BENCHMARKING AND BEST PRACTICES IN PALM OIL CONTRACT FARMING, IN SOUTHERN THAILAND

Ketsaraporn Suttapong[*], *Suthijit Choengthong*[*], *Chompunoot Duangjan*[*],
Sirinuch Loykulnun[*] & *Suchart Choengthong*[**]

Abstract: *Oil palm is an important economic crop in Thailand, but currently farmers face a low market price for their palm oil products, and look for improvements in efficiency. Thus, the first purpose of this study was to specify criteria for performance benchmarking, and identify best practices in palm oil contract farming. Second, we also aimed at developing and implementing a benchmarking model with criteria for trading the products from palm oil contract farming. The approach to these goals was to collect data about palm oil marketing practices in the study area, and about contract farming economic status and practices. To test for validity or results, assigned trading practices were used for 3 months, and the results assessed qualitatively. There were three types of participants, namely (1) 73 farmers who joined the program, (2) the Wattana Agricultural Cooperative Oil Palm ramp, and (3) the Jiras Palm crushing plant. The best practices from the study overall fit the policy to "improve quality - reduce costs -increase price ". The best practice for farmers was to improve fresh fruit bunch quality by adjusting the harvesting cycle, and to sell as a group or create a farmer network based on quality policy. The best practices at ramps included comprehensive and vivid grading criteria, trustworthy quality selection, price incentive based on oil palm fruit bunch quality, management policy, public relations, technical assistance to suppliers, guaranteed accurate weighing scales, and establishment of a harvest team. The best practices of crushing plants were to create incentives for customers, quality–based purchasing policy, and attention to transportation advantages.*

Keywords: *Benchmarking, Best practices, Contract farming, Palm oil industry*

1. INTRODUCTION

Palm oil is an important economic crop in Thailand, especially in its Suratthani province located in the southern peninsular part. This province has 829,630 rais of palm oil plantation area, contributing 26.01% of the total yield area in Thailand. Palm oil production is locally of high priority, with attempts to increase planted area and attain higher yields in support of the larger vision for Thailand to become the world leader in manufacturing and export of palm oil products. However,

* Faculty of Liberal Arts and Management Sciences, Prince of Songkla University, Surat Thani Campus, Thailand, *corresponding author E-mail: ksuttapong@hotmail.com*

** Faculty of Sciences and Industrial Management, Prince of Songkla University, Surat Thani Campus, Thailand

while the production quantity has successfully improved, the quality still faces challenges. The main productivity problems stem from low yield and low oil percentage in the fruit bunches. The palm oil purchasing price at Suratthani province is typically lower than in other provinces, as shown in Table 1. Five years ago it was observed that the extracted palm oil, as weight percentage of fruit bunches produced, was continuously declining. Especially in 2008, Suratthani province had the lowest percentage, which in effect increases the production costs per unit of oil produced. While a farmer may look at the quantity of fruit bunches to define yield, the purchaser is looking at the quantity of oil extractable, and attempts to have pricing matched to this.

A review of production statistics about five years ago showed that palm oil yield from Surattani province was increasing, because the planted area was increasing along with the number of farmers. Similarly, the number of plants and their production capacities increased. However, this growth in quantities is not indicative of product quality. A low oil yield causes problems, when, for example, the purchasing team cannot determine the raw material quality in terms of extraction yield. When the purchasers of fruit bunches at the ramps cannot assess quality but only quantity, the farmers have no incentive to improve quality. If quality of product does not affect its sales price, the extra effort for improving quality is not rewarded.

Table 1
The Palm Oil Purchasing Price at Suratthani Province

Item	Unit	2012									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct
Ripe fruit	Baht/kg.	4.60-5.70	5.00-6.25	5.60-6.25	5.50-6.40	4.80-6.00	5.00-5.70	5.20-6.30	4.60-6.00	3.60-5.00	4.60-5.70
Palm oil	Baht/kg.	28.05-31.00	29.50-33.00	30.00-34.50	33.00-36.00	30.00-34.50	30.00-33.00	30.00-34.00	28.60-31.00	25.00-30.00	28.05-31.00

Source: Department of Internal Trade, Thailand

Especially in Thailand government agencies have promoted contract farming in agriculture. The farmers gain some benefits from this, including predictability of "market demand" for their produce and use of modern techniques and knowledge. Our interest is to integrate contract farming and palm oil purchasing for mutual benefits. The oil extraction plants could benefit from more uniform or at least better-quantified quality of their raw materials. However, the characteristics of contract farming depend on the specific product, and must be beneficial both to the farmer and to the buyer of produce. Therefore, the best practices must take into account several stakeholders and seek for their shared benefits. In this study, we implement such integrated process benchmarking, in which the existence of interdependencies between the participating

organizations' capabilities can be a source of competitive advantage (Teece, Pisano and Shuen, 1997).

