

Thailand: National Study on Agriculture Sector

Final Workshop RISPO-II

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Outline

- Introduction
- Policy gaps
- Proposed policy
- Analysis
- Conclusion

Agriculture Sector

Current situation

- Largest population group (44% of work force in the country) works in this sector
- Generated GDP approximately 10%
- The Farmers have low incomes and increasing debts
- conventional agriculture prevails the agriculture in the country
 - Heavy chemical use
 - Health impacts from chemicals
 - Environmental degradation
- Imported agricultural products from neighboring countries affecting farmers in the country

EI impacts on Agriculture Sector

Agriculture Sector

Without OLIA promoting policy, the conventional agriculture is the majority of the agriculture in the country resulted in some degrees of positive impacts of agriculture sector, in terms of economics

GTAP model result

- Agricultural sector, production of vegetables, fruits, and nuts will increase under MEI, as well as DEI scenarios; however, paddy rice production will be more under only MEI scenario.
- Net export value of paddy rice and vegetables, fruits, and nuts will raise under MEI scenario. Additionally, under DEI scenario, net export value of paddy rice will largely increase.

El impacts on Environment

Environmental impacts

Due to the increasing of agricultural production and commercialization, environmental impacts will be alleviated in many environmental media...

- Water pollution
- GHGs and air pollution
- Wastes
- Deforestation and biodiversity

GTAP model result

- On environmental perspective, the degradation of the environment is expected to be seen under MEI and DEI scenarios. Greenhouse Gases (GHGs), air pollution, wastewater, and wastes will be increased by time.

Why Promoting OLIA

Organic and Low-Input Agriculture (OLIA) because...

Potentials

- Higher GDP, population,
- Environmental concern and health awareness
- Governmental policies

Benefits

- Price difference
- Reduction of chemical uses
- Low health risk/impacts
- Lower environmental impacts
- Poverty alleviation



**Solve
current
problems**

National Focus

The King of Thailand,

- His Majesty King Bhumibol Adulyadej's "Sufficiency Economy Philosophy" is the fundamental of numerous policies in low-chemical input agriculture and organic agriculture in Thailand, including the National Agenda on Organic Agriculture.
- Moderation, Reasonableness, and Self-immunity by relying on our own feet and using what we have and can be applied for agricultural sector in Thailand...OLIA

Current Policy

Government Policy

- **National Agenda on Organic Agriculture**

Addressed the importance of organic agriculture and set target area for low-chemical and organic agriculture. Focusing on poverty alleviation strategy, self-reliability, expense reduction, and increasing of incomes, food safety and safety to farmers.

- **National Food Safety**

The program has purpose to control quality of food from farm to table.

- **Organic Thailand logo and Q mark**

The purposes are to provide safe and good quality products to customer, to build confidence in consumers both national and international.

Current Policy

Goals and targets of the National Agenda 2005-2009

- The imported quantity of chemical fertilizers and agricultural chemicals will be reduced 50%
- The area of land : Organic 1 millions rais and reduced chemicals 84 millions rais (Total agricultural land is about 131 millions rais)
- The number of farmers converted to use organic substitutions instead of chemicals will be 4.25 millions
- The farmers will gain more income by 20%
- The exported organic agriculture products and capitals of exported products will increase 100% every year

Current Policy

Implementation of the National Agenda... Not reach goals

- The area of land : Organic 1 millions rais and reduced chemicals 84 millions rais
 - In 2006: 141,000 rais for organic agriculture
- The exported organic agriculture products and capitals of exported products will increase 100% every year
 - In 2005: 920.39 Million Baht
 - In 2006: 948.03 Million Baht

Policy Gaps

Even though there are implementing policies, there are gaps to be fulfilled in order to facilitate OLIA production and products.

