Panel Discussion on International Cooperation in the Civil Engineering Field

"Don't stay inside the country.
Civil engineers shall cross the borders."

Katsuji Fukumoto

Secretary General
International Activities Committee
JSCE

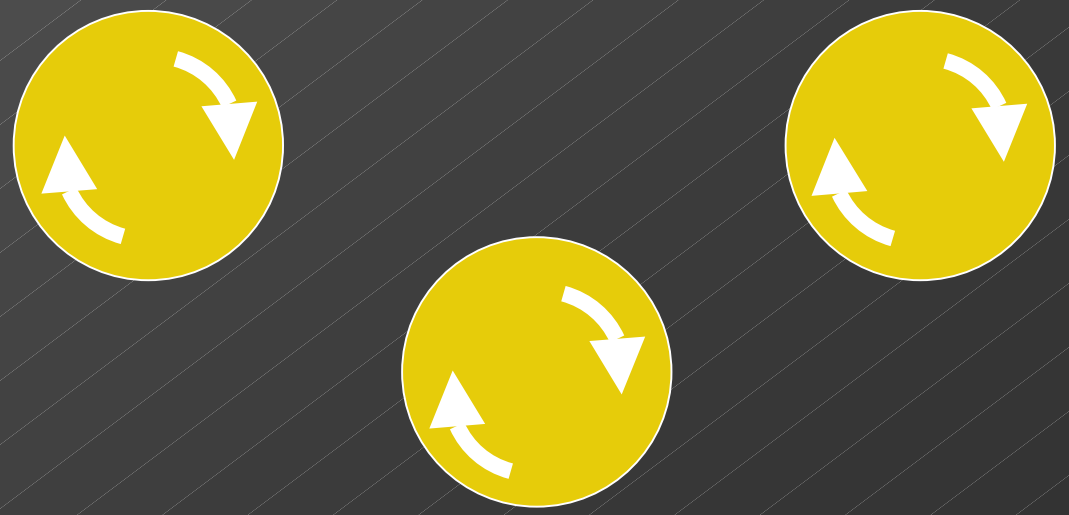
Contents

1. Background

The area where civil engineers work will be expanded as the society becomes matured.

Old Days

- Activities of civil engineers are limited inside the own country.



1. Background

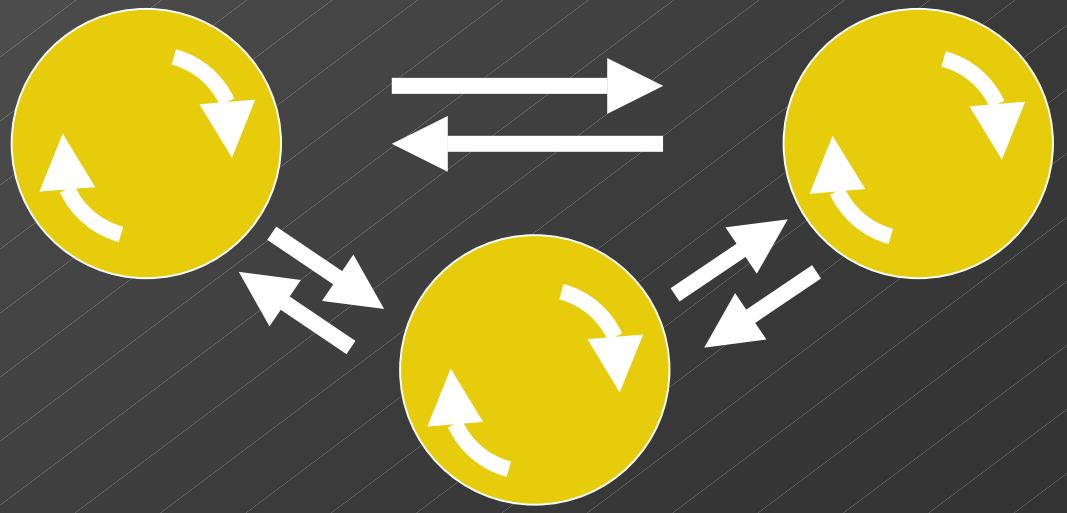
The area where civil engineers work will be expanded as the society becomes matured.

Old Days

Developing Period

- Activities of civil engineers are expanded to the foreign countries.

