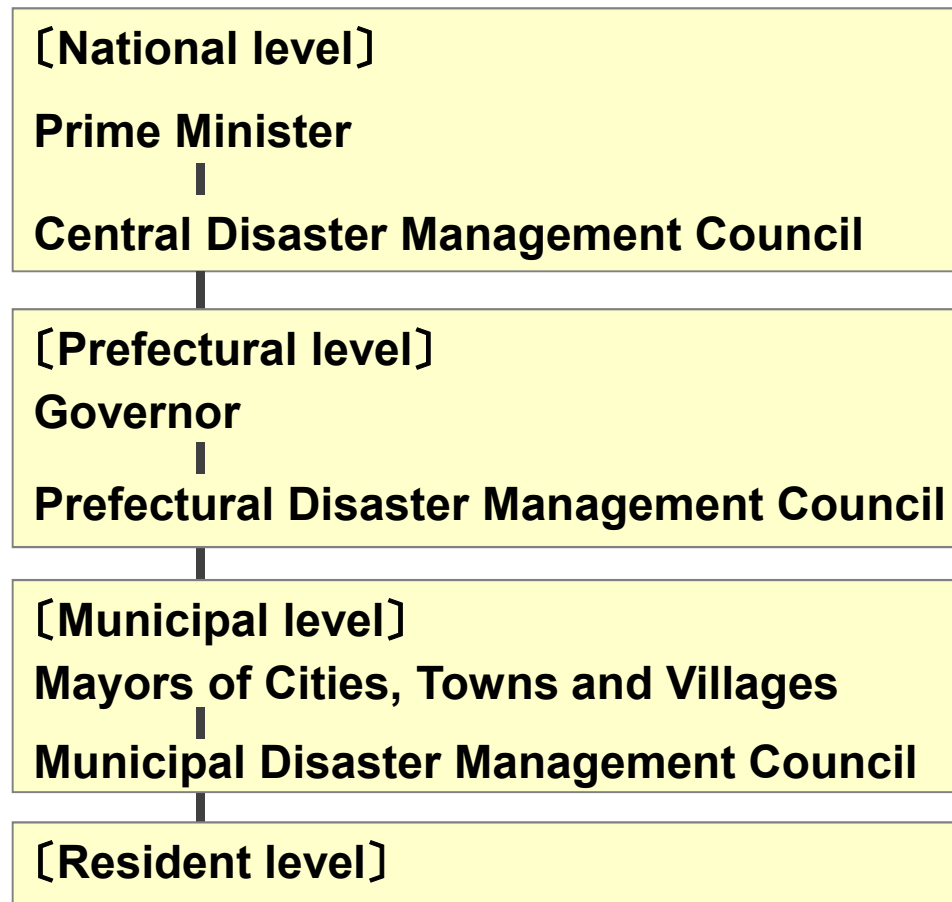


Flood Management in Japan

Water and Disaster Management Bureau,
Ministry of Land, Infrastructure, Transport and
Tourism (MLIT), Japan

- Under the Disaster Management System in Japan, clear roles and responsibilities of the national and local governments are defined ahead of time.
- The relevant stakeholders of the public and private sectors cooperate in implementing various disaster countermeasures.

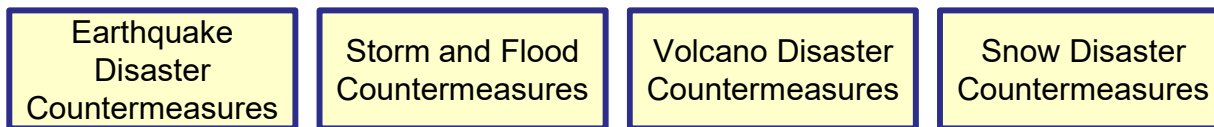
Disaster Management System in Japan



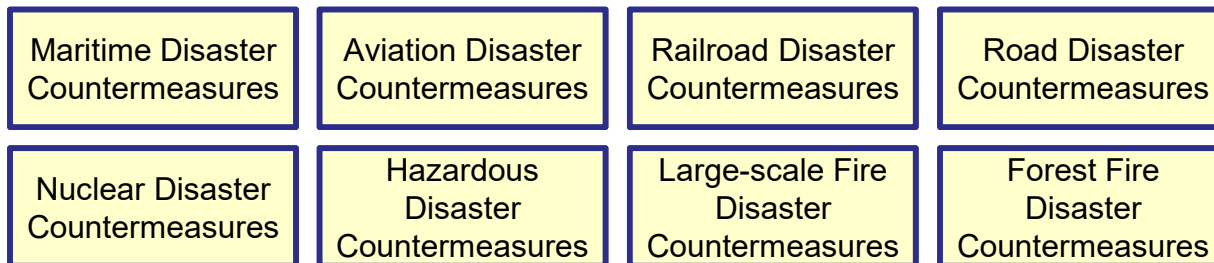
“Basic Disaster Management Plan”

- The Basic Disaster Management Plan states comprehensive countermeasures for disaster risk reduction, such as disaster management system, projects on disaster risk reduction, fast and appropriate disaster recovery and rehabilitation works, as well as scientific and technical research.

Natural Disasters

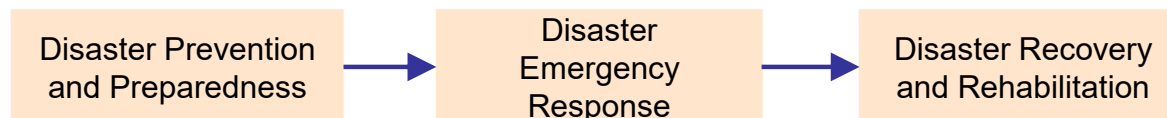


Accident Disasters



- The plan has been revised based on the experience of disasters.

