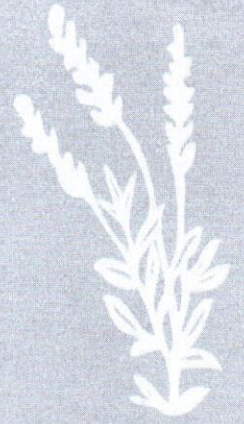


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A Development Model for Sustainable Thai Agricultural Co-Operatives

Chiratus Ratanamaneichat

Kasem Bundit University, Bangkok, Thailand

chiratus@gmail.com

Sakchai Rakkarn

Kasem Bundit University, Bangkok, Thailand

sakchai.rak@kbu.ac.th

Senee Suwantee

Kasem Bundit University, Bangkok, Thailand

senee.suw@kbu.ac.th

Wilailuk Nakrungrueng

Phak Hai Agricultural Co-operative Ltd., Thailand

wilailuk8699@gmail.com

The corresponding author: Chiratus Ratanamaneichat

Abstract

Nowadays Thai agricultural co-operatives face tremendous changes from domestic and international business environments as well as changes in their co-operative member needs and customer needs. This paper demonstrates how to develop a sustainable agricultural co-operative using a case study of Phak Hai Co-operative Ltd. We spend 3 years of collecting data, studying and analyzing not only qualitative method but also quantitative method. Starting from ordinary functions, this agricultural co-operative provides rice farming services for their members such as rice milling, rice drying, seeds and fertilizer selling plus rice trading from members to market. Firstly, we apply a model of vertical business development by introducing flooding endurance rice seeds to be planted, using contract farming, and creating a rice brand. Then, we create horizontal business links along their supply chain: alliance with local investors to build a quality controlled mill, connect with traditional trade, modern trade, and opening mobile shops as marketing channels. Finally, we aim to fulfill their member needs, local people needs and our country needs by establishing a farmer market as a center of trading local agricultural products. As a result, Phak Hai Co-operative Ltd. is able to surge their new members more than 25% at the end of the third year.

Keyword: business economics, supply chain development, agricultural co-operative

Introduction

Lately, the agricultural cooperatives are growing up around the world. In the United States, cooperatives are very important to an agriculture sector. Over 3,000 agricultural cooperatives provided roughly 3.1 million farmers with agricultural marketing, farm supplies, and other farm-related services in 2002. They captured 28 percent market share of the United States market value [1]. In Europe, the majority of the world's 100 largest agricultural cooperatives, 62 of them, are located. In Europe and Asia, there is a significant number of large cooperatives compared to non-cooperative companies [2].

The agricultural co-operative movement brings together their members over one billion people around the world. Some facts about the Movement demonstrate their relevance and contribution to economic and social development. Co-operatives create and maintain employment around the world. In France, 21,000 co-operatives provide over 1 million jobs representing 3.5% of the active working population. Co-operatives are significant economic factors in national economies. In Japan, agricultural co-operatives report outputs of USD 90 billion with 91% of all Japanese farmers holding membership. In 2007 consumer co-operatives reported a total turnover of USD 34.048 billion with 5.9% of the food market share. In Malaysia, 6.78 million people or 27% of the total population are members of co-operatives [3].

However, there are the problems and prospects of co-operative movement mainly focusing on several pitfalls and shortcomings like: poor infrastructure, lack of quality management, over-dependence on government, dormant membership, non-conduct of elections, lack of strong human resources policy, absence of professionalism [4].

In the case of Japan, agricultural co-operatives have risen from the ashes. They have demonstrated their economic, social and political strength through sheer hard work, organizational and management capacities and capabilities, a systematic application of farm-related technologies, and consolidating their marketing, supply and credit efforts. These institutions have provided a continued supply of food, which, in a way, gave a strong boost and confidence to Japan's economic and industrial development. Lately, these co-operative institutions have undertaken a number of innovations and structural reforms to be able to counter the negative effects of global competitiveness. The Japanese agricultural co-operatives have made the farming profession equally remunerative and honorable as the industrial profession. Merging their experiences of the present days and experiences of the past times, they have a lot of lessons to share to other Movements outside Japan [5]. There is a significant research comparing the performances of agricultural cooperatives between Thailand and Japan with varies case studies [6]. Sustainable development is the main desirable for every economy. Regarding their strong roots and ties with local communities, cooperatives could form a particularly vital mechanism for the development of the marginalized sections of the society.

