



# Final presentation

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## *Content*



- I. Activities in Japan.
- II. Lesson learn form Japan
- III. Recommendation to Disaster management in Lao PDR.
- IV. My lesson learn to apply to my work.

# I. Activities in Japan

- Japanese Class From 20 July-6 August 2004.



Received  
Certificate



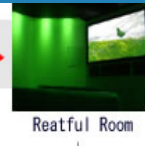
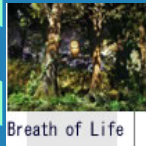
• Visited the Great Hanshin-Awaji Earthquake Memorial



Disaster Reduction Museum



Human Renovation Museum



• Attended Earthquake and firefighting Experiences.



Earthquake Experience



Firefighting Experience



• **The Great Hanshin-Awaji Earthquake Information 17-01-1995. 5:46. 7.3 Scale**



Description	Number
Dead	6,401
Missing	3
Seriously injured	10,494
Lightly injured	29,598
Houses damaged	448,929
Building damaged	248,412
Total cost of damaged	9,926.8 Billion Yen

• **Visited Nigawa Landslide Museum.**



Completed works



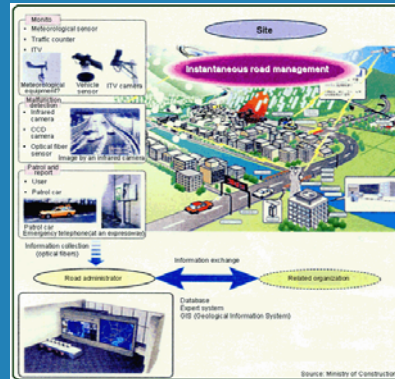
Model of Facilities





•Visited Tokyo on 23-25 August 2004.

•National High Way & Risk Management Division:  
 Response for planning and coordination of road traffic safety administration, survey and research of measure to prevent disaster on road.  
 Established transportation and lifeline systems and other urban facilities, several earthquake monitoring networks to use earthquake information for early warning or early damage assessment.



Information Technology for Road Management

•Visited Tokyo on 23-25 August 2004.

Emergency Operation Center:

Function as the central room for disaster management, to decide the immediate response in case of large disaster. The Center based on the latest IT Technology, has a comprehensive role to collect, integrate, understand and disseminate the disaster information and the damage conditions.



This center provide the information of MLIT for the Official residence of the Prime Minister and other related organization, to request assistance to the related organization and to carry out publicity work.

1. Collection of disaster information: The regional organization of MLIT and the related organizations automatically transfer the meteorological information, earthquake information, river information and .....
2. Collection of damage information: The system for the collection of real time image of a disaster ( from a helicopter or monitoring camera ) is prepared.
3. Estimation of damage: Disaster information system is introduced, which is developed by Cabinet Office for the automatic rough estimation of damage caused by an Earthquake.
4. The base function of activities: Through a digital circuit, TV conference is performed with regional organization.

## •Visited Tokyo on 23-25 August 2004.

### Ministry of Public Management Home Affairs Posts & Telecommunication.

Fire & Disaster Management Agency:  
With the earthquake preparedness as the most important issue, Fire & Disaster Management Agency comprehensively promotes the following eight issues:

- Prevention of Fire outbreaks
- Initial firefighting
- Improvement of regional disaster preparedness
- Reinforcement of initial response action
- Information management
- Prevention of fire spread
- Search & Rescue
- Evacuation and post quake safety



With the lessons learned from the effective initial fire fighting immediately after the Great Hanshin-Awaji Earthquake, they emphasize these eight items in fire drills and make efforts at the appropriate use of the Earthquake Damage Prediction System in line with a seismograph network,

Build disaster resilient communities, FDMA have steadily urban infrastructures and promoting projects on fire resistant building. At the same time, each and every Tokyo citizen must have a correct understanding on risks in the communities of their residence, and take sufficient preparatory measures in the daily course of life.



Many activities on Public awareness & education and training in every years.



## •Attended the Public Forum”Recovery from Catastrophic Disaster-toward a safer world for all”

This forum organized by ADRC, Cabinet Office of Japan, The United Nations University, UN ISDR Secretariat and UNDP. In cooperation with USAID, NHK ( Japan Broadcasting Cooperation ) and Hyogo Prefecture Government.

Focused on, learning from the pass experience to improve and develop the approach, disaster reduction Networking among governments, NGOs, regional/international organizations, communities, and corporations is essential in achieving a holistic approach to disaster reduction. Networking can facilitate information sharing, best practices, many experiences and weak point to be improved for the future disaster risk preparedness and recovery activities.



