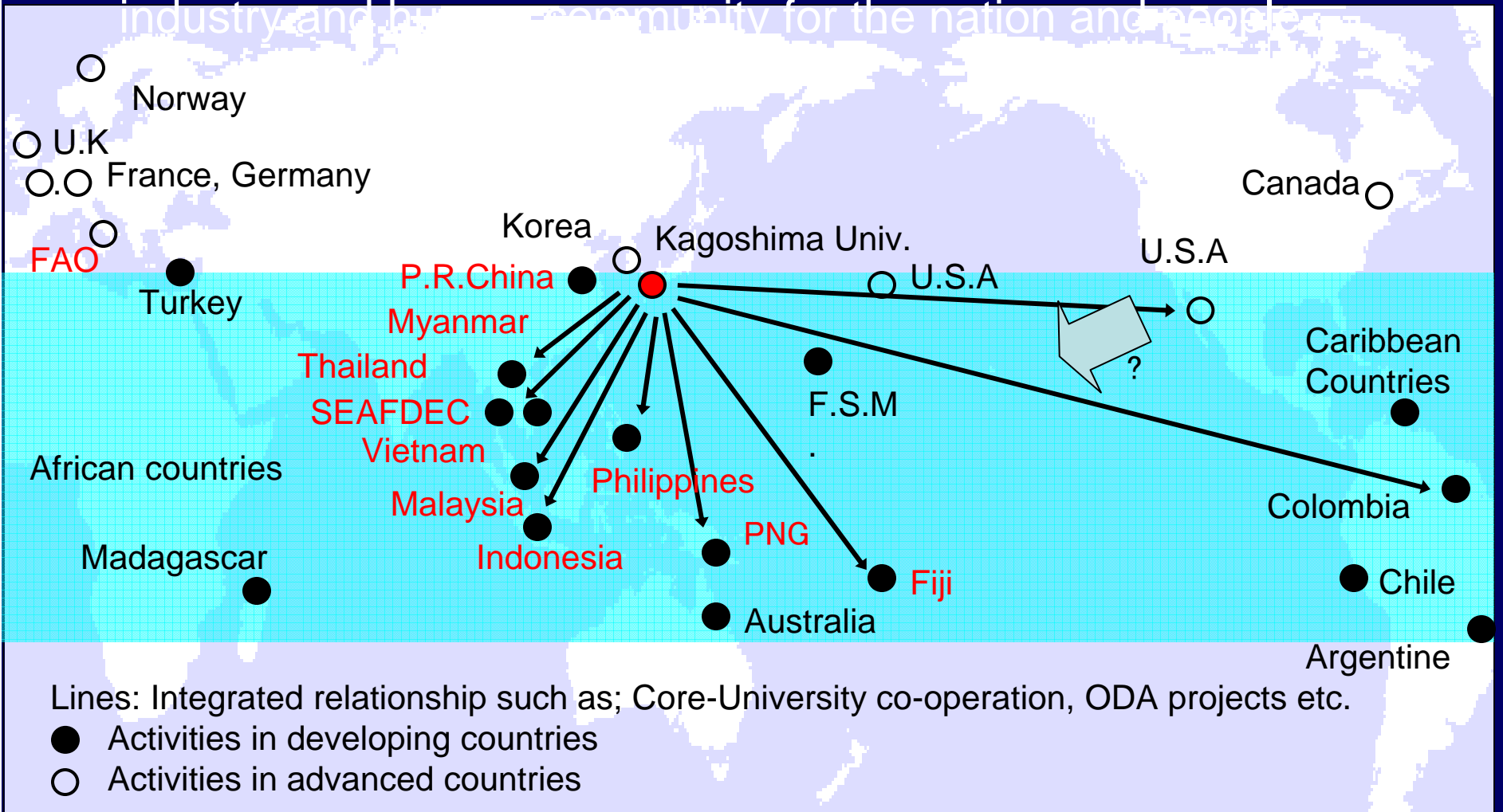


Poverty alleviation through  
rehabilitation of negative impacts to  
aquatic environment and fisheries  
resources in coastal area  
in Southeast Asia