We base our study on two theoretical perspectives of benchmarking and best practices, as described in the literature. Our aim is to demonstrate the relevance of these theoretical perspectives of benchmarking and best practices in the palm oil industry of Thailand, in order to build competitiveness of this industry. The study may contribute in multiple ways. Firstly, new knowledge of benchmarking and best practices in the palm oil industry is gained. This study proposes to specify criteria for performance benchmarking and to identify the best practices of palm oil contract farming. Secondly, we aim to develop palm oil contract farming by implementing a benchmarking model that sets criteria for trading. Thirdly, the benchmarking model is developed based on data from the palm oil marketing practice in the study area, and the contract farming situation, so an observational assessment providing new data is documented. Finally, the benchmarking and best practices for palm oil contract farming will be assessed for performance in a practical implementation.

The organization of this paper is as follows. In the next section, we explain the theoretical background emphasizing the different theoretical perspectives of process benchmarking and best practices in the literature, and benchmarking for palm oil trading agreement. In the empirical analysis methods section, we describe the study area, sampling, and data, and also data analysis. After that, the results of the analyses are discussed. The theoretical and managerial implications are discussed, before concluding with limitations and suggestions for future research.

2. THEORETICAL BACKGROUND

2.1. Definition of Benchmarking

Benchmarking is a quality management tool and reputedly has in many industries given a competitive advantage. Benchmarking not only evaluates performance of an organization, but can help identify best industry practices both inside and outside the organization studied. Moreover, benchmarking can help integrated development of an industry by exchanging knowledge and know-how between organizations. The results can therefore widely benefit the economy.

According to Benyakit and Siripanit (2002), benchmarking is the best-in-class method to evaluate organization performance, including products, service and process, and its results help in becoming the best performing organization, not only being successful and economically viable. In addition, benchmarking relates to identifying the capabilities supporting superior performance that should be priorities for further study (Camp 1989), because as capabilities are benchmarked they are correlated with performance and with competition (Menon *et al.* 1999;

Moorman and Slotegraaf 1999). Normally, benchmarking theory assumes that executives can not only absolutely select those marketing capabilities they believe to be useful, but can also connect these capabilities with superior business performance. The literature provides two key alternatives for benchmarking design: performance benchmarking, in which performance capabilities are assessed separately, and product benchmarking, in which a set of products and customer satisfaction are assessed collectively. Interdependencies between performance capabilities often exist, and these can be a valuable source of competitive advantage (Srivastava, Shervani, and Fahey 1999; Teece, Pisano, and Shuen 1997).

For this study, we selected process benchmarking to analyze the best practices in palm oil contract farming in Thailand, to help improve its competitiveness. The purpose of process benchmarking is to achieve knowledge and know-how about characteristics of planning, designing, implementation and control of various business processes and activities, by which competitors and other companies successfully implement set strategies. This helps improve efficiency of implementing long term strategies. Process benchmarking exposes the most benefits when used integrally.

2.2. Definition of Best Practices

"Best Practices look like the key to unlocking the secrets of business competition shift into higher position with the introduction of various league tables and award for high performing organization" (Whittle, Tranfield and Foster, 1992). However, Hughes and Smart (1994) suggest that "it is unlikely that all industrialists understand fully what best practice actually means and how it might be determined". Camp (1989) defines "best practices as those that will lead to the superior performance of a company thus, best practice is associated with higher performance levels". Heibeler, Kelley and Ketteman (2000) describe best practices as "the best methods to perform a business process". Hughes and Smart (1994) propose a more detail definition of best practice as "an activity or action which is operated to a standard which is better or equal to the standard achieved by other organizations in situations that are sufficiently similar to make meaningful comparison possible".