(Addressing all the disaster phases)



(Tangible countermeasures to be taken by each stakeholder)

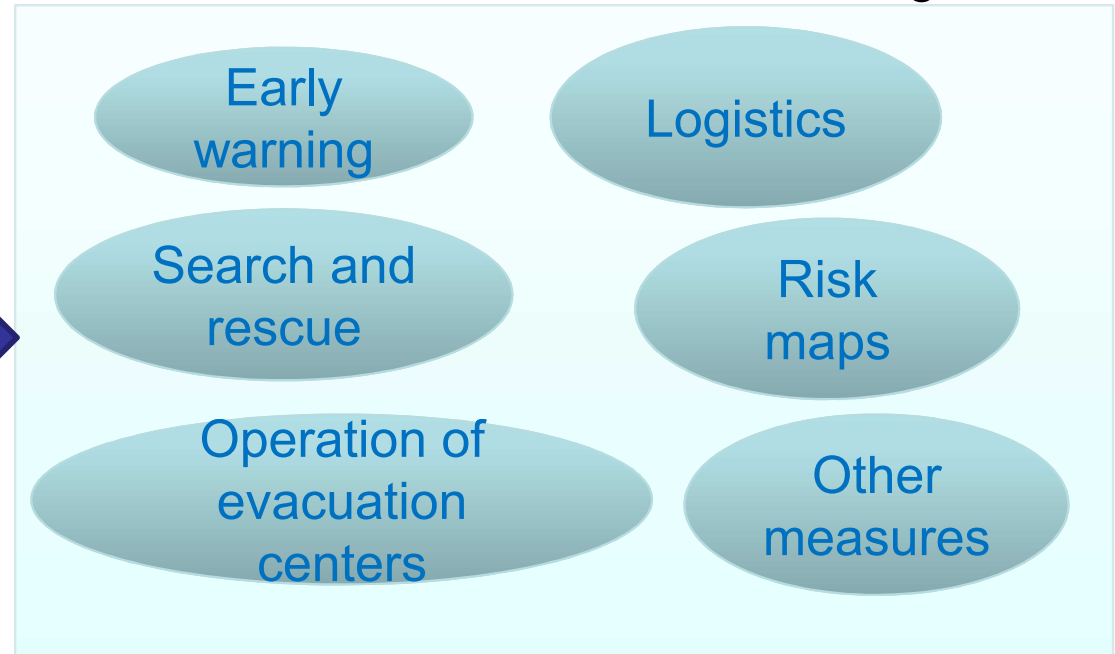


- In particular, non-structural measures are taken by various stakeholders.