## •Joined Disaster Management ( Action ) Drill. By Hyogo prefecture

Medical care

Evacuation & Relief

Firefighting

Search & Rescue

Firefighting Experience

Earthquake Experience

Smoke protection Exper.



## •Experience of Town Watching & Hazard Mapping.



## •Visited Hokudan-cho Earthquake Memorial Park



## • Visited Disaster Prevention Center in Kakogawa City



## • Visited Kyoto City Citizens' Disaster Prevention Center



## •Visited Hyogo Prefecture Disaster Management Center.

### Disaster Counter Measure in Hyogo Prefecture

1. Facilities to use for implementation Disaster management activities such as:



Emergency Relief Headquarters Control Room



Stock Room



Audio-Visual equipment Control room



Network Control Room



Night Duty Room



Water Supply



Air Conditioning



Diesel (fuel) stock



Battery stock



Electricity Generation

## •Visited Hyogo Prefecture Disaster Management Center . (Cont )

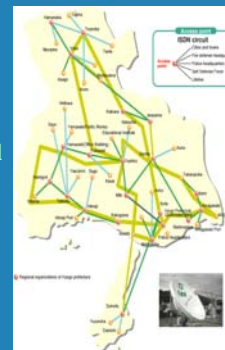
### 2. Preparation for the Emergency Response System in Hyogo Prefecture

Established Monitoring & Quick Response System.  
Three Building containing 76 department have been constructed near the prefectural office as the standby lodgings for first staff in case of emergency.

#### Phoenix Disaster Management System.

The main purpose is to collect information as a result of meteorological observation, the initial stage estimation of damage to be caused by disaster, and assessment of actual damage, together with a map and visual images.  
331 Computer work stations installed ( 65 at offices of the prefectural government, 71 at prefecture related organization, 124 at municipalities and local fire department, 5 at organizations related to disaster management, 62 at local police headquarters and precincts, and 4 at utility companies )

#### Networks of the Phoenix Disaster management system



## • Visited Hyogo Prefecture Disaster Management Center . (Cont )

### 3. Development of emergency management bases.

1. Regional emergency management bases have been established for each major area in the Prefecture

( there are 7 regional emergency management bases ), to store rescue materials and equipment and relief commodities for the victims; to collect and deliver relief supplies; and to station relief and rescue workers. In addition, some existing facilities will be also used as emergency management bases.

2. Emergency management bases has 3 function as: 1. Storage, 2. Collection and delivery of supplies, 3. Stationing.

**Arial view of Miki Earthquake Disaster Memorial Park**

**1: Hyogo Prefectural Disaster Management Center**

**2: Hyogo Prefectural Fire Fighters Training Institute**

**3: 3-D Full-Scale Earthquake Testing Facility**



## • Field survey on Flood situation in Toyooka City, Hyogo Pref.



## •Flood damage information

**23rd Typhoon on 20 October brought downpours and strong winds, cause to flood, landside to many cities in Southern and Central of Japan**



In the whole country reported:

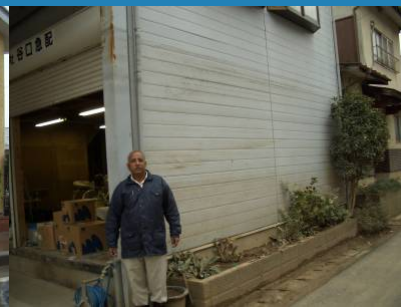
- 82 dead
- 8 missing
- 443,198 houses completed destroy
- 9,322 damaged houses
- 252 public building damaged.

## •Flood damage information

**•Level of flood in Toyooka city.**



**•Around 1 m an half**



**Around 4 m**

## •The damage in the city

•Damaged houses & buildings



Damaged train, bridge, car, boat and agriculture



## Emergency response of the government.

Government set up the Volunteer Center



Head quarter corner

Relief stock

Register corner



Information corner

Tool use for Volunteer

Cooking corner

## Emergency response of the government.

- Very quick and good cooperation of related organization on information dissemination and early warning.
- ( before, during and after disaster) Information Forecasting on TV and Radio very frequently
- Evacuation was very Quick.