Government Policy Gaps

- **Ineffective promotion on organic agriculture**
 - Fail to reach goals: Organic land and export
 - Not reach grassroot level
- **Poor chemical pesticides and fertilizer controlling regulations**
 - Negative list system
 - No control on distributors (Reporting)
- **Poor quality control of organic products**
 - Cleanness
 - Contaminations
 - Testing

Policy Gaps

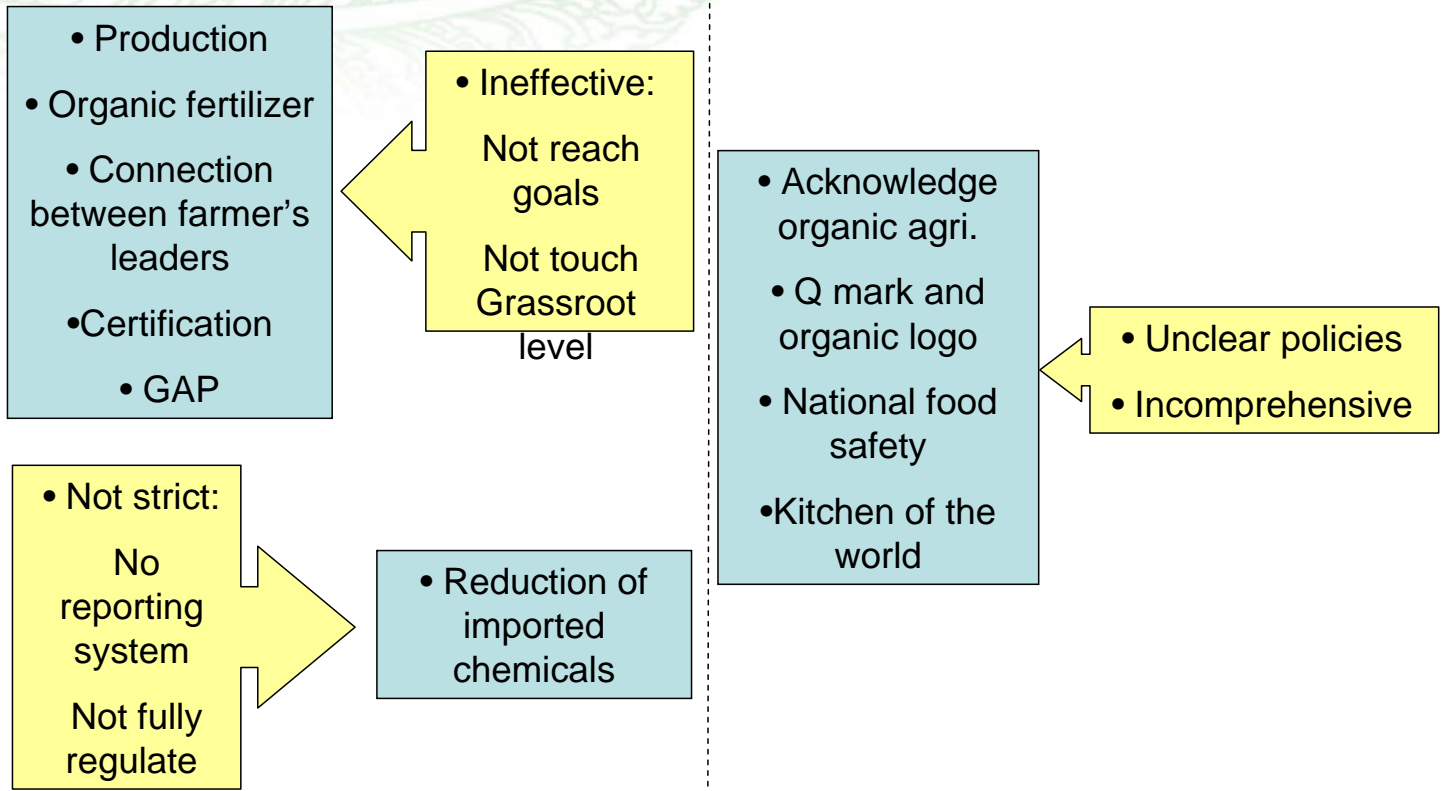
Government Policy Gaps

- **Poor market channels of organic products in both domestic and international levels**
 - Limited shops
- **Difficulty for having organic product certified**
 - Small number for certified organic
- **Unclear promotional policies of OLIA products in the market for local and international levels causing unclear understanding to customers**
- **Lacking of value-added measures**