Relevant stakeholders

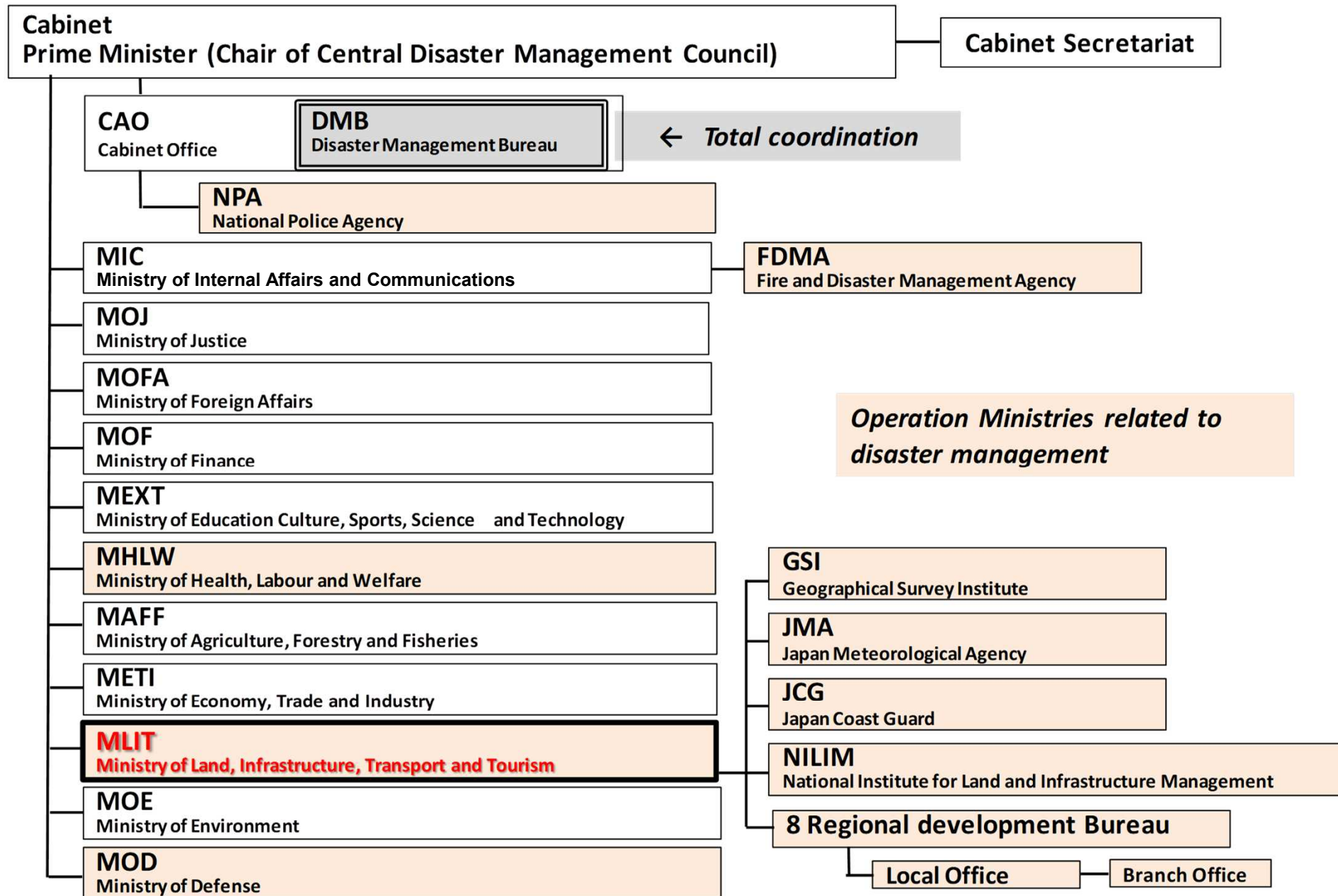


Various Measures for disaster management

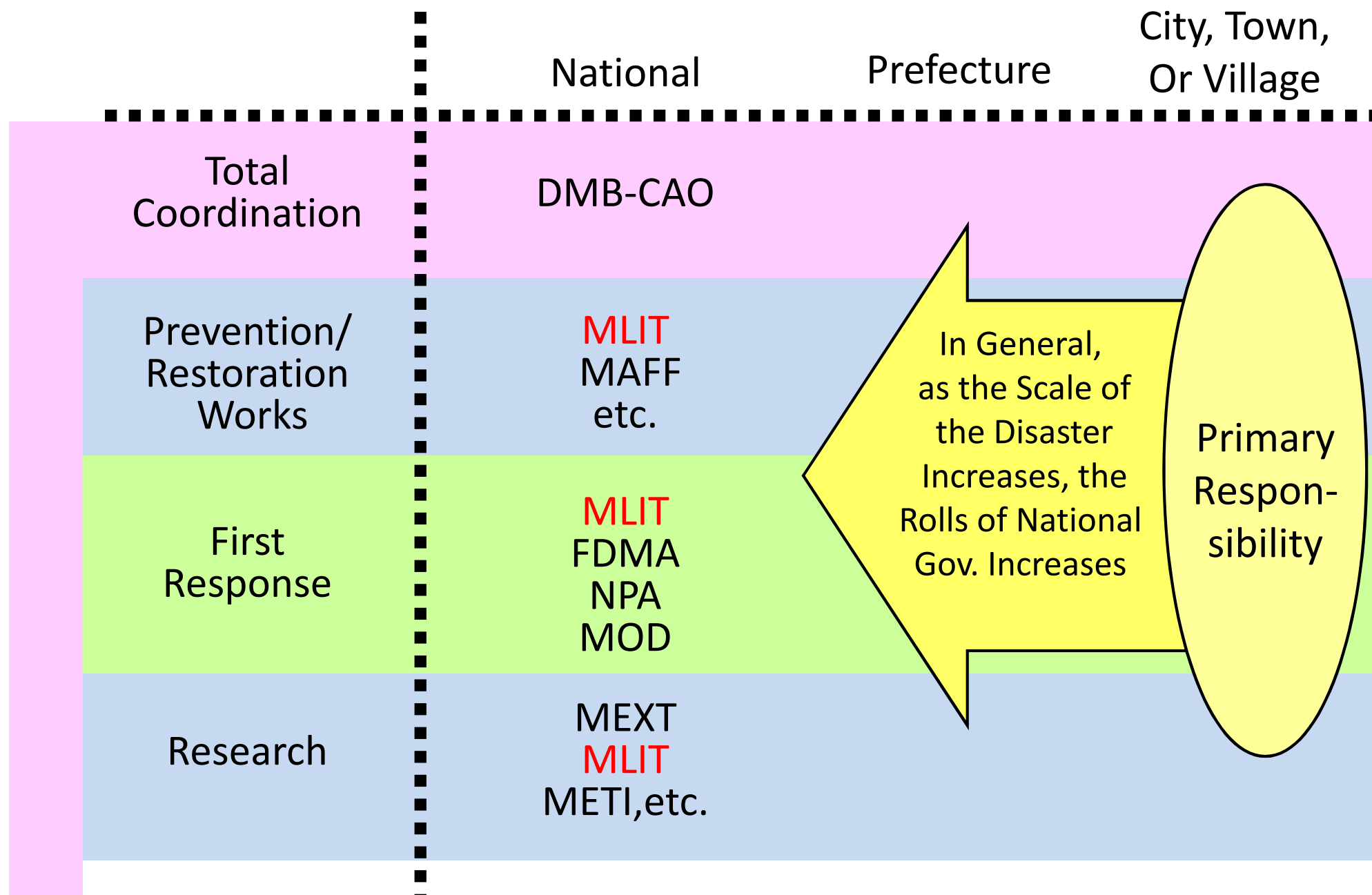


National Government, Prefectural Government, and Municipalities develop the **Basic Disaster Management Plans** which clearly states the responsibility of each stakeholder.