## Emergency response of the government.

### Quick rescue.



## Emergency response of the government.

Good coordination and actively from volunteer groups and many sections related on rehabilitation as:



## Visited Osaka prefecture office .





## History of flood damage in Osaka prefecture government.

### Photo of flood in the pass



Date	Flood damage, No. Houses damage
- Jul. 12-13,1972	43,411
- Sep. 15-16, 1972	61,407
- Jun.27-Jul.2,1979	13,087
- Sep.30-Oct1,1979	27,736
- Aug.2-3,1982	50,040
- Sep.2-3, 1989	1,953
- Sep. 14,1989	3,668
- Sep. 19-20, 1989	1,697
- Jul.2-6 1995	2,040
- Jul.9, 1997	172
- Jul.13, 1997	3,828
- Aug. 5, 1997	3,202
- Aug.7,1997	9,213
- Jun. 26-27, 1999	401
- Jun. 29-30,1999	197
- Aug. 10-11, 1999	3,480
- Sep. 17,1999	3,957

## Neya river basin comprehensive flood control measures in Osaka prefecture government.

In order to create a safe and comfortable town by alleviating flood damage, not only the restoration of rivers, but also the construction of water retention facilities such as:

- Flood control green spaces
- Flood control reservoirs
- Effluent facilities,
- Underground flows.

Improvement measures for the river basin for the purpose of preventing rainwater from flowing out to the sewerage system or rivers all at once are also important.

## Reconstruction of bridges to broaden of the river, raising the height of the levees.

Before the reconstruction ( 1971 )



Mostly completed in 1981, This photo taken in 2000



## Diversion channels

Neya river driving channel



Illustration of Diversion channels

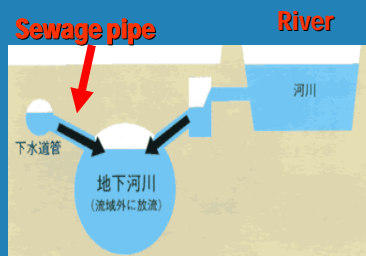


## Under ground flow

Neya river northern section underground flow



Illustration of underground flow



Underground flow  
(water is discharged outside the basin)

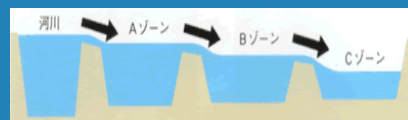
## Drainage basin. (Flood control green space)

Neya river flood control green space



Illustration of flood control green space

River Zon A Zone B Zone C



View of the Neya river flood control green space when receiving flood water (August, 1999)

## Mitsushima flood control reservoir



Illustration of a flood control reservoir in the basin



Sewerage system      Flood control reservoir      Water channel

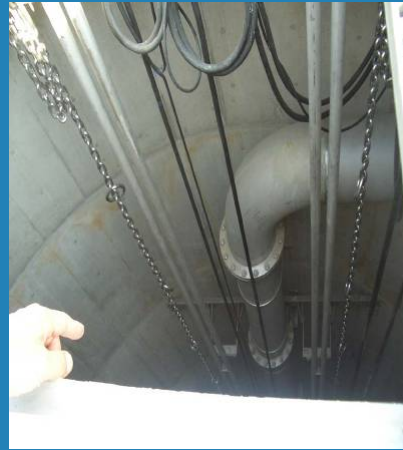


Underground view of the section circled with the dotted line in the above

## Reserving rainwater within the grounds of a school (Shijonawate city) and building



**underground flow which just completed.**



**Field survey on Earthquake in Niigata Prefecture.**



## Information of Earthquake Damage.

People Dead	40
People injured	2,867
People evacuation	10,663
Houses destroyed	2,028
Houses partially destroyed	4,430
Housed damaged	42,429

**Major Earthquakes with magnitudes ranging from 5.9 to 6.8 struck on 23 Saturday evening October 2004 in Niigata prefecture, northern Japan. Cause to landslides, Flood and Mudslide, wrecking houses and buckling railway tracks. Many people dead, missing, and thousand of people evacuation.**

## Information of Earthquake Damage.



**Cause to dead, damage houses, old temple and gravestone, derail trail.**



**Cause to many huge landslide, flood and mudslide, damaged roads & railways**

## Emergency response of National & Local government.

The Niigata prefecture set up the Emergency center, in this center there were many related organization based, to sharing information about the earthquake, discussion Such as: there is the corner of the representative from Hyogo prefecture to share the lesson learn and suggestion how to response in the emergency, based on Experience of Hanshin Awaji earthquake 1995.

There is the corner of Self Defense Force, Conner of Medical service, and many organizations related to.....



