

# SAFE: SPACE APPLICATIONS FOR ENVIRONMENT



## OBJECTIVES (01)

Climate change and human activities accelerate hazards, such as deforestation, landslides, droughts, and floods in Asia-Pacific countries. To mitigate these hazards, environmental monitoring has become important. Space Applications For Environment (SAFE) aims to encourage environmental monitoring for climate change mitigation and adaptation studies, as well as studies on other forms of practical application, using space applications. In particular, satellite remote sensing technology enables observation of the Earth from the space, and provides the basis to measure some of the changing environmental parameters in various areas, such as water resources, sea level, land cover, deforestation, agricultural production, and ecosystems.

## FRAMEWORK (02)

The SAFE activities are implemented by issue-based prototyping project teams consisting of end users, technical supporters, and data and application providers.

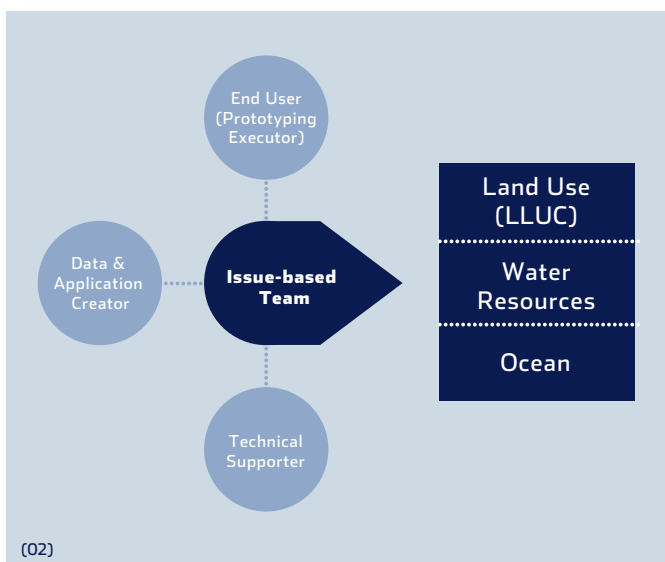
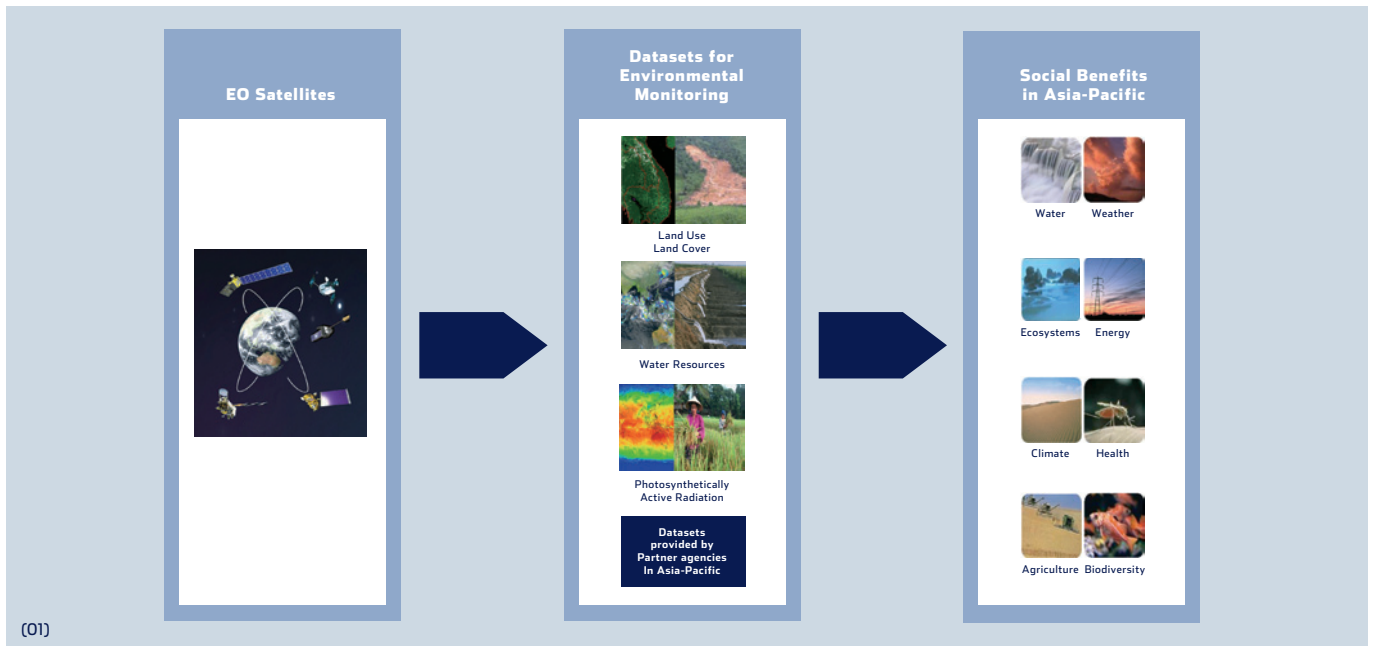
## SAFE PROTOTYPE ACTIVITIES (03)

Under the SAFE Prototyping, environmental changes, such as water-related disasters, sea level rises, land cover changes, deforestation, ecosystem changes and so on, could be identified, and climate change mitigation and adaptation strategy implemented by using space-based technologies.

SAFE prototype activities are carried out by the voluntary project teams by theme. APRSAF supports such activities by approving them as the official SAFE activities.

## HISTORY

- APRSAF-15, Hanoi (2008): SAFE was officially established.
- 1st SAFE Workshop, Pattaya, Thailand (May 2009): 7 proposals from 4 countries were submitted, and 2 proposals were approved as new SAFE prototyping
- Mini-Workshop, Jakarta, Indonesia (August 2009): 5 revised proposals were reviewed, 2 of which were approved at APRSAF-16 in Bangkok, 2010.



SAFE PROTOTYPE ACTIVITIES (AS OF MARCH 2010)

STATUS	COUNTRY	THEME
Completed	Vietnam	Forest monitoring
	Vietnam	Integrated water resource management
In Action	Cambodia	Water cycle and agriculture
	Laos	Forest monitoring
	Sri Lanka	Risk of sea level rise
	Indonesia	Potential drought monitoring
	Pakistan	Integrated water resource management
Proposed	Sri Lanka	Fishery monitoring
	Indonesia	Coastal zone monitoring
	Indonesia	Ocean carbon flux
	Sri Lanka	Environmental assessment due to flood
	Thailand	Fishery monitoring
	Nepal	Glacier extension monitoring

(03)