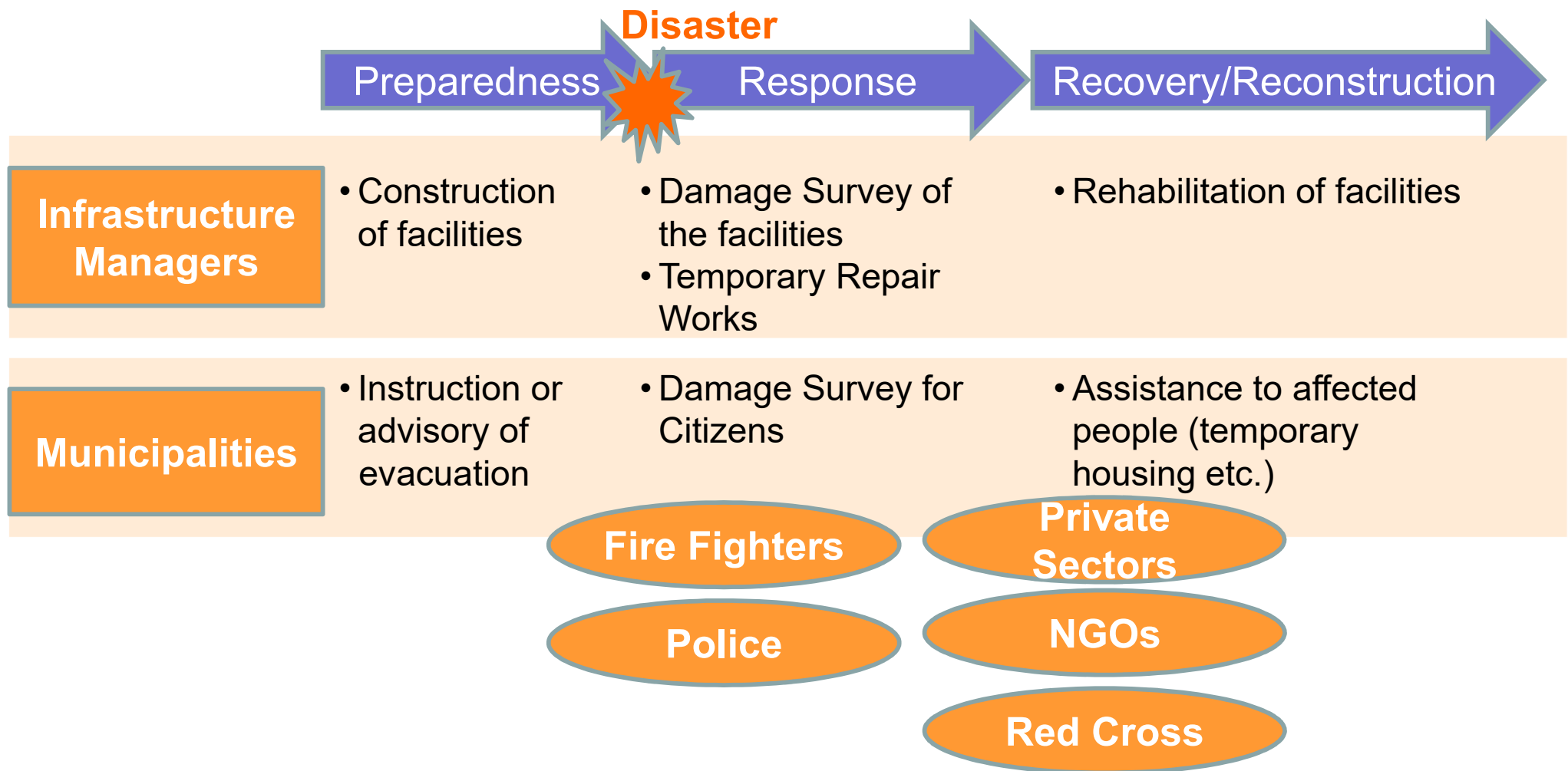
- **Municipalities especially take the important role** in implementing countermeasures such as transmitting early warnings.



※Organization chart has been simplified from a real organization chart



- Various organizations take different roles in disaster management in Japan.



- Infrastructure Managers

National government, Prefectural government, or Municipalities according to the classification of the infrastructures.

Structural measures for disaster management are mostly taken by infrastructure managers.

Disaster Prevention

- As public facility administrator
 - ✓ Improvement and management of disaster management facilities (e.g., levees, flood gates and so on)
 - ✓ Improvement and management of disaster resilient facilities (e.g., roads, ports etc.)
(there are 8 regional development bureaus and 179 branch offices of the bureaus)

Emergency Response

- MLIT as public facility administrator, has established the system that enables immediate response to a disaster.
- MLIT provides prefectural governments and municipalities with necessary supports by use of TEC-FORCE system.

