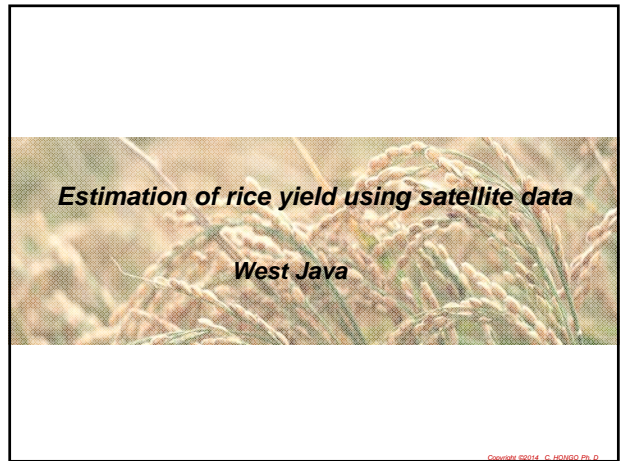


Practical application of satellite data to Agricultural Insurance

Granted by Ministry of Education, Culture, Sports, Science and Technology

Background

- (1) "Prototype" of damage assessment system is already available.
- (2) Research results and experience on **yield estimation** of rice:
 - + on individual paddy field basis,
 - + using satellite data,
- (3) Establishment of **Research & Education Center** for food security.

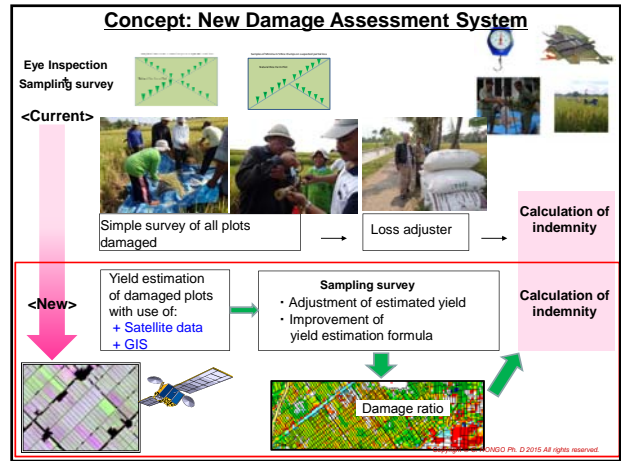
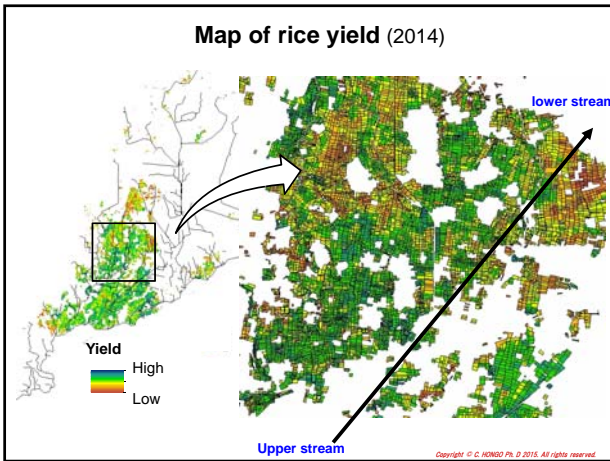


◆Data for analysis

- + **Satellite data**
SPOT5, 6, 7, Rapid Eye, WV2, Geo Eye, Landsat8, MODIS
- + **Ground observation data**
Observation date : harvesting season
Unit of yield (t/ha) : 30~50 samples

Results Extraction of paddy field

All paddy field including different growth stages (Light green color)



Advantages of Satellite Data for Agricultural Insurance

- ◆ More "objective" damage assessment
- ◆ Saving cost and labor
- ◆ Efficient loss assessment covering wide area
- ◆ Visualization of damage situation for better understanding and acceptability
- ◆ Development of "Recommendation" for improvement
- ◆ Understanding of time-series changes through data accumulation

Issues and solutions

- ◆ Cover with clouds → Use of UAV and SAR (platform & data fusion)
- ◆ Not real time observation → Use of UAV
- ◆ Shortage of data analysts → Capacity development

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Thank you for your attention

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