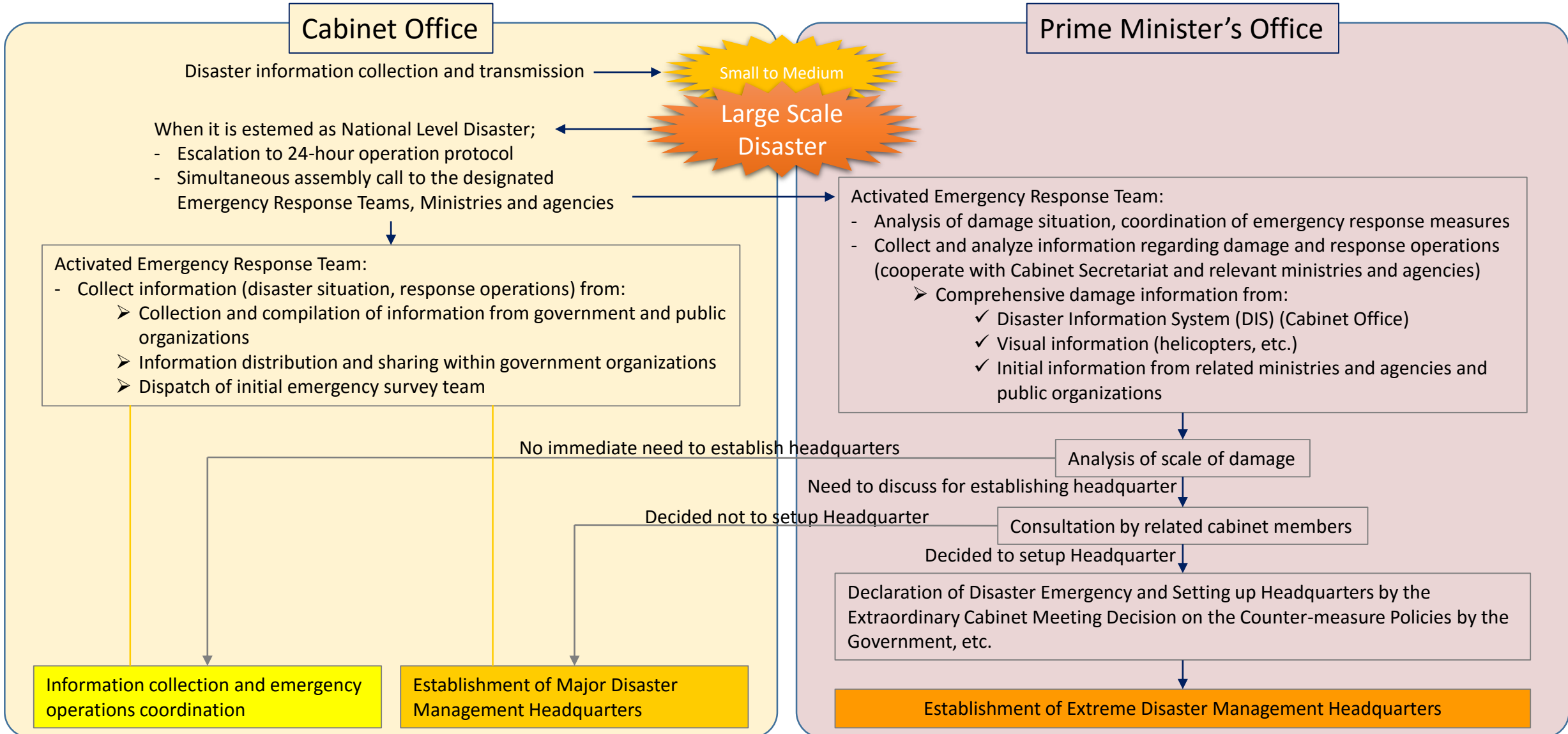
Supporting public consultation



Deployment of helicopters and variety of machines



Cabinet Office Disaster Response Mechanism



Cabinet Office Disaster Response Mechanism

Cabinet Office

- Inter-ministerial meeting
- Coordination of emergency operations by each ministry
- Dispatch of government investigation team
- Administration of on-site disaster management office
- Chief: Minister of State for Disaster Management
- Location: Cabinet Office
- Secretariat: Cabinet Office
- Management of headquarters
 - Coordination of emergency operations by each ministry
 - Dispatch of government investigation team
 - Administration of on-site disaster management headquarters etc.

