



中华人民共和国民政部国家减灾中心

National Disaster Reduction Center of China

Research Finds As Visiting Researcher

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National Disaster Reduction Center of China

2008-05



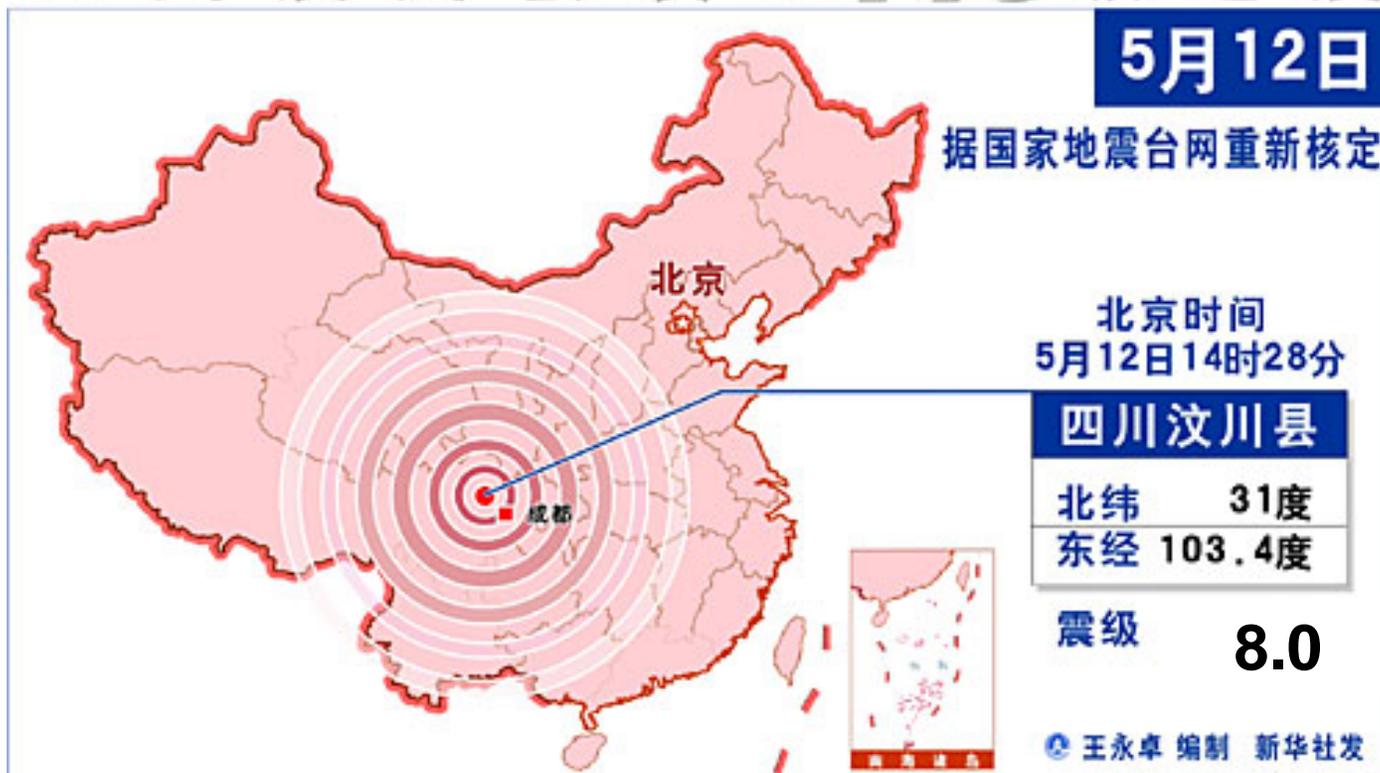


Powerful earthquake hits Sichuan

四川汶川县发生 8.0 级地震

5月12日

据国家地震台网重新核定





People died: 65,080

As of May 27, 2008





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May 19th to 21st are designated as an national mourning period for victims of the earthquake.

- National flags to be flown at **half-mast**
- All public entertainment to be suspended





Millions of people in China mourn people died
in Sichuan Earthquake





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**Hope each person lead a peaceful life
without tragedy!**





Overview

- ➡ **Experience in Japan**
- ➡ **Lessons learned from Japan**
- ➡ **Action Plan**
- ➡ **Impression of Japan**





