

# Regional Cooperation in Policy and Decision Making for Better Drought Management: the case of the Greater Mekong Subregion

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ADB





# ADB Strategy 2020

Infrastructure

Environment

Regional cooperation

Finance sector

Education



# Outline

Greater Mekong Subregion (GMS)

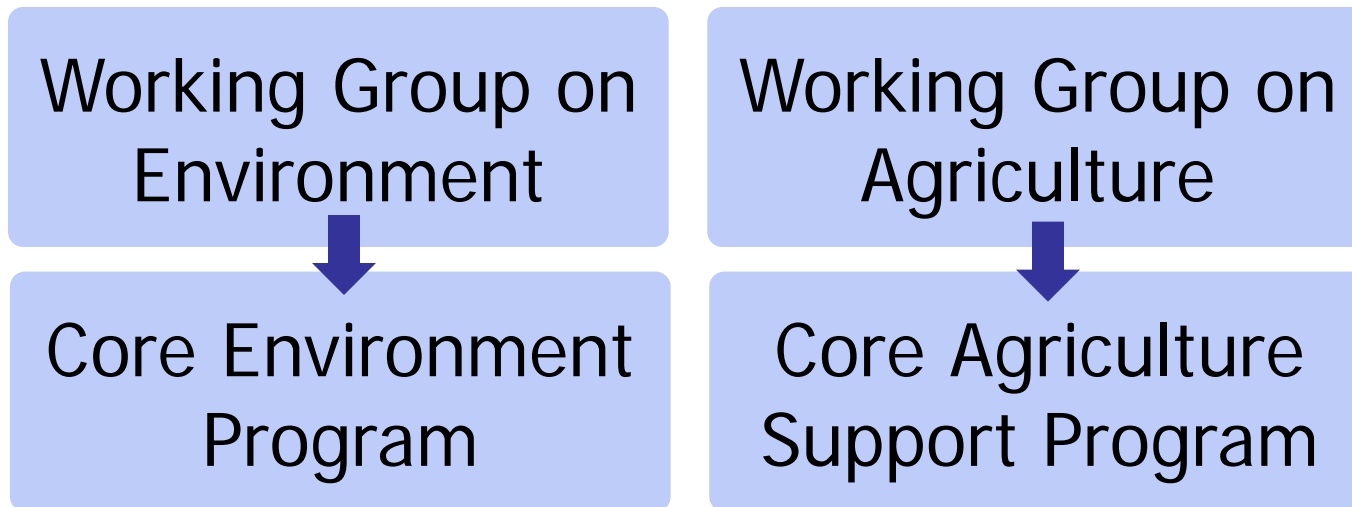
Applying Remote Sensing Technology for  
Drought Management in the GMS


Regional knowledge base for climate change  
adaptation planning

Uptake in Planning and Decision Making  
– Regional cooperation channels

# GMS

- Cambodia, P.R. China, Lao P.D.R., Myanmar, Thailand, Viet Nam

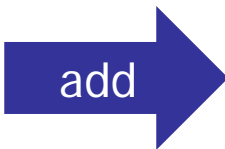
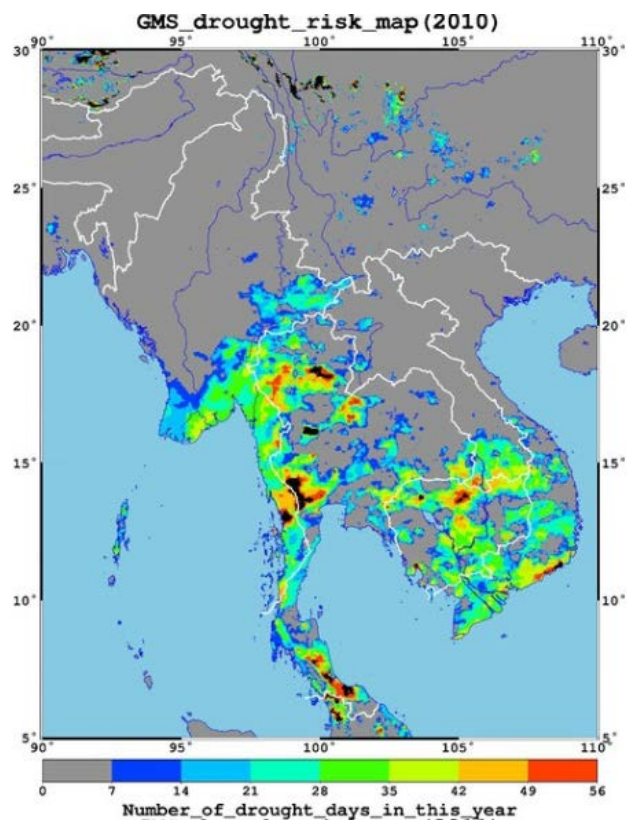