Information collection and emergency operations coordination

Establishment of Major Disaster Management Headquarters

Prime Minister's Office

- Chief Commander: Prime Minister
- Location: Prime Minister's Office
- Secretariat: Prime Minister's Office and Cabinet Office
- Management of headquarters
 - Coordination of emergency operations by each ministry
 - Dispatch of government investigation team
 - Administration of on-site disaster management headquarters etc.

Establishment of Extreme Disaster Management Headquarters

The Disaster Management System

System for coordinating activities between the national government and local public entities:

In the event of a disaster occurring, **municipalities will primarily** be the center of emergency management as they are the closest to affected people. Prefectural administration will get involved when the comprehensive wider-area measures are necessary.

In the event of a large-scale disaster beyond the capability of local public entities struck by the disaster, national government will step in to **support the local entity** and coordinate mutual support among the local entities.

At the national level, the Extreme Disaster Management Headquarters or the Major Disaster Management Headquarters is set up to promptly collect the disaster information from relevant ministries and local public entities struck by the disaster, and **overall coordination** is provided for rescue, first aid, medical and emergency supplies as necessary and appropriate. Also, an **on-site disaster management headquarters** may be set up to promptly coordinate among the affected local entities and collect information and requests from relevant prefectures and to properly conduct the emergency response activities in consideration to the needs for the affected people.

The Disaster Management System

The on-site disaster management headquarters were set up in the affected areas in such cases as the Great East Japan Earthquake in 2011, the heavy snowfall in 2014, the torrential rainfall in August 2014, and the volcanic eruption of Mt. Ontake in 2014. Through joint meetings held in collaboration with the disaster response headquarters organized by the local entities in the affected areas, the national government and the local entities coordinate based on their shared awareness to serve as the government's closest **one-stop contact point for requests from the affected local entities**. As such, the role of the on-site disaster management headquarters is increasing its importance.

The Disaster Management System

Coordination System between National and Local Governments (in the case of the Great East Japan Earthquake)

Communication and coordination system between Extreme Disaster Management Headquarters and each prefecture during the Great East Japan Earthquake

Extreme Disaster Management Headquarters (Prime Minister's Office)

- Chief: Prime Minister
- Deputy Chief: Chief Cabinet Secretary, Minister for Internal Affairs and Communications, Minister of Defense, Minister of State for Disaster Management
300 staff (maximum)
 - Support Team for Livelihood of Disaster Victims (Cabinet Office)
 - Secretariat: Cabinet Office etc. 100 staff (maximum)

On-site Headquarters for Extreme Disaster Management

- On-site Headquarters (Miyagi Pref.) 60 staff (maximum)
- Chief: State Minister of Cabinet Office for Disaster Management
 - On-site Contact Office (Iwate Pref.) 25 staff (maximum)
Chief: State Minister of Cabinet Office for Disaster Management
 - On-site Contact Office (Fukushima Pref.) 25 staff (maximum)
Chief: Parliamentary Vice-Minister for Disaster Management

Ministries and Agencies (Regional branch offices and bureaus, Self-Defense Forces etc.)

↑ Contact and coordination through Ministries and Agencies ↓

◆ Miyagi PDMH
◆ Iwate PDMH
◆ Fukushima PDMH
PDMH: Prefectural Disaster Management Headquarters



Contact and coordination through On-site Headquarters

Lesson Learnt from the Great East Japan Earthquake

Cabinet office (Report of the Committee for Technical Investigation, Final report of the Committee for Policy Planning)

- “We must gravely accept the fact that the results of the pre-disaster assumptions of earthquakes and tsunamis were far removed from the earthquake and tsunami that actually occurred, and must undertake a fundamental review of the principles regarding selection of earthquakes and tsunamis for future hazard assumptions.”
- “Residents need to be educated not to excessively rely on such measures as construction of coastal protection facilities and to be aware of the importance of taking evacuation actions swiftly and autonomously to higher ground with no hesitation as soon as a large earthquake erupts.”
- Improvements to tsunami warning announcements
- Improvement and strengthening of tsunami warnings and information delivery systems
- “Prefectural governments should take necessary measures to collect information when municipalities are no longer able to report their damage status, secured information collection methods should be established, prior to occurrence of disasters detailing the departments/divisions from which personnel should be dispatched to affected municipalities to collect information.”
- “Rescue/firefighting forces should enhance and strengthen their structures by establishing organizations that provide and receive support for the activities of on-site units.”
- “The cases in abroad on emergency response should be referenced to develop rules for communication in order to mutually share information and coordinate disaster response among different forces so that issues such as ineffective or overlapping operations (e.g., different on-site units searching the same location at different times), can be remedied, and collaborative and effective rescue activities can be conducted.”