Amanda and Ashok (2002) suggest that "benchmarking method is very much performance measurement based. Independent performance measures are chosen in advance of the study and the approach of achieving this performance is analyzed through investigating organizations that are achieving high class of performance in this area. The best practice is then identified base on the performance differentials".

Reijers and Liman (2005) "classify best practices in a way that respects the framework they have adopted. They identify best practices that are oriented

towards as customers, which focus on improving communication with customers. Business process operation, which focus on how to implement the workflow. Business process behavior, which focus on when the workflow is operated. Organization, which considers both the structure of the organization (mostly the allocation of resources) and the resources involved (types and number). Information, which describes best practices related to the information the business process uses, creates, may use or may create. Technology, which describes best practices related to the technology the business process uses or may use. External environment, which attempts to enhance upon the collaboration and communication with the third parties".

Based on the stated findings, we choose to define best practices in the following way: The best practice is a knowledge or expertise from learning from other companies and competitors to improve the competitive advantage and build potential in global competition.

2.3. Definition of Contract Farming

The meaning of contract farming according to the Department of Thai Commerce is such trading that has an advance agreement or contract between producing farmers and purchasing dealers. A trading contract includes details such as conditions of production plantation, quantity, purchasing price, quality control, and delivery time (Department of Thai Commerce, 2007). The benefits from contract farming include reducing the farmer's risk from uncertainty of purchasing price or demand for their produce. Contract farming plays an important role in many developing countries. A contract farming agreement typically obligates an enterprise to provide inputs, and guarantees the palm oil price or credit, while it also binds the palm oil farmer to follow a specific production method or input requirement. The liberalization of agricultural markets and the removal of trade barriers have expedited the formation of these vertical relationships between palm oil farmer and agro-industrial enterprises (Mathew and Nigel, 2002). Moreover, contract farming has significantly increased the income of farmers and may improve rural development as a source of information about new cropping technologies. Moreover, contracts farming often serves credit, inputs, information, and services to the smallholder growers (Glover, 1984; Goldsmith, 1985; Morrissy, 1974; Williams and Karen, 1985). However, contract farming has also been considered a tool for agro-industrial enterprises to create an unequal power relationship with farmers. When the farmers invest in specific assets or change their cropping patterns, they become overly dependent on their contract crops and may lose bargaining power to the middleman, being then forced to accept less favorable or exploitative contract terms (Mathew and Nigel, 2002).

2.4. Benchmarking for Palm Oil Trading Agreement

According to literature, the situation of economic crops in Thailand, including pineapple, asparagus, corn, rubber and tapioca, is such that the main criteria affecting purchase price include quantity, quality, transportation cost, distribution center and payment practice. The analysis of contract farming other economic crops is helpful for benchmarking palm oil, because it indicates standards, conditions and contract farming patterns. In the current study we use process benchmarking to analyze the palm oil purchasing process including yield, quantity, transportation, quality monitoring, and payment.

The criteria for palm oil contract farming were developed based on the criteria for other economic crops. We defined 5 types of contract farming models, as representative of best practices. The parties of the contract could select the model, and apply it to palm oil contract farming for 3 months, so we could evaluate the effectiveness of these models.

3. EMPIRICAL ANALYSIS AND METHODOLOGY

3.1. The Study Area and Sample Selection

The sampling to collect data relates a main goal of the study, namely to building process benchmarking and best practices. A firm's capability to deploy process benchmarking is critical for the further goals. We selected a ramp and a crushing plant located in Surattani province, Thailand, operated in cooperative style. The study subjects selected in total were: (1) 73 farmers who joined the program (2) Wattana Agricultural cooperative and (3) Jiras crushing plant. This sampling is necessarily biased, but our goal is not to provide representative unbiased data from sampling. Rather our goals include defining and demonstrating the effectiveness of best practices in non-adversarial conditions. The study results will not imply general universal knowledge, but intend to demonstrate a workable beneficial approach that could be imitated in favorable conditions.