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Experience In Japan





Arrival Time:
January 10, 2008

Approx. 5 months



Departure Time:
May 28, 2008

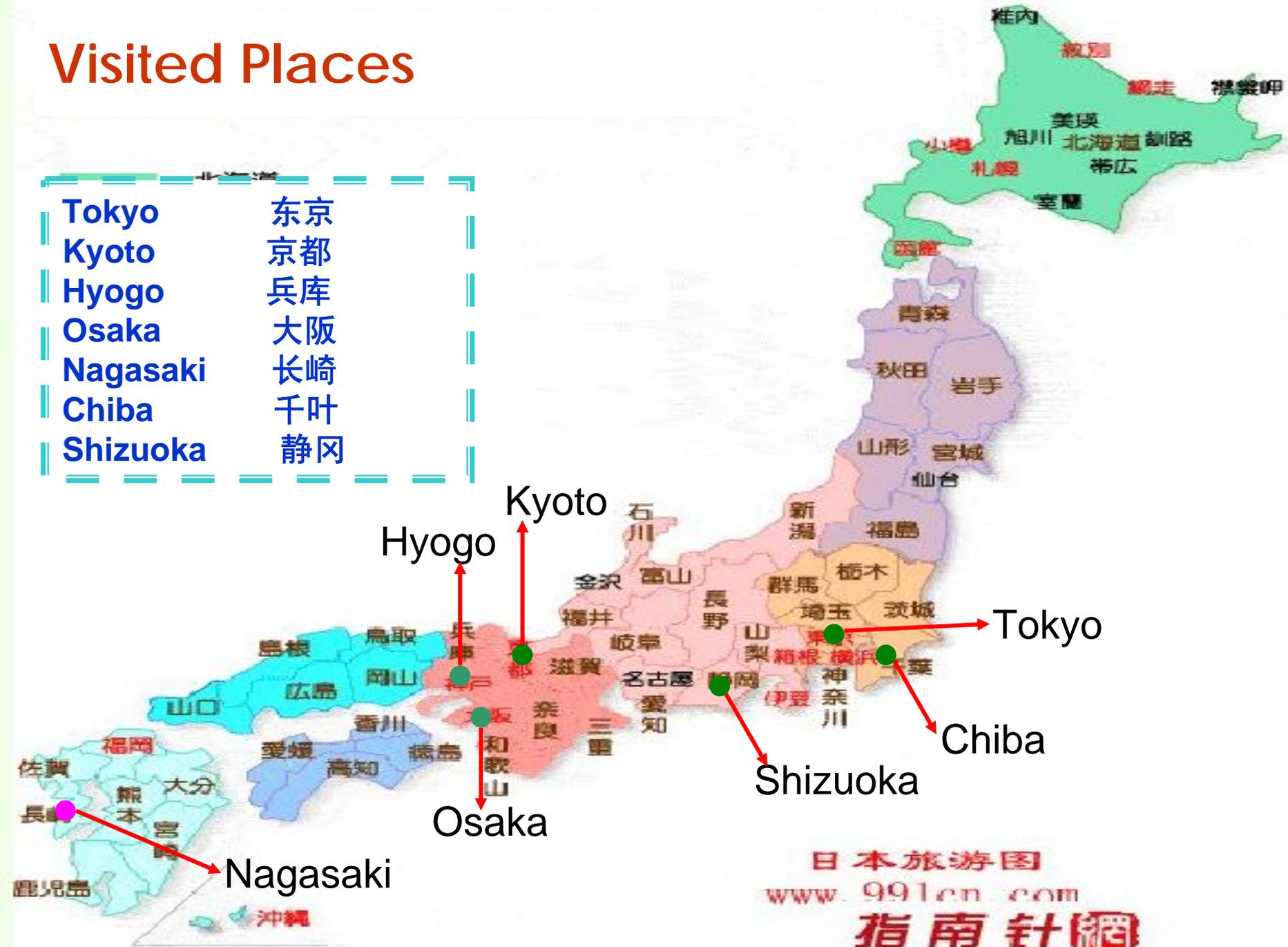


Taken in Kansai International Airport, January 10, 2008



Visited Places

Tokyo	东京
Kyoto	京都
Hyogo	兵庫
Osaka	大阪
Nagasaki	长崎
Chiba	千叶
Shizuoka	静岡





Visited departments

- ➡ **Administrative organizations**
- ➡ **Research institutes**
- ➡ **Companies**
- ➡ **Hospitals**
- ➡ **Schools (including universities and high schools)**
- ➡ **Museums**
- ➡ **Communities**
- ➡ **Places of historic interest**