Lesson Learnt from the Great East Japan Earthquake

Cabinet office (White Paper on Disaster Management 2011)

- The Prime Minister issued the Declaration of a Nuclear Emergency Situation 11 March at 19:03 after the strike of the accident at Tokyo Electric Power Company (TEPCO) Fukushima Daiichi Nuclear Power Station (NPS) and Fukushima Daini NPS, and established the Nuclear Disaster Management Headquarters (NDMH) and Local Headquarters for Nuclear Emergency Response.
- An Integrated Government – TEPCO Headquarters for measures against Fukushima NPS Accident was established on 15 March headed by the Prime Minister for the government and TEPCO to integrally respond to the accident.
- On 18 March, a local coordination office was established to strengthen coordination with the Self Defense Force and other related organizations.
- On 29 March, a 2team for supporting the lives of the Nuclear Disaster Victims” was established under the NDMH with the Minister for Economy, Trade and Industry as the Chief.
- After the accidents at TEPCO’s Fukushima Daiichi and Fukushima Daini Power Stations, to secure the safety of residents in the vicinity of the power stations, the chair of the NDMH ordered the designation of evacuation zones, after considering the opinions of Nuclear Safety Commission, for securing the safety of residents living in the vicinity of the power stations.
- On 30 March, the Minister for Economy, Trade and Industry directed electric power suppliers to implement the emergency safety countermeasures such as drills, improvement of facilities and development of tsunami protection plans.

Lesson Learnt from the Great East Japan Earthquake

The World Bank: Learning from Mega disasters – lessons from the Great East Japan Earthquake –

- Domestic and international assistance initiatives were launched by a large number of public and private sector organizations.
- Civil society organizations play an indispensable role in disaster management. These organizations have the advantage of flexibility and speed in reaching and caring for affected communities.
- Without prearranged coordination mechanisms, even the best-prepared teams cannot function properly on the ground because of the complexity of disaster response operations and the large numbers of actors involved.
- Voice messages were widely used to confirm whether family members and relatives were safe, and satellite phones played a crucial role in emergency communication during the response stage. Social media was extensively used for search and rescue, as well as for fundraising.



Figure 14.3 TEC-FORCE activities in response to the GEJE

Source: Ministry of Land, Infrastructure, Transport and Tourism (MLIT).

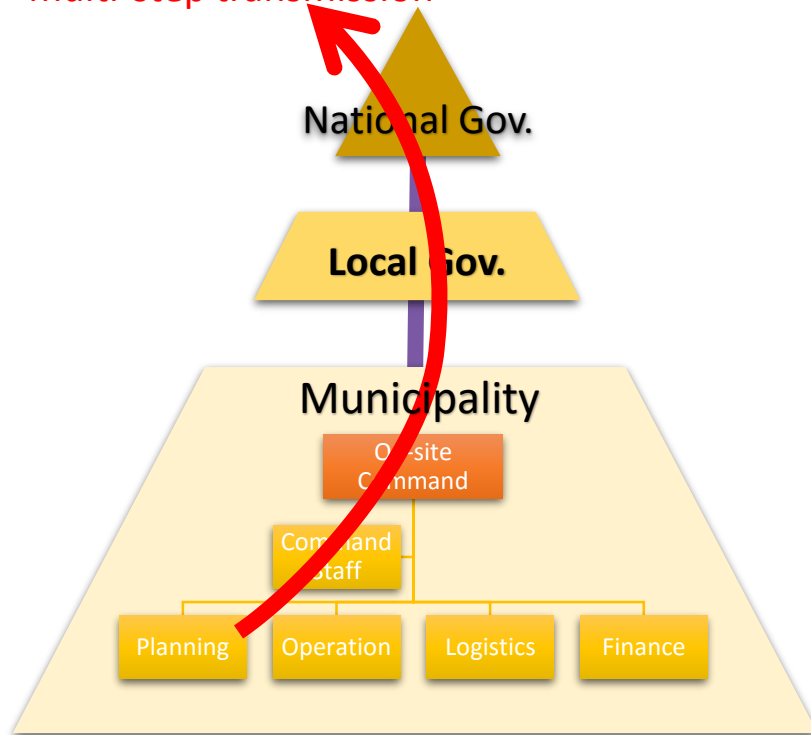
Lesson Learnt from the Great East Japan Earthquake

