

International Cooperation and Governance

“Cooperation sustainability agriculture for relation with three countries”

Group C



December 4, 2015

Introduction

Background:



We know some problems in agriculture in each country

BUT!!!



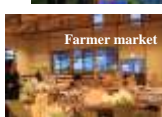
How to cooperate???

Introduction

Background:



Excursion



Introduction

Excursion and Lectures during Winter Course

What we get??

A good opportunity to increase knowledge and broaden our horizon

What we do??

Discussion: The differences among Japan, Indonesia, and Thailand also issues existing in each country

What the result??

The concern about International Cooperation and Governance

Difference condition among 3 countries

	Indonesia	Thailand	Japan
Climate	subtropics	subtropics	temperate zone
Season	dry/rainy season	rainy/high or low temperature	4 seasons
Temperature	35/28°C	25°C/32°C/35°C	20°C/35/20/0-10°C
Rice paddy crop	upland and paddy	paddy	paddy
Cultivate method	traditional	traditional/mechanization	mechanization
National institute	not enough	not enough	Jircas/Ja/Coop
Location	island	coastal nation	island
Cultivated area	17200000ha/64%/land	2000000ha/41.22%/land	4560000ha/12.2%/land

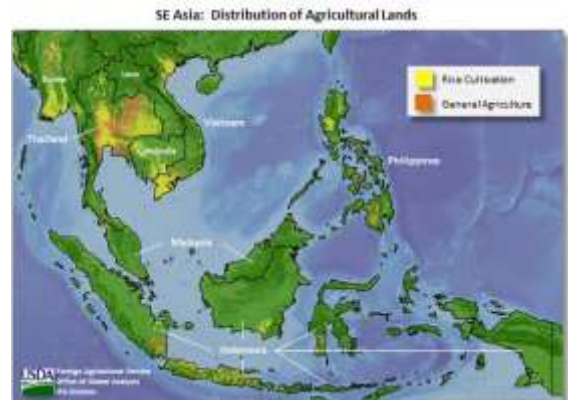
Current situation of Japanese agriculture

- Agricultural product in Japan already fulfilled a domestic market demand
- Agricultural sector supported by modern and high technology and educated labors/farmers
- Japan have a plan to join TPP (Trans-Pacific Partnership), thus Japanese need to develop the techniques in agricultures sector

- International collaboration with Thailand and Indonesia to conduct some Research Projects in agriculture (ex. organic farming) to support agricultural sustainability
- As of now, Thailand and Indonesia is not ready yet to join FTA (Free Trade Agreement) because their domestic demand not yet fulfill.

Objective

1. Find out the differences of quality and technology among Japan, Thailand and Indonesia.
2. Find out cooperative agriculture system and higher practical of organic farming, reduce waste product.
3. Practicing an advance agriculture engineering to give a training for the farmers to increase their skills



Indonesia						
Agriculture Growth Domestic Product in Indonesia 2011-2014						
Subsector	Growth (%)					
	2010	2011	2012	2013	2014	Average
GDP		6,17	6,03	5,58	5,02	5,70
1. Agriculture, Animal Husbandry and persecution		3,47	4,58	3,85	3,71	3,90
1.1 Crop		1,00	4,90	1,97	0,24	1,53
1.2 Horticulture		8,77	2,21	0,67	4,19	2,83
1.3 Plantation		4,94	6,95	6,15	5,83	5,97
1.4 Cattle		4,80	4,97	5,08	5,44	5,07
1.5 Agricultural service and persecution		3,83	6,07	5,91	2,58	4,60

Source: Indonesian Agency Statistic 2015

Indonesia	
Condition of agriculture	
1	Indonesia have 39,5 million ha area but only 25,5 million ha area utilized (14,0 million ha area are unuse).
2	Agriculture production can not fulfill national demands
3	Traditional agriculture processing
4	Indonesian agriculture research agency need to be improve (knowledge)
5	Increasing of production costs (fertilizer, labors)
6	Agrarian law need to be improve (Governance)

Organic Farm in Indonesia



1. Indonesia already started organic farming such as integrated farming system in Indonesia at Bogor and Bali (SIMANTRI)
2. Indonesia has been developed organic product such as bio-urine, biopesticide, bio-gasses, compost and organic manure.



But, the condition and development of organic farming in Indonesia still can not fullfill the needs of the national market demand

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Thailand



Planting



Weeding



Harvesting

The land of agriculture
Rice is the main product

Thailand



Good point: many kinds of **fruits**



Postharvest technology

- Temperature Control
- Fungicide Utilization
- Package Improvement
- Products Coating

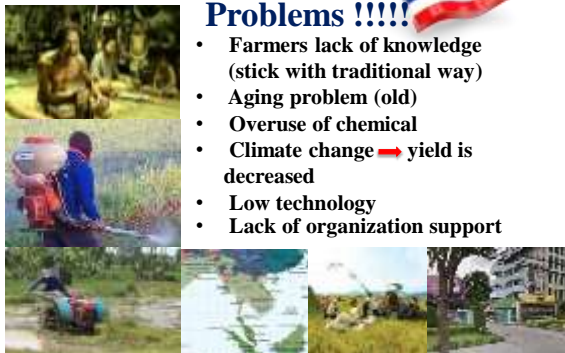


Thailand



Problems !!!!!

- Farmers lack of knowledge (stick with traditional way)
- Aging problem (old)
- Overuse of chemical
- Climate change → yield is decreased
- Low technology
- Lack of organization support



Japan



1. There are a lot of technology center for agricultural research compared to Indonesia and Thailand
2. Machanization is developed in Japanese farming system

Japan



Japanese agricultural is deeply related 4 seasons.

→ Can not grow up in winter season

Problems



1. Aging of farming population
2. Difficulty of machinalize utilization for smallholder farmers
3. Quantity of crop waste is larger compared to that in Indonesia and Thailand



Characteristic of farming system

	Indonesia	Thailand	Japan
problems in agriculture	<ul style="list-style-type: none"> • smallholder farmer • machinarize • aging farmer 	<ul style="list-style-type: none"> • smallholder farmer • machinarize • aging farmer 	<ul style="list-style-type: none"> • smallholder farmer • aging farmer
unique skills the world	<ul style="list-style-type: none"> • traditional organic farming by using plant fertilizer plant pesticide 	<ul style="list-style-type: none"> • postharvest • proceeding fruits 	<ul style="list-style-type: none"> • breed improvement • research about pathogenic mechanism of the disease on different crops

How to solve the problem ???

Problems that arise to make cooperation

1. Lack of agricultural technology
2. Product quality is lower than Japanese products (morphological, taste, etc.)
3. The organic farming just started in Thailand & Indonesia
4. Exceed demand more than supplies

- Thai agricultural products were sent to various markets (both premiere & local market)

How to solve the problem ?



Establish international cooperation with others countries



Problem solving to make cooperation

1. International collaborative researches such as dispatch & invitation of researcher
2. Training of trainers for farmers



3. Improvement the human resources
 - student's exchange
 - internship
 - seminar
 - international conferences
4. Learning collaborative marketing
5. Establishing technology in agriculture



Conclusion

- The sustainable agriculture can be improve to become a better agriculture in a future by integration from all aspects including international cooperation and governance
- Agriculture`s technology in Japan needs to be adopt in Indonesia and Thailand for sustainable agriculture to improve economic condition and society welfare.
- Japan get some exchange information about knowledge and specific agricultural system from Indonesia and Thailand

Thank you for your attention

