

Sustainability Management for Wine Production: A Case of Thailand

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Abstract—At present, increased concerns about global environmental problems have magnified the importance of sustainability management. To move towards sustainability, companies need to look at everything from a holistic perspective in order to understand the interconnections between economic growth and environmental and social sustainability. This paper aims to gain an understanding of key determinants that drive sustainability management and barriers that hinder its development. It employs semi-structured interviews with key informants, site observation and documentation. The informants are production, marketing and environmental managers of the leading wine producer, which aims to become an Asia's leader in wine & wine based products. It is found that corporate image and top management leadership are the primary factors influencing the adoption of sustainability management. Lack of environmental knowledge and inefficient communication are identified as barriers.

Keywords—Environmental, knowledge; Sustainability management; Top management leadership; Wine industry

I. INTRODUCTION

At present, increased concerns about global environmental problems have magnified the importance of sustainability management. To move towards sustainability, companies need to look at everything from a holistic perspective in order to understand the interconnections between economic growth and environmental and social sustainability. The narrow focus of economic performance is a shortcoming in the creation of environmentally responsible organizations. Widespread negative environmental impacts of industrialization have destroyed the environment, natural resources and human health. Like most industries, the wine industry is seen as one of the polluting industries, causing wastewater, air emissions, greenhouse effect and solid organic waste in parallel with consuming a lot of fresh water and energy. The negative impacts on the environment and society occur from viticulture to transportation. Many wine producing countries, especially in the new latitude wine making countries such as Australia, New Zealand and the United States, perceive and concern about such environmental problems. To date, there seems to be relatively little research that attempts to identify drivers and barriers to implementing sustainability management for wine production processes. Studies that have been done frequently focus on environmental management systems and green supply chain management [1, 2].

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This paper aims to at least in part fill that gap, by exploring key determinants that drive sustainability management and barriers that hinder its development. Two key research questions are addresses:

RQ1. What are key determinants that drive sustainability management for wine production in Thailand?

RQ2. What are barriers to the development of sustainability management for wine production in Thailand?

II. LITERATURE REVIEW

A. Sustainability management and wine production

Sustainability stands as the means of meeting the needs of the present generation without compromising the ability of future generation to meet their own needs [3]. The term includes all activities involved in the generation of economic growth while protecting the environmental and natural resources upon which present and future societies depend. In order to balance the need for economic growth with environmental and social sustainability, companies need to take a system perspective and not departmental time-static world when evaluating environmental impacts. Also, they have to shift their thinking from centering on economically oriented management to that of creating a long-term vision of environmental and social sustainability along the entire length of the supply chain [4]. There is a great deal of pressure from external forces driving environmental management practices including governments, customers and local communities [5, 6]. These bodies are working to push companies to focus on the environment and society rather than solely on a company's financial success. Likewise, competitive advantage, reputation, better efficiency, cost savings, management attitude, employee expectation and quality of food or service are important drivers which encourage companies to adopt sustainability management [6, 7, 8, 9, 10]. It is interesting to note that trust and brand equity of winery will increase after adoption of pro-environmental business practices [11]. Moreover, the adoption of environmental sustainable strategies in wine producers brings about product differentiation, competitive advantage and increased sales volume [11]. However, lack of knowledge and skills, financial difficulty, management inertia and lack of time are barriers to the implementation of sustainability management [12, 13].