Visit to Geographical Survey Institute



Visit to Japan Red Cross Society



Visit to Maiko High School



Visit to Japan Meteorological Agency





Hazard Mapping based on town watching



Visit to Miki Earthquake Disaster Memorial Park



Visit to Kobe Fire Station



Visit to Hyogo Emergency Medical Center





Visit to E-Defense



Visit to Kiyomizudera Temple



Visit to Chiba University



Visit to Osaka Water Control Office





Giving a lecture in Fuji Tokoha University

央区 「自国で役立てたい」
 アジア防災センターの外国人研究員
 市消防で自主防災学ぶ

アジア防災センター(中央区)で、路大震災の課題や教訓を積極的に質問。中でも、イルさんは同二月、目下5月15日、

市消防で自主防災学ぶ

Visit to Kobe City Hall





Studied Subjects

1. The vulnerability of Japan against disasters
2. The great impact of Kobe Earthquake on Japan
3. The countermeasures against disasters after Kobe Earthquake
4. The activities of ADRC
5. The activities of other organizations related to disaster management





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lessons learned from Japan





lessons learned from Japan

Important factors for disaster reduction

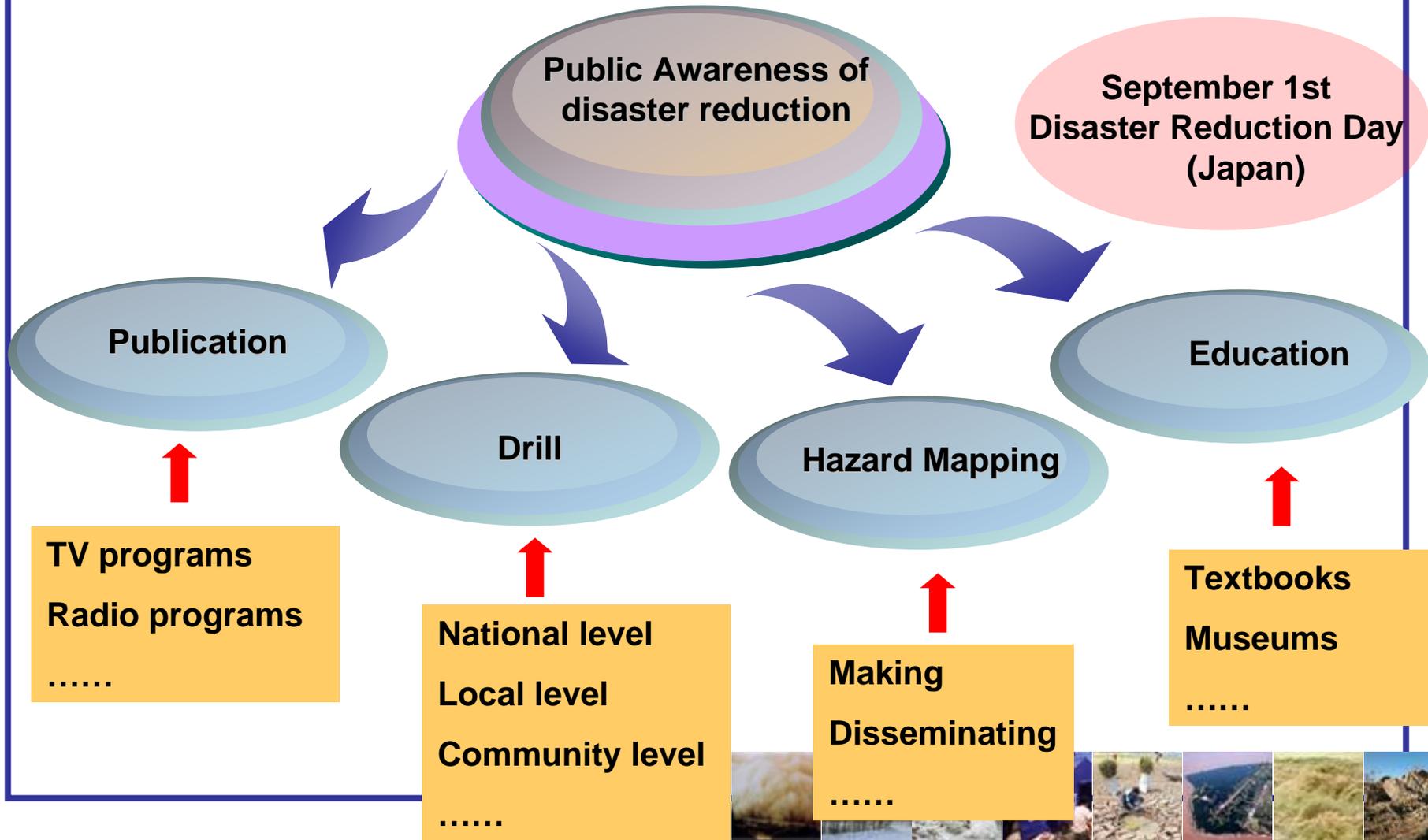
1. Improvement of public awareness of disaster reduction
2. Change of ideas of Disaster Management
3. Establishment of legal system of disaster reduction
4. Application of high-technology to disaster reduction
5. Establishment of disaster information system
6. Great financial support for disaster reduction
7. Enhancement of Volunteer system