3.2. Research Methodology

This study is intently exploratory to identify the best practices in palm oil industry in Thailand. We applied a qualitative research approach and an in-depth interview method. Such qualitative approaches can help understand the underlying dynamics and motivations associated with constructs, and how these are enacted and evolve (Schmidt, M., 2010). The qualitative data were obtained through secondary resources and observations during the site visits. In particular, ten senior executives were interviewed in-depth, from crushing plants that played significant roles in developing the palm oil industry of Surat Thani, Krabi, and Chumporn provinces, in Thailand. The interviews were composed of a pre-interview and an

in-depth interview. First, the interviewees were provided with a brief description of this study. This was followed by questions regarding: (1) the purchasing type with contract farming in palm oil industry, (2) the problems from contract farming in palm oil industry (3) the effects on cost and revenue from contract farming, and (4) the effectiveness of performance management programs in palm oil industry. Moreover, interviewees were assured that their identities would remain confidential.

The results from in-depth interviews were analyzed and classified by 10 criteria in the contract, namely fresh fruit bunch quality, quantity, inspection, poor quality palm management, purchasing price, transportation cost, delivery period, delivery transaction, paying period and paying method. A workshop was organized for the palm oil farmers to ensure familiarity with the concepts and conditions in trading agreements. The workshop also spread awareness about this project, and provided contacts for brainstorming about potentially identified problems. These activities have enabled defining best practices in palm oil industry. Finally, the palm oil contract farming conforming to our best practices was tested for 3 months, to assess the effectiveness of the best practices.

3.3. Analyses Techniques

The data collected from in-depth interviews and secondary data were reviewed and suitable criteria identified to define relevant factors. Moreover, another economic crop was assessed to help specify standards and criteria also relevant to palm oil contract trading. The workshop informed us about some opportunities to improve the conditions and criteria for palm oil trading. Especially, we identified some key success factors and best practices for palm oil contract trading.

4. RESULTS

4.1. Contract Farming Conditions of Economic Crops in Thailand

Process benchmarking was used to compare and evaluate the conditions of contract farming select economic crops, namely asparagus, pineapple, corn, and sweet corn. Eight criteria were found as key distinguishing elements between the cases:

– *Yield*: Products must meet the specifications agreed to, for example quality, cleanness, or weight. The buyers may reject products not up to specifications. Hence, the farmer may improve productivity meeting specifications by control of plant variety, plantation maintenance (fertilizer and chemicals used), and harvest practices.

– *Quantity:* The terms for product quantity depend on both demand and planting area.

- *Inspection*: The examiners on purchase use random sampling to estimate the characteristics of total produce. Produce with defects would be rejected and returned back to the farmer.
- *Price*: The pricing depends on the contract, on minimum pricing, and on quality.
- *Delivery period*: The delivery period depends on harvest seasons.
- *Delivery*: The delivery criteria define place, volume, standards, and timing. The logistics deployed may affect product quality as well as incur costs.
- *Payment*: The typical payment method is bank transfer within 1-2 weeks.
- *Assistance/credit*: The assistance and credit conditions in the agreement may include soft loan to the farmer, or providing seeding, fertilizer and knowledge for growing and harvesting.

4.2. The Model for Palm Oil Contract Farming

The model scope includes farmer, ramp and crushing plant. The 10 standard criteria in the model for palm oil trading include fresh fruit bunch quality, quantity, inspection, poor quality palm management, purchasing price, transportation cost, delivery period, delivery transaction, paying period and paying method (as shown in table 2).

Table 2
Criteria and Conditions for Palm Oil Contract Trading

Criteria/Condition	Detail	
	Between ramp and crushing plant	Between ramp and farmer
Quality	Only one grade (Palm ripe)	Only one grade (Palm ripe)
Quantity	Not specific	Not specific
Inspection	Random check	All check
poor quality palm management	Comment in first time, but next time stop purchasing	Return back to farmer
purchasing price	Posted price (current day)+ agreement price (baht/tons)	Posted price(current day)+ added price (0.2baht/tons)
transportation cost	crushing plant responsible	farmer responsible
delivery period	Within 1 day	Within 1 day
delivery transaction	Delivery to crushing plant	Delivery to ramp
paying period	Next day after delivery	Current day
paying method	Cash	Cash

The palm oil fruit bunches must meet the basic quality criterion of being ripe only. After that, the Wattana Agricultural cooperative ramp could identify that

the quality of palm oil should have ripe only and the inspection depend on palm oil quality because if palm oil does not meet specification, the buyer will reject and return all back but if palm oil meet specification the buyer will offer higher price. Finally at the crushing process, the Jiras crushing plant has offer a higher price than average purchase price, because an agreement price is added more than the normal market price, and transportation costs are covered. The trading process steps are schematically shown in Figure 1.