B. *Wine industry in Thailand*

Thai people started knowing wine since 1657; it was given to the Thai lords by French vendor who came to do business in Thailand. Wine became popular among the high society; the most popular period of wine was in the 80-90's, which the legally imported volume of wine was as high as 13 million liters. Thailand had first local wine maker in 1981, which started from producing 'wine cooler' then other wines. At present, there are 7 major wine makers in Thailand. The value of wine import to Thailand in the year of 2008 was 31% higher than the previous year, and tends to be higher. [14]

III. RESEARCH METHODOLOGY

This paper focused on the biggest wine producer in Thailand. The research was conducted by semi-structured-interviews with key informants, site observation and documentation during the winter of 2011. The informants are production, marketing and environmental managers. They were asked a core set of semi-structured questions and probed for elaborations and explanations of issues as they emerged. Extensive notes were taken at the time and written up later the same day. Data was analyzed by using the method suggested by Miles and Huberman (1994) for qualitative analysis: data reduction, data display matrix and conclusion drawing and verification. By using this method, we can understand determinants and barriers to the implementation of sustainability management for wine production in Thailand.

IV. COMPANY PROFILE

Company A was established in 1986 with the authorized capital of 3,000,000 in US Dollar. The first product of the company was sparkling wine. After that, the company has launched many more wines and wine-based products. Now, the company is the biggest wine producer in Thailand and Southeast Asia. The products of company A are exported to 25 countries all over the world, such as United States of America, United Kingdom, Japan, Germany, France, Holland, Switzerland, and Belgium. The company has received many international management certificates, including ISO9001: 2008, GMP, HACCP and ISO14001: 2004.

V. FINDINGS

A. *Drivers to the adoption of sustainability management*

As the biggest wine producer in Thailand and Southeast Asia, the company has taken care of environmental responsibility since the establishment of the company and factory. The causes or driver to the adoption of sustainability management are corporate image and top management leadership.

- *Top management leadership*

Top management leadership is the most influencing factor of the company to adopt and implement sustainability management in the organization.

"Top management himself cares about community and environment issue, and always arranges the activities to help the communities," (Environmental Manager.)

This makes the environmental concerns written as the core value of the company which is reflected through firm's vision and mission.

- *Image*

As the company wants to look good in others' eyes, image is another influencing driver to adopt the sustainability concept and continuously develop the sustainability management.

"... Another thing is corporate Image. Having environment management increases our image. When visitors come to observe our production process, we can demonstrate them the wastewater treatment system..." (Marketing Manager)

B. *Barriers to the development of sustainability management*

After adopting sustainability management, implementing or developing is also challenging. There are obstacles during the development, the research identified primary barriers: lack of environmental knowledge and insufficient communication.

- *Lack of environmental knowledge*

As human resource is the most important part of the company and they work directly in the production site, workers need to have environmental knowledge and skills. The finding reveals that some employees do not have enough knowledge and skills of environmental practices.

"When we have new rules or new practices, we have to tell and teach our workers, but sometimes they do not do what they should do. This reflects the lack of concerns and knowledge," (Production Manager.) The company fixes this problem by having the one-day training camp for every worker in the company and factory. The purpose of this activity is to encourage the workers to learn and understand about the good practices in working, following quality standards, such as HACCP, ISO.

- *Inefficient communication*

Within the company, communication is very important. If message is unclear or distorted, the work cannot be done correctly or will be late.

"Insufficient communication is another barrier to the development of sustainability management. Communicating messages to others, ones may not understand and continue working wrongly, which effects the time using in each task, but the outcome is still correct," (Environmental Manager)

VI. CONCLUSIONS, LIMITATION AND FUTURE RESEARCH

At present, companies cannot focus only on economic growth; they need to focus on sustainability. Sustainability

management is becoming more important as environmental issues and global warming are more serious. In wine production, it's important to have sustainability management, because the production effects the environment negatively. This paper aims to gain an understanding of key determinants that drive sustainability management and barriers that hinder its development. The findings show that key determinants that drive sustainability management consist of top management leadership and image. Lack of environmental knowledge and insufficient communication are identified as the barrier to the development of sustainability management. A deeper understanding of these factors derived from case study research with the use of in-depth interview and site observations will assist the implementation of environmental and social responsibility into corporate strategies and operational practices. Furthermore, in order to improve the generalization of the findings, future research should widen the sampling of wine processing companies. Comparative research between industries, countries and regions should be pursued.

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