For - Importing advanced technologies
- Technology exchanges
- Exporting technologies



1. Background

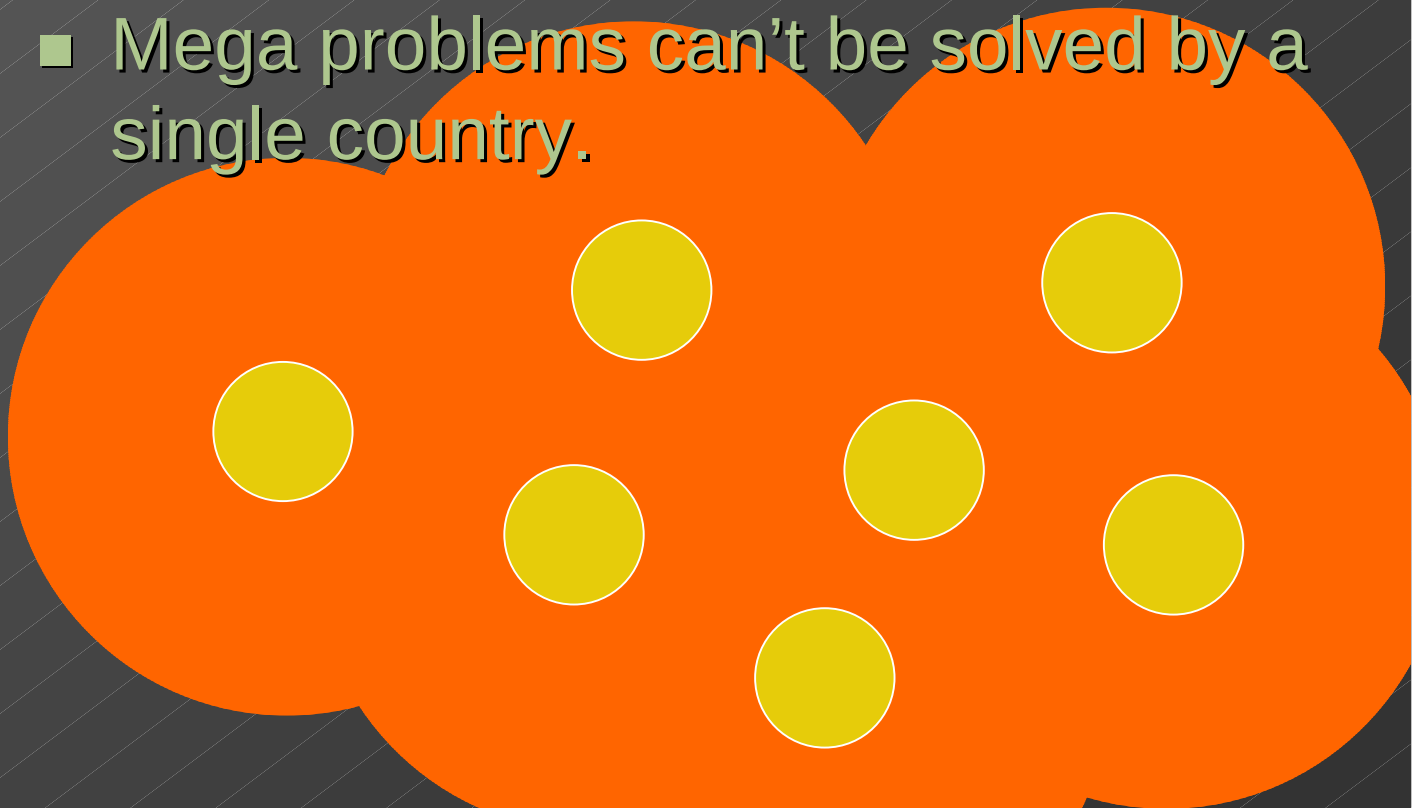
The area where civil engineers work will be expanded as the society becomes matured.

Old Days

Developing Period

These Days

- Human activities in the country will affect activities of other countries.
- Mega problems can't be solved by a single country.



1. Background

Civil engineers in related countries shall work together to solve confronting problems.

Pollution	Natural disaster	Global Warming	Climate changes

- Marine pollution
- Floating debris in the ocean
- Air pollution

By: National Institute for Environmental Studies

Destruction of coral reef

By: White Paper on Envirnment,2007

1. Background

Civil engineers in related countries shall work together to solve confronting problems.