4.3. Validation Test for the Best Practices Proposed

The best practices for palm oil contract farming were tested with 73 farmers, Wattana Agricultural cooperative, and Jiras crushing plant, for 3 months. Significant factors that motivated the stakeholders to join in this program included:

– *An advertising campaign*: The researchers provided brochures and billboards informing the farmers about their benefits from this project.

– *A workshop to introduce the project*: Knowledge was shared with farmers about the criteria or standards in contract farming.

– *Tracking problems and constraints*: Problems and constraints were tracked and solved during the duration of the validation tests.

– *Certificates*: The Wattana Agricultural cooperative ramp rewarded participating farmers that met the criteria and standards of contract farming with certificates.

4.4. Best Practices of Palm Oil Contract Farming

The validation study suggested that the best strategy in contract farming was to **"improve quality- reduce cost- increase price"** (Figure 2). Process benchmarking between palm oil and other economic plants identified best practices as follows:

4.4.1. Farmer

Farmer may improve productivity by:

– *Harvest behavior modification*: The palm oil harvest period should be shortened from current 19 to 15 days, because more frequent harvest provides better quality of produce.

– *Establishment of palm oil cluster or farmer network*: These provide opportunities to share ideas and pricing information, awareness of which improves bargaining power.

#### 4.4.2. The Ramp (Agricultural Cooperative)

The ramp may improve productivity by:

Figure 1: The Palm Oil Contract Farming Process
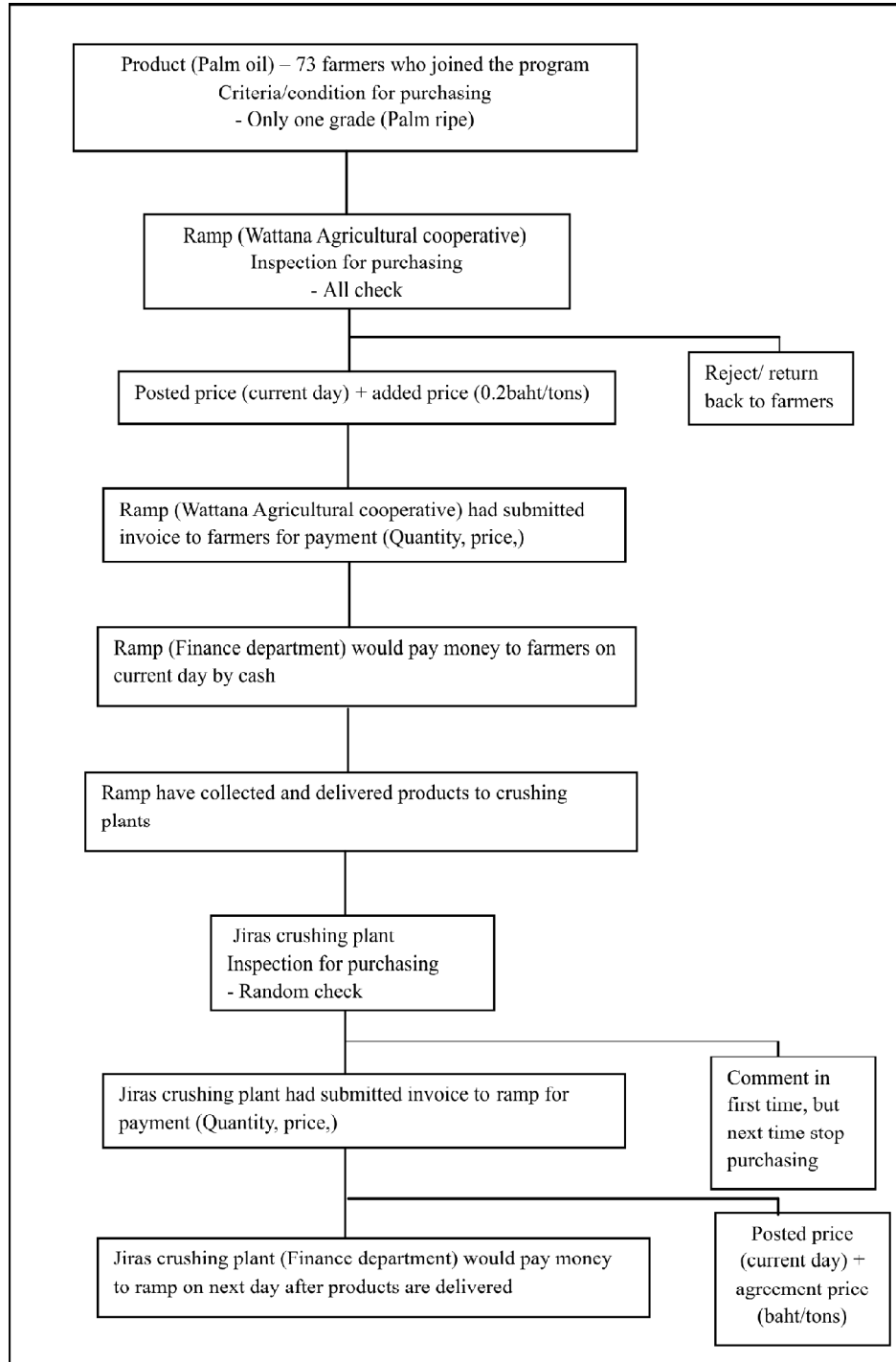
– *Establishing standards and quality criteria*: The ramp should define the specific standards for purchasing palm oil fruit bunches. The quality standards, such as ripe fruit, and consistency of delivery should be set in an agreement with the farmer. The ramp should also set up a database that helps monitor the developments over time.

