Earth Observation System activities in Southeast Asia and Introductory of Asian Institute of Technology

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CCOP Technical Secretariat
An Intergovernmental Organization

12 Member Countries

- Cambodia, China, Indonesia, Japan, Malaysia, Papua New Guinea, the Philippines, Republic of Korea, Singapore, Timor Leste, Thailand and Vietnam

Supported by

- 16 Developed Nations (Cooperating Countries)
- International Cooperating Organizations
  eg ESCAP, ASCOPE, PETRAD, UNESCO, CPC, CIFEG, EuroGeoSurvey etc
Eastern Asia Natural Hazards Mapping Project (EANHMP)

Landslide Hazard Analysis; Application Using GIS and Remote Sensing

The Strategy for Coastal Environment Management of the Asian Delta Region on coastal erosion problem
The key to progress

- Training and capacity building for institutional strengthen and personal ability.
- Publication for communication of the government of Member Countries as well as potential investor.
- Technical co-operation between developing countries
Asian Geoinformation Data Infrastructure (AGDI-CCOP)

Contents
- Digital Compilation for Geoscientific Maps (DCGM/CCOP)
  - Spatial Data

Inventory
- CCOP Metadata Project Phase I to II
  - ISO Metadata

Language
- SANGIS/CIEFEG/CCOP Multilingual Thesaurus

Standards
- OneGeology CCOP
  - OGC standards: WMS, WFS, GeoSciML

Contents
- 1 million scale geological maps

Platform
- CCOP GeoGrid
  - Secure Data Exchange Platform

GIS
- CCOP Geospatial Correlative Integration for Geological Application in East and Southeast Asia (KIGAM)
  - Database, Mathematic Model, Web-based System

Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP)
SE Asia Countries are well established the multi-geohazard monitoring and observation data network systems through key national and international organization.
The international organizations have advance technologies on tools and materials for earth observation and monitoring especially in remote sensing and seismic & ground instability.
Broadband seismic stations (148)
The Philippine Seismic Network at Present

- 29 manned stations
- 30 unmanned stations
- 5 seismo-volcanological observatories
- MetroManila micronetwork (5 seismic stations)

Seismic Data Receiving Center
Current integrated geo-science, social & economics sciences supported project activities in public education and community preparedness in Indonesia.
Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP)
I. Introductory of AIT

The Asian Institute of Technology promotes technological change and sustainable development in the Asian-Pacific region through higher education, research and outreach. Established in Bangkok in 1959, AIT has become a leading regional postgraduate institution and is actively working with public and private sector partners throughout the region and with some of the top universities in the world.
I. Introductory of AIT

Key Facts and Figures

2300+ Students from 47+ Countries/Territories
16000+ Alumni from 80 Countries/Territories
24000+ Short-term Trainees from 70+ Countries/Territories
130 World Class Faculty from 20+ Countries
499 Research and Support Staff from about 30 Countries
About 400 Sponsored Research Projects
33 Board of Trustee members from 19 Countries
II. Overview

AIT has been involved in Technological and Developmental research of relevance to the region from its inception.

Sustainable development of the region has been at the core of major projects carried out in various parts of Asia.

www.ait.asia
II. Current Researches

DISASTER MANAGEMENT & MITIGATION

Recent intense occurrences of natural disasters all over the earth leading to massive loss of life and destruction of infrastructure have grabbed the attention of the world.

Receiving attention is disaster risk management—the know-how to prepare for such disasters and to reduce their effects.

AIT and its partner institutions are determined to contribute more toward bringing this know-how to disaster managers and engineers.

A new academic program was designed to instill the necessary interdisciplinary capacities to manage and minimize the effects of disasters in people on the front-lines of disaster response and preparedness.

www.ait.asia
DISASTER MANAGEMENT & MITIGATION
The partners and collaborators of this program are:
- Asian Disaster Preparedness Center (ADPC)
- National Oceanic and Atmospheric Administration (NOAA),
- International Institute for Geo-information Science and Earth Observation (ITC), the Netherlands
- International Center for Urban Safety Engineering (ICUS), The U.of Tokyo, Japan
- U.of Washington Extension (UWE), USA
- Coastal Resources Center (CRC), U. of Rhode Island, USA
- Japan Aerospace Exploration Agency (JAXA), Japan
- UN. Office for the Coordination of Humanitarian Affairs (UNOCHA), Regional Office for Asia and the Pacific, Bangkok
- Disaster Prevention Research Institute (DPRI), Kyoto U.

www.ait.asia
Research at AIT
Sustainable development in the context of Climate Change

Broad Climate Change areas at AIT

Climate Science – study of vulnerable areas using GIS and RS,
Disaster preparedness, air quality monitoring and modeling, etc.

Mitigation – renewable energy and carbon neutral economies, etc.

Adaptation – eg. major problem in the coastal areas and islands of Asia, urban, rural and coastal areas, etc.
III. New Direction

Centre of Excellence: Sustainable Development in the Context of Climatic Change

Providing greater impetus to develop new adaptation and mitigation strategies to provide local communities more resilience.

ASEAN Regional Centre of Excellence on MDGs
The United Nations-designated home of the world’s first Regional Center of Excellence on the Millennium Development Goals in partnership with UNITAR, UNDESA, UNDP and UN-ECOSOC for training of trainers for governments, educational institutions, civil society, NGOs and private sector.

Asian Centre for Corporate Social Responsibility
The mission of the Centre is to advance the development and implementation of effective sustainability solutions for and by business as well as facilitate development of the supportive framework conditions for corporate social responsibility and sustainable development.