lessons learned from Japan

1. Improvement of public awareness of disaster reduction





lessons learned from Japan

2. Changes of ideas of Disaster Management



- The ideas from relying solely on structural measures to combination of structural and nonstructural measures
- Demarcation and collaboration between self-help, community-help and government help
- The emphasis of disaster reduction from disaster emergency to disaster preparedness



lessons learned from Japan

3. Establishment of legal system of disaster reduction(1)

- Establishment and improvement of Legal system of disaster management following the lessons learned from large-scale disasters

Turning point

Ise-wan Typhoon(1959)



Enactment of Disaster Countermeasures Basic Act (1961)

Great Hanshin-Awaji Earthquak(1995)



Further strengthening of legal system of disaster management

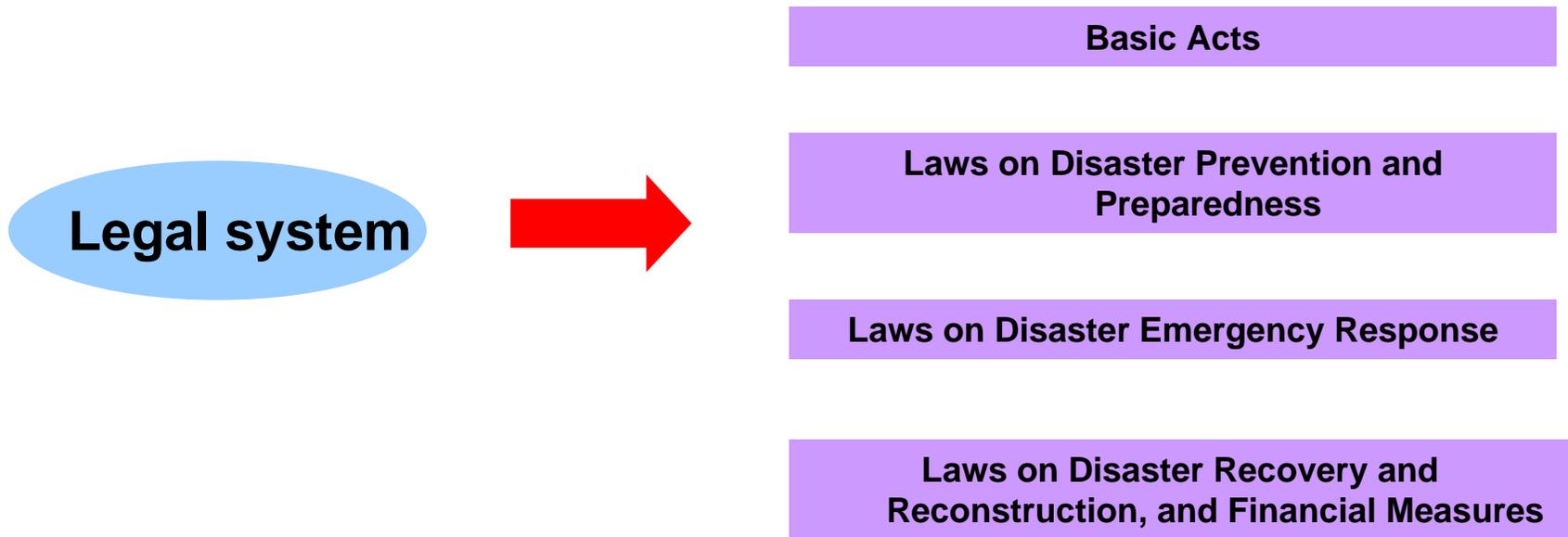




lessons learned from Japan

3. Establishment of legal system of disaster reduction(2)

- Legal system is the most powerful measure which guarantees disaster-resistant activities to be executed smoothly and strictly.





lessons learned from Japan

4. Application of high-technology to disaster reduction(1)

- According the science development plan of Japan, establishing the most safety country in the world is regarding as the major goal.
- Based on this goal, Japanese government set 10 important issues on disaster reduction.