– *Price incentives*: A high quality product is deserving of a high price. An agreement with the farmer should also set such pricing. Moreover, the ramps also have agreements with crushing plants to set price partly based on quality.

Figure 2: Best Practices of Palm Oil Contract Farming Trading
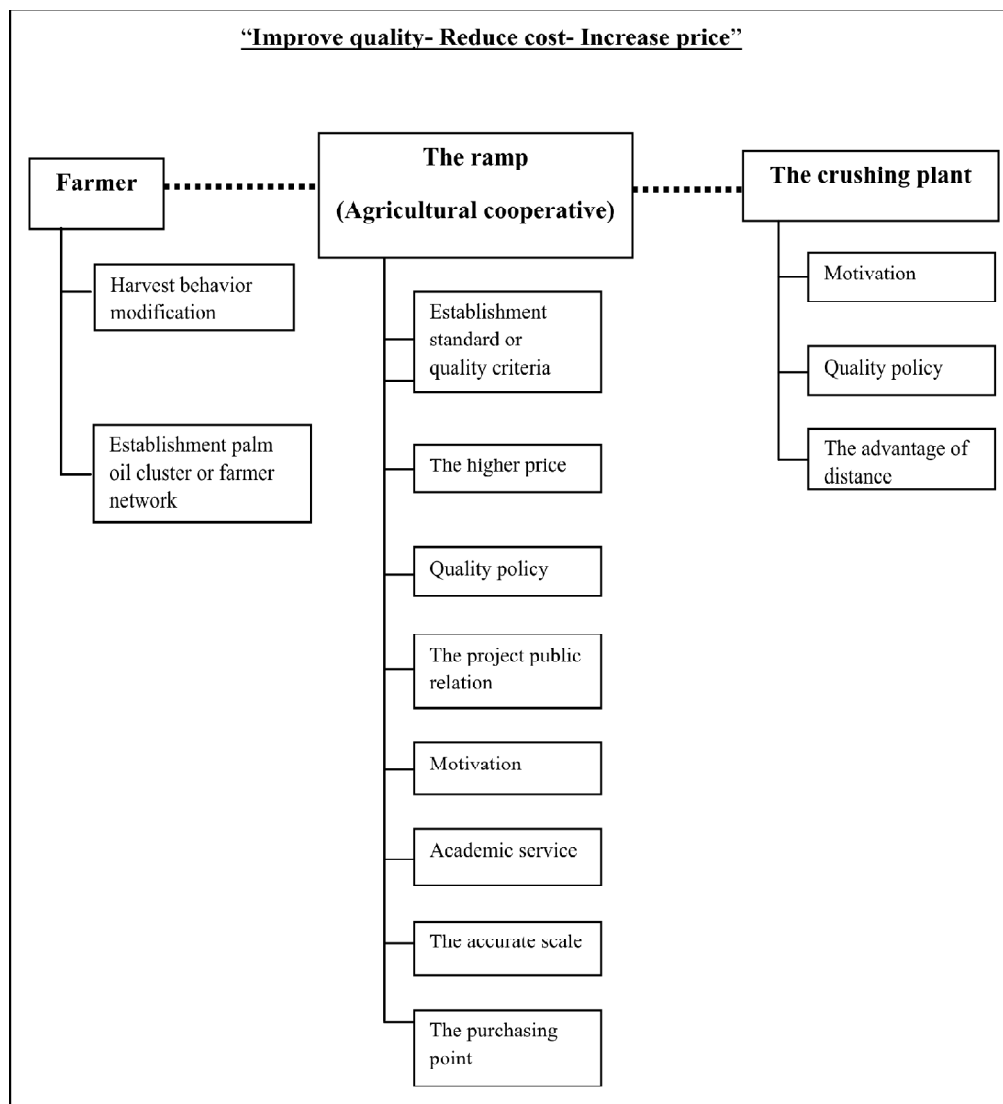
– *Quality policy*: The executive not only ensure that materials is consistency but also consider to quality improvement. Quality policy therefore uses quality assurance and production control as well as product to achieve more consistent quality. Moreover, quality policy encourages the farmers to produce palm oil meeting higher quality standards.