## Emergency response of National & Local government.

There were many organizations based In Ojiya City office such as Ojiya Disaster Management Center, Red cross, and many media from many prefectures. There were many update information day by day, providing for the residents and media such as the information about the damaged of road, direction of road can be used, evacuation, health consultation and many concerning.



## Set up evacuation center

The city gymnasium was used as a evacuation center temporary. There were many organizations as Self Defense Force corner, Red Cross corner, Information Corner, Play room, Relief corner, Cooking corner, some private food relief corner, temporary toilet & bath room and many corner else..



## Set up volunteer center

In Volunteer center there were many Volunteer from all around the country having difference skills as Computer skill, first aid....., information providing also have in Japanese and English, there was the corner provide food for evacuee and also many activities took place.





## Very quick search & rescue.



## Very quick evacuation



**Very quick response on relief as providing food, water, clothes and necessary things.**



**Very quick Recovery and Reconstruction.**



Enjoy visiting famous places in Japan.



Enjoy visiting famous places in Japan.



## Enjoy Japanese food.



## II. Lesson learn from Japan

## 1. Experience of pass major disaster

Realized the emergency response of Hanshin-Awaji Earthquake ( search and rescue, emergency assistant, the way assessment and other else...).

Also realized the quick and well coordination and collaboration from networking group and people of Japan, especially involving implement for recovery & reconstruction after earthquake. Also many steps toward recovery & reconstruction process were implemented will be the very good guidance for many countries in the implementation of recovery and reconstruction.

Sharing lesson learn and experience of pass major disaster is very important process for develop and improve the weakness points of the actions for the effective response to future disaster, especially for planning the response measure for disaster reduction and mitigation for the future.

More knowledge about rainwater and sanitation treatment systems which are widely know for my advanced process of flood control in Japan.

## 2. Disaster preparedness IN JAPAN

**There are many disaster prevention facilities and equipment:**

- Observation equipment such as: meteorological satellites, weather observation radar and seismometers.
- Materials and machinery required for emergency response such as relieve stocks, firefighting equipment, water tanks and power generators.
- Systems for liaising and communicating emergency information such as telecommunication or broadcasting facilities.
- Transportation vehicles such as helicopters, ships and automobiles.
- Facilities of evacuation and headquarters for disaster countermeasures.

Also there are many projects such as fireproofing buildings, providing evacuation routes, areas and facilities for disaster preparation bases.

- Disaster prevention in urban areas such as creating green space, spreading aseismic examination and reinforcement of existing buildings, improving and inspecting public facilities and seismic retrofit of lifeline facilities.

- There were many erosion control works such as landslide prevention, Soil and water conservation, flood control, steep slope prevention and any els....

- There are many activities on school Education & disseminating such as: 1<sup>st</sup> of September every year is "Disaster management day" in the period of August 30<sup>th</sup> to Sept 5<sup>th</sup> as 'Disaster management week' many event such as dm fair, dm seminar, dm poster contest and dm drills.



There are many training to volunteer, local organization and residents such as: fighting fires, fighting floods, search and rescue, first aid, and evacuation.






### **3. Disaster Emergency Response & Recovery and reconstruction**

Experiences on the real situation and many actions took place in Earthquake and flood emergency response from national and local government . I released that Japan has very good preparedness so many organizations related to, have more skill, understand well their role and responsibilities and the way how to coordination in the emergency situation. Thus the Disaster emergency response and recovery & reconstruction were very quickly and smoothly.



### **III. Recommendation to Disaster management in Lao PDR**

- 
- Should pay more attention on increasing capacity of district and provincial authorities to prepare communities to respond to disasters and reduce disaster vulnerability.
  - Should improve the coordination and flow of information between all administrative levels ( national, provincial, district and village ).
  - Emergency response plans at high risk district should be clear and disseminated to all relevant agencies and organizations.
  - Emergency response drill should conduct at least 1 a year.
  - Lesson learn of past experience on disaster emergency response should be reviewed and sharing the good and weakness points for effectiveness response to future disaster.
  - Information about past Major disaster should be awareness and education to the residents.



#### **IV. My lesson learn to apply to my work**



I will share my skills that gain from Japan such as:

- Assist NDMO to develop and implement disaster prevention plans.
- Sharing my lesson learn from Japan to my colleagues.
- Introduce the highlight activities to the local government through training.
- Continue strengthening collaboration and coordination with ADRC on sharing lesson learn and information about disaster.

"Thank you very much for your well taking care and helpful to me

"Thank you"

