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Obstacles Effecting the Implementation of Organic Vegetables in Thailand

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Abstract

Organic agriculture is the most dynamic and rapidly-growing sector of the global food industry. In Thailand, production of organic crops is undertaken mainly by smallholders, farmer groups or by large agro-enterprises using organized groups of contract farmers. Estimates indicate that certified organic production increased from 2,147 ha in 2001 to 22,550 ha in 2006, equivalent to 0.11% of the country's total agricultural area (21 million ha), representing an increase of over 950% over the 2001 hectareage. Constraints to limited implementation of organic vegetables need to be found. The objectives of the research were to investigate constraints of organic vegetable production and market in Thailand and to formulate recommendations for improving the system. Data were collected from the best practice of farmers, and processors/handlers such as Rai Thon Nuey (Dare to sweat farm), Rai Plook Ruk (Thai Organic Farm), Suwannabhumi Organic Co. Ltd. and Swift Co. Ltd. The techniques of semi-structured interview and observation were used. Empirical analyses and documentary analysis were applied.

The results showed that constraints of organic vegetable production consist of 1) bio-physical constraints, low soil fertility, water shortage, irregular rainfall and pest, 2) economics constraints, high initial cost, high labour cost, high transport cost, and market, and 3) knowledge constraints lack of understanding about problems on farm such as nutrient balance, crop-environment, post harvest management, waste management, and consumers' perception. The important problems of organic vegetable farming are the farmers don't know what are problems on farming, the fundamental cause of all problems, problem solving, the way leading to problem solving, the problems mentioned in vegetable system are obstacles to extend organic farming to conventional vegetable farms. Sharing problems, knowledge and exchanging the know-how should be considered.

Key words: organic farming, organic vegetables, vegetable system, Thailand

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1. Introduction

Vegetable production is essentially a small-farm venture that benefits thousands of families in urban, peri-urban and rural communities. Growing vegetables provides self-employment to families who are engaged in all aspects of the business: propagation, production, harvesting, preparation for the market, and even selling. In recent years; however, production costs have increased around 50–60 percent. Most farmers are compelled to use family labour in order to cut costs and remain competitive in local markets. High costs compel resource-poor farmers to limit their inputs, such as fertilizer and agro-chemicals resulting often in crop losses and lower outputs. Often, there is an overuse of harmful chemicals, which endanger the health of consumers and pollute the environment (FAO, 1999).

Organic agriculture is the most dynamic and rapidly-growing sector of the global food industry (Ellis et al., 2006). Production of organic crops is undertaken mainly by smallholders, farmer groups or by large agro-enterprises using organized groups of contract farmers. Estimates indicate that certified organic production increased from 2,147 ha in 2001 to 22,550 ha in 2006, equivalent to 0.11% of the country's total agricultural area (21 million ha), representing an increase of over 950% over the 2001 hectarage (Ratanawaraha et al., 2007).

2. Objectives

To investigate constraints of organic vegetable production and market in Thailand, and to formulate recommendations for improving the system.

3. Methodology

Data was collected from the best practice farmers, and processors/handlers: Rai Thon Nuey (Dare to sweat farm), Rai Plook Ruk (Thai Organic Farm), Suwannabhumi Organic Co. Ltd., and Swift Co. Ltd.

The techniques of semi-structured interview and observation were used for data collection. Empirical and documentary analyses were applied.

4. Results

4.1 Constraints and problems in organic vegetable system

Constraints of organic vegetable production consist of bio-physical, economics and knowledge (Figure 1).

Bio-physical constraints are low soil fertility, water shortage, irregular rainfall and pest. Economic constraints are high initial cost due to virgin land requirement, bio-physical problem and certification, high labour cost, high transport cost conducting to the need of volume produce especially to export, and market with modern trade because the produces will get premium price then marketing cost may be necessarily. Finally, knowledge constraints are lack of understanding of problem on farm such as nutrient balance, crop and nutrient relation or other environment, post harvest and processing management, and waste management or residue management to make value added, and also consumers' perception.