(1) Earthquake observation, monitoring and prediction

(2) Geological research

(3) Damage reduction technologies such as earthquake-proofing and development of disaster response, recovery and rehabilitation plans

(4) Volcanic eruption prediction technologies

(5) Storm, flood, landslide and snow disaster, observation, prediction and damage reduction technologies

(6) Satellite-based natural disaster observation and monitoring technologies

(7) Monitoring, warning, information transmission and damage prediction technologies to be used in the event of a disaster

(8) Search and rescue and other emergency response operation technologies

(9) Development of a disaster-resilient society

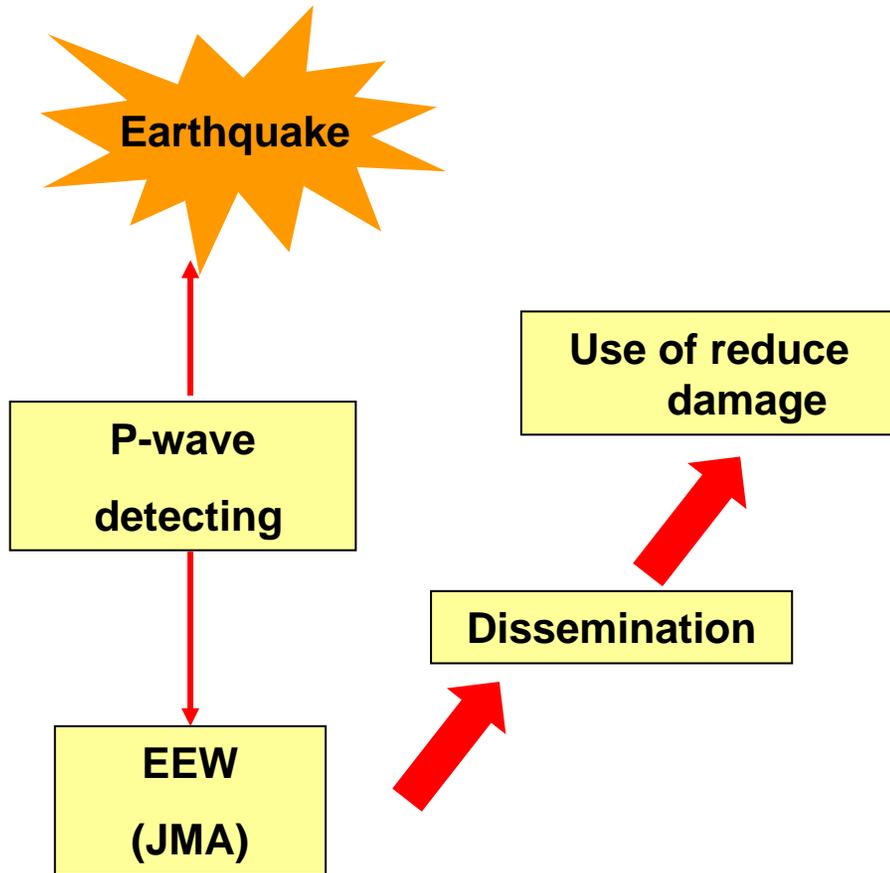
(10) Facility security assurance and accident reduction technologies



lessons learned from Japan

4. Application of high-technology to disaster reduction(2)

Utilization of Earthquake Early Warning Information (EEW)



Disaster management organizations

Immediate action against disasters
Ensure safety of residents

Public Institutions (hospitals, schools, etc.)

Ensure evacuation and safety

Residents

Fire prevention, evacuation

Transportation, elevators, etc.