# Applying Remote Sensing Technology for Drought Management in the Greater Mekong Subregion

- Sustainable satellite-based drought monitoring and warning system
- Drought vulnerability area maps in GMS
- Cost-benefit analysis of droughts interventions in GMS
- Capacity development of policy makers and local organizations

# Satellite-based Daily Drought Information



# GMS-AIN (Agricultural Information Network) Website

GMSAIN Greater Mekong Subregion Agricultural Information Network

Home | About Us | Partner | Contact | Help

English | ខ្មែរ | 中文 | မြန်မာစာ | ភាសាខ្មែរ | ភាសាប្រាំង | Tiếng Việt Friday the 16th of December, 2011

News

- Introduction of GMS
- Working Group of Agriculture
- Agricultural Policy
- Agricultural Technology
- Cooperation Project
- Trading Platform
- Forum

Senior CPC official calls for Guangxi's efforts to promote China-ASEAN trade

BEIJING, March 10 (Xinhua) -- A senior official of the Communist Party of China (CPC) on Thursday called on Guangxi Zhuang Autonomous Region to promote trade facilitation of the China-ASEAN free trade area.

... (Detail)

Links

- Asia Development Bank
- MAFF of Cambodia
- MOA of P.R.China
- MAF of Lao PDR
- MOAI of Myanmar
- MOAC of Thailand
- MARD of Viet Nam

more links

More News

- China, Myanmar forge partnershipS...
- ASEAN+3 finance ministers vow toS...
- 1st ASEAN-EU Business Summit opeS...
- Senior CPC official calls for GuS...
- Cambodia finalizes strategic plaS...
- China, Vietnam mull constructionS...
- Vietnam to host first IWI forS...

Meetings

- Cambodian parliament approves naS...
- Joint investigation launched in S...
- FAO: Global warming calls for stS...
- FAO: Climate change threatens foS...
- Four measures to ensure steady aS...
- China,ASEAN Free Trade Area: TarS...
- Announcement Measures on BehalfS...

FOOD SECURITY

Climate Change

Implementation Review on GMSAIN August 8-19, 2009

Regional page

Daily Information

Annual and Monthly Information

Supplementary Information

Country pages

# Satellite-based drought monitoring and warning system in Greater Mekong Subregion (GMS)

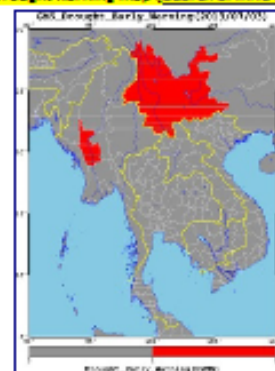


GMS (2013/07/03)

Drought warning statistics

- China-Yunnan: 400 (km<sup>2</sup>)
- Myanmar-Magwe: 96 (km<sup>2</sup>)

Drought warning map (Search archive data)



Drought anomaly map



Drought risk map

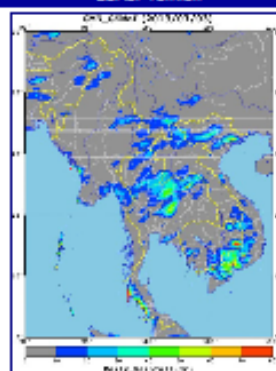
[Drought risk map](#)

[Monthly drought index map](#)

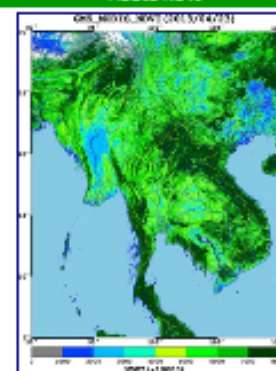
[Crop calendar in province level](#)

Related Information

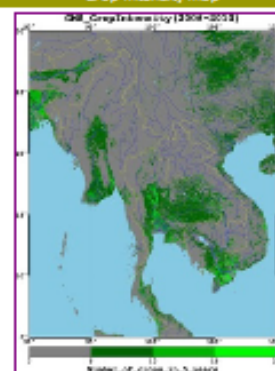
[GSMaP rainfall](#)



[MODIS NDVI](#)



[Crop intensity map](#)