Conclusion of Current Policy

Production

Market



Policy Package

Policy package contains 2 policies

1. Promoting OLIA production for commercialization

Farmer:

- Establish organic cooperatives (hubs) for knowledge sharing, promoting contract farming for creating price guarantee, and provide support fund or loan to farmers to pursue OLIA

Chemical distributor:

- Apply product charge for hazardous chemicals
- Manage chemicals distributors and establish systematic distribution system
- Change regulations on chemical from negative list to positive list

Policy Package

2. Developing market mechanism for expanding OLIA marketing

- National Food Safety, National Agenda on Organic Agriculture and Kitchen of the World
- Organic logo and Q mark and certification for international market
- Subsidizing for market system
- Promote agroindustry

Analysis of Policy Package

Analysis are conducted to assess the 3 policies of proposed policy package:

- Establishing local organic cooperatives (hubs)
- Promotion of agroindustry
- Organic logo and Q mark and certification for international market

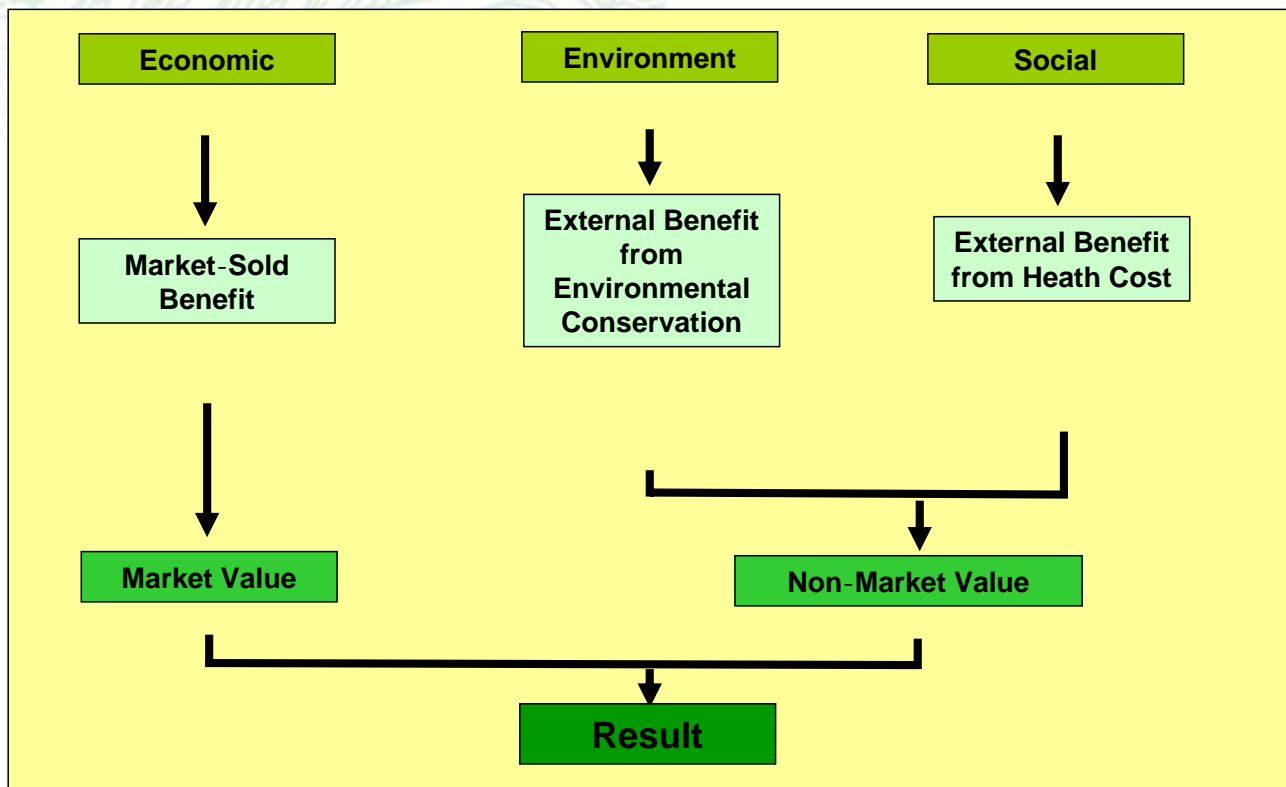
3 proposed policies are practiced by the organic farmer pursued 3 proposed policies

The analysis in this research are...