Emergency stop for safety

Companies/Factories

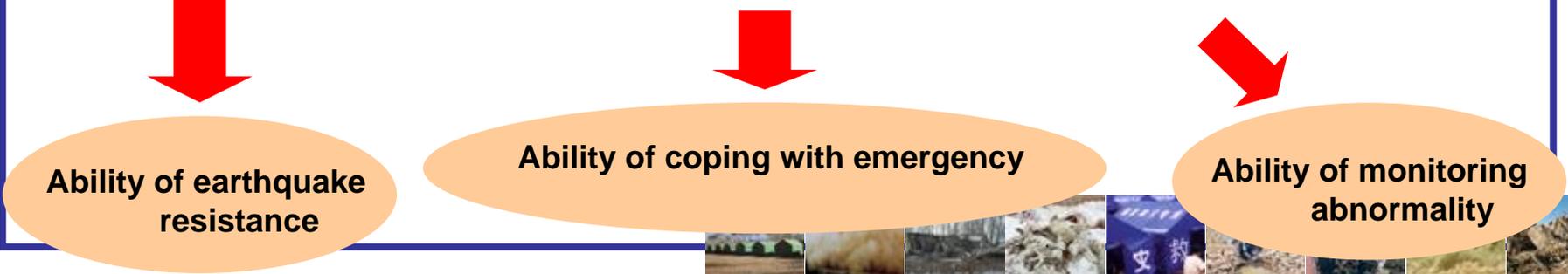
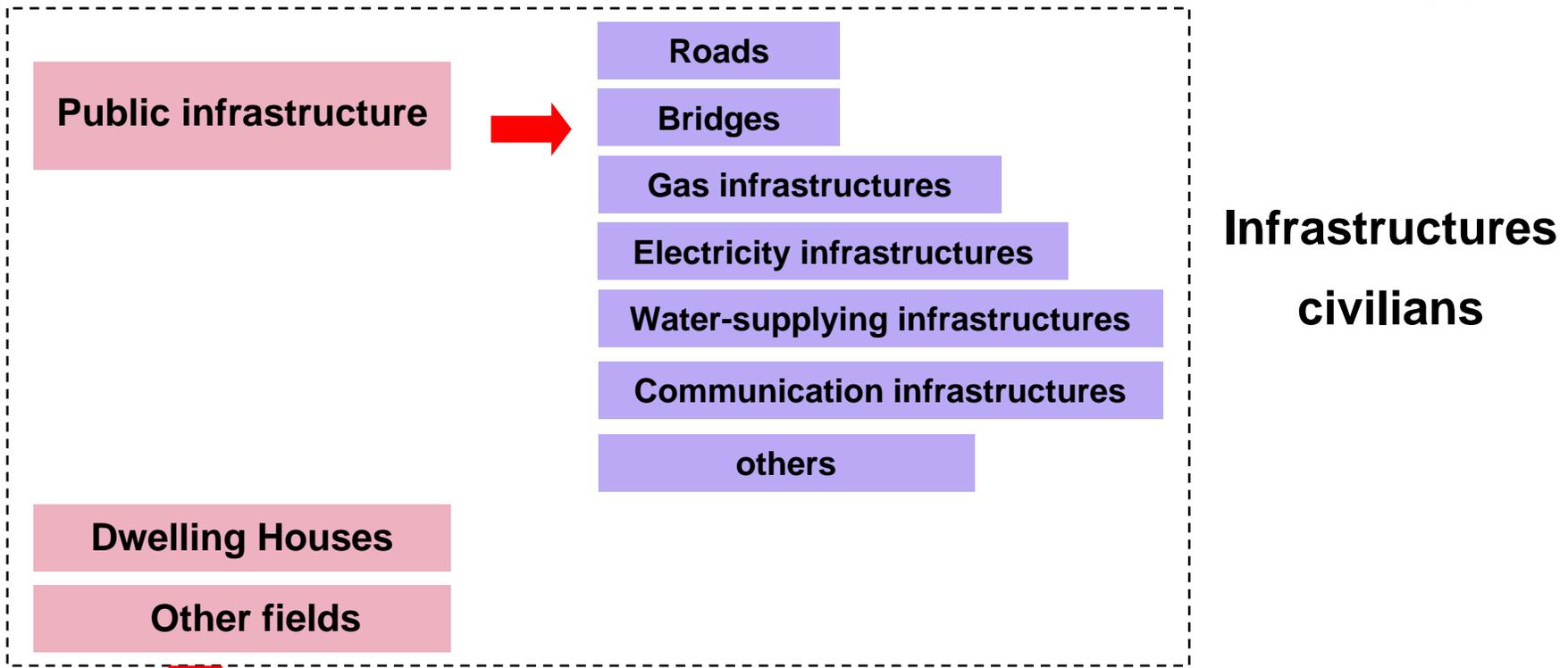
Protection of workers and facilities against disasters
Backup of important data