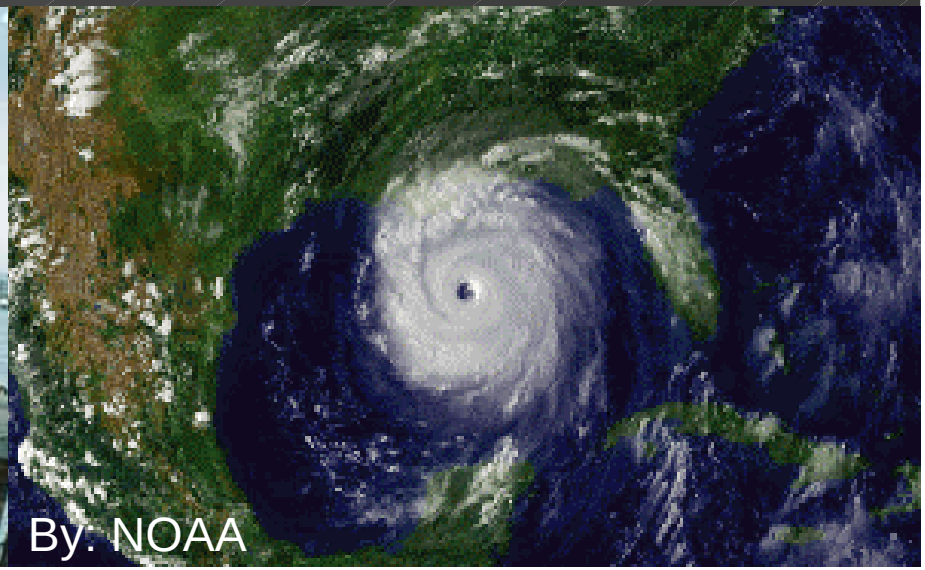
Pollution	**Natural disaster**	Global Warming	Climate changes

- Earthquake
- Typhoon

Earthquake in Java Island

By: JSCE

Hurricane Katrina in August 2005



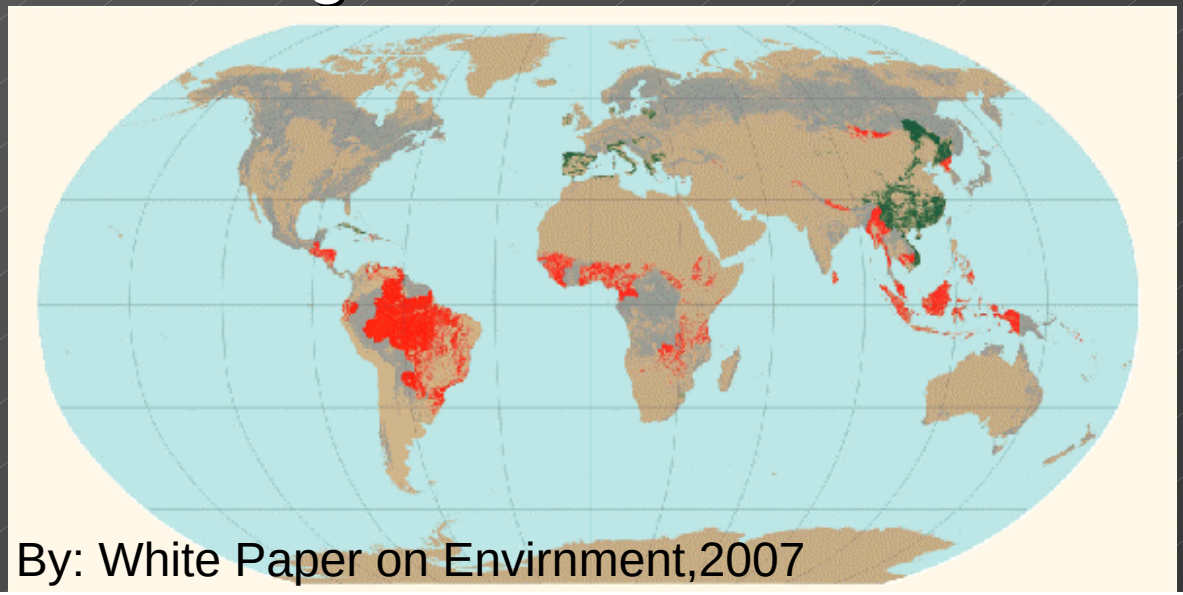
By: NOAA

1. Background

Civil engineers in related countries shall work together to solve confronting problems.