Disaster Recovery

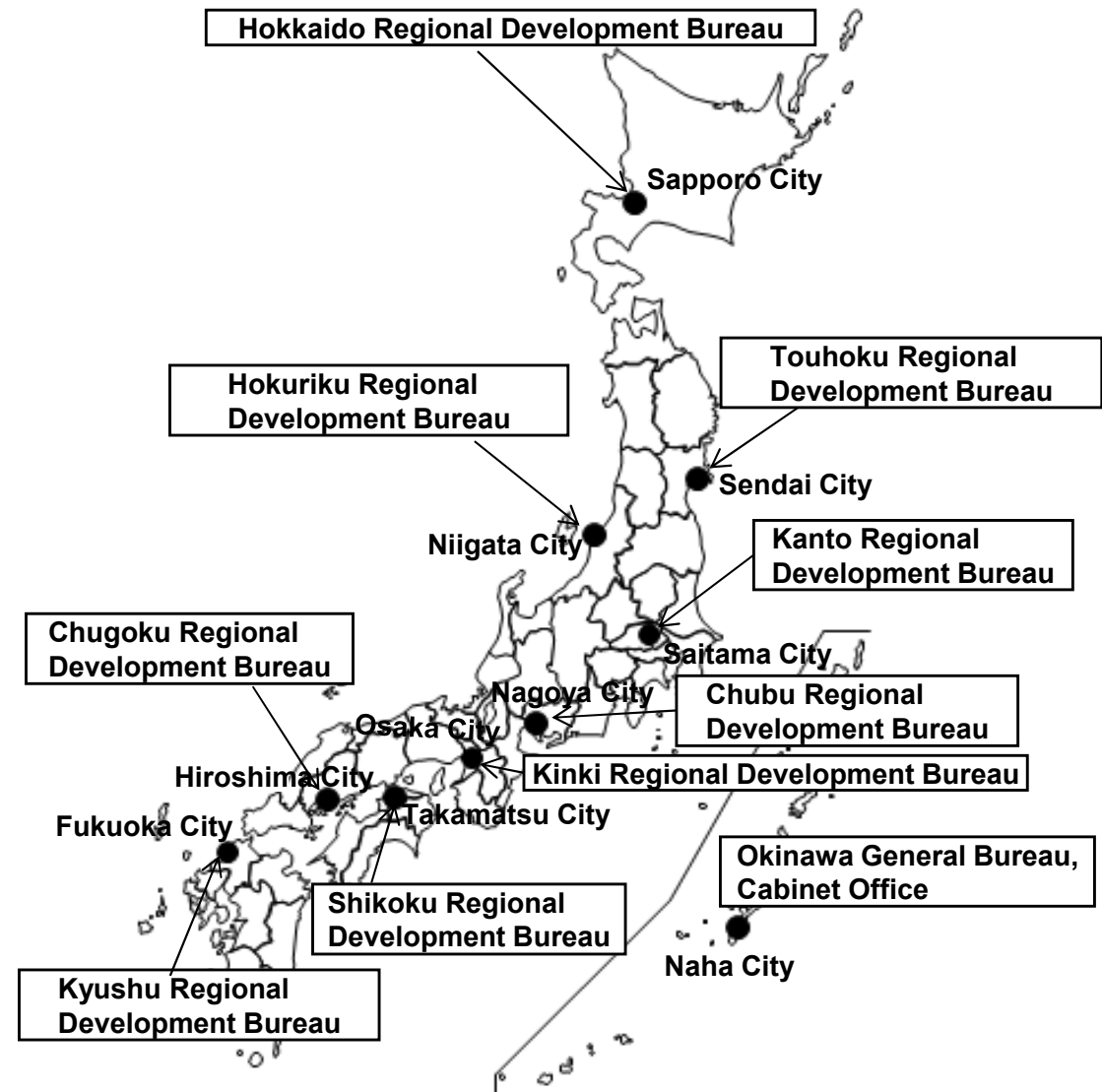
- As public facility administrator, MLIT raises funding and implements various projects.
- MLIT manages disaster recovery system (evaluation of a disaster and decision making on the selection of an adequate project)

Rehabilitation

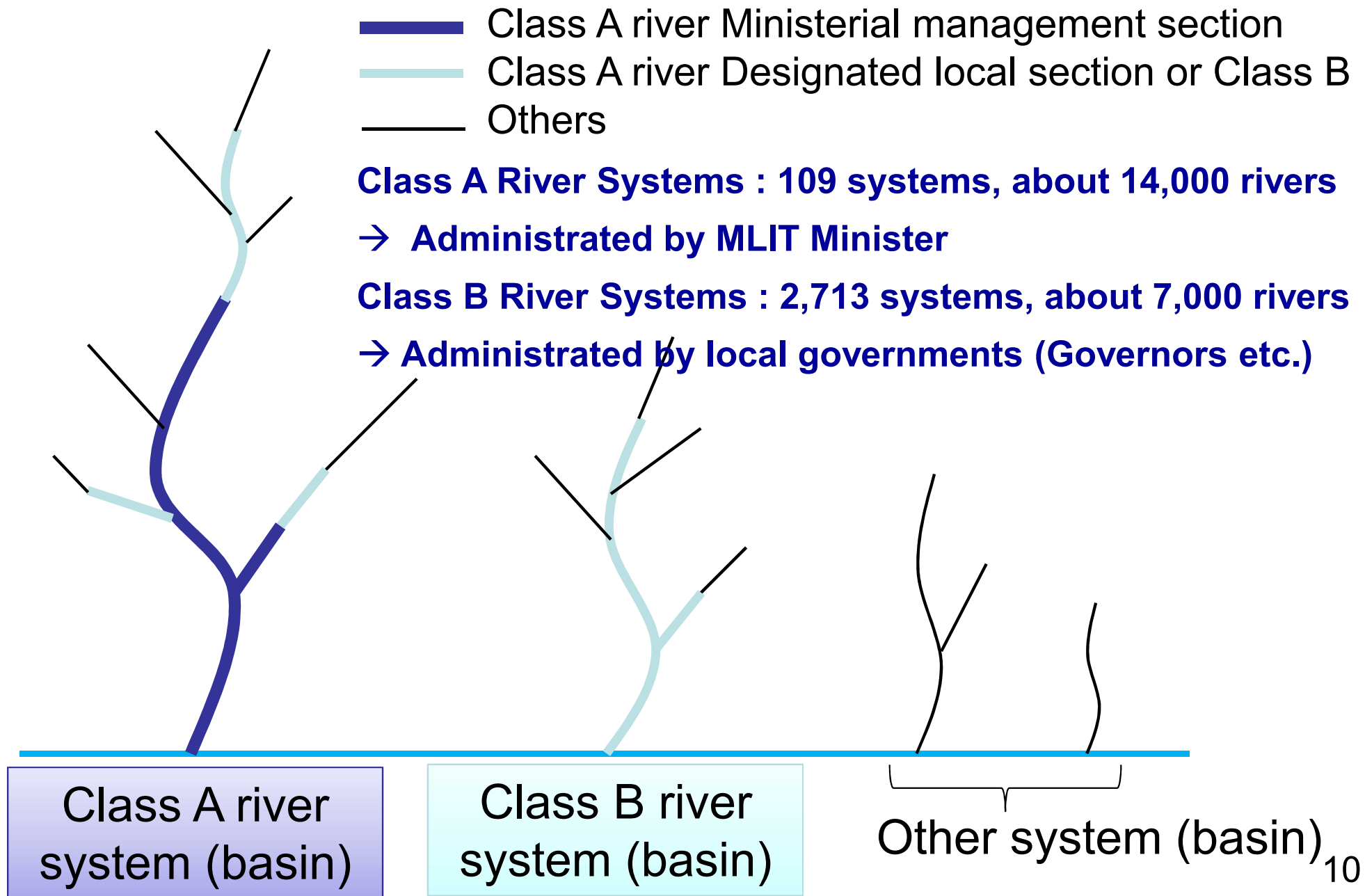
- As public facility administrator, MLIT raises funding and implements various projects.
- MLIT provide assistance for construction of resilient towns against disaster (e.g., Law on Tsunami Disaster Management Regional Development and so on)