lessons learned from Japan

4. Application of high-technology to disaster reduction(2)

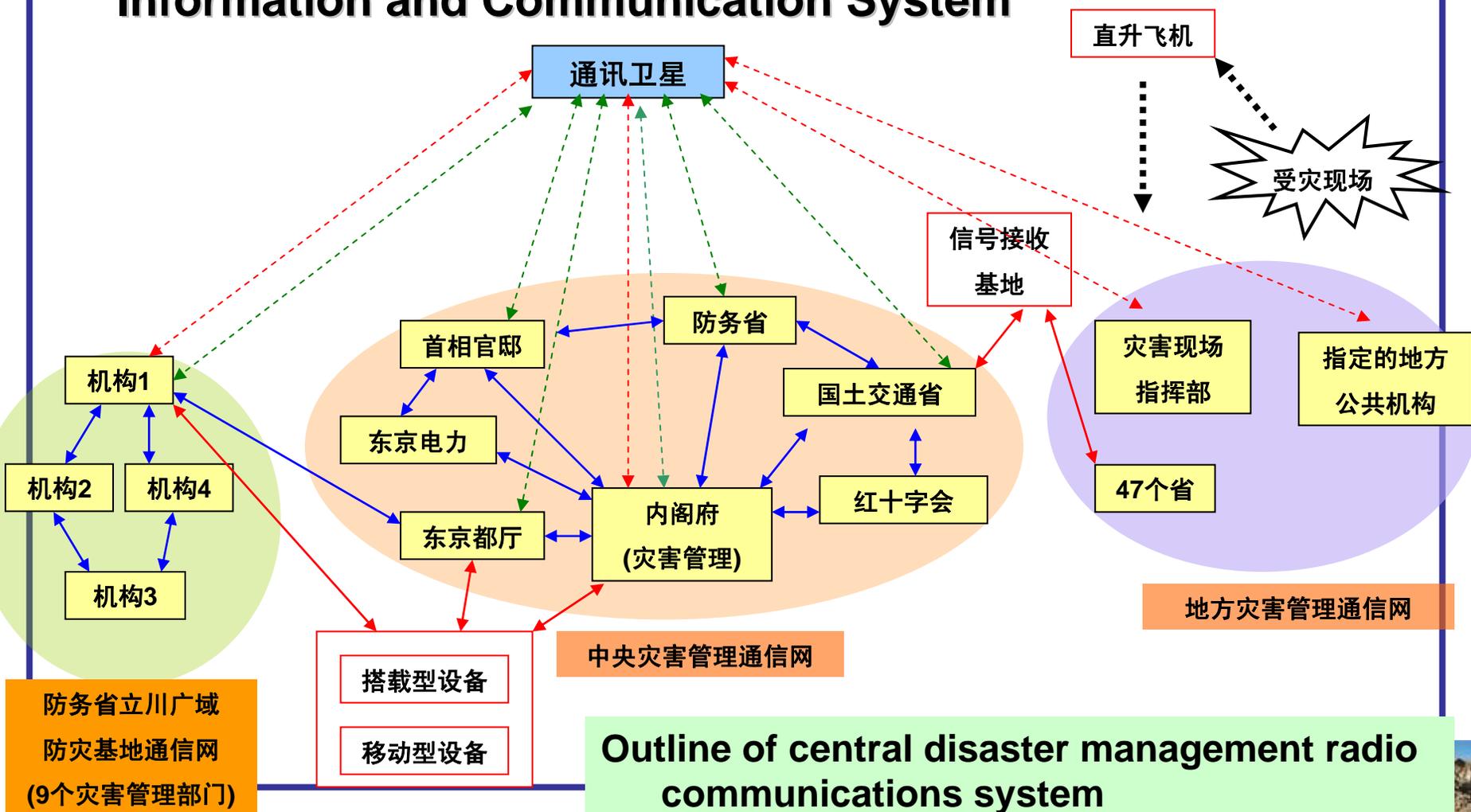




lessons learned from Japan

5. Establishment of disaster information system(1)

Information and Communication System





lessons learned from Japan

5. Establishment of disaster information system(1) Information and Communication System

- Online system linking disaster management organizations of the national and local governments and media organizations
- Radio communications networks exclusively for disaster



Effective use of early warning information

- Fixed communications system connecting 60 disaster management organizations
- Satellite communications system connecting 37 disaster management organizations



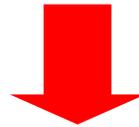


lessons learned from Japan

5. Establishment of disaster information system

Integrated Disaster Management Information System(2)

- ① DIS (Earthquake Disaster Information System)
- ② RAS (Real Damage Analysis System by Artificial Satellite)
- ③ PF (Disaster Information Sharing Platform)



- ① Grasp the situation of the disaster early
- ② Promote information sharing among relevant organizations
- ③ enable quick and appropriate decision-making for emergency response operations





lessons learned from Japan

6. Great financial support for disaster reduction

- In Japan, the national budget for disaster management is approximately 4.5 trillion yen (average annual budget from 1995 to 2004), accounting for approximately 5% of the total amount of the budget for general accounts.

Scientific technology research: 1.3%

Disaster prevention and preparedness: 23.6%

National Land Conservation: 48.7%

Disaster Recovery and Rehabilitation: 26.4%





lessons learned from Japan

7. Enhancement of Volunteer system

Community-based voluntary disaster organization



Disaster prevention

Emergency response

Recovery and rehabilitation



Firefighting team

Flood fighting team

others

- January 17th of each year designated as **Disaster Reduction and Volunteer Day**
- January 15th to 21st of each year designated as **Disaster Reduction and Volunteer Week**





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Action Plan





Action Plan

- 1. Apply the advanced ideas of disaster information management into practical work**
- 2. Improve the participation of civilian in activities of disaster mitigation**
- 3. Advance China's hazard mapping with the theories and methods learned from Japan**
- 4. Share what I learned in Japan with other departments related to disaster management**