– *The inspection process*: The ramp inspections are an essential part of quality control, and even more important when tied to contractual price. These inspections must then be properly defined and regularly executed, with appropriate monitoring.

– *Motivation*: The ramp's entrepreneurs (agricultural cooperative) should offer higher price or other benefits to farmers such as soft loan or agriculture support for motivating them to create high quality and consistency supply raw material.

– *Know-how service*: The ramp's entrepreneurs (agricultural cooperative) should collaborate with academic institute or government agency to support farmer's know-how about cultivation, fertilization and harvesting.

– *Ensuring reliable and trustworthy service*: For example, the weighing scales used must be guaranteed for calibration and accuracy, because the delivered weight determines compensation.

– *Adding purchasing points:* The ramp operators could temporarily or permanently establish additional collection and purchase points, to save in transportation costs for remote farms.

4.4.3. The Crushing Plant

The crushing plant may improve productivity by:

– *Motivation*: Price or bonus incentives may motivate to achieve improved quality and consistency of supply.

– *Quality policy*: For achieving quality policy, quality is an issue for every farmer, the ramps and the crushing plants, whether dealing with commodities produced to basic standards or with the high-end quality products in palm oil industry. Also, palm oil farmers and the ramp entrepreneurs must build on high quality reputation to sustain competitiveness and profitability.

5. CONCLUSIONS AND SUGGESTIONS

In this study, we used process benchmarking to analyze and benchmark palm oil contract farming integrative, including industrial oil extraction in the scope, and proposed select best practices. Process benchmarking is an assessment tool helpful for the palm oil industry in southern Thailand. Implementing the results

may improve performance and provide competitive advantages to the palm oil industry.

The results from process benchmarking suggest that (1) a uniform clear standard for quality of the produce needs to be set, to provide farmers clear expectations directing improvements. Currently, the National Bureau of Agricultural Commodity and Food Standard (ACFS, Thailand) gives the quality criterion that palm fruit bunches should be ripe, meaning that the fruit are ripe and their peel is red. Clearly more detailed quality criteria emerged, specifying also cleanliness, absence of physical damage, absence of unripe fruit (which should be quantified instead of being an absolute), etc. (2) Purchasing price incentives implemented at ramps collecting produce from farmers would provide motivation to move in the direction specified, i.e., improve product quality and consistency of delivery. Using both price and quality in supplier selection can enhance the efficiency of public and private procurement. Moreover, if the procurer has exact knowledge of the cost of producing different levels of quality and if producers are flexible, then lowest price with appropriate minimum quality requirements, quality-only with price fixed at a suitable level or a price-and-quality scoring rule are all equally efficient (Bergman and Lundberg, 2013). (3) Additional ramps for collection and purchase could both improve fruit bunch quality at the extraction mill, and reduce transportation costs overall in the chain from farmer to the mill. (4) Compensation creation, the procurers should motivate the buyers to supply high quality palm oil by offering the compensation or higher price to farmer. (5) Establishing a database that allows monitoring and analysis of historical data about farm production and quality would both help assess development trends achieved in quality and productivity, and help project supply capacity in the near term.