The World Bank: Learning from Mega disasters – lessons from the Great East Japan Earthquake –

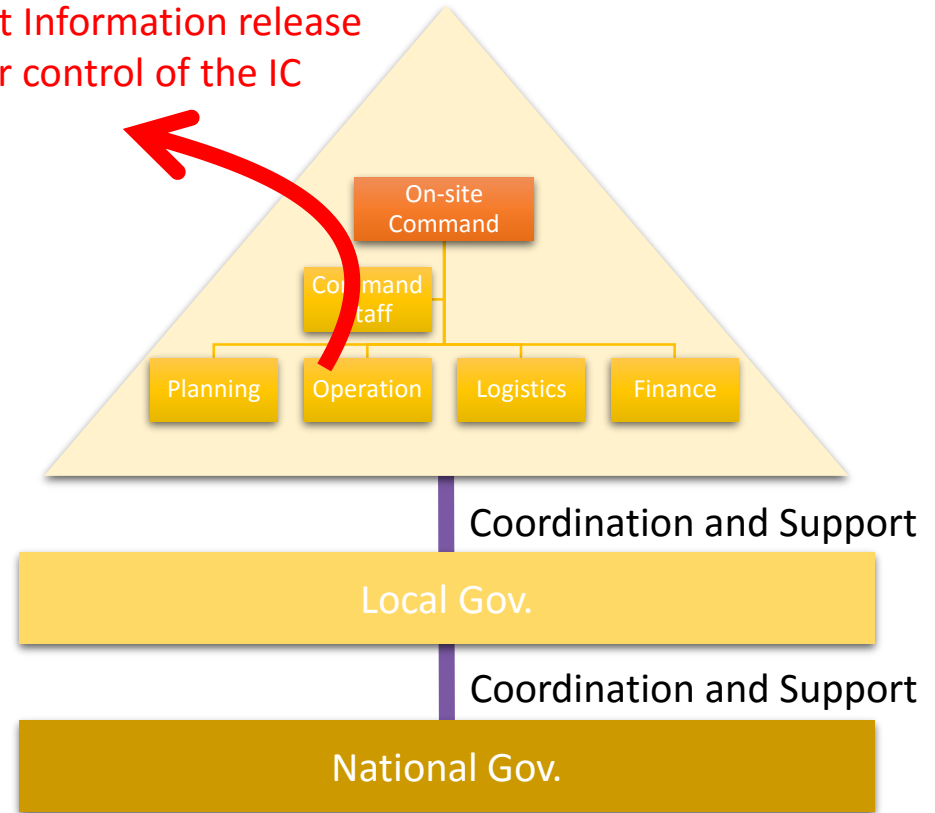
- Relief goods delivery through prefectural- and municipal- level faced several problems including fuel shortages, interruption of telecommunication services, and supply and demand mismatches, resulting in stockpiling of the goods in depots and delayed delivery to the people in need. Several measures can be taken to address these issues, including prior surveys of depot facilities, advance estimates of the quantities of emergency goods, the enlisted support of professional logistics specialists, and the promotion of logistics information management in unaffected areas, among others.
- Many municipalities in Tohoku suffered serious damage to their office buildings and incurred considerable staff losses, which hampered their disaster response. To compensate for this, many kinds of partnership arrangements were formed between localities in the affected areas and their counterparts in unaffected areas.
- A mega disaster necessarily results in an enormous number of evacuees staying in evacuation centers for a significant time period. It highlights important management issues including shortages of essential supplies and services, successful self-management practices initiated by the affected people themselves, good management practices by local governments, and the sensitivity required to accommodate diverse groups of evacuees with special needs.
- Women, the elderly, and the disabled— and experts sensitive to the needs of all vulnerable groups— should be engaged in the planning, design, and implementation of relief- and- recovery activities to ensure a more effective and efficient recovery.

Command or Support?, Situation Information UP or DOWN?