Regional Development Bureaus and Their Functions

Number of Staff	26,556(FY2012) ※ staff in all sectors including roads, ports, etc.
Number of Local Offices	Local Offices 179 <Breakdown> Rivers and Roads:48 Rivers:55 Dam Construction:21 Dam Management:39 Sediment Control (Sabo):14 Others:2
Number of Branch Offices in Local Offices	Branch Offices : 387
Services (Number of Systems and Facilities)	109 River Basins Management (Lengths of rivers directly managed by MLIT 10,588km) 39 Dams under construction 120 Dams in operation 12 Coasts, 39 Sediment Control (Sabo) Area



River classification



- Hydrological observation data are used in river administration
- This data can also be widely provided to and used by local governments, researchers

Hydrological observation

- Rainfall observation (rain recorder, radar rain gauging)
- water level gauging
- Discharge observation,
- water quality observation
- bottom material observation
- underground water level observation

Publication

- hydrological water quality DB
- river disaster information
- disaster information center

○ Drafting river plans

○ River development

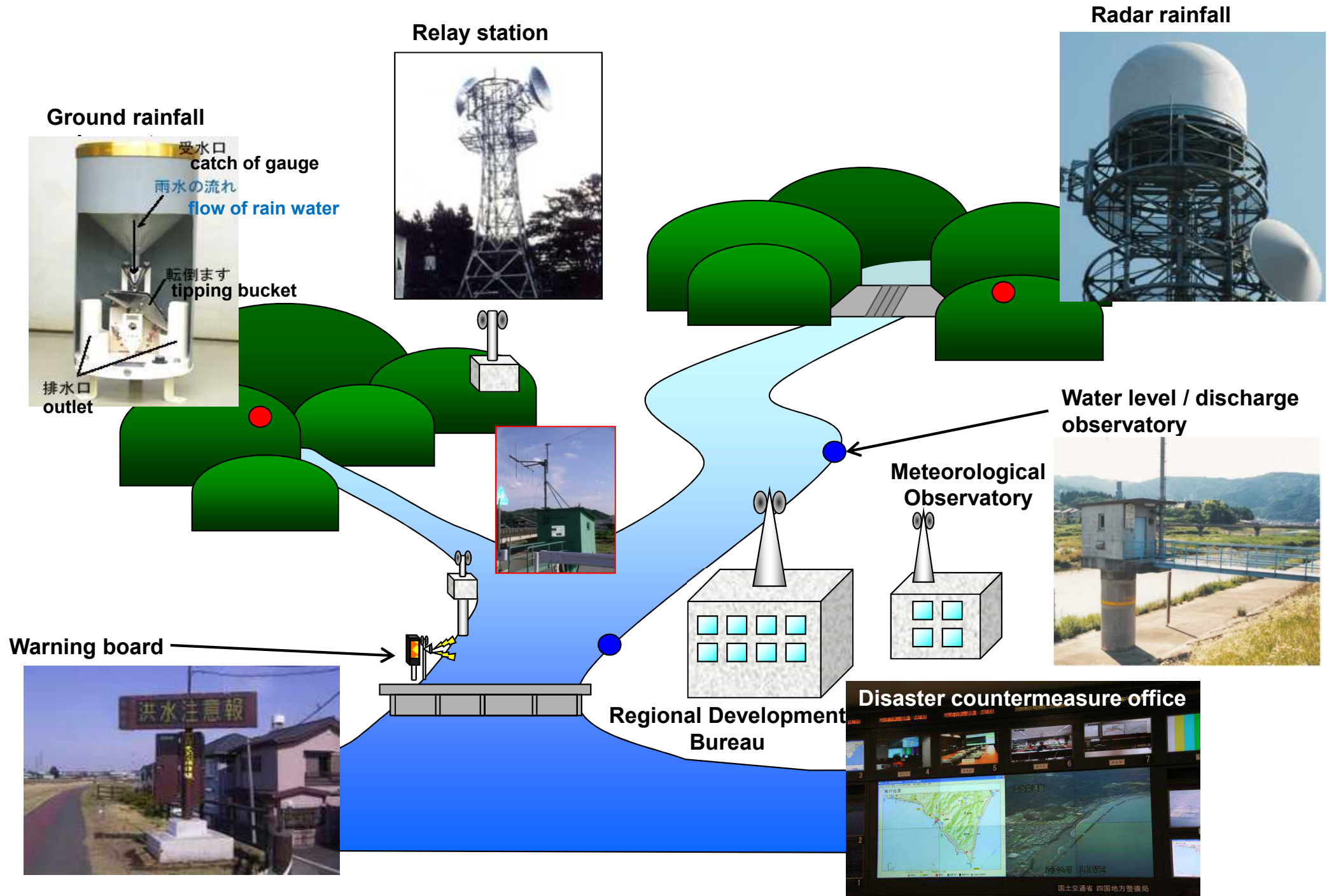
○ Proper maintenance

○ control of rivers and facilities

○ conservation of river environment

○ Risk management on flood time

Hydrological observation in rivers (image)



