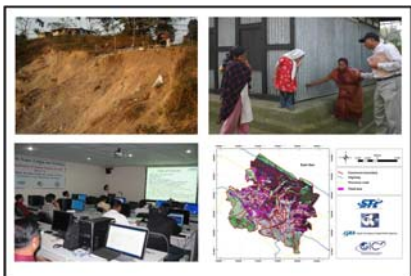


**T**he effect of Global Warming and Climate Change are identified as two major global issues affecting natural and social environment globally. Various research conducted to evaluate the impact have documented that these changes will continue escalating threat level or the risk on living environment. It is reported that reversing these phenomenon will not be possible and experts are advising to turn to better adaptation strategies to reduce the risk or avert risk by proper risk management.



Climate change is threatening safety and human security far more than any other phenomenon and the water induced disasters as a consequence account for loss of life and property. On the other hand, climate changes could be the consequences of long term environmental degradation and proper understanding environmental status and monitoring our natural environment could lead to better management of risks due to disasters. Use of Remote Sensing, GIS and GPS are becoming important in gathering information pertaining to disasters, state of natural environment, environmental changes that could provide vital information for sustainable management of natural resources to put forward appropriate counter measure to these current problems. While satellite systems and data are key for information gathering, capacity building and technology transfer is very important, particularly in developing countries, for ensuring proper use of these information in local levels.

### Program Narrative

Japan Aerospace Exploration Agency (JAXA), the agency responsible for Japan national space programs is making every effort to provide opportunities to people in Asia to develop their knowledge in applications of Remote Sensing, GIS and GPS in their national needs. It is true to say that applications of Remote Sensing, GIS and GPS are expanding in Asia rapidly and there is an increasing demand for technical expertise who could help the appropriate use of these technologies. Since 2004, a comprehensive capacity building program, called 'Mini-Project' is being implemented by the JAXA in collaboration with the GeoInformatics Center (GIC), Asian Institute of Technology (AIT) principally targeting capacity building in Asia and Pacific. The main feature of this approach is to carry out end-to-end capacity building activities through projects on real-world problems. Mini-projects have been recognized as a part of JAXA's international capacity building activities which support JAXA-initiative projects such as Sentinel Asia and SAFE. JAXA is currently inviting state agencies to apply for this capacity building project to enhance their human resources and in the meantime requesting local organization to contribute to this initiative with their own resources such as satellite data, local data and funds to make this activity sustainable in the long run.

### Terms of Reference

Objectives of Mini-Project proposal should address national needs of the country and can be from any disciplinary including environment, disaster, agriculture, fishery, coastal process etc.

Proposals should identify the use of space based technologies, specifically use of satellite data in addressing the problem.

Proposal should be submitted by a lead agency with a partner agency. In ideal situation, one of them could represent a mapping/space agency and other one a user agency. Either one of these two agencies can be the lead agency to submit a project proposal.

Duration of projects are generally for one year, but may be extended depending on availability of funds and the significant of first year results. Project schedule includes 2-3 weeks of initial training and project planning at AIT, 1-week fieldwork, and 5-6 weeks workshop for data analysis at AIT.

Proposal should clearly identify possible financial contribution from the proposing agency/agencies. For example; cost of fieldwork, participants travel cost to Bangkok, participants accommodation cost at AIT, participants daily allowances, etc.

ALOS satellite data will be provided free of charge to cover the target area based on project requirements. Also, archived Japanese satellite data will be provided if requested to fulfill objectives.

Proposing agency/agencies should identify data requirements for the project and clarify the availability, and method of acquiring them.

It is ideal if the proposal can identify the method agency/agencies would follow to promote the results within their own country. Example: practical usage in their agency, publication, etc.



**Proposal Format**

1. Project Title
2. a) Lead agency's name and contact person's name/address  
b) Partner agency's name and contact person's name/address
3. Introduction/Background/Significance of the project
4. Location of study area (Please provide co-ordinates, latitude-longitude)
5. Objectives (Please specify sub-objectives, if any)
6. Data (Please specify the available data and data to be procured/collected)  
Vector data (contour, spot heights, road, river, etc.)  
DEM (Digital Elevation Model)  
Landuse/landcover map  
Satellite images/aerial photographs  
Building footprint maps/settlements  
Hydro-meteorological data (e.g., rainfall), river cross section/discharge etc. (for flood projects)  
Socio-economic/demographic data  
Other data (as per project requirements)
7. Methodology (please provide a brief description)
8. Expected Results
9. Names of Participants (Name/Age/qualification/experience/expertise)
10. Contribution from the lead agency/partner agencies (Data, transportation/TA/DA for field work, etc.)
11. Remarks (if any)

**Authorization**

Please submit your proposal with the **recommendation of the head** of the agency. He/she should approve the content of the proposal and need to give the permission to **participants** to work on the project for one year and **visit AIT twice** during the project period.

**Important Dates**

- Closing date for submission of proposals: **26 June 2009**
- Proposal selection and notification: **By 20 July 2009**
- First project planning workshop/training at AIT: **3 weeks (Aug/Sep 2009)**
- Fieldwork: **1 week (Nov/Dec 2009)**
- Second Workshop for Data Analysis at AIT: **5-6 weeks (Jan 2010)**

**Submission**

Please submit your proposal electronically to **both** the e-mails below.

1. [sentinel.asia@jaxa.jp](mailto:sentinel.asia@jaxa.jp)
2. [geoinfo@ait.ac.th](mailto:geoinfo@ait.ac.th)

**Contact**

Sentinel Asia Project Office  
Asia Branch of the Disaster Management Support System (DMSSO)  
Satellite Applications and Promotion Center (SAPC)  
Japan Aerospace Exploration Agency (JAXA),  
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