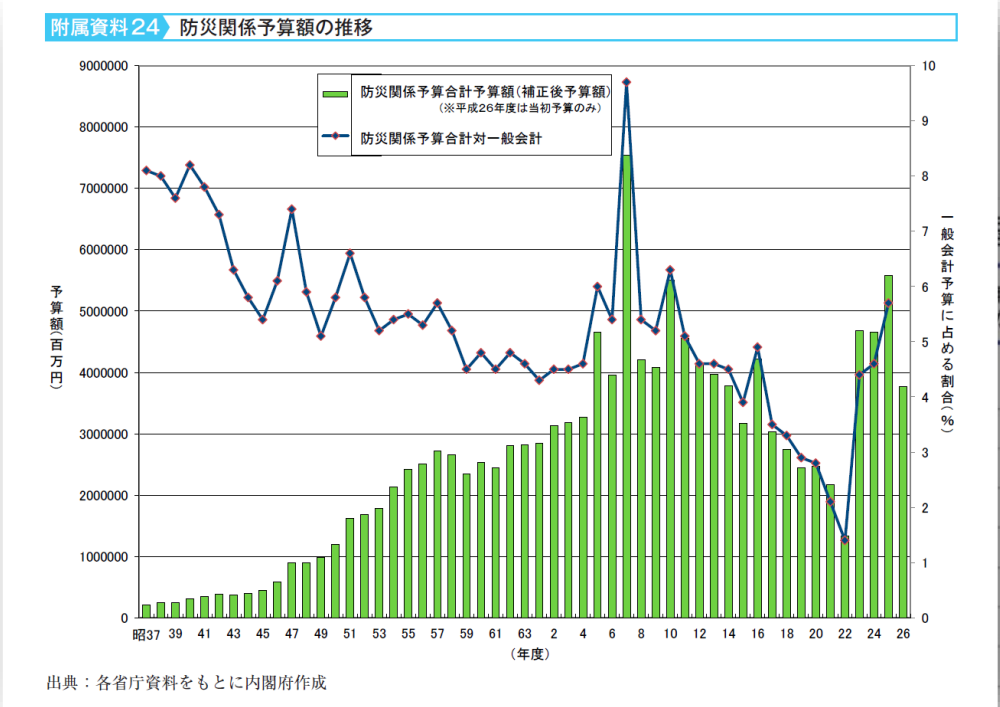
Public information after
multi-step transmission



Direct Information release
under control of the IC



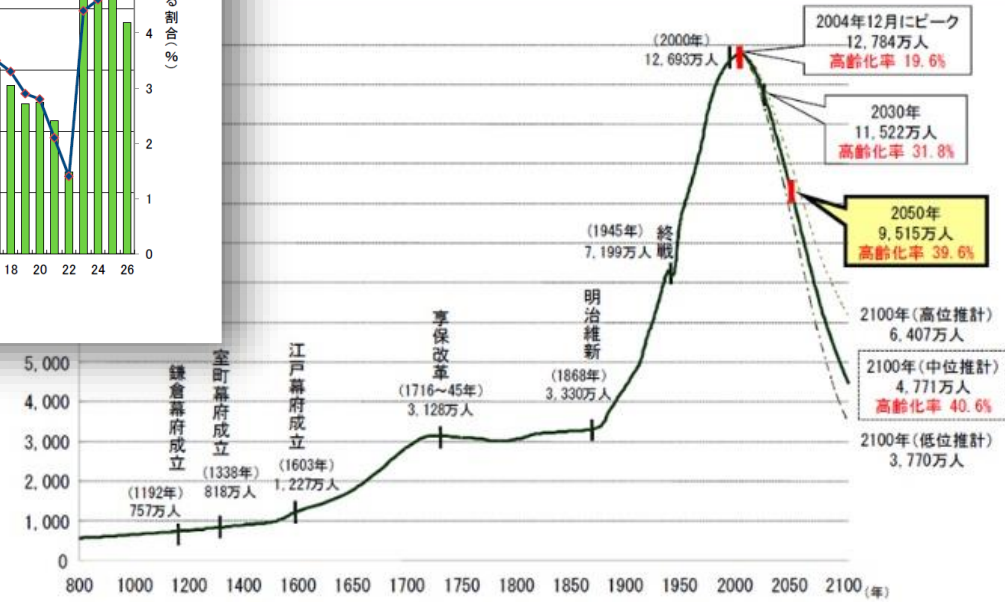
Challenges of DRM in Japan



- Cost of DRR
- Decreasing population

日本の人口は長期的には急減する局面に

2000年をピークに、今後100年間で100年前(明治時代後半)の水準に戻っていく。この変化は急激な減少。



(出典)総務省「国勢調査報告」、同「人口推計年報」、同「平成12年及び17年国勢調査結果による補間推計人口」、国立社会保障・人口問題研究所「日本の将来推計人口(平成18年12月推計)」、国土庁「日本列島における人口分布の長期時系列分析(1974年)をもとに、国土交通省国土計画局作成

Challenges of DRM in Japan

- Aging society
- Decreasing Human Resources