3L water level gauges

✓ **Low cost**

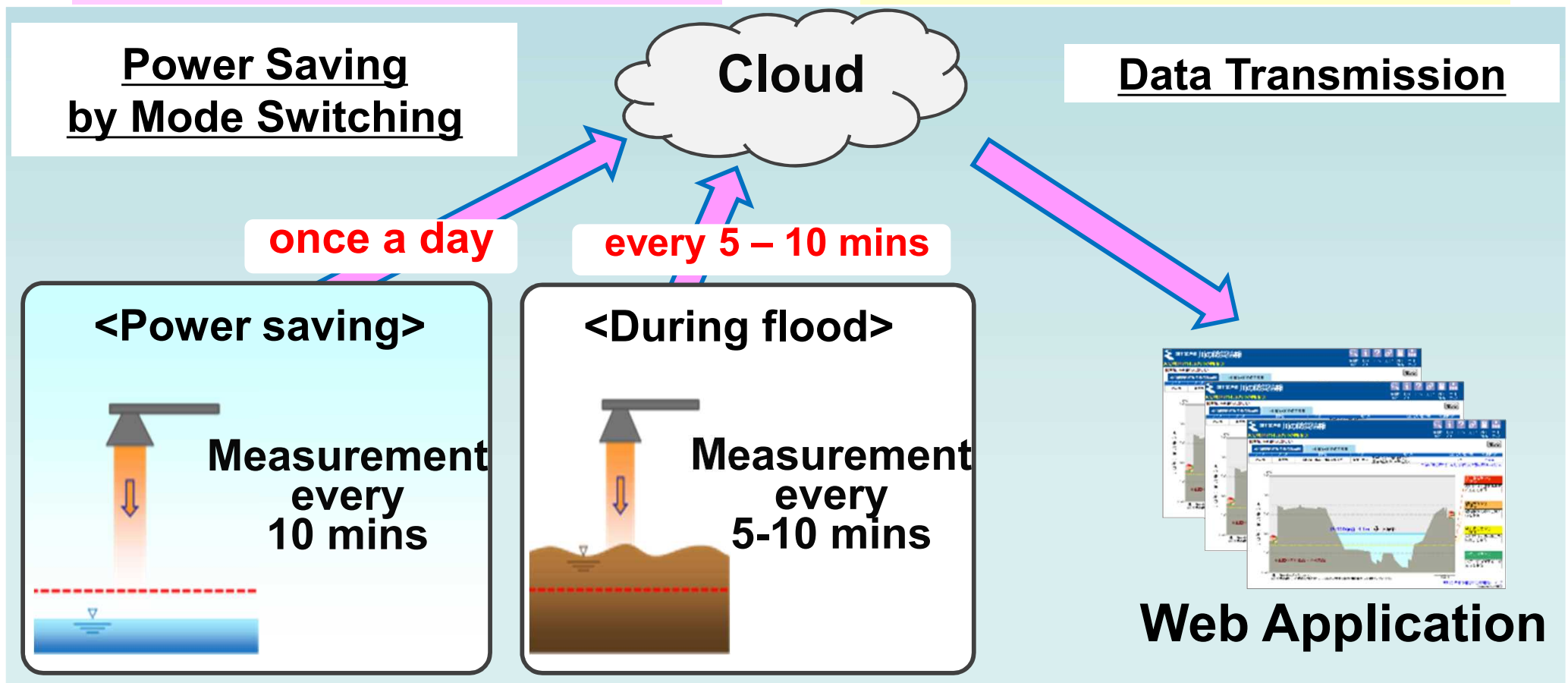
- Measure river level only during flood
- Less than 10 thousand US\$ for initial cost

✓ **Long life**

More than 5 years operation without power supply

✓ **Localized**

Local river authorities are able to maintain it and use data



Real-time and wide-range rainfall data

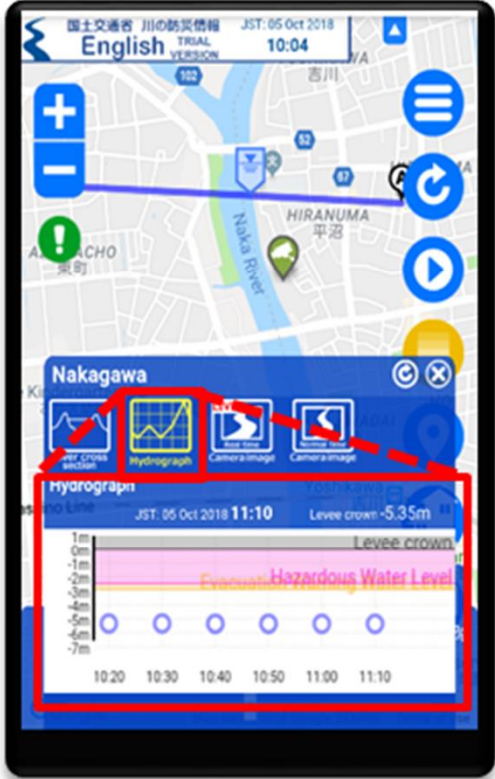
CCTV camera

Current and past river levels, showing the trend of river level rise

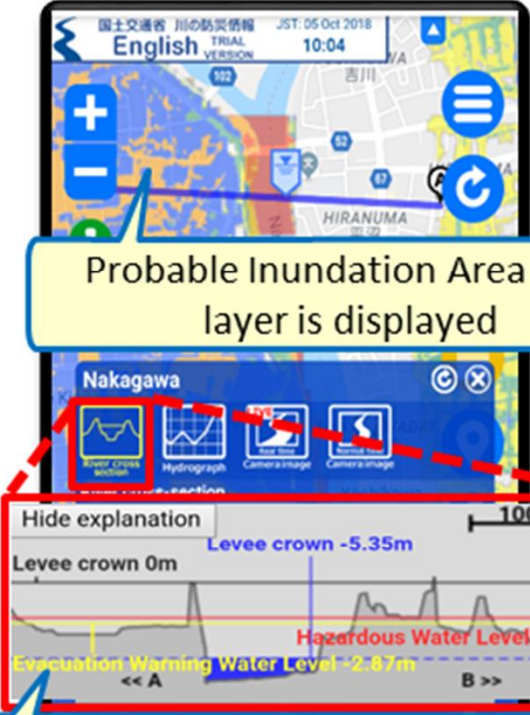
Lateral profile of the current river level, showing the risk stage of flooding