Explore by country



Cambodia

China

Lao PDR

Myanmar

Thailand

Vietnam

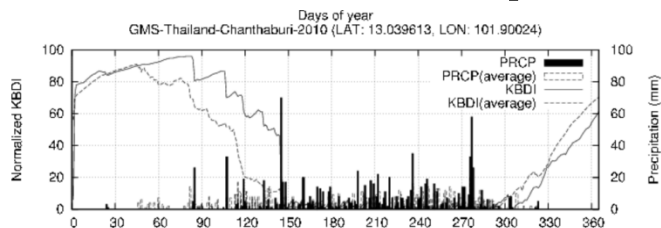
<http://paddy.iis.u-tokyo.ac.jp/GMS/>

# Country page

## Daily Information

## Annual and Monthly Information

## Provincial Graph



## Supplementary Information

ADB GMSAIN AXA

Thailand (2013/07/05)

Drought warning status: No drought is found.

Drought warning map (Special analysis date)

Drought anomaly map


Drought risk map

Province level historical drought status

Related information

GSMap rainfall MODIS NDVI Crop intensity map

Global Rice Crop Monitor Developer: Dr. Wataru Takouchi  
E-mail: wtakouchi@iis.u-tokyo.ac.jp



## Regional knowledge base for climate change adaptation planning

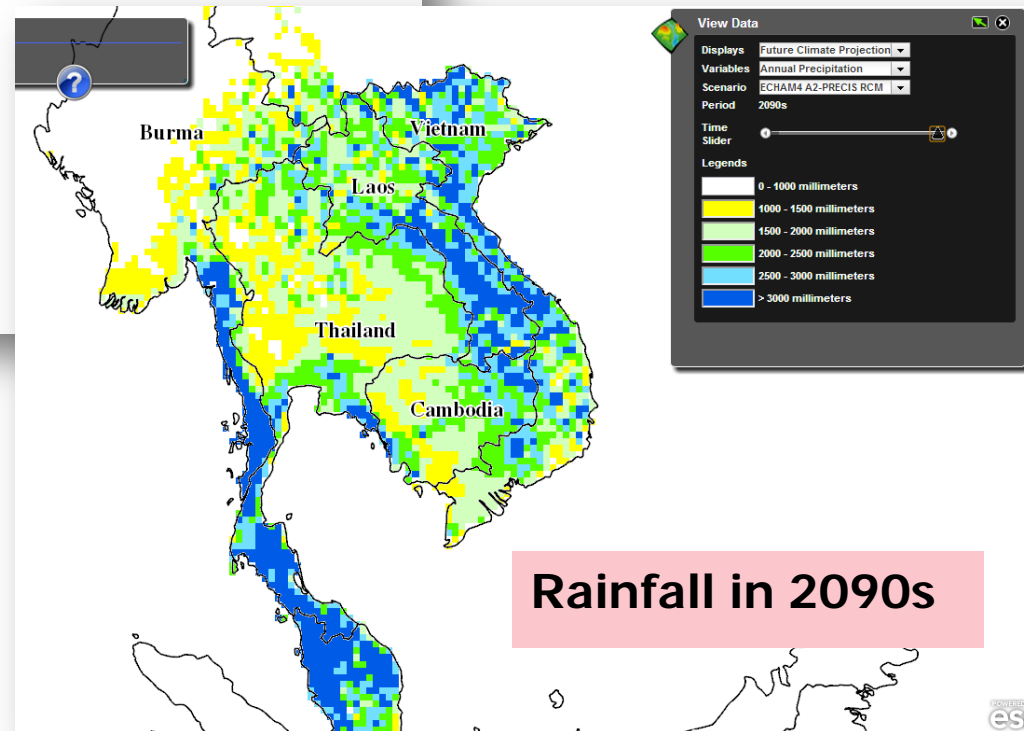
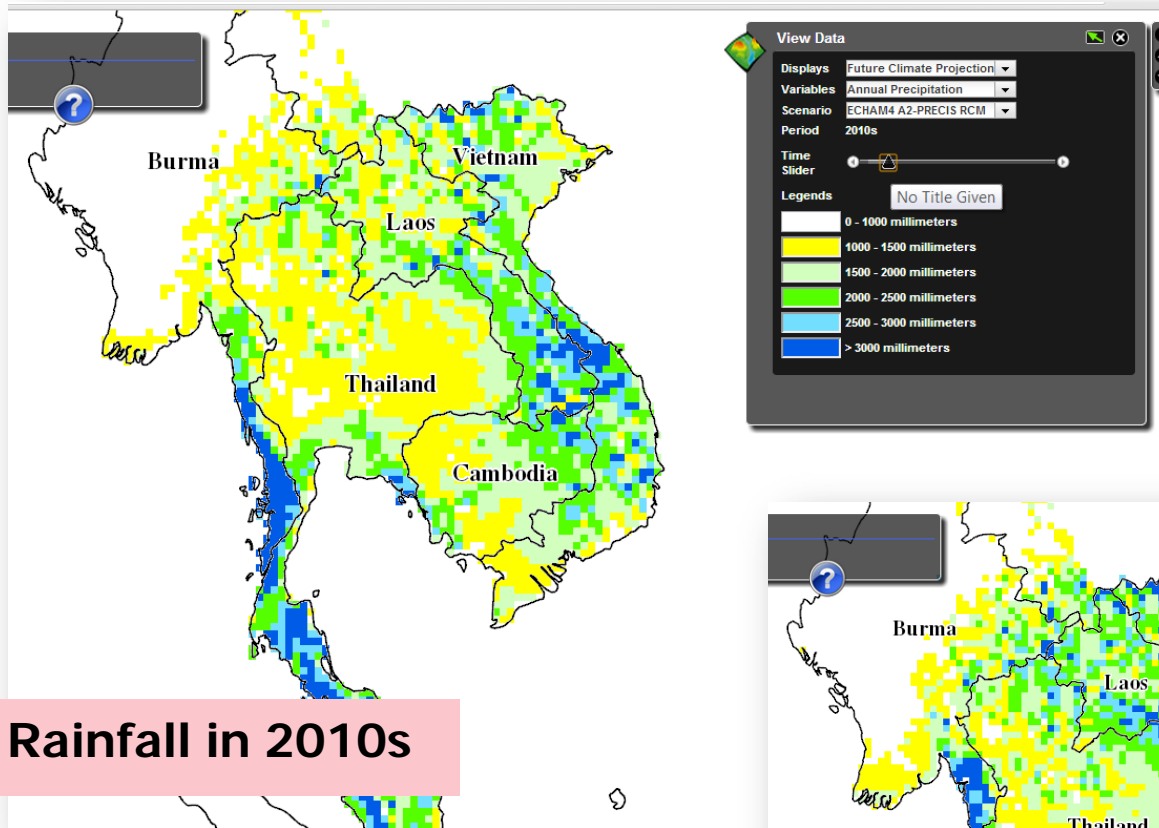
Data