Pollution	Natural disaster	**Global Warming**	Climate changes

- Carbon dioxide
- Diminishing rain forest



By: White Paper on Envirnment,2007

Annual diminishing rate of forest in the world between 2000 through 2005

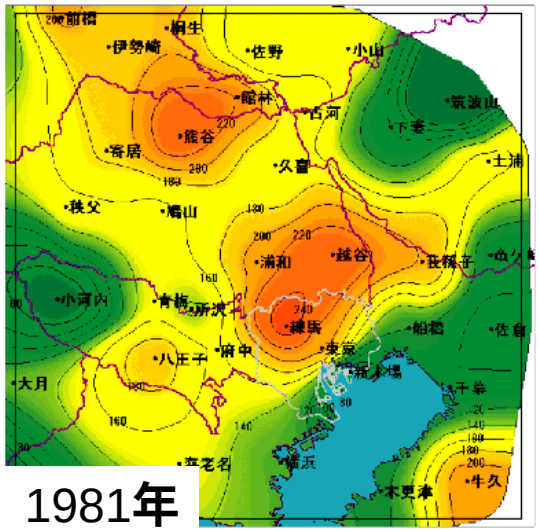
- diminishing more than 0.5%
- increasing more than0.5%
- fluctuation within 0.5%

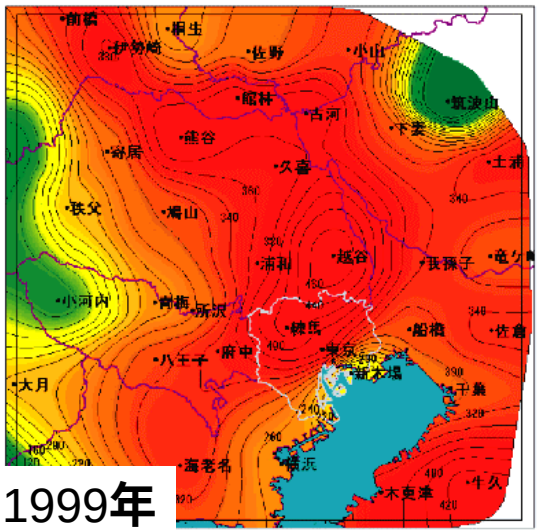
1. Background

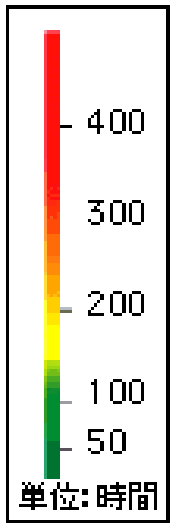
Civil engineers in related countries shall work together to solve confronting problems.

Pollution	Natural disaster	Global Warming	**Climate changes**

- Severe weather
- Heat island







Cumulative hours when temperature is more than 30 degree in Tokyo

By: White Paper on Envirnment,2007

2. International Cooperative Actions of JSCE

“Agreement of Cooperation” with 25 institutions

- ASCE, USA (1988)
- CSCE, Canada (1988)
- KSCE, Korea (1989)
- The Institution of Engineers, Australia (1990)
- SSCSE, Sweden (1990)
- ICE, UK (1991)
- CICHE, Taiwan R.O.C. (1992)
- CNISF, France (1993)
- PICE, The Philippines (1997)
- FECIC, Mexico (1988)
- ECCE, EU (1989)
- CCES, China (1989)
- EIT, Thailand (1989)
- The Institution of Engineers, Singapore (1989)
- The Institution of Engineers, Bangladesh (2000)
- VCA, Vietnam (2000)
- The Institution of Engineers, Pakistan (2001)
- TCCE, Turkey (2001)
- The Institution of Engineers, Malaysia (2002)
- HKIE, Hong Kong (2002)
- MACE, Mongolia (2002)
- The Institution of Engineers, India (2002)
- NEA, Nepal (2003)
- The Institutions of Engineers, Indonesia :PII (2005)
- Korea Disaster Prevention Association, Korea (2007)

2. International Cooperative Actions of JSCE

International activities on the JSCE Annual Meeting

- Round Table Meeting
- Panel Discussion
- English Session

By: JSCE

2. International Cooperative Actions of JSCE

Annual Summer Symposium for International Students in Japan

By: JSCE

2. International Cooperative Actions of JSCE

Organizing Joint Seminars

In 2006, 4 joint seminars were organized in China, Vietnam, and Korea.

By: JSCE

2. International Cooperative Actions of JSCE

Study Tour Grant

Recent STG recipients

- 2003：MACE, Mongolia
- 2004：NEA, Nepal
- 2005：IEM, Malaysia
- 2006: EIT, Thailand
- 2007: PII, Indonesia

By: JSCE

2. International Cooperative Actions of JSCE

Emergency Relief Assistance

Dispatching disaster research teams 19 times since 1999

By: JSCE

3. International Cooperative Actions Of Civil Engineers in Japan

A. Government

International cooperation through an economical assistant program is implemented through JICA and JBIC.