- Cost-benefit Analysis
- Social Capacity Assessment
- Integrated Policy Assessment

Cost-benefit Analysis

- Three aspects: **Economic**, **Environment** and **Social**



Cost-benefit Analysis

Economic

- Cost and income from paddy rice

Social

- Health cost

Environment

- Soil erosion prevention
- Flood prevention
- Nutrient in soil
- Carbon source
- Water retention
- Water quality

Do not evaluate*

* Limitation of the study

Data collected from 2 conventional and organic farmers in central region of the country. The result is computed from 5-year data of both conventional and organic agriculture

Cost-benefit Analysis

	Economic Benefit	Environmental Benefit	Social Benefit
Conventional Agriculture: BCR			
• Paddy rice	1.55	1.55	0.82
• Milled rice	2.06	2.06	1.47
Organic Agriculture: BCR			
• Paddy rice	2.20	2.23	2.20
• Milled rice	2.67	2.68	2.67

Organic agriculture provides more benefits

Social Capacity Assessment

Assess:

- Capacities of stakeholders to promote, support, and push conventional agriculture to convert the practice to OLIA by adopting 3 proposed policies.
- Capacity to adopt proposed policies

Stakeholder:

- Government Sector
- Farmer Sector
- Civil Sector
- Trader

Assessment method:

- Literature reviews
- Expert opinions
- Interviews stakeholders

Social Capacity Assessment

- **Government sector**

- Policies support organic agriculture
- Routine jobs
- Ability to allocate budget for organic agriculture
- Human resources
- Lacking of linkage between policies
- Overlap duties between agencies

Gap: Harmonization of agencies and Suitable knowledge educated to farmers

- **Farmer sector**

- Ability and knowledge to do organic agriculture
- Support from NGOs
- Capital problem in initial stage of switching
- Lacking of necessary facility for organic agriculture
- Confusion in given knowledge and concept of agricultural practices

GAP: Awareness, concern and attention to pursue OLIA and Grouping farmers

Social Capacity Assessment

- **Trader/Distributor**

- How to keep vegetable fresh
- Limited number of shops

GAP: Facility to process organic products and Fast transportation system

- **Civil sector**

- Higher concerns in health and environment
- Growing demand for organic products
- Support from NGOs
- Export products require certification and market channels

GAP: Wider range of consumers, More understanding for organic, and More locations for distribution

Integrated Policy Assessment

Impacts

- **Economic**
 - Linkage between policies
 - Larger areas for OLIA agriculture
 - Lower chemical usage
 - Market and channels for OLIA products in domestic level and organic products in international level
- **Social**
 - Poverty reduction
 - Lower health problems of farmers and consumers
- **Environment**
 - Water and soil quality improvement

Conclusion

Based upon policy gaps, analysis, and other opportunities, ...

- The 3 proposed policies are able to fill policy gaps, **alleviates poverty, solve environmental problems** and can be implemented in social context.
 - Economics: 1.55 Vs. 2.23 and 2.06 Vs. 2.68
 - Environment: 1.55 Vs. 2.23 and 2.06 Vs. 2.68
 - Social: 0.82 Vs. 1.47 and 2.20 Vs. 2.67
 - Current governmental policies (Supportive)
 - Budget allowance
 - Supports from NGOs

Conclusion

Value added of the research

- Develop local organic rice mills with the implementation of cooperative system

Needs for future research

- Detailed study of Thailand's OLIA products in international trade under harmonized certification standard
- Comparative study of health in OLIA and conventional farmers
- Large scale study on economic impacts of agricultural chemical (fertilizer and pesticide) reduction of OLIA production



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**Thank you
for your attention**



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