Cooperatives in Thailand, similar to all developing countries, have been initiated by the government since 1915 with the prime aim of being as a means of improving the living standard of small farmers. This means is mostly aimed to cure a growing debt problem due to farmers changing their business from self-sufficient economy to trade economy. Natural disasters such as droughts and flood have further worsened the debt situation for these farmers. Consequently, they lost their farmland and become laborers, leaving their debts unpaid. The first cooperative in Thailand was named Wat Chan Cooperative Unlimited Liability was established by the government on February 26, 1916, in Phitsanulok [7]. In 1968 with the objective to strengthen the cooperative movement, the Government enacted the Cooperative Act, which allowed the establishment of the Cooperative League of Thailand, functioning as the apex organization of the cooperative movement. The Cooperative Act also allows for the amalgamation program combined the neighboring small villages, credit cooperatives, paddy and marketing cooperatives, land improvement and land settlement cooperatives into larger scale cooperatives at district level performing multipurpose functions and officially categorized as agricultural cooperatives. Agricultural cooperatives have been established in Thailand for more than 30 years. The five foremost functions of service are 1) loans; 2) savings and deposits; 3) sale of consumer farm supplies, and agricultural products; 4) joint marketing; and 5) agricultural extension and services. Many agricultural cooperatives in Thailand had to stop their business operations because they had low operational successes and severe repeated losses from their operations, thereby affecting the survival of the farmers who are the members of the cooperatives. A research indicates that there are four main types of risk that have relevant impact on profitability and even threaten solvency of Thai agricultural cooperatives, namely: credit risk, liquidity risk, operational risk, and market risk. Risk bears significance on the cost of funds, costs for operations, loss provision and "other costs"; consequently influencing the total cost of agricultural cooperatives [8].

This research studies how to develop the business model for a sustainable agricultural co-operative using a case study of Phak Hai Co-operative Ltd. This agricultural co-operative provides rice farming services for their members such as rice milling, rice drying, seeds and fertilizer selling plus rice trading from members to market. The data has been collected since 2012 for 3 years. We advise and guide this agricultural co-operative to gradually change from traditional business behavior to profitable and sustainable behavior. With the vertical and horizontal of business development model, we frame a sustainable agricultural co-operative ideal.

Problems and Theory

1. Problems Defining

The problems are associated with the Thai traditional of agricultural cooperatives. After operating Agricultural co-operative for a while, their farmer members have still been lack of

the proper profit, farming knowledge, risk and skill sharing, and being a co-owner of selling products. These facts result the marketing problems of farmers selling their products at low prices. Firstly, they have been exploited by powerful buyers and middle men. Secondly, after the season of harvest, many farmers rush in to sell their crop yields at the same time. Thirdly, the farmers are absence of modern agricultural production such as how to accurately use of fertilizers, insecticides, and pesticides. Inconsequence, the crop yields are low with high production costs and not worth to invest. Fourthly, the types, size as well as quality of crops grown, are not match the market demand. Therefore, agricultural co-operative members, who produce and deliver the bulk of agricultural products to the cooperative would not earn the net earnings derived from their true processing, handling, and marketing of their products. From the specifics stated above, we are able to emphasize the unique characteristics of Thai traditional agricultural cooperatives, which differ from other (investor-oriented) businesses [9]:

- Cooperatives are owned and democratically controlled by their members (i.e., those that employ the cooperative's services or purchase their goods) and not by outside investors. Members elect their board of directors from their ranks. Major policy decisions are based on the one-member, one-vote principle, regardless of how much money each member invest in the cooperative.
- Cooperatives give surplus income (revenue over expenses and investment) to members in proportion to their use or patronage of the cooperative, and not proportionate to their investment or ownership share.
- Cooperatives are motivated not by profit, but by providing services to satisfy members' requirements for affordable and standard quality goods and services.
- Cooperatives exist solely to serve their members.

The cooperatives are formed by their members when the marketplace fails to provide needed goods and services at affordable prices and acceptable quality. Cooperatives empower people to improve their quality of life and enhance their economic opportunities through self-help. This echoes these sentiments by providing the following reasons why cooperatives were, or are being formed: to strengthen bargaining power; maintain access to competitive markets; capitalize on new market opportunities; obtain needed products and services on a competitive basis; and improve income opportunities.

2. Theory

This section emphasizes on the theoretical framework that can be applied to the Thai agricultural cooperatives for a sustainable cooperative model. The rapidly changing economic environment, reflected in increasing globalization and agricultural industrialization, has led many agricultural cooperatives to undertake substantial structural development in order to survive in a new situation. Royer [10] for example, mentions that in addition to mergers,

consolidations and acquisitions (horizontal and vertical restructuring), cooperatives have become increasingly involved in fundamental institutional changes. Moreover, the related transaction costs can also be associated with asset specificity, i.e., assets that are acquired to support specific transactions. Owners of such relationship specific assets cannot use these assets in other transactions without some loss in productivity or incurring costs in adapting them to other uses. This is very important for sustainable development of cooperative model. There are four different forms of asset specificity, namely: (1) site specificity (where assets are located nearby to reduce transport or inventory costs); (2) physical asset specificity (assets with physical properties specifically tailored to a particular transaction; e.g., a cheese factory or ethanol plant); (3) dedicated assets (investments based on a promise of a particular customer's business which would make it profitable); and (4) human asset specificity (acquired skills and knowledge of certain workers which are more valuable within a particular relationship than outside it). There is an additional, another form of specificity of importance to agricultural transactions, namely temporal specificity by Sykuta and Chaddad [11]. This is due to the time sensitive value of agricultural products and production processes which creates another margin which may entice opportunistic behavior by trading parties.