Knowledge  
of risks

Adaptation

- Collaboration with SEA START

# Interactive Climate Data informing Drought Risk Analysis



# Climate Vulnerability Assessment in GMS Rural Communities

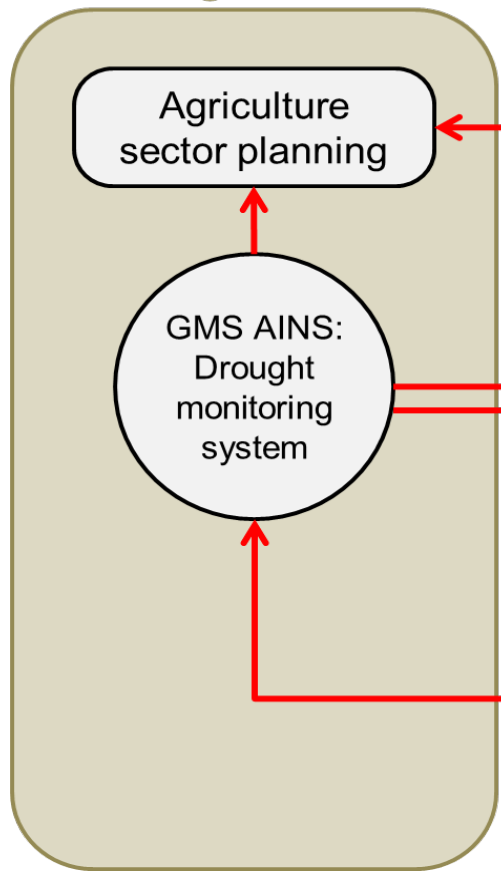
- Develop **climate vulnerability assessment framework** suitable for GMS
- **Build capacity of GMS practitioners** to assess vulnerability of communities to:
  - Increasing weather variability
  - Increasing extreme events such as droughts and floods
- Identify and pilot **adaptation options**
- Identify **investment opportunities** to scale up adaptation measures.