Live image from CCTV camera, showing the condition of river and flood plain

(Image)

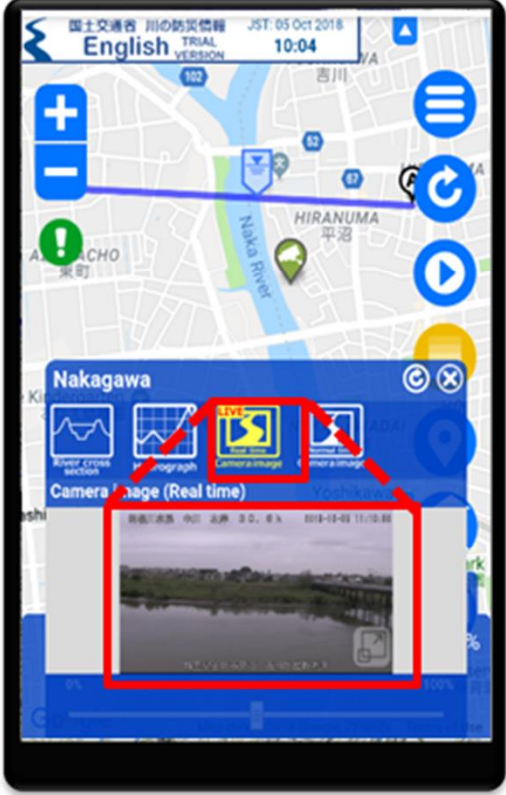


(Image)



Slide to show the land elevation in the area

(Image)



Flood Forecast

- Show water levels and flow rates when there is a risk of flooding and notify municipalities
- Target rivers in large basins where it is technically possible to predict water levels etc.

Water Level Notification

- Notify municipalities when water levels reach reference levels for evacuation
- Target rivers where the basin area is small and there is not sufficient time to conduct flood forecasting

Flood Warning

- When there is a risk of flood disaster, notify municipalities of the need to carry out flood-fighting activities.

- ・"Regional Bureau, MLIT" and "Regional Headquarters, JMA" implemented the collaboration announcement about forecasting and warning of the Typhoon.
- ・TV stations broadcasted the contents of the announcement.



東北地方整備局と仙台管区気象台の合同説明会
(令和元年10月11日 NHK「てれまさむね」より)

国土交通省
Ministry of Land, Infrastructure, Transport and Tourism

令和元年10月10日(木)
東京管区気象台
関東地方整備局

Press Release

台風第19号に関する『共同会見』

東京管区気象台と関東地方整備局は、台風第19号の現状と今後の見通しについて、説明・解説を行う共同会見を実施します。

【日 時】令和元年10月11日(金) 14:00~
【会 場】関東地方整備局広域水管理司令室(さいたま新都心合同庁舎2号館16階)
埼玉県さいたま市中央区新都心2番地1
【備 考】○会場への立ち入りは、報道機関のみとさせていただきます。
○入室時刻は13:00からです。
※入館手続きがありますので、時間に余裕を持ってご来庁をお願いします。
入館にあたっては、免許証等の身分証明書をお持ち下さい。
○会見内容は関東地方整備局のYouTube7割に会見終了後アップします。

発表記者クラブ
竹芝記者クラブ、神奈川建設記者会、埼玉県政記者クラブ、横浜海事記者クラブ

問い合わせ先(○:主な問い合わせ先)			
■気象に関すること	東京管区気象台	☎042-497-7193	FAX:042-493-2626
	気象防災情報調整官	永井 佳実	042-497-7217
	○防災調整官	小野沢 和博	042-497-7193
■防災全般に関すること	関東地方整備局 防災室	☎048-601-3151(代表), FAX:048-600-1376	
	総括防災調整官	牛嶋 宏	(内線 2119)
	○防災室長	塚本 一三	(内線 2151)
■河川に関すること	関東地方整備局 河川部	☎048-600-3151(代表), FAX:048-600-1378	
	河川調査官	高畑 栄治	(内線 3513)
	○河川計画課長	渡邊 加奈	(内線 3611)
■道路に関すること	関東地方整備局 道路部	☎048-600-3151(代表), FAX:048-600-1387	
	道路情報管理官	伊與田 弘樹	(内線 4114)
	○道路管理課長	西村 逸夫	(内線 4411)
■港湾空港に関すること	関東地方整備局 港湾空港部	☎045-211-7427	FAX:045-228-5529
	○港湾空港防災・危機管理課長	佐野 幸保	(内線 5719)
	港湾空港防災・危機管理課長補佐	黒木 真也	(内線 5739)

Collaboration Announcement by MLIT Tohoku Reg. and JMA Sendai
(October 11, 2019 NHK)

Collaboration Announcement with JMA

- "Kyushu Regional Bureau, MLIT" and "Fukuoka Regional Headquarters, JMA" implemented the collaboration announcement about forecasting and warning of the heavy rain
- All of the TV station in Kyushu area broadcasted the contents of the announcement.

Collaboration Announcement



TV broadcasting



Broadcasting times of each TV station

NHK	18:10~18:13
KBC	18:15~18:17
RKB	18:15~18:16
FBS	18:15~18:16
TVQ	17:42~17:43
TNC	17:45~17:46

All of the TV
station in Kyushu
Broadcasted

- THANK YOU -

Masahiko Murase, Ph.D

Director, International Affairs Office, Water and Disaster Management Bureau,
Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

2019.11.11