Tatsuro MATSUOKA  
Faculty of Fisheries,  
Kagoshima University, Japan

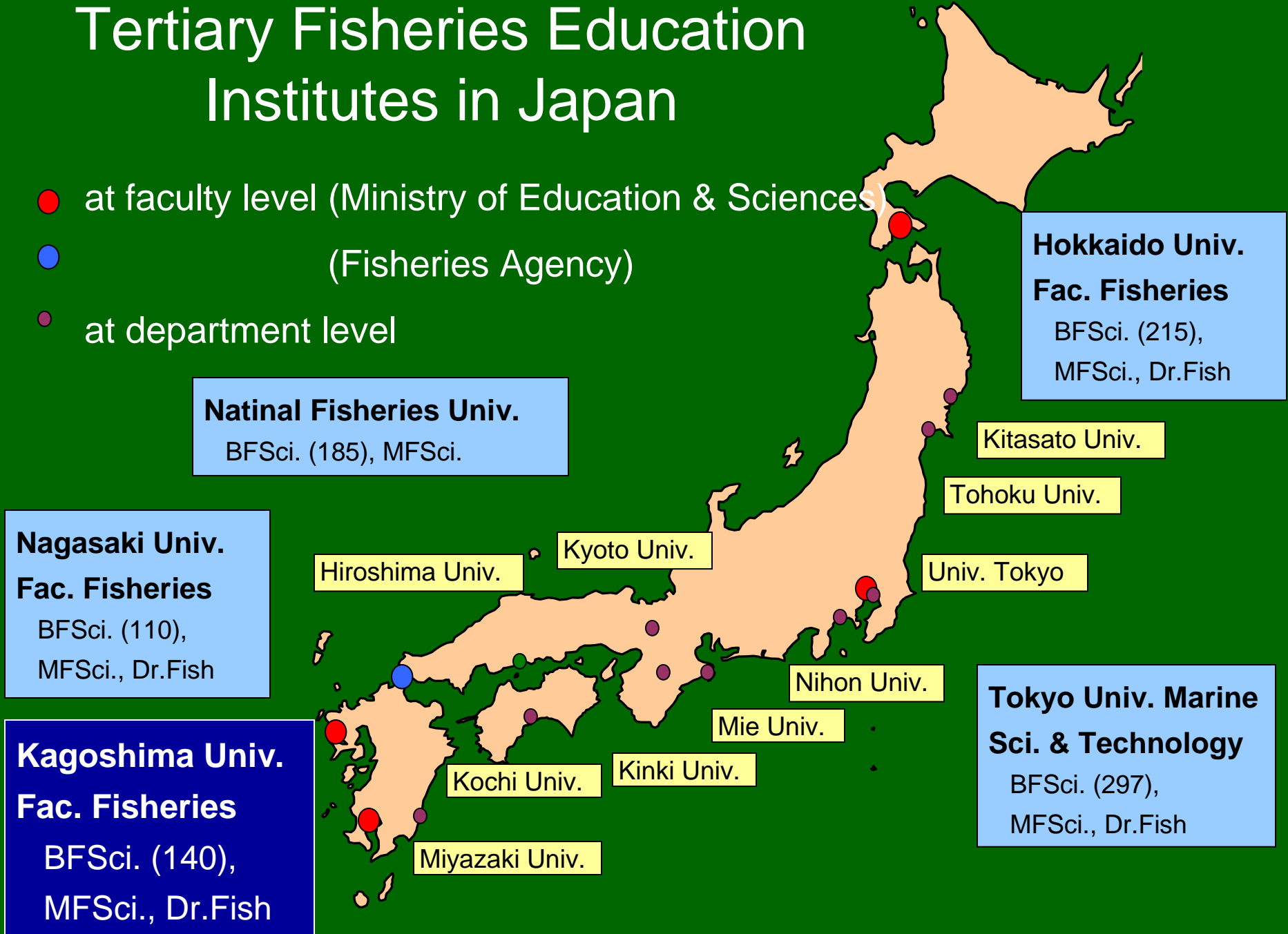
# Tropical and sub-tropical aquatic belt and Kagoshima University

Policy: National universities accumulate and provide scientific information on local characters to face global diversity in nature, industry and human community for the nation and people.



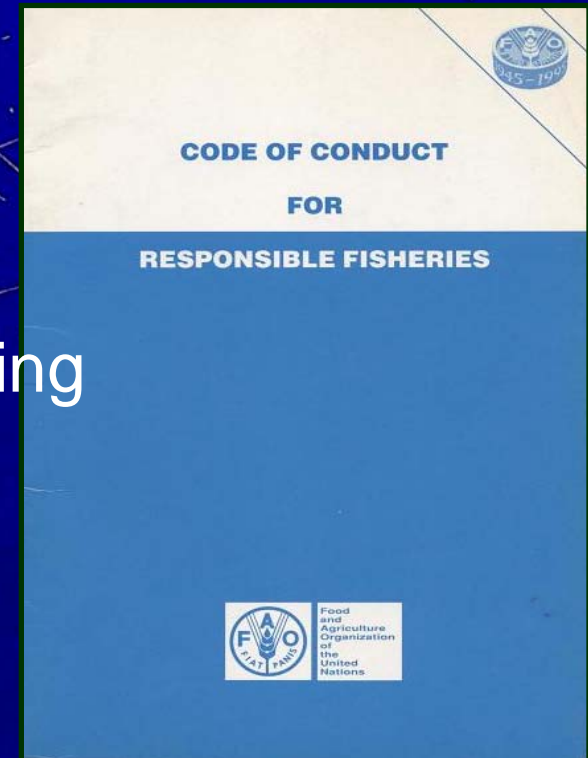
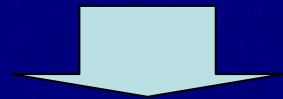
# Tertiary Fisheries Education Institutes in Japan