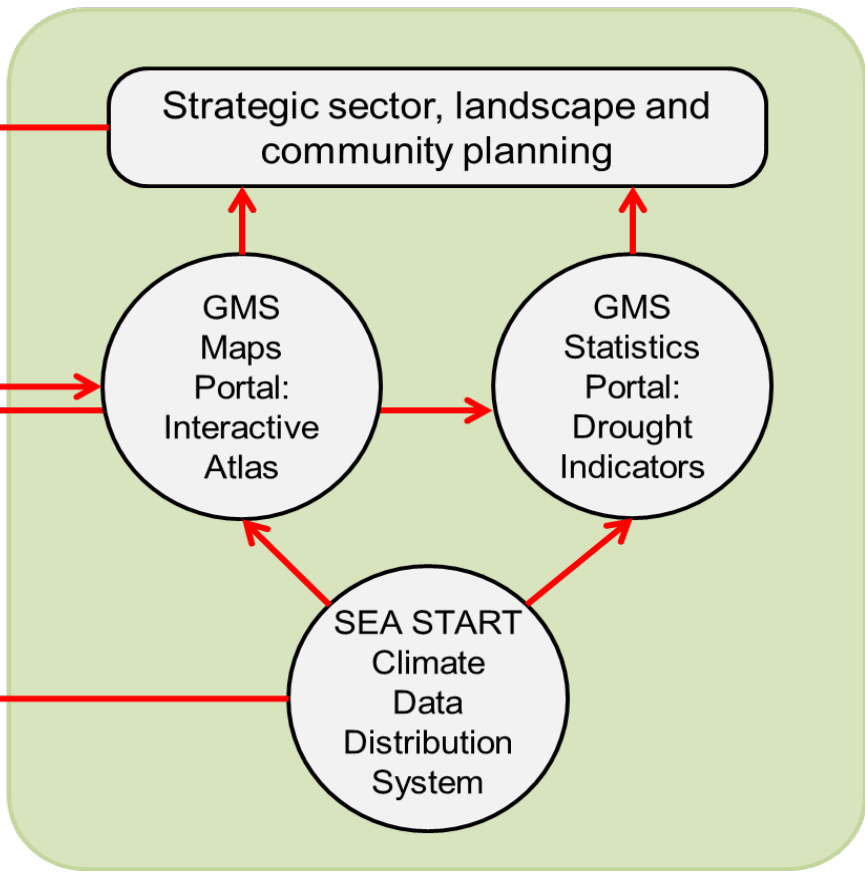
Uptake in Planning and Decision Making  
– Regional cooperation channels



## Working Group on Agriculture



## Working Group on Environment



Agriculture sector planning

GMS AINS:  
Drought monitoring system

Strategic sector, landscape and community planning

GMS Maps Portal:  
Interactive Atlas

GMS Statistics Portal:  
Drought Indicators

SEA START  
Climate Data Distribution System



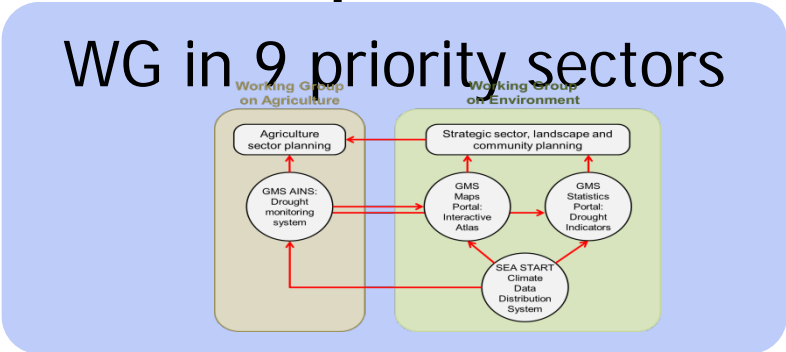
**GMS Summit**

**Ministerial-level Conference**

**ADB GMS Secretariat**

**National Coordinating Committee in each country**

**Senior Officials' Meeting**





# Conclusion

GMS and drought management

Knowledge

Decisions

Investments  
and action  
on the  
ground

Thank you



# GMS Flood and Drought Project

2002 GMS Economic Cooperation Program  
Strategic Framework  
2008 Vientiane Plan of Action

Regional and  
transboundary  
activities

National investments  
CAM  
LAO  
VIE



# What will the project do?

2013-2019

Reduced economic losses resulting from floods and droughts

Improved capacity and preparedness to manage and mitigate the impacts of flood and drought events

1

Enhanced regional data, information, knowledge base for flood and drought management

2

Upgraded water management infrastructure

3

Enhanced capacity for community-based disaster risk management (CBDRM)