Due to time limitations of this study, the harvest behavior remained unchanged and its effects on palm oil quality remain undetermined. Also, the actual quality of palm oil extracted, and its relation to adopted quality measures and other production factors were not quantified. Instead, the study was based on the hypothesis that current quality criteria are appropriate for the purposes of oil extraction mills. The above remain potential topics for further studies, and an additional topic might be the comparison of contract farming with conventional farming that lack such contracts, to determine their major differences from the viewpoints of each stakeholder.

Reference

Amanda, J. D. and Ashok, K. K. (2002), Manufacturing Best Practice and Performance Studies : A Critique. *International of Operation & Production Management.* Vol. 22, No. 3, pp. 289-305.

Benyakit and Siripanit (2002), Benchmarking : Track to Business Successful. 2nd Edition. Thailand Productivity Institute: Bangkok.

Bergman, A. M. and Lundberg, S. (2013), Tender Evaluation and Supplier Selection Methods in Public Procurement. *Journal of Purchasing and Supply Management.* Vol. 19, pp. 73–83.

Camp, Robert C. (1989), Benchmarking: The Search for Best Practices That Lead to Superior Performance. Milwaukee, WI: ASQC Quality Press.

Department of Thai Commerce, (2007), *source: www.moc.go.th/*

Glover, D. (1984), Contract Farming and Smallholder Out Grower Schemes in Less-developed Countries. *World Development*, 12(11/12), 1143–1157.

Goldsmith, A. (1985), The Private Sector and Rural Development: Can Agribusiness help the Small Farmer. *World Development.* Vol. 13, No. 10/11, pp. 1125–1138.

Heibeler, R., Kelley, T. B., and Ketteman, C. (1998), Best Practice – Building Your Business with Customer – focus Solution. Simon & Schster. New York: USA.

Mattew Warning and Nigel Key. (2002), The Social Performance and Distributional Consequences of Contract Farming: An Equilibrium Analysis of the Arachide de Bouche Program in Senegal. World Development. Vol. 30, No. 2, pp. 255–263.

Menon, Anil, Phani Tej Adidam, and Steven W. Edison (1999), Antecedents and Consequences of Marketing Strategy Making: A Model and Test. *Journal of Marketing.* Vol.63 (April), pp. 18-40.

Moorman, C. and Rebecca, J. S. (1999), The Contingency Value of Complementary Capabilities in Product Development. *Journal of Marketing Research.* Vol. 36 (May), pp. 239-257.

Morrissy, J. D. (1974), Agricultural Modernization through Production Contracting. New York: Praeger.

Morduch, J. (2000), The Microfinance Schism. *World Development.* Vol. 28, No. 4, pp. 617–629.

Reijers, H. A. and Liman, M. S. (2005), Best Practices in Business Process Redesign : An Overview and Qualitative Evaluation of Successful Redesign Heuristics. *Omega.* Vol. 33, pp. 283 – 306.

Schmidt, M. (2010), Quantification of Transcripts from Depth Interviews, Open-ended Responses and Focus Groups Challenges, Accomplishments, New Applications and Perspectives for Market Research. *International Journal of Market Research.* Vol. 52, No. 4.

Srivastava, R. K., Tasadduq, A. S., and Liam, F. (1999), Marketing, Business Processes, and Shareholder Value: An Organizationally Embedded View of Marketing Activities and the Discipline of Marketing. *Journal of Marketing.* Vol. 63 (Special Issue), pp. 168-79.

Teece, D. J., Pisano, G. and Shuen, A. (1997), Dynamic Capabilities and Strategic Management. *Strategic Management Journal.* Vol. 18, No. 7, pp. 509-535.

Whittle, S. S., Tranfield, D. and Foster, M. (1992), Implementing Total Quality: The Downside of Best Practice. Seventh Annual Conference of the Operations Management Association on International Operation – Crossing Border in Manufacturing and Service, Proceeding of the Conference held at UMIST, Manchester, 23-24 June, pp. 52-247.

Williams, S., and Karen, R. (1985), Agribusiness and the Small-scale Farmer: A Dynamic Partnership for Development. Boulder, CO: Westview Press.