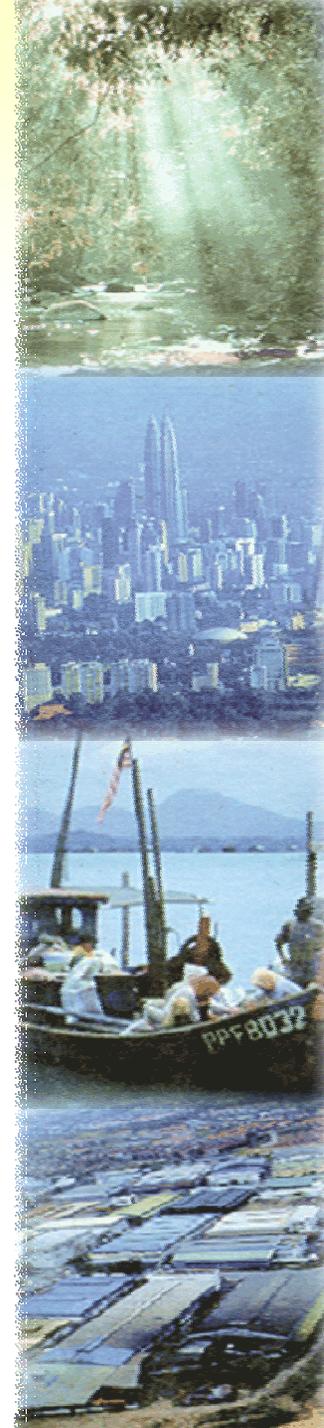


# Sustainability Science for Sustainability Governance: A study on science–governance symbioses



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# INTRODUCTION



- Environmental degradation and catastrophic hazards/disasters
- 26/12/04 Tsunami
  - Need for an effective science-policy interface has become more pressing
  - Assurances that scientific inputs are reaching decision makers
  - Measures in place take into account scientific input

# ISSUES



- Could this be a fault of a system in governance or a poor link-up between scientific inputs to decision-making?

*facilitating structures, systems & processes – feed ups, types & scales*

- Could scientific input and knowledge have been lost in translation in governance?

*mismatch, conflict & relevance*

- What is the proper conduit?

*structures, systems & processes*

- Who decides?

*what, when, where, how & why*

- How should scientific inputs be channelled and understood? *levels*

- How much of the scientific input channeled is used once in governance systems?

*assessment & monitoring*

## CONCERNS



- That scientific input is not effectively channelled to government i.e. to policy and decision makers;
- That there is a gap in understanding and translating scientific inputs for governance, e.g. disaster risk reduction and control;
- That there is a 'divide' between technocrats and bureaucrats in current systems of governance; and
- That there is no clear facilitating mechanism to better translate and interpret scientific inputs in decision-making processes.

# CONUNDRUM



Wealth of scientific data collected, generated and disseminated through various forms both printed and virtual, yet there is no clear assessment as to how much has been absorbed by the systems and processes of governance.

*bottlenecks; directions; purpose*

# The thing about learning from, fitting in & contributing to SCA



Sustainability science: solution driven, integrative science that is focused on nature-society interactions;

Science of and for sustainable development;

Closing the gap between knowledge and action.

*exchange information; promote collaboration & cooperation; work together for sustainable development: a prosperous, harmonious and greener Asia*

# OBJECTIVE



## *Point of symbioses*

To study the current framework for science-governance symbioses in Malaysia using Japan and Indonesia as a comparative case study

## *Feasibility of formalised interaction*

To assess the feasibility of a formalised framework for interaction facilitated by the Academy of Sciences Malaysia with scientists, researchers, academics and practitioners with the government

## *Assessment of effectiveness of scientific translation in governance*

To determine the appropriate methodology for the assessment of effectiveness in the use of science in governance

## Facilitating structures



*Point of symbioses*

- Academy of Sciences Malaysia
- Government Research Institutes
- Technical committees in government agencies

# Facilitating systems



## *Feasibility of formalised interaction*

- Policy making
- Decision making
- Assessments and Reviews
- Implementation / Enforcement

# Facilitating processes



## *Assessment of scientific translation*

- Decision making
- Consultation and participatory processes
- Monitoring, Evaluation, Assessments
- Reviews

# SCOPE



- The characterisation of fields, disciplines and approaches that forms a basis of sustainability science, its scope and coverage
- The application of scientific input in governance
- The characterisation of sustainability governance

# METHODOLOGY



- Literature review
- Consultative discussions
  - selected government stakeholders
  - scientific communities
- Comparative studies – Japan and Indonesia

## PREMISE



The initial work will be premised on responses to geological hazards, studying the means of channeling of scientific inputs and the outcome of governance responses and measures to control risks and impacts

# OUTPUT



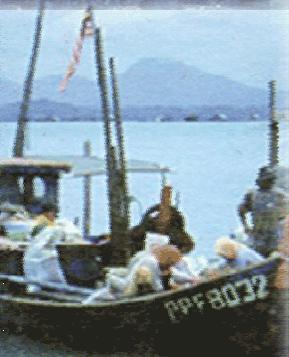
- Plan of action to strengthen science – governance symbioses
- Characterisation of sustainability science and governance

Duration: 24 months

*Existing work*

*Fundamental grant*

*National grant*



THANK YOU

