# The Complex Pathway to Green Fields: Opportunities and Challenges of Organic Agriculture in Thailand

## Yuqian Chu<sup>1,a,\*</sup>

<sup>1</sup>Faculty of Arts & Social Sciences, National University of Singapore, 271022, Singapore a. E1142737@u.nus.edu.

\*corresponding author

**Abstract:** This article explores the complex dynamics of organic agriculture in Thailand, focusing on the interplay of economic viability, environmental sustainability, and consumer awareness. Since the implementation of the National Economic and Social Development Plan in 1961, Thailand has emphasized cash crop production, leading to increased reliance on chemical fertilizers and pesticides, which have raised significant environmental and health concerns. The article highlights the pivotal role of non-governmental organizations, such as the Alternative Agriculture Network, in advocating for sustainable farming practices and facilitating knowledge transfer between producers and consumers. Despite the potential benefits of organic farming, challenges persist, including labor-intensive production methods, declining interest among younger generations in agricultural careers, and a general lack of consumer understanding regarding organic products. The article underscores the importance of local financial support systems, such as cooperative loans, and government initiatives aimed at promoting organic agriculture. It argues that enhancing consumer awareness and demand for organic products is essential for fostering a sustainable agricultural future in Thailand. Ultimately, the findings suggest that a multi-faceted approach involving policy support, education, and community engagement is necessary to overcome the barriers to organic farming and ensure its growth in the Thai agricultural landscape.

Keywords: Organic Agriculture, Sustainable Farming, Thailand, Consumer Awareness, NGO.

#### 1. Introduction

Since the introduction of the National Economic and Social Development Plan in Thailand in 1961, the policy of exporting agricultural products has been largely emphasized by the government. Much of the land has been used to grow cash crops such as rice and tobacco, thereby stimulating the commercialization of farming as well as economic growth. At the same time, in order to cater to the highly increasing demand for food crops, many farmers have started to use chemicals such as fertilizers and pesticides, with a series of negative impacts such as environmental damage and health hazards [1].

In the 1990s, AAN (Alternative Agriculture Network), a civil society organization working to promote sustainable agricultural development and farmers' empowerment in northeastern Thailand, organized nationwide seminars to eliminate the information gap between agricultural producers and food consumers and to promote a chemical-free model of crop production [2]. By exploring the development history of organic agriculture in Thailand, the current challenges of economic viability,

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the active role of NGOs, and the support of government policies, this article aims to dialectically analyze the major opportunities and challenges of organic agriculture in Thailand.

### 2. The role of government and NGOs in promoting sustainable agricultural practices

The Thai Government's initiative to incorporate the principles of sustainable agriculture into the Eighth National Economic and Social Development Plan (1997-2001), under the persuasion of the AAN, can be regarded as a key initiative to promote the development of organic agriculture. Since then, the Ministry of Agriculture and Cooperatives of Thailand has conducted pilot projects on sustainable agriculture development in 34 provinces, including Chiang Mai. NGOs such as the Earth Net Foundation have played an important role in promoting the organic farming model in Chiang Mai, especially by providing assistance in establishing organic certification and marketing, a relatively neglected part of the government organization [3].

On the level of organic food certification, the Thai government set standards for organic crop production in 2000 and issued the Department of Agriculture (DOA)'s "Organic Thailand", the only domestic organic certification label. The main IFOAM (International Federal of Organic Agriculture Movement)-accredited certification body for organic agriculture standards is Organic Agriculture Certification Thailand or ACT, a non-governmental organization established in 1995. This discrepancy between the international and local recognition of organic food may pose a barrier to the export of Thai organic food.

### 3. Challenges faced by farmers in transitioning to organic practices

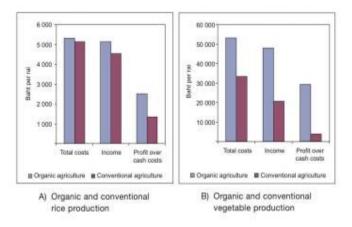


Figure 1: Comparison of total costs, income, and profit over cash cost [4].

As shown in Figure 1, the total cost of rice and vegetable production under the organic model is higher than under the conventional model, as well as the total income, and the total cash profit is also more significant in the organic model. Therefore, it can be said that organic agriculture is more economically viable in the long run, however, cash costs, which are one of the most important indicators affecting agricultural production activities, may result in a situation that puts farmers in debt. Moreover, although in the long run there is no significant difference in yields between the adoption of organic and conventional modes of agricultural production, 85.7% of the farmers interviewed felt that switching to organic agriculture could lead to a large-scale decline in yields [4].

A survey reported that many of the Thai farmers interviewed indicated that large-scale cultivation of organic agriculture is difficult to bring about predictable profits, emphasizing that organic agriculture focuses on labor-intensive development, and thus the model of organic cultivation seems to bring about excessive workloads for individual growers based on a smaller number of households

[5]. On the other hand, age seems to be one of the important indicators that influence organic farming. Although the younger generation influenced by new technologies seems to be more interested in adopting organic farming than older farmers, the trend that young people in Thailand are more attracted to go to the cities in search of jobs rather than staying in the villages to continue working creates a challenge that discourages the younger generation from participating in organic farming [6].

In terms of financial support, farmers are more likely to turn to organic agriculture when local loans are readily available. This is because loans from cooperatives are more accessible, less bureaucratic, and have more favorable terms than loans from state-owned or commercial banks. A local Surin organization called Surin Smallscale Farmers Network has partnered with the Community for Agro-Ecology Foundation (CAEF) to share knowledge and experience in green farming by establishing workshops and to form a pool of funds that farmers can use to make loans for organic farming [7]. This local lending approach has greatly reduced the burden on farmers and increased confidence in sustainable agriculture. Therefore, it can be argued the Thai government's support for such small funding organizations will also play an important role in promoting organic farming expertise and encouraging more growers to adopt organic methods.

## 4. Consumer awareness and perceptions impact the growth of organic markets

In addition, the agricultural model of organic production is also very much dependent on consumer demand, as consumers' lack of understanding of the production process may reduce the confidence of agricultural laborers in organic production. According to a survey among 390 respondents in Northern Thailand, 71% of the respondents said that they had heard of the term "organic" but did not know what it really meant, while 20% were unsure of the definition of the term. In addition, while 62% of respondents said they recognize the claim that organic food production is strictly controlled and certified, 41% of respondents believe that the claim of organic food is just a marketing ploy [8]. Some studies reveal that health concerns and environmental awareness are the main motivators for consumers to buy organic food, and that the main obstacle to the promotion of organic food is not the high price of organic food, but mainly the lack of knowledge or acceptance of the labeling information of organic food by consumers [9][10].

#### 5. Conclusion

Overall, the development of organic agriculture in Thailand is characterized by the complexity of multiple actors involved. On the one hand, organic agriculture offers a sustainable pathway, supported by several non-governmental organizations, which is expected to address the environmental and health impacts of conventional agriculture. Policy support from the Thai government, such as the inclusion of sustainable agriculture principles in the national development plan, and the facilitation of loans for organic agriculture by local organizations, provide a solid foundation for the promotion of organic agriculture.

However, challenges also exist, including the inconvenience of labor-intensive production methods for family farms, the declining interest of the younger generation in agriculture, and the lack of consumer awareness of organic products. It can be argued that the Thai government has a long way to go in the promotion of organic agriculture, and needs to continue to strengthen the marketing and education of organic products and raise public awareness of the value of organic food, so as to promote the development of Thai organic agriculture in a more sustainable and economically viable direction.

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