- at faculty level (Ministry of Education & Sciences)
- (Fisheries Agency)
- at department level



# Negative impacts to and from fisheries industry

- Code of Conduct for responsible fisheries endorsed by FAO in 1995
- Global concern to negative impacts in capture fisheries
  - Destruction of habitat
  - Bycatch and discards
  - Derelict fishing gear and ghost fishing
  - Contamination by aquaculture
  - Post-harvest losses



Development of countermeasure and remediation



# International Cooperation: Core-University Exchange

Sponsored  
by JSPS



Univ. Philippines  
in the Visayas

Fac. Fisheries,  
Kagoshima Univ.

Sister core-university  
programmes in  
fisheries in Indonesia,  
Thailand

Institutes in fisheries  
in the Philippines

Institutes in fisheries  
in Japan



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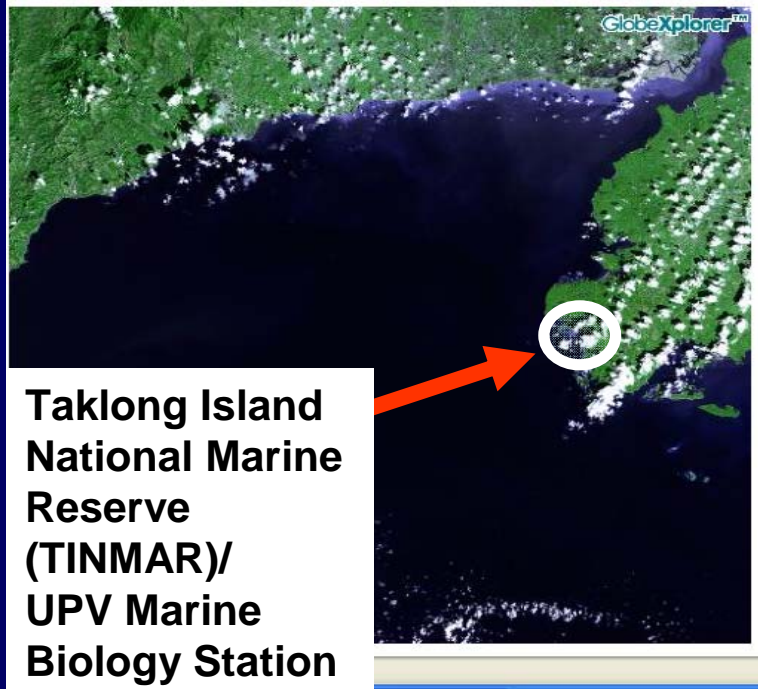
Institutes in fisheries  
in Japan





# Oil Spill Aug 11, 2006 and Research Cooperation


- 2 million liters of bunker fuel from a tanker that sank south of Guimaras, Philippines
- Affects Guimaras, Iloilo and Negros
- Hit Taklong Island with UPV Marine Biological Station/National Marine Reserve



# Project components toward enhancement and internationalisation of post-graduate education in the Faculty of Fisheries

Super-goal for Faculty of Fisheries: Establishment of higher education institute in fisheries which contributes the local and global communities, producing high quality man-power in the field of sustainable development of fisheries resources, their rational utilisation and conservation of aquatic environment and producing culture leading the activities related to tropical and sub-tropical waters on the basis of cooperation around Southeast Asia and Pacific regions.

Post-graduate education in Fisheries, Agriculture and Medical/dentistry sciences in the Philippines



E-distant education network in Fisheries in the S.E Asian Region

Involvement of post-graduate students in the Formulation of Research and Education Core (JSPS) project

Development of regionally-common subjects on the basis of distant education system and Liaison Office at the University of the Philippines in the Visayas and establishment of the cooperation net-work and centre for post-graduate education in the Region



# Proposed model toward poverty alleviation from inferior areas common in Southeast Asia

Terrestrial discharge including substances of negative impacts to coastal waters

- Industry
- Human life
- Agriculture

**Land:** Expanding poverty in coastal inferior areas

- Inhabitants for poors
- Poor hygiene and malfunction
- Source of fishery products without safety assurance
- Hazard against food security

- Aquatic environment conservation
- Food security
- Human health

- Social safety
- Poverty alleviation

Land

Sea

Fish and fishery products

**Sea:** Contamination with negative impacts

- Destruction of habitat environment for organisms, e.g. eutolofication
- Disturbance against biological reproduction
- Fish and crustacean diseases
- Ecological changes and negative organisms, e.g. red-tide