Development Model

The business model of Thai agricultural cooperatives has many appealing components at its core. The idea of development of agricultural cooperatives model must be easily accepted, embraced and make it as generally well functional in rural areas. The model is centered on the user owned, user controlled, and user benefited concept of business. The people still working together for a common cause, especially in small towns, is nothing new. Adapting that shared responsibility concept to a business creation model is a fairly easy transition to take. We have seen farmers and ranchers working together to market their products to various kinds of customers. The evolution of the process of forming a cooperatively-owned business follows some very specific steps that are critical to the eventual success of the project [12]. Having the right people on the steering committee is critical to effective development. The steering committee should come from a broad representation of the community such as business leaders, civic leaders, and those who might represent a certain prevalent demographic component of the community. If the business is more specific in nature, such as a marketing co-operative for locally grown or made products, then the steering committee should be representative of the potential growers or producers who might be benevolent benefit to the business. These committees tackle the major components that lead to the creation of an overall plan-of-work and business plan. Moreover, the cooperative enterprise is the development model of organization that is most suited to addressing all dimensions of reducing poverty and exclusion. The way cooperatives help reduce poverty is important - they identify economic opportunities for their members; empower the disadvantaged to

defend their interests; provide security to the poor by allowing them to convert individual risks into collective risks; and mediate member access to assets that they utilize to earn a living [13].

Case Study

This research studies at Phak Hai Co., Ltd., which is a cooperative of cooperatives "agriculture" was established on October 1, 1969 to the current 46 years. The office is located at 217/1 Moo 4 Phak Hai District, Phak Hai District, Ayutthaya, Thailand. The organization aims to help and support their members who are engaged in agriculture with self-help and mutual aids. There are 1,975 persons with operating formally capital of one hundred million baht. The office is operated by a steering committee of 15 members and management staff of 13. It has been encouraged and supported by the Provincial Cooperative Office and audits by the Office of the Provincial Cooperative Auditing. The most of members are rice farmers in Phak Hai area, where is regrettably flooded annually. Hence, the rice field is damaged and farmers encounter the poverty. The steering committee had searched for a proper development of the co-operative since 2012. The cooperative has considered to restructuring model of itself by using the vertical and horizontal strategy to the related transaction costs. A vertical strategic alliance is to create a partnership between a cooperative and its suppliers (National Center of Genetic Engineering and Biotechnology, nearby farmers and rice mill manufacturers). The National Center of Genetic Engineering and Biotechnology has delivered the flood-resistant rice seeds for the cooperative to provide to farmers. The cooperative has gently convinced farmers by using a contact farming strategy and also educating skills and knowledge to farmer for enhancing product quality. In addition, the cooperative dealt with rice mill manufacturer problem by built a 200 tons/day rice mill with its alliances for satisfying capacity and quality control. Vertical alliances deepen the relationship of the cooperative with suppliers through the exchange of know-how and commercial intelligence. They extend the firm's network and benefit customers by lower prices. Suppliers become actively involved in product design and distribution arrangements. For the horizontal strategic alliances are formed between partners operating of end users in the distribution business area such as retailers, cooperatives, traditional trades, and modern trades). It is a strategy to sell a product in multiple markets. Moreover, the cooperative has created new local market channel with mobile shops and fresh market located in Phak Hai district to build confidence for its members. The operating results of this 3 year development model have surged farming area and sale revenue for 4 times. Ultimately, benefit return to its members soared twice and number of members increased more than 25%.

Conclusion

The research has investigated the development for a sustainable of Thai agricultural cooperative using a case study of Phak Hai Co-operative Ltd. The problems are deal with the co-operative business model is unresponsive demand and supply. We spend 3 years of collecting data, studying and analyzing problems with the committee of the organization. The horizontal and vertical restructuring and transaction cost economics are involved to develop a self-sustainable model since 2012. Initially, we, as an advisor, applied a model of vertical business development by introducing flooding endurance rice seeds to be planted, using contract farming, and creating a modern rice brand. Then, we created horizontal business links along their supply chain: alliance with local investors to build a quality controlled rice mill, connect with traditional trades, modern trades, and opening mobile shops as marketing channels. Finally, we aim to fulfill their member needs, local people needs and our country needs by establishing a farmer market as a center of trading local agricultural products. As a result, Phak Hai Co-operative Ltd. is able to surge their new members more than 25%, rice area and sale revenue increase quadruple, then benefit returns to its members twice.

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