By: Ex-post evaluation reports of yen-loan-financed project in 2002

3. International Cooperative Actions Of Civil Engineers in Japan

B. University

- Collaboration with overseas universities
- Organizing joint seminars

2006APRU
Undergraduate Summer Program

By: APRU

AEARU2005

By: AEARU

3. International Cooperative Actions Of Civil Engineers in Japan

C. Industry

- Organizing joint ventures for foreign projects – uniting advanced technologies and local expertise
- Technology transfer through joint ventures

By: Obayashi Corporation

4. Expected International Cooperative Actions Now and for the Future

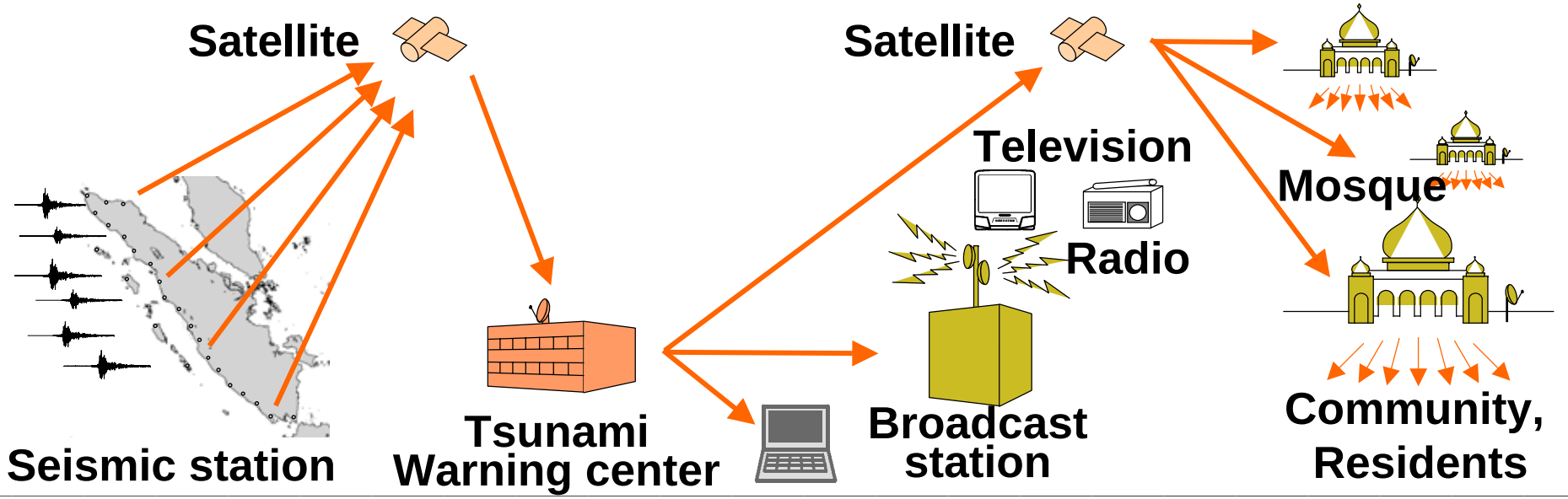
- Technical cooperation between Japanese civil engineers and local civil engineers is organized through the project, which is necessary in the local country.

- Technology transfer can be achieved through the real projects in technical cooperative manner.

By: Obayashi Corporation

4. Expected International Cooperative Actions Now and for the Future

- Big project, which can't be solved by a single country
  - Mekong River (ACECC)
  - Other big river improvement projects
  - Tsunami early detection and warning system
  - Typhoon early warning system



4. Expected International Cooperative Actions Now and for the Future

- Technical cooperation is not limited to the construction field, but can be organized beyond the boundary of academic fields.

Biological and Agricultural Engineering and Civil Engineering

- Increasing output of agricultural products

Ocean and Marine Engineering and Civil Engineering

- Increasing output of fish products
- Preserving environment of ocean

Meteorology and Civil Engineering

- More efficient irrigation system
- Flood control system

5. Conclusion

Functions of Civil Engineer's Society are as follows,

- Coordinating with organizations of other fields, such as agriculture, mechanical engineering, biotechnology
- Coordinating researches and development of various universities and institutions
- Initiating international cooperative activities
- Organizing multi-national organizations

FIN

Thank you very much for your attention