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Impression of Japan





Warm and Kind





polite





brave



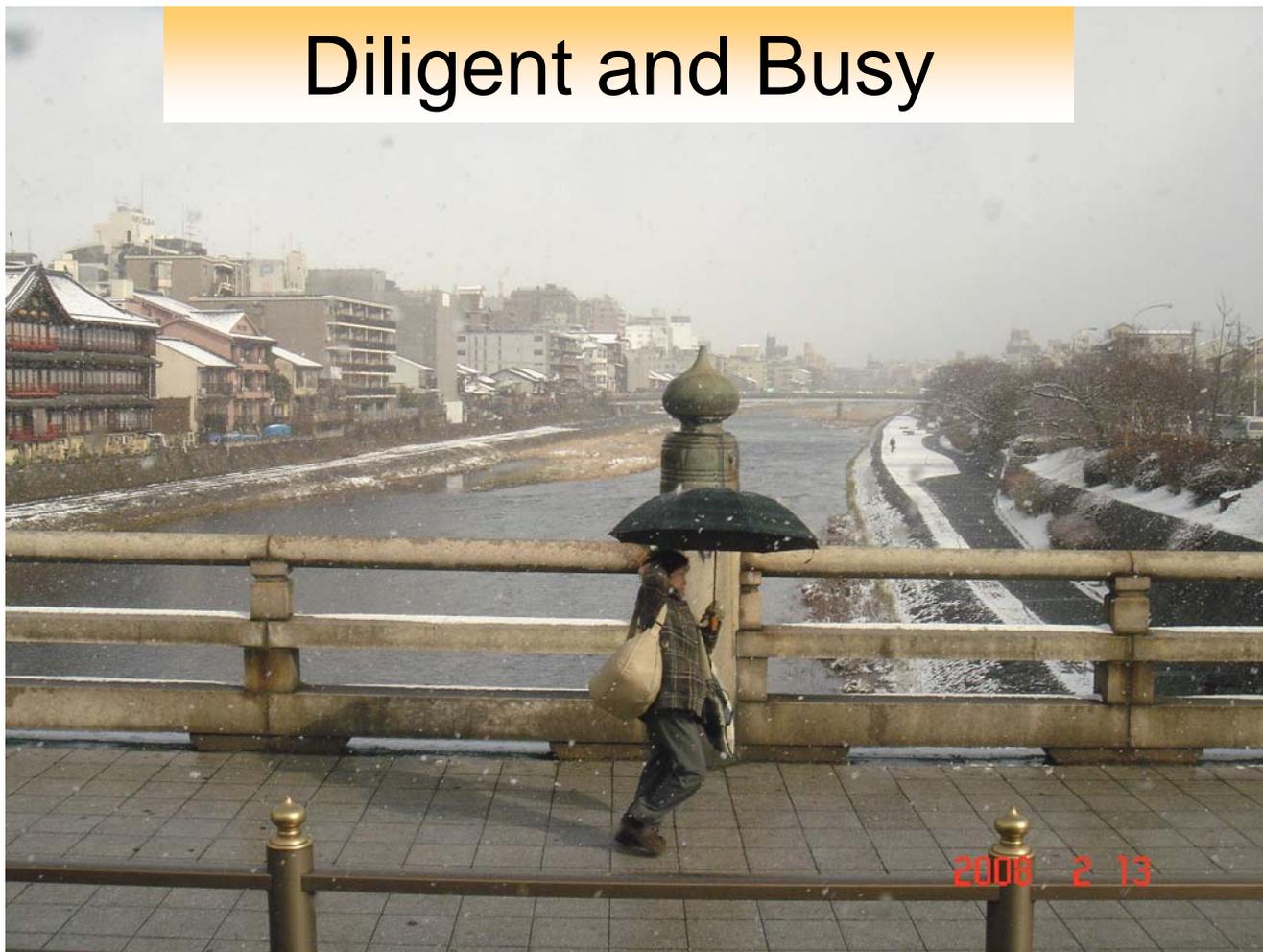


orderly and quiet





Diligent and Busy





Clean and beautiful





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National Disaster Reduction Center of China

Special Thanks

Executive Director
Senior Researcher

Koji Suzuki
Masato Ohori

And all ADRC staff



Kobe Earthquake





Sichuan Earthquake





Remember these tragedies FOR EVER!



深切哀悼四川地震遇难同胞

Mourn the people killed in the earthquake



中华人民共和国民政部国家减灾中心

National Disaster Reduction Center of China

Thank You For Your Kind Attention !

谢谢!



Zhang Yunxia
(Visiting Researcher ADRC 2008)
National Disaster Reduction Center of
China