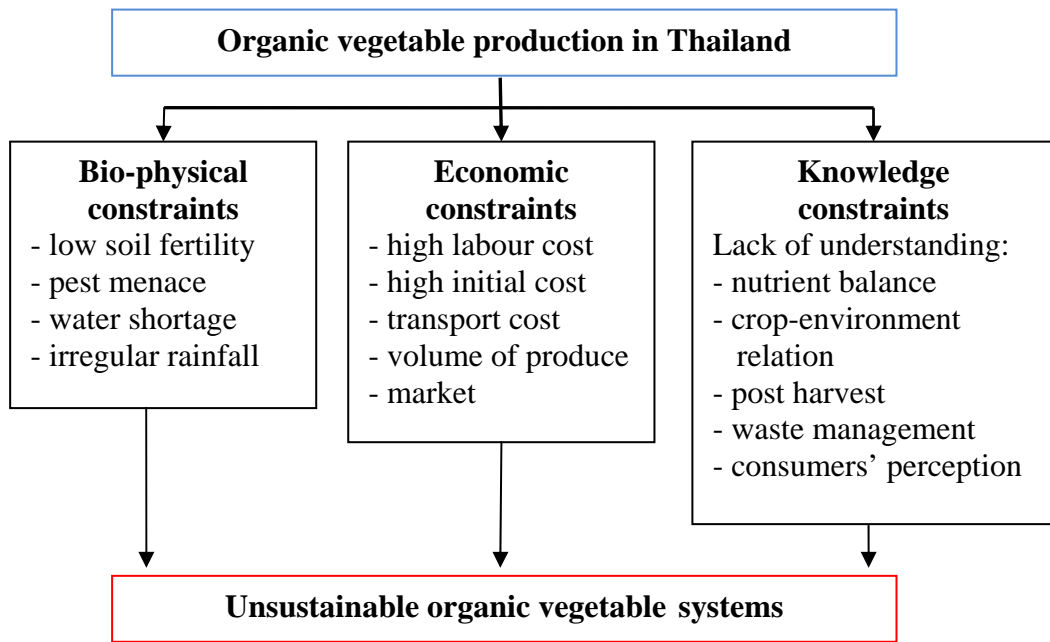


Figure 1: Constraints of organic vegetable production system

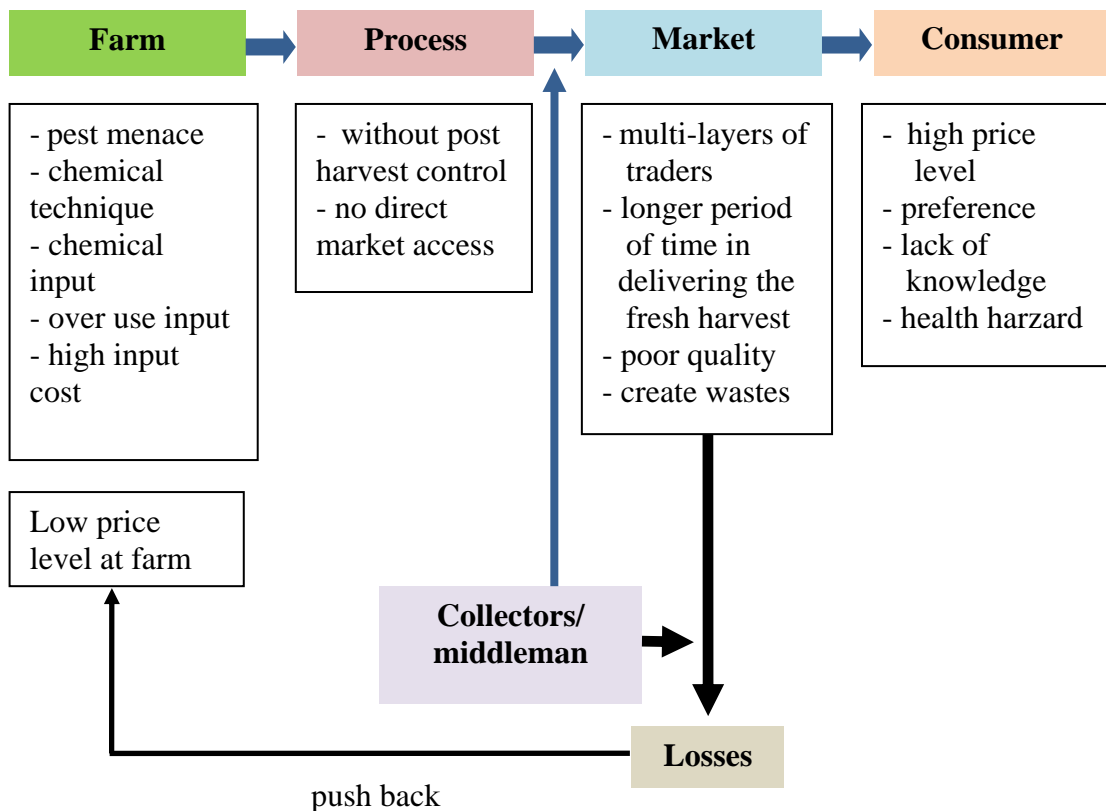


Figure 2: Problems in vegetable system

4.2 Problems in conventional vegetable system

Figure 2 represents problems in vegetable system. These are one important obstacles of vegetable organic farming implementation. Due to chemical use and over use for pest on farm, the input cost is high. After harvesting, producers pack their produce without any post harvest control and

collectors or middleman just collect produce. The produce changing hands through many layers of traders before reaching main markets and retailers, longer period of time in delivering the fresh harvest to consumer create wastes and can greatly damage product quality if there is no post harvest control. Significant cost and profit-taking are added on at every layer. They finally reach consumers in poor stage, relatively high price level. These threaten the enhancing of organic vegetable system.

4.3 The 4 steps of problem - solving

From the study, the important problems of organic vegetable farming are: farmers don't know what is the fundamental cause of all problems on farm especially on production technique and they; however, try to do farm as the responding to the condition of certification or market. So they do not see what originating problems, as the result, they cannot solve problems occurring on farm. Therefore, the way leading to problem solving and cycle cutting cannot be reached.

The way leading to solve the existing problem may be sharing such as experience, problems, and knowledge, exchanging know-how and understanding the nature. Moreover, the 4 steps of problem- solving should be considered (Figure 3).

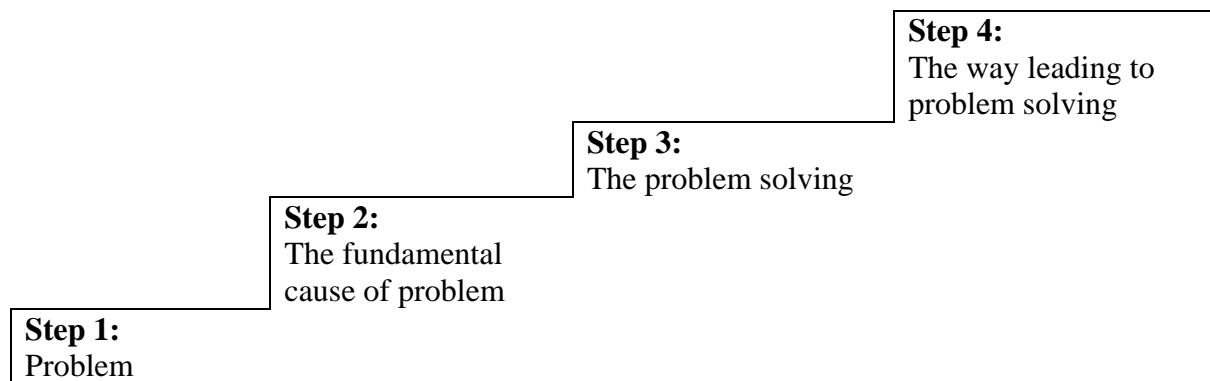


Figure 3: The 4 steps of problem - solving

5. Conclusions and recommendations

Constraints and problems of organic vegetable farming are usually occurred on farm and also market system whereas the problems in vegetable system are the obstacles to expanding organic farming to conventional vegetable farms. Sharing of problems, knowledge, and exchange know-how should be taken into consideration. The most important thing is the farmer must understand problems and be able to manage and apply knowledge to solve them.

References

- Ellis, W., Panyakul, W., Vildoza, D. and Kasterine, A. 2006. *Strengthening the Export Capacity of Thailand's Organic Agriculture: Final Report*. An EU-International Trade Centre Asia Trust Fund Technical Assistance Project.
- FAO. (1999) *The Vegetable Sector in Thailand: A Review*. Regional Office for Asia and the Pacific.
- Ratanawaraha,C., Ellis, W. Panyakul, V. and Rauschellbach, B. 2007. *Organic Agri-business: A Status Quo Report for Thailand*